POPULAR ELECTRONICS' $1.95

CITIZENS BAND HANDBOOK 1977

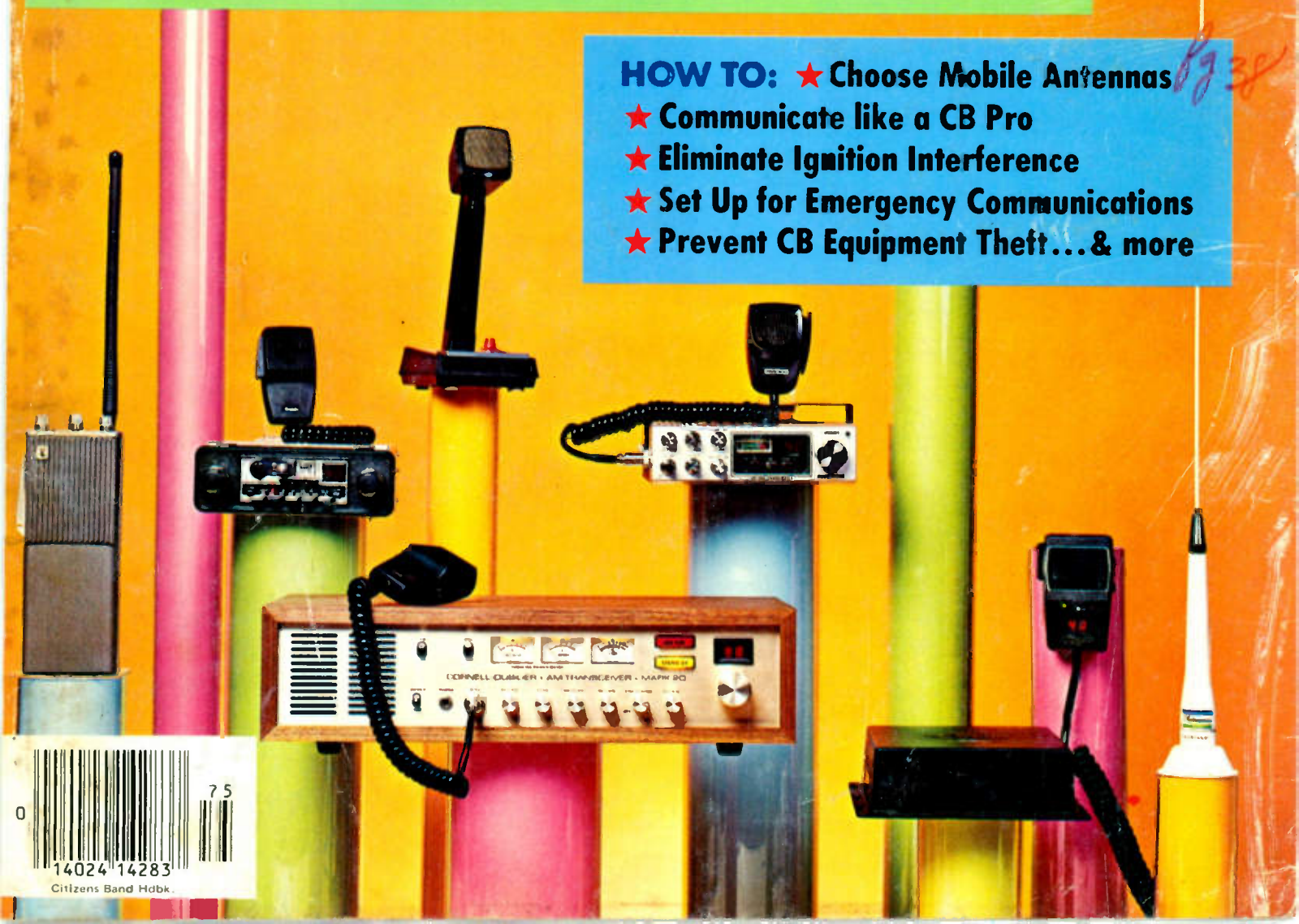
COMPLETE BUYER'S AND USER'S GUIDE TO CB RADIO

YOUR ONE-STOP SHOPPER'S GUIDE TO THE NEW 40-CHANNEL CB TRANSCEIVERS

★Latest prices ★Features ★Specifications ★Photos

HOW THEY STACK UP AGAINST THE OLD 23's

HOW TO: ★Choose Mobile Antennas
★Communicate like a CB Pro
★Eliminate Ignition Interference
★Set Up for Emergency Communications
★Prevent CB Equipment Theft...& more



At 55 mph, CB ought to be as easy to use as a push-button radio.

SBE Key/Com 1000, an entirely new experience in CB radio that has a microcomputer as its heart. A keyboard entry control system lets you do things no other CB radio can do. And do it as easily as operating a push-button radio.

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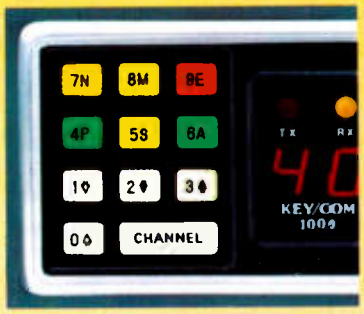

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Revolutionary breakthrough in CB antenna design

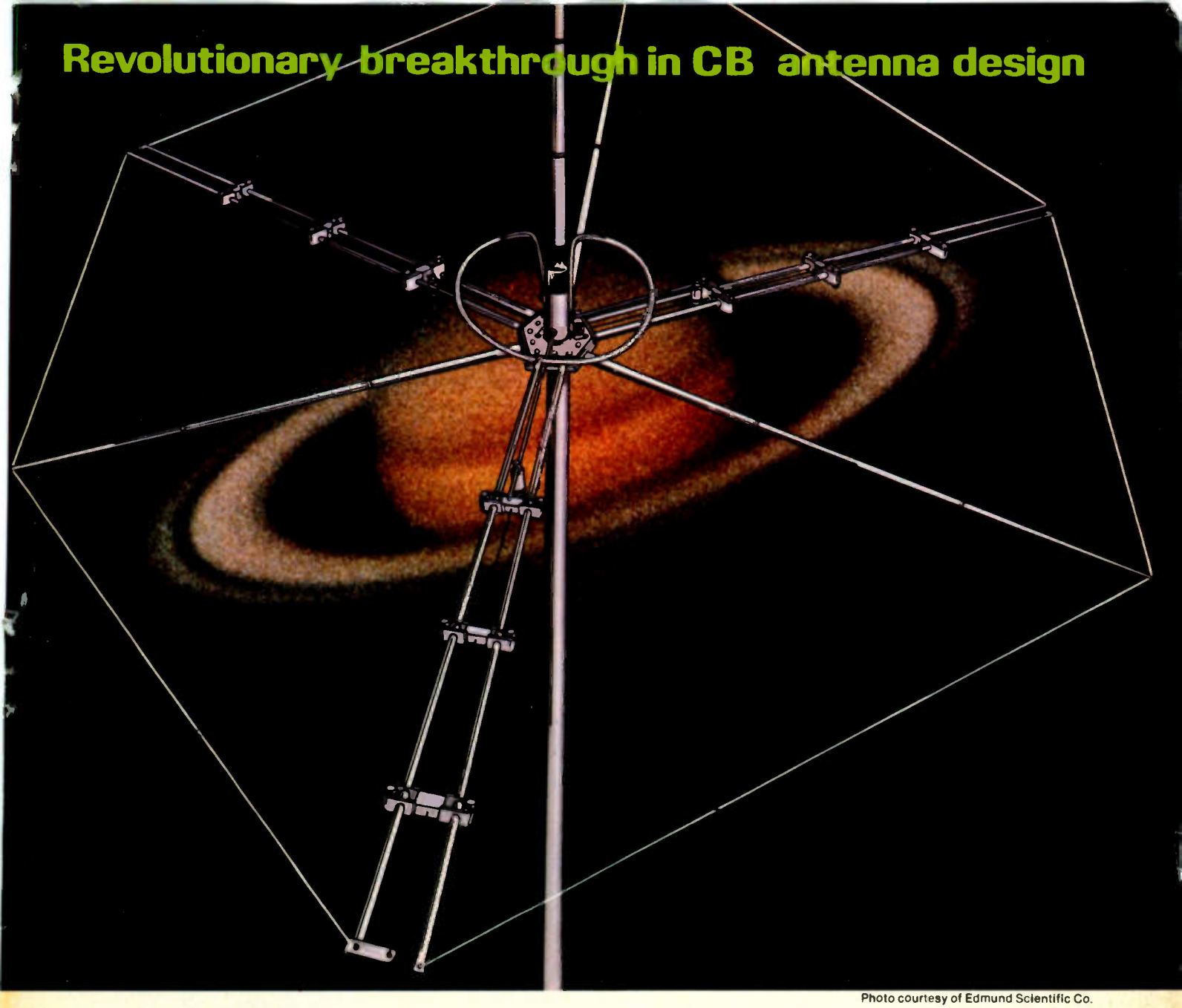


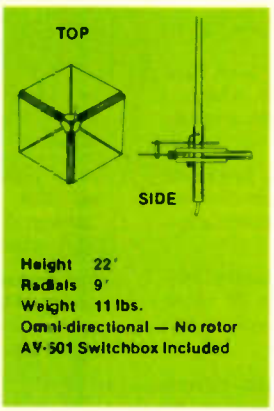
Photo courtesy of Edmund Scientific Co.

AVANTI Invents the Saturn™ Base

The reason the "Saturn" is so revolutionary is that it is absolutely the only **combination vertical *and* horizontal omni-directional antenna.** That's right, it needs no rotor! You can pick up mobiles (which are vertical) or horizontal and vertical beams.

The "Saturn", invented after years of research by Avanti engineers, is the latest development using AVANTI's unique CO-INDUCTIVE principle to give you the performance of two antennas combined into one.

The "Saturn" not only works on both polarities, but pounds out signals like an air hammer and picks them up like a magnet. Both polarities offer high gain figures.



Those of you who are worried about sun spots and "skip" can relax too. This antenna really helps. When the sun spots cause a signal shift, you can often change polarity (just like our P.D.L. or Moonraker) and still pick up the desired channel with no loss of transmission.

The P.D.L. and Moonraker made dual polarity famous as the only antennas to have during the last sun spot cycle, and this time around any serious C.B.'er will want to have the "Saturn."

In fact, having a "Saturn" and a "P.D.L." or "Moonraker" will put you in the elite group of C.B.'ers who "always seem to get out better."

Avanti makes a complete line of high performance base and mobile CB antennas from $11.95 to $404.00. Write for free Avanti catalog.

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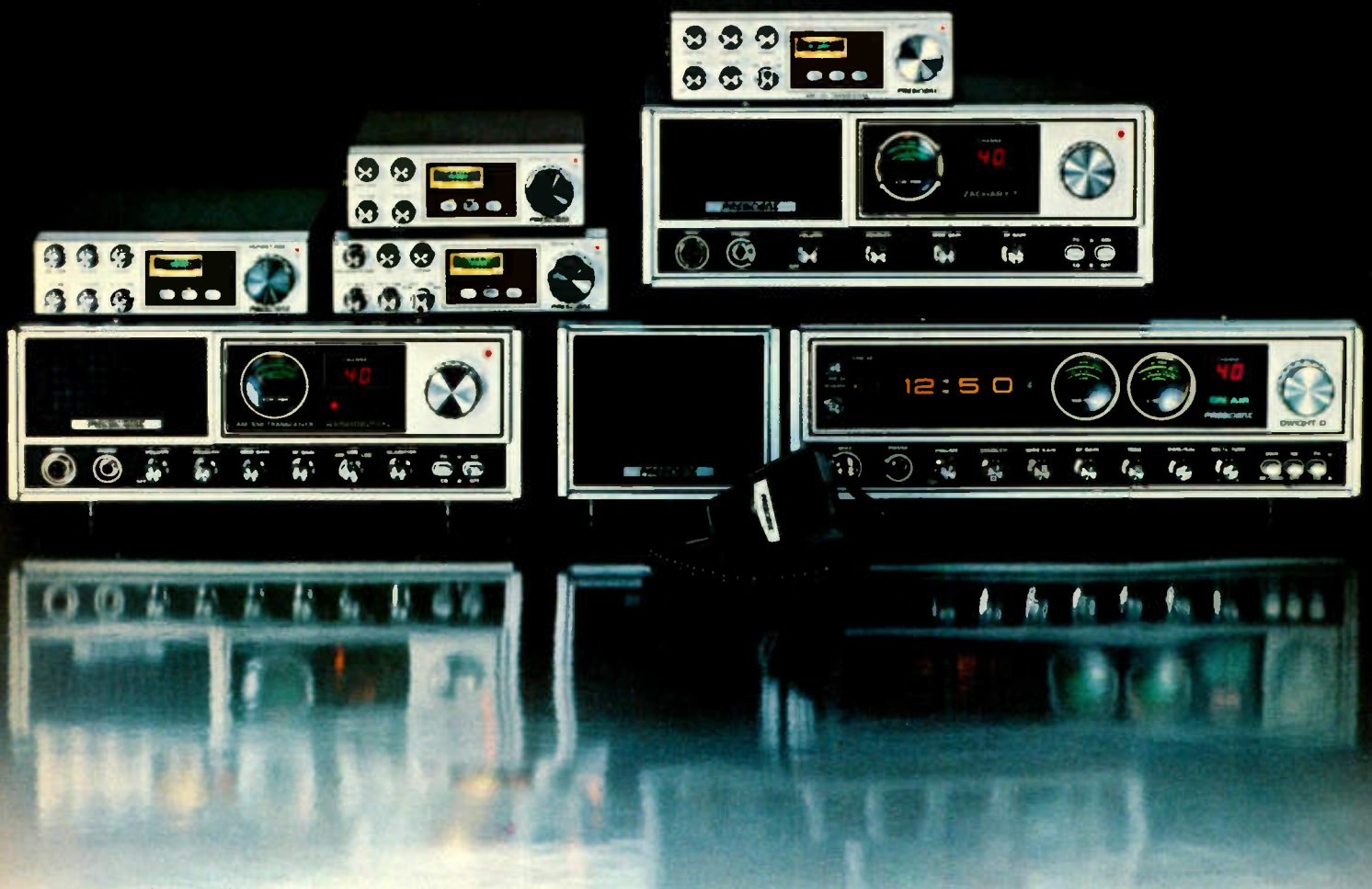
Every one with quality control second-to-none because every single radio is checked thoroughly for peak performance before it leaves the factory.

President may be a new CB company but the people who founded President aren't new to CB. They're industry leaders who were there in the beginning and want to offer the American people CB's with a little bit extra.



President Radios

John Q—40-channel AM mobile. Mid-priced mobile with base station features. Volume, squelch, variable mike gain, ANL, receiver sensitivity switch, digital channel indicator with dimmer control, S/RF meter, PA.

Honest Abe—40-channel AM mobile. Designed and priced to become a best seller. Digital channel indicator with dimmer control, RF gain, delta tune, variable mike gain, S/RF/modulation meter, ANL, PA.

Teddy R—40-channel AM mobile. Top-of-the-line mobile. Volume, squelch, mike gain, RF gain, delta tune, true RF noise blanker, tone control, PA switch, S/RF modulation/SWR meter, digital channel display with variable dimmer control.

Zachary T—40-channel AM base station. A short step down from the top-of-the-line. Volume, squelch, variable mike gain, RF gain, S/RF meter, digital channel display, PA, ANL, AC/DC.

Dwight D—40-channel AM base station. Top-of-the-line base. Digital clock with built-in alarm, two meters reading signal strength, relative RF power output, modulation, SWR reflected and forward. Also, digital channel display, volume, squelch, mike gain, RF gain, tone, delta tune, true RF noise blanker, PA, AC/DC.

Grant—40-channel AM/SSB mobile. Variable brilliance channel indicator. Variable mike gain, local/distant switch, RF noise blanker, clarifier, large AM, upper and lower sideband control, LED transmit light, PA, volume, squelch.

Washington—40-channel AM/SSB base station. A quality price leader. LED transmit indicator. Volume, squelch, mike gain, RF gain, clarifier, PA, RF noise blanker, large S/RF meter, AC/DC, digital channel indicator.

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CONTENTS

PRODUCT DIRECTORIES

A. E. F. Johnson's "Messenger 92" Portable

B. Boman's CBR-9950 AM-FM/CB In-dash

C. Shure's 526 T Base-Station Mike

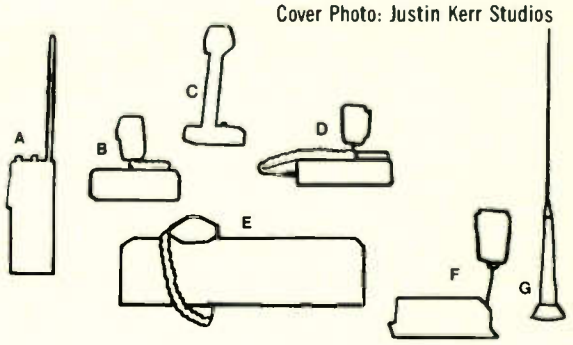
D. President's "Grant" SSB Mobile

E. Cornell-Dubilier's "Mark X" Base Station

F. Hy-Gain's 2679X Mobile Transceiver

G. Shakespeare's "White Knight" Antenna

Cover Photo: Justin Kerr Studios



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Eliminates CB installation problems. Any transceiver mounts on the Kamel speaker, speaker mounts on the hump, fits snugly when driving. CB dials easy to see, easy to reach. For safer operation. To remove, just unplug antenna and power leads, lift entire unit and place in trunk for maximum security. No screws to unscrew. No hassle. Acoustically designed speaker deadens static and channel noise, eliminates voice distortion. We make having an expensive CB rig in your vehicle safe and worthwhile. Isn't it about time somebody did?

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DIRECTORY OF MANUFACTURERS

continued on page 69

Americans have been using Motorola 2-way radios to find campsites for years.

It's a fact that the people who first put radio on wheels also made the first radio on wheels on the moon.

But it's not surprising.

Because Motorola® makes more radios for police, firemen, taxis, and lunar rovers than anybody.

And now Motorola makes a 40-Channel CB radio that shares much more than a name with our professional 2-way radios.

The clean, uncluttered lines of the Motorola CB, for instance.

Features that many manufacturers leave on the outside of their sets (or don't offer at all) are built into a Motorola CB.

Gain control, noise limiting, audio compression, even a TV interference filter are built-in, fully automatic circuits that actually make communication better.

And operation easier.

A digital phase lock loop synthesizer provides precise tuning (automatically, of course).

A professional-quality 3½-inch top-fire speaker gives the Motorola CB an audio quality that must be heard to be fully appreciated.

And every Motorola CB gives you the added advantage of a power mic that doesn't need batteries. That doesn't cost 50 bucks extra.

The Motorola 40-Channel CB radio.

We believe it's the most sensibly engineered CB radio on the market. We believe it will deliver years of service at a level of performance few could match.

Put a Motorola CB radio under your dash and you'll believe, too.

Motorola CB

From the voice of experience in 2-way radio.

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To find the dealer nearest you, write: Customer Relations Manager, Motorola Inc., Automotive Products Division, 1299 East Algonquin Rd., Schaumburg, Illinois 60196.
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The 40-channel Cobra 29XLR. From the sleek brushed chrome face to the matte black housing, it's a beauty. But its beauty is more than skin deep. Because inside, this CB has the guts to pack a powerful punch.

The illuminated 3-in-1 meter tells you exactly how much power you're pushing out. And pulling in. It also measures the system's efficiency with an SWR check. In short, this Cobra's meter lets you keep an eye on your ears.

The Digital Channel Selector shows you the channel you're on in large LED numerals that can be read clearly in any light. There's also switchable noise blanking to reject short-pulse noise other systems can't block. The built-in power of DynaMike Plus. Automatic noise limiting and Delta Tuning for clearer reception.

And the added protection of Cobra's nationwide network of Authorized Service Centers with factory-trained technicians to help you with installation, service and advice.

The Cobra 29XLR. It has 40 channels. And it has what it takes to improve communications by punching through loud and clear on every one of them. That's the beauty of it.

Cobra

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PUNCH AND BEAUTY

THE AGE OF PERSONAL COMMUNICATIONS IS HERE!

USING the Citizens Band Radio Service for emergency and motorist-assist communications is one of its most significant applications. The comfort of knowing that you can cry out to "Good Buddies" wherever you are in time of crisis is well worth the modest cost of a CB radio/antenna in an automobile. It serves as the most economical, effective substitute for a telephone that's available today in our auto-oriented society.

Since there are more than 20-million CB rigs, help is generally available at a CB'ers fingertips. Moreover, there are teams of local volunteers who monitor emergency channel 9 continuously as a public service, as well as many state and local police departments that monitor channel 9 or a popular highway channel, such as channel 19.

In addition to supplying an information- or life-saving communication line of a few miles to the outside world, CB two-way radios serve a variety of other purposes. For example, a boring auto trip can be enlivened by talking to other CB'ers on the road, people who engage in outdoor activities, such as hiking and fishing, can maintain contact with each other, and so on.

With at least 12-million CB'ers on the air, it is clear that we are now in the age of personal communications. One out of 10 passenger cars today is equipped with a CB two-way radio; 3 out of 4 long-haul trucks; 4 out of 9 recreational vehicles; and 1 out of 7 pleasure boats. And CB radio is growing by leaps and bounds as more and more people realize that this easy-to-use equipment can be employed for pleasure, safety, business, and public service—all without requiring any technical knowledge or a test, as do some other radio services.

Getting Your CB License. A station license that also serves as an operator's license is required before one can legally transmit on the CB band (unless you are a member of a household where a member holds a CB license and gives you permission to transmit under his or her responsibility).

Obtaining a CB license for the Citizens Band Radio Service, which is one of the services in the overall Personal Radio Service, is easy. Aside from not requiring any examination to get it, it's free! Simply meet a few basic requirements, such as being 18 years of age or older and affirming that you do not represent a foreign government, and you're eligible to get your license. You just complete FCC Form 505, packed with every new CB transceiver. This will take all of two minutes. Then mail the form to the Federal Communications Commission, P.O. Box 1010, Gettysburg, Pa. 17326 and await receipt of your license. Until the license arrives, however, you may operate a CB rig immediately for a

period of 60 days by completing a temporary permit (FCC Form 555-B, also packed with each new transceiver), which provides one with a temporary call sign while your regular application is being processed. This form is *not* mailed. Keep it in your possession.

Rules and Regulations. Also packed with a new transceiver is the section of Part 95 Rules and Regulations that applies to CB operators: Subpart D. This must be read by a CB'er and maintained in his home. It spells out what one's responsibilities are as a CB'er, what you can and cannot do.

For example, you may transmit telephone (voice) signals only . . . no code, whistling, etc. . . . on any of the 40 frequencies (channels) authorized for use. Maximum radio-frequency power output permitted is 4 watts (AM) and 12 watts PEP on single-sideband (SSB). Adding a device (a linear amplifier) to boost power is illegal and subject to a heavy fine and/or imprisonment.

The use of channel 9 is restricted to emergency and motorist-assistance communications. On all other channels, permissible communications include those for personal or business activities, as well as for emergency/motorist-assist purposes. There are additional communications permitted regarding Civil Defense activities and others. These exceptions are fully explained in Section 95. 461 of Subpart D. It is illegal, however, to use the CB channels to sell anything. And, obviously, a CB'er is forbidden to use obscene language, interfere with communications of other parties, give a false call sign, play music, and so on, as outlined in Subpart D.

In general, all communications should be as brief as possible. The legal maximum communications time for persons holding different station licenses is five minutes, followed by one minute of silence. For business or members of a family with the same station license, this time limit is not applicable, but conversations must be brief.

There are a number of other prohibitions. Among the key ones are the following: It's illegal to communicate with a station at a distance greater than 150 miles. The reason for this is to minimize overcrowding of channels in an area. After all, CB radio was designed for short-distance communications, not to handle radio traffic beyond local areas even though possible from time to time when atmospheric conditions are "right." This is called "skip" and it's illegal to take advantage of it.

Technical requirements that CB'ers must meet include limitations on antenna structures.

Omnidirectional antennas—the type most often used by CB'ers because they receive and transmit essentially the same in all directions—have a 60-foot above-ground-level limit, which includes its supporting structure, at the antenna's highest point. Furthermore, the highest point may be lowered if you are near an airfield. (The FCC makes available a worksheet to figure this out.)

Consequently, if one is mounting an omni atop a house at a point that is 20 feet above ground, maximum length of the antenna and its structure cannot exceed 40 feet. If the antenna is mounted atop a building that could cause the antenna to exceed 60 feet above ground, then the maximum height permitted is only 20 feet above the structure itself. If the antenna is mounted on the transmitting antenna structure of another authorized radio station (say, a ham radio antenna), it cannot exceed 60 feet above ground level *nor* the height of the supporting structure. If mounted on an antenna that is used solely for receiving purposes (say, a TV antenna), it cannot exceed 20 feet in height nor the structure's height.

Beam antennas, on the other hand, which receive and transmit radio signals with greater gain than omnidirectional types, although not in all directions, can*not* exceed 20 feet in height above ground level or a building structure upon which it is mounted.

When testing or adjusting an antenna a non-radiating "dummy antenna" must be substituted for the regular antenna so that transmissions are not "on-the-air." Brief test signals, with or without voice, may be made with the unit's antenna, though, when it's necessary to use a radiating antenna (such as matching a transmitter to an antenna). However, one cannot interfere with communications already in progress, station identification must be made in the normal manner, and unmodulated test transmissions cannot exceed a total of one minute during any five-minute period.

Any tests, adjustments, or repairs of a transmitter, which may affect proper operation of the station, must be made by (or under the immediate supervision and responsibility of) a person with a first- or second-class operator license.

Emergency & Motorist Aid. All CB operators must give priority to emergency communications of other operators when it involves human safety or immediate protection of property. Although channel 9 is reserved exclusively for such emergency communications (and motorist-assist communications), *any* channel may be used for this purpose.

One point to keep in mind concerning emergency communications on channel 9: If immediate action is not required, it is not an emergency. For assisting a motorist—flat tire, out of gas, motel information, etc.—the message must be for a particular motorist, not for motorists in general. Also, if communications are lengthy, the exchange should be shifted to another channel if possible so that channel 9 will remain open for other emergency and motorist-assistance calls. Channel 9 can be used for marine emergencies, too, of course, but it is not a substitute for the authorized marine distress system since the Coast Guard does not officially participate in monitoring any Citizens Band channel.

There are priorities that should be observed when using channel 9. Communications relating to an existing situation dangerous to life or property (say, a fire or automobile accident) takes precedence over any other communications. This is followed by communications on potentially hazardous situations (car stalled in a dangerous intersection or a lost child, for example). Next is road assistance for a disabled vehicle on a highway or street. Last are road and street directions for lost motorists.

Used properly, a CB transceiver can make life safer and more pleasurable. More and more people are discovering this fact, which is why CB transceivers will one day be as commonplace as the AM radio is in the car. Now that the U.S. Department of Transportation is allocating funds to every state to set up highway emergency communications via CB radio, that day doesn't seem to be too far away now! ◇

"Gondola Luigi, gimme a 10-13. . . ."

The ultimate base. The ultimate manual.

If you are one of the many discriminating CB operators who has decided to purchase our D201 base station, we apologize for the delivery delay you are undoubtedly experiencing. We are sure that you understand that the D201 is not capable of being mass produced and customer demand for this radio continues to far exceed our limited production capability.

We would like to suggest, in the meantime, that you acquire the D201 owner's manual. Tram's technical staff has put the same concern for quality and detail into the manual that has gone into the D201. Sixty-seven pages of easy to understand text, photographs and diagrams will tell you all you need to know to get years of enjoyment out of your base station, while the technical sections contain all the information a quallfied service person will ever need to keep your D201 operating at peak performance.

The D201 base station is the most sophisticated and complex CB radio available.

We believe that you owe it to yourself to review the D201 manual before the arrival of your base station, so that you will, as one of our customers recently told us, "be in CB'ers Heaven," from the first moment you put your D201 on the air.

D201 manual, $5.00 from the factory. (Refundable upon receipt of your D201 warranty registration card.)

TRAM® **TRAM/DIAMOND CORPORATION** Lower Bay Road, Box 187, Winnisquam, NH 03289 (603) 524-0622

CIRCLE NO. 26 ON FREE INFORMATION CARD

WHAT DO YOU DO AFTER YOU TURN YOUR CB TRANSCEIVER "ON"

Here are practical operating tips for anyone getting on the air for the first time.

THE waiting is over and you are about to join the millions of Americans currently using the Citizens Band Radio Service by going on the air for the first time. You should not make your CB debut, however, until you have familiarized yourself with CB radio operating techniques, the knowledge of which will enable you to more fully enjoy the conveniences available through CB.

Let's say the CB radio you now own is a full-feature model with typical specifications. Fig. 1 shows the operating controls and indicators supplied on your rig. (For a comprehensive discussion of CB radio specifications, controls, and indicators, see the "Glossary of CB Technical Terms" found elsewhere in this Handbook.) You must know the function and use of this mass of dials, switches, meters, and lights. In addition, the neophyte must be aware of CB jargon and codes as well as operating procedures and conditions. Note that it is not necessary to keep your license (FCC Form 505 or 555-B) and a copy of Part 95, Subpart D with your mobile unit—these may be left at home. Until recently, it was necessary to affix a completed transmitter identification card (FCC Form 452-C) to your mobile CB radio in a readily visible location. Recently, however, the FCC eliminated this requirement, although posting of a station license—whether used as a base or mobile rig—remains the same.

Before you attempt to communicate with other CB'ers, it's a good idea to listen for a while, during which time you will learn to interpret what you hear and acquaint yourself with the use of the receiving controls on your rig. The ideal way to start is to park your car (preferably in an open space, such as an empty parking lot) so that you may actively monitor and operate your radio before attempting to do so while in transit. Set the various controls as follows: On-Off/Volume to *off;* AM/USB/LSB to *AM* (we'll tackle SSB operation later); Squelch to *open* (usually fully counterclockwise); RF Gain to *open;* Clarifier to *center position* (this control is referred to as Delta Tune on AM-only transceivers); Automatic Noise Limiter (ANL) to *off;* Noise Blanker to *off;* Meter Function switch to *RF;* Microphone Gain to *full-open;* CB/PA switch to *CB;* and, finally, the microphone should be connected (some transceivers will not receive unless this is done). Now you're ready to turn on your ears!

What You'll Hear. When you turn on your rig the "S meter" should jump to life. Adjust the volume control for a comfortable listening level. Do not become concerned if you do not hear anyone speaking—there may be no one on the channel at the moment. This may be the case if you are operating in a rural area, where the CB channels may be sparsely populated. On the other hand, if you are located in a metropolitan area, where the density of CB radio users is high, you may find a jumble of conversations in progress simultaneously (CB'ers are always trying to disprove the saying "We can all sing together, but we can't all talk together").

You should now operate the channel selector until a fairly strong and intelligible signal is received. A word is in order here about the various types of transmissions you may expect to find on any one of the 40 channels available. Channels 1 to 7, 14, 15, 17, and 21 to 35 are used for general communications. Channel 11, once designated as a calling channel, is now also available for general communications. Channels 16, 18, and 36 to 40 are the habitat of stations operating in the SSB mode. If you listen to the "sidebanders" in action while your rig is set in the AM mode, all you will hear are distorted voices. Reception of SSB communications will be covered further on. Channels 10, 12, and 19 are mostly used by mobile stations in transit. In some areas channel 8 may be used for agricultural operations. In coastal areas or lake regions channel 13 is often used for maritime communications. Of course, channel 9 may be used for emergencies or motorist assistance. Except for channel 9, other channel applications have been adopted by CB'ers to bring some sense of order to the CB spectrum.

Your first communication should be with a base station. The operator of a base station probably has more time and patience to devote to advising you about your rig's performance when transmitting—you will want to know if you are "getting out." A mobile-station operator, however, must concentrate on driving and could thus give you a cursory radio check at best. You should therefore first monitor one of the channels used for general communications, rather than a highway channel such as channel 19. Vary the RF Gain control (or Local/Distant switch) to achieve strong reception of any signal heard (advance it for better reception of weak signals, decrease the setting when receiving overly powerful signals). The Clarifier (Delta Tune where applicable) may also be varied to provide slightly improved reception clarity of AM transmissions which are off frequency.

When a readable conversation has been tuned in, you will notice that communicating via CB often involves a vocabulary and various codes which are much different than the language used for normal conversation. Refer to "Q Signals Often Used on SSB") and the APCO Ten-Signals as aids in deciphering what you hear. You will eventually recognize the commonly used APCO Ten-Signals and CB slang words. The base station or base-to-mobile conversations you are listening to may progress as follows:

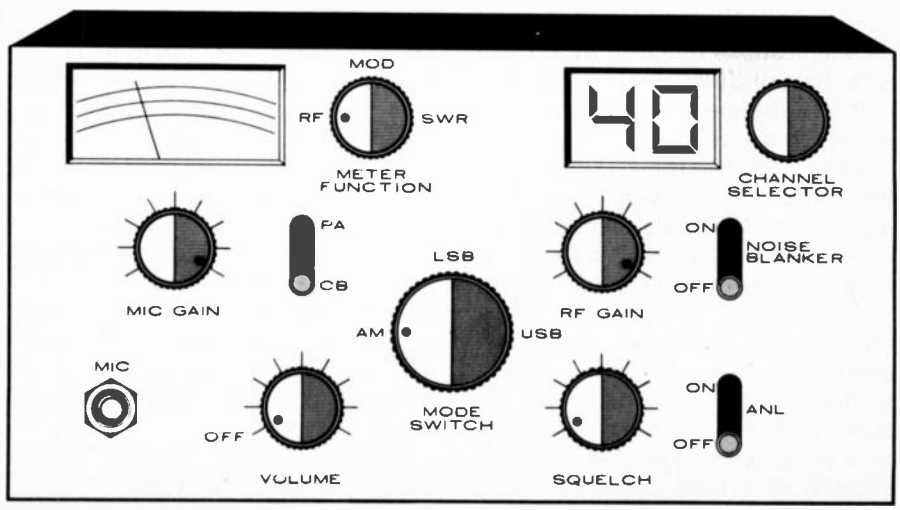
"This is the Sheepdog, KAA0000. Break 15." "Go ahead breaker. This is the Salmon KAAA0000." "Thanks for the comback, Salmon. I've just installed a mobile rig in my car and would like to know how it sounds. Can you help me out, Good Buddy? C'mon." "Sheepdog, this is the Salmon, back at you. Your audio sounds fine and you're hitting me with five pounds here at Maple and Elm. Is that a copy, Sheepdog?" "10-4, Salmon. My 10-20 is Smith and Riverside, and the first personal is John. Thanks for the break and the radio check, Good Buddy. I'll catch you on the flip-flop—threes to you. This is the Sheepdog, KAA0000. We're clear." "10-4 Sheepdog. The first personal here is Frank, and we'll modulate with you another day in another way—threes. This is the Salmon, KAAA0000, 10-8 on the frequency."

You should be able to derive the meaning of the above communications making use of the interpreting devices previously mentioned. It is also important that you understand the operating procedure used. After listening for a few minutes it may become evident that the Salmon is "picking up" all the breakers and is directing the operations of the stations using the channel. Salmon is said to be acting as a monitor station or, more popularly, the "channel-master" (CM). The purpose of the monitor station is simply to direct the local channel usage so that the goings-on remain orderly. The monitor station is prohibited from using the channel for personal communications while it is acting as monitor. Note that you are not required to submit to the authority of the monitor station. However, you may not intentionally interfere with the operations of the stations using the channel in question. Therefore, to communicate effectively you may wish to observe the directions of the monitor station. CB neighbors usually voluntarily abide by this system to provide for reliable two-way contacts.

Going on the Air. So that stations you are communicating with may identify you quickly, it is best to choose a "handle" for yourself. Something describing an outstanding characteristic or desired image of yourself or an old nickname will do. Or you can let your imagination run wild in choosing a unique handle. Whatever you choose to use as a handle will serve best if it is easily pronounced and recognized (avoid using handles already in use). Ask your friends or spouse what they think of the handle you have chosen. They may even be helpful in deciding on one. But be sure of your choice, because if you change it you'll have to re-educate all your CB contacts. Using a handle still obligates one to use the legal call.

When you have chosen a handle, you are ready to go on the air. Operating your rig in the transmit mode causes a larger current drain on your car's electrical system than when the receiver alone is used. So if you are planning to transmit from a fixed position for any length of time you may wish to start the engine of your car and keep it running to avoid draining your battery. Hold the microphone approximately two or three inches from your mouth and turn it 45 degrees so when you talk, you are talking across the microphone rather than directly into it where breath noises would likely occur. When there is a pause in the conversation, press the PTT button on the microphone and, speaking in your natural voice, strike up a conversation similar to the one previously discussed. You may be told to stand by for a while until the stations operating on the channel have ended their communication. If you receive no answer at all, break again, or try another channel. When you eventually establish two-way contact with another CB'er, you may be told that your audio is too loud or too low. You can adjust the Microphone Gain control to compensate for this. Note that the person you are talking with can not hear you while he is modulating (your CB radio cannot be operated as is a telephone). You must wait until your contact has stopped transmitting before you can speak to him. Allow a few seconds to elapse between the time the other station stops transmitting and you begin, so that other breakers may be heard and acknowledged. Also, be

Fig. 1.



REVISED APCO "TEN CODE" USED BY SOME CB'ERS

10-1 Signal Weak
10-2 Signal Good
10-3 Stop Transmitting
10-4 Affirmative (OK)
10-5 Relay (To)
10-6 Busy
10-7 Out of Service
10-8 In Service
10-9 Say Again
10-10 Negative
10-11 _____ On Duty
10-12 Stand By (Stop)
10-13 Existing Conditions
10-14 Message/Information
10-15 Message Delivered
10-16 Reply to Message
10-17 Enroute
10-18 Urgent
10-19 (In) Contact
10-20 Location
10-21 Call (_____) by Phone
10-22 Disregard
10-23 Arrived at Scene
10-24 Assignment Completed
10-25 Report to (Meet)
10-26 Estimated Arrival Time
10-27 License/Permit Information
10-28 Ownership Information
10-29 Records Check
10-30 Danger/Caution
10-31 Pick Up
10-32 _____Units Needed (Specify/ Number/Type)
10-33 Help Me Quick
10-34 Time

sure to press the PTT button all the way in before you start talking and release it after you have finished. Failure to do so will result in parts of your message not being transmitted.

During the first few weeks of your CB career you may notice various patterns concerning channel use and conditions. One factor affecting these characteristics is the time of day. You will notice that during the mornings and evenings many motorists make use of their CB's while enroute to or from work. Shortly after school lets out the number of children on the air will begin to increase. There is always a lull in channel activity during dinner time. Maximum use of the Citizens Band Radio Service occurs during the period following dinner right up to the early hours of the morning. Things will then quiet down until the morning's rush to work. On weekends you will find the din of rush-hour communications replaced by the less hectic talk of CB'ers motoring during their leisure time, perhaps visiting or enroute to a picnic.

During the morning hours and throughout the day you may notice that signals can be heard of stations giving their 10-20's as hundreds or perhaps thousands of miles distant from you! You may monitor these signals and perhaps even report the reception to the transmitting station by mail if enough information has been furnished. However, it is illegal to communicate with stations at a distance of greater than 150 miles from the location of your station. These long-distance communications are made possible by the occurence of certain atmospheric conditions and are referred to as "skip."

A noticeable decline in activity should be detected when you switch from one of the original 23 channels (except perhaps channel 9) to one of the 17 recently designated channels (24 to 40). The reason for this is that relatively few CB'ers have rigs which include the new channels. As a consequence of this, you will be able to communicate over greater distances on channels 24 to 40 than on one of the lower 23 (less of your receivable signal is absorbed in overcoming interference generated by on-channel and adjacent-channel operations). The upper channels thus provide more reliable communications over a greater distance (four times the distance covered on the lower 23 channels, allowing coverage of an area 16 times as great). This advantage offered through the use of the new 17 channels will decline in magnitude as more and more Good Buddies purchase 40-channel rigs and take to the higher frequencies, thus raising the noise levels of those channels. But owing to more stringent spurious response specifications for 40-channel rigs, communication range will be greater than that attainable with 23-channel transceivers.

Mobile Communications. The operating conditions and methods used by mobile stations operating on channel 19 (or another channel used virtually exclusively on highways) differ from those found on other channels. To familiarize yourself with these procedures, monitor channel 19. You should adjust your rig for the operating conditions encountered while you are stationary. To do so while in transit would require a lapse of concentration on traffic conditions, possibly leading to you being the next 10-33 called in on channel 9!

You may notice that there are a number of mobile stations travelling in the same direction along a certain road communicating amongst themselves. A typical conversation heard would sound something like this:

"Salmon, this is the Sheepdog, KAA0000. My twenty is the half-mile marker before Exit 10. There's a Smokey taking pictures over the rise just past Exit 9. 10-4, Salmon?" "Roger, Sheepdog. This Salmon, KAAA0000, thanks you for that Smokey report, Good Buddy. I've got your back door and I'm just coming up on Exit 8. Keep the front door open for me. This is the Salmon, KAAA0000, standing by."

Or you may hear traffic conditions being relayed as follows:

Break 19 for a 10-13 on the Lincoln Highway, westbound. This is the Salmon, KAAA0000. C'mon." "Salmon, this is the Sheepdog, KAA0000, westbound on the Lincoln Highway. You've got a clear shot to that Exit 88. A half-mile further on there's a down four-wheeler on the right shoulder being assisted by an 18-wheeler. After that it's clean and green. Back to you, Salmon." "10-4, Sheepdog, thanks for the mail. I'll back it down around Exit 88. This is KAAA0000, standing by."

Again, with the help of the references mentioned, you should be able to understand the meanings of these conversations.

When operating a mobile station in transit you will notice variations in your ability to communicate. These variations are caused by a number of things, such as the distance between stations. Obstructions which absorb RF energy, such as large constructions (bridges, buildings, etc.), may cause the strength of the received and transmitted signals to decrease when you pass near them. In addition, you may notice that the transmissions of another mobile seem to fade in or out. This is caused in part by the fact that some antennas sway in the wind—this results in varying radiating characteristics of the antenna. Also, most mobile antennas are mounted in a convenient location (for example,

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the trunk lip or rear fender) that does not provide equalized radiation patterns.

You may also experience an increase in static and other noise. This is caused by your proximity to other cars which may be generating RF interference. Your ANL or Noise Blanker should be used to eliminate as much of this interference as possible. You will probably detect bleedover ("splash") as you near a base station located by the roadway and operating on another channel. Splash may also be caused by mobiles operating on parallel-running routes which are using, say, channel 10 or 12. The magnitude of such interference will decline as you move away from the source of it.

During operation when the channels are crowded, you may wish to set your Squelch control so that you can hear only those stations close to you. While the person you wish to copy is transmitting, adjust the Squelch until it blocks him out and then reduce the setting to just beyond the point that he can be heard. Now no sound will issue from your speaker unless the station you are interested in or one at least as strong transmits.

SSB Operation. There are many benefits to be derived from operation in the single-sideband mode. These include greater range, more reliable communications, and quieter reception. Switch to a channel used by sidebanders and turn the AM/USB/LSB switch to *LSB* (lower sideband) or *USB* (upper sideband). Vary the Clarifier until the transmissions being received are intelligible. You will notice that the adjustment of this control is critical to the clear reception of SSB signals. When the stations operating on the channel are tuned in, you should monitor the conversation in progress. You may note the use of identification numbers in lieu of handles. Sidebanders (who tend to be more serious about their CB communications than most AM operators) sometimes use ham radio Q signals in place of the APCO Ten-Signals. These are primarily used by amateur radio operators when communicating and in some instances are more applicable to two-way communication than are APCO Ten-Signals. There are a number of CB clubs whose members operate frequently or even exclusively in the single-sideband mode. A good way to start a conversation on SSB would be to break on the upper or lower side of a SSB channel and ask about joining a club and obtaining an identification number.

Emergency Communications. Channel 9 has been reserved for emergency and motorist-assistance communications. The priorities for use of this channel are explained in Part 95. Any licensed station may be operated on this channel under the proper conditions. When using channel 9 to request motorist assistance or to report an emergency you should be prepared to provide the responding station with specific information. The nature of the problem, where and when it occurred, whether or not there are injured parties, and vehicle license plate numbers and descriptions should be given. There are a number of CB organizations which monitor channel 9 continuously, ready to dispatch or call for whatever aid is needed. REACT is the best known of such groups. You can request a Team Directory (see "CB Organizations" insert) which lists the REACT Team names and numbers for specific areas. This will assist you in contacting a REACT station in your area, or elsewhere, should the need ever arise or if you wish to be a volunteer monitor. In additon, various law-enforcement agencies monitor channel 9 (in some areas channel 19 is monitored also).

This basically covers the operating procedures you should know to ease your entry into CB society. You will no doubt find that there are many friendly people using the Citizens Band Radio Service who are happy to answer your questions and provide you with advice over the air, at CB jamborees, or at "eyeballs." Be patient when using your CB, listen a lot, and talk only when necessary. You'll soon join the ranks of CB'ers who, with a moderate investment, are able to enjoy the fun and convenience of two-way radio communication presently available through the use of the Citizens Band Radio Service. ◈

"Q" SIGNALS OFTEN USED ON SSB

Q SIGNAL	USE AS QUESTION	USE AS REPLY
QRJ	Is my *signal weak?*	Your signal is weak.
QRK	What is the *intelligibility* of my signal?	The intelligibility of your signal is . . . (1. bad, 2. poor, 3. fair, 4. good, 5. excellent).
QRM	Is my transmission being *interfered* with?	Your transmission is being interfered with . . . (1. nil, 2. slightly, 3. moderately, 4. severely, 5. extremely).
QRN	Are you troubled by *static?*	I am troubled by static (1-5 as for QRM).
QRX	When will you *call* me again?	I will call you again at . . . (time).
QSA	What is the *strength* of my *signal?*	The strength of your signal is . . . (1-5 as for QRK).
QSL	Can you *acknowledge* receipt?	I am acknowledging receipt.
QSM	Shall I *repeat* my last message?	Repeat your last message.
QSO	Can you *talk* with Joe?	I can communicate with Joe.
QSP	Will you *relay* to . . . ?	I will relay to . . . .
QSY	Shall I *change* to another frequency?	Change transmission to . . . (frequency or channel).
QTH	What is your *location?*	My location is . . . .
QTR	What *time* is it?	The time is . . . .

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IS YOUR CB STATION READY FOR AN EMERGENCY?

How to set up handling emergency calls received on Channel 9 or any other channel.

MUCH has been written about the public safety potential of the many CB radio stations spread across the country. Equally publicized is how CB'ers have responded to past large- and small-scale disasters. But a well-executed assist does not "just happen." It is planned in advance and is practiced over and over until both equipment and operators are ready to handle the emergency when it occurs.

Hundreds of CB clubs have organized emergency communications systems, and many of the more successful organizations have expanded to nationwide scope. REACT, ACBOA-ALERT, and REST Marine are typical of these emergency networks. However, in spite of these admirable efforts, many CB'ers are still not equipped to handle emergency communications. Are you?

What's an Emergency? The FCC defines an emergency that deserves channel priority as one which, "involves . . . the immediate safety of life . . . or the immediate protection of property." Only when a situation meets these requirements should the band be cleared for priority traffic. Then operating restrictions can be abandoned *if necessary* to initiate and direct rescue operations. However, misuse of priority or distress procedures can result in very heavy fines (up to $10,000), imprisonment (up to one year), or both—not to mention widespread confusion!

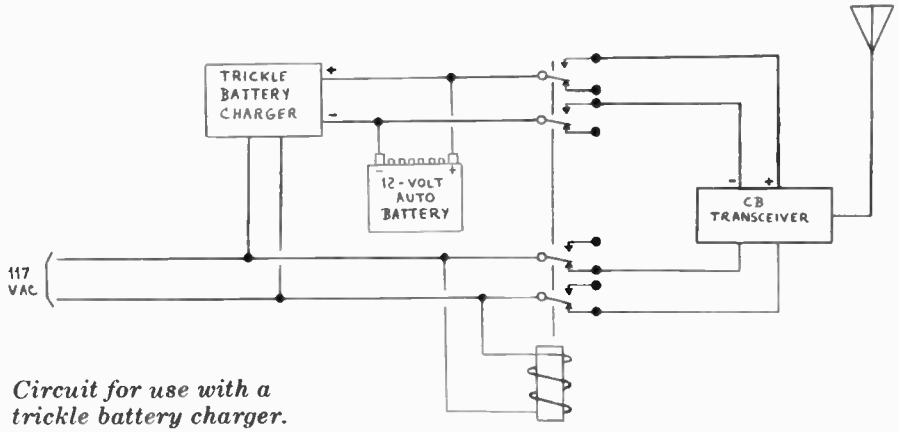
Less grave situations, such as motorist assistance, do not qualify for priority or distress traffic, but they may be conducted on the emergency channel 9, or any of the other 39 "free" class D channels. Channels 8 and 10, should be avoided, if possible to prevent possible "bleedover" on Channel 9. But in any event, as soon as contact is made on channel 9, you should move to another one to keep this emergency channel open.

Being Prepared. Public safety communications facilities should have reliable equipment, local maps and a list of needed phone numbers, a telephone, and most of all trained and dedicated operators.

Every CB'er is aware of equipment requirements—a good transceiver and a high-performance antenna. The rig should be checked regularly to make sure it's in top shape and to be certain that all channels are on frequency. Preventive maintenance schedules should be followed. To make a transceiver truly useful for emergency, it should be provided with a power source independent of the commercial power lines. For mobile units, which are powered by the car battery or alternator, there's no problem. But base stations are a different story. Obviously, if a real disaster occurs which knocks out the power lines, you won't be able to do much with a dead base transceiver.

Many transceivers, especially those of the "base/mobile" variety, will accept 12 volts dc as well as 117 volts ac. With such equipment, fully-charged automative storage batteries will provide the back-up power you might need. But the batteries must be charged. A trickle charger permanently attached to the power line will keep the battery topped up.

A relay can be used for automatic, instantaneous switching when the ac



Circuit for use with a trickle battery charger.

line fails as shown in the diagram. For extended operations, more than one battery might be required. If needed, the additional batteries can be simply placed in parallel with the primary battery. But be sure to observe standard safety procedures for handling and charging lead-acid storage batteries. For ac-only base transceivers, a battery/ac inverter combination or an emergency generator will be needed.

Although not required, auxiliary equipment will be useful. This includes a vhf/FM scanner with local Public Service channels and (if you live near the shore) vhf/FM marine channels 2, 16, and 22. A special Channel 9 monitor, built into some transceivers, will allow you to communicate on another channel, but will automatically switch over to Channel 9 whenever an emergency message is broadcast. Some don't switch over to voice, but have a visual alert lamp when channel 9 is activated. A tape recorder and a phone patch might also prove handy, but I hardly ever use my patch unless the band is unusually quiet. This equipment should also have a back-up power source.

Other items that should be included are:

- Pencils, notepads and a logbook.
- Land-line phone within easy reach.
- City street listing and maps of your monitoring area.
- Telephone numbers for all local public safety agencies.

Training Yourself. As I mentioned earlier, all this equipment is of little value unless the operator is properly trained and can use it efficiently. In emergency communications, effectiveness is essential. The guidelines for emergency traffic handling can be summed up in the "Four C's."

Be Calm. No matter what the emergency, a calm, professional attitude will help cool the situation and instill confidence. Remember that the person reporting the emergency is likely to be excited, and might even be abusive or irrational in his anxiety.

Be Courteous. Persons seeking assistance sometimes expect the service of a professional operator. Try to act the part. No matter what the provocation, you *must* be courteous.

Be Concise. When you receive an emergency message, jot down all the essential data needed to identify the nature of the incident, its exact location, the number and identity of persons or vehicles involved, and the nature and extent of injuries, if any. Make your transmissions as brief and clear as possible.

Be Correct. Before you relay a message, try to get confirmation from a second source, if possible. Note the call signs of reporting stations, vehicle registration numbers, etc.—any information which will identify the victim(s) and the caller. Be particularly careful to confirm the exact location of the incident. Excited informants are often confused about their exact whereabouts. Keep in mind that your information can do more harm than good when you direct emergency teams to the wrong location!

It's not easy to follow these four commandments in the heat and excitement of an emergency, but that's precisely the time when they are most necessary to get the message through. Play it cool. Keep emotion out of your voice. Remember—this takes self discipline and *practice*.

Whom to Notify. Generally, when you receive an emergency call at your base location you will be asked to relay a message to police or marine safety agencies. But you must know the jurisdictions of each organization so you can alert the proper one. For example, don't deliver a message to your *local* police concerning an accident on an interstate highway patrolled by state authorities. However, if you need an ambulance, a call to your local police (or to the 911 emergency service if available) may be your best bet.

If you monitor marine activity, you should know what marine safety groups are active in the area. Do the local police maintain a marine patrol, or is there an active Coast Guard Auxiliary Flotilla in your area? If you call the Coast Guard directly, chances are that they will refer your call to one of these other agencies. Precious time will be lost in the process. The best way to find out whom you should call for each situation is to visit these groups at their own bases of operations and see for yourself how they operate. Normally, they will appreciate your interest and efforts to learn. You will also find out which, if any, of the organizations operate CB equipment of their own and how they can be contacted directly on the Citizens Band. (Most are far too busy to maintain a continuous CB watch, but might monitor one individual channel.) This knowledge is of particular value when you are reporting an emergency from your mobile unit.

The best way to handle emergency communications on the local level is to organize a CB monitor-and-assist team. Even if you're not presently associated with the local REACT, it's good practice to know the other emergency operators in your area. Perhaps your local CB club has an organized net. If not, try and form one yourself. Through an organized approach, you can quickly establish a working relationship with public safety agencies and such groups as the Red Cross. Also, a local emergency net can hold drills and simulated emergencies to sharpen operating skills.

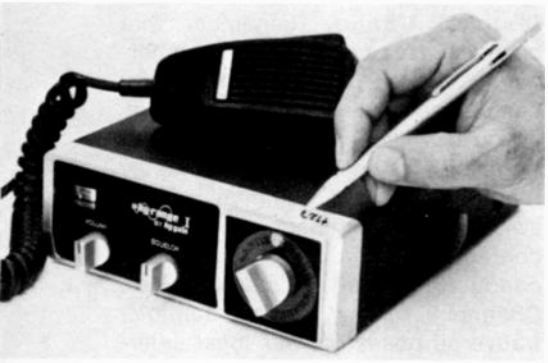
Channel Usage. Remember that channel 9 is to be used only for emergency traffic. But if it's tied up, you can use *any* other channel. However, if you do use Channel 9, keep your transmissions short. If the emergency requires extended communications, switch to another channel as soon as contact has been established. Don't conduct simulated message relays on Channel 9, or use it for the *administrative* purposes of your local emergency team. Now that many truckers have moved their highway communications to channel 19, channel 9 is much less susceptible to heavy "bleed-over." But you might hear an emergency message about a highway accident first on channel 19 via the truckers. Marine messages might first be heard on channel 13, which is used by shipboard CB'ers.

If you are monitoring channel 9 and scofflaws are using it for nonemergency purposes, don't argue with them. The experienced operator avoids a confrontation of this sort because he knows that a response usually just compounds the problem. The FCC is stepping up its efforts to indict illegal operators, and will appreciate your efforts to provide them with positive identification. Sometimes, signals from Latin America will "skip" in on channel 9. These operators are not governed by U.S. regulations, and their transmissions are all quite legal. It's just one of the annoyances that CB'ers must tolerate. ◈

HOW TO AVOID CB RIPOFFS

Some ideas on theft prevention

THE theft of CB rigs from boats and vehicles has grown to epidemic proportions during the past year and is becoming even more prevalent as each month goes by. There are few statistics available from official sources, but it is believed that as many as one in twenty mobile transceivers were stolen last year. So, when that guy from out-of-state promises you any new 40-channel rig you want at 50% off list price, within 24 hours, where do you think it will come from?



Mark your CB unit with an engraving tool.

Official Attitudes. I asked several local, state, and federal law enforcement agencies for their ideas on how the average CB'er can protect his investment in mobile equipment. Their unanimous answer was, "We are doing what we can, but we must have the help of the CB'ers themselves to stem this growing type of larceny." Most officials doubt that there is a single, foolproof countermeasure, but they believe that if each of us would take a few simple precautions, CB larceny would soon become too risky to attempt.

Some officials pointed out that insurance companies could do more than anyone to curb the rising tide of CB thefts, simply by insisting that those caught be charged and, if convicted, punished by the courts. All too often, the officials complain, the insurers of stolen property refuse to press charges against a thief who is caught because of trial expenses. Thus, the thief is out on the streets again in a few hours, ready to steal again. An alternative suggestion is that the insurance carriers relinquish their subrogation rights and urge owners with insurance to press charges, even though their claims have already been paid.

I found little statistical information of value collected by these companies; but, apparently, so many claims are being made that it is not profitable to insure mobile radios. As a result, many have advised that by the time you read this most policies will exclude all two-way radios (including CB, amateur, and vhf transceivers) from coverage.

Chief Francis Virgulak of the Norwalk (Connecticut) Police Department, his chief Crime Prevention Officer, Lieutenant Doug Lamb, and other department heads spent several hours in research and conferences to provide material and technical assistance for this article. In that city, the incidence of Auto Break and Entry cases increased only 9.4% in 1975 compared to the previous year. In the same period, however, the theft of tape decks increased 40.5%, and the theft of "radios" rose 425%. This police department does not differentiate among the types of radios stolen, but acknowledges that most of these were CB rigs.

Most sources I consulted indicated that, from personal experience, many (and possibly the majority) of CB thefts are not reported to the police. They could not explain why, but believed that many people feel that the police can do nothing about it, or that "illegal" (unlicensed) operators are afraid that the police will turn them in to the FCC. Lieutenant Lamb was quick to point out that the Police Department's concern was the prevention of larceny. No request to see a license is made when a theft is reported. He also said that any report of theft *which includes the serial number* of the stolen property will be put into the state and federal (NCIC) computers and remain on record for at least a year. Although the authorities admit that the chances of a successful recovery are not great, they point out that their only hope of catching the thief is through these records. So they really depend on the cooperation of the CB'er to report all thefts.

Steps You Can Take. With the help of the police, we developed a list of "Dos and Don'ts" to reduce your chances of getting ripped off. In the long run, if followed by most CB'ers, they will make CB larceny so unprofitable that it will be reduced to a minor problem.

- When you buy a rig, deal with a reputable dealer and get a sales slip on a printed letterhead form.
- Save that sales slip! When you take your new rig out of the box, record the serial number on the slip. Put it in a safe place, and remember where it is. Besides its usefulness in case of theft, it is a valid proof of purchase for warranty purposes.
- Remove the chassis from the cabinet and paste in a label that identifies you as the owner, requesting the technician to compare your name with that on his repair slip. (Be sure

NOTICE TO CB REPAIRMAN

If the name and address on your repair order do not agree with those below, this set may be stolen. Please ask your local police to check the serial number through NCIC for possible theft. If it is stolen, please *call collect* the owner (number below) to notify him and arrange for a return.

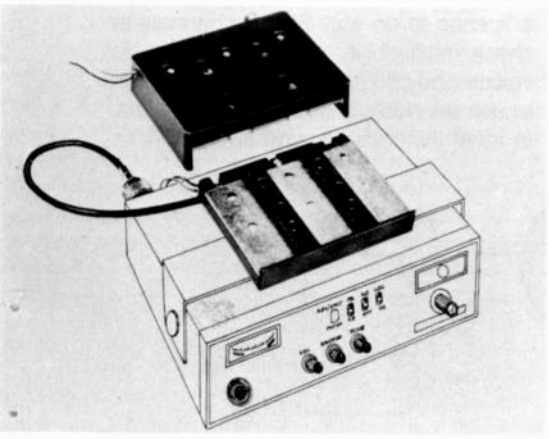
(Owner's name, address, and telephone)

(Date of purchase)

Fig. 1. Sample label to be attached to your equipment to aid recovery if it is stolen.

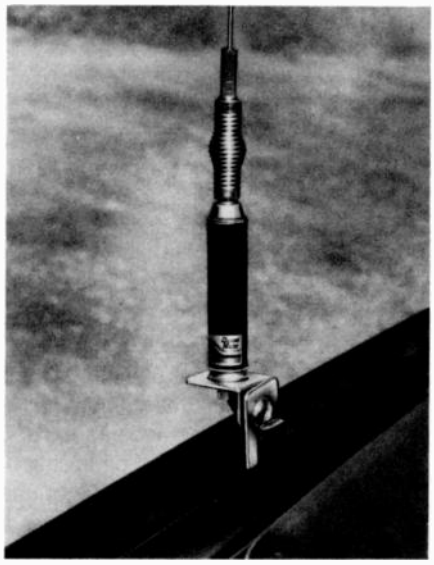
not to hamper convection cooling.) If the two names do not match, request on the slip that the technician report the serial number to the police for a check against NCIC records. A sample label is shown in Fig. 1. Many service techs will cooperate, either because they are dealers hurt by the black market, or because of warranty problems. Most manufacturers insist that their authorized service stations check all serial numbers against a "hot list." A more permanent ID can be engraved with a suitable stylus on the chassis itself.

- If your rig is stolen, report it immediately to your local police department. Include the serial number in your report and ask them to have it registered with NCIC.
- Consider investing a few dollars in a locking security mount which accommodates almost any transceiver and vehicle. These mounts usually require a key to gain access to the mounting bolts. An alternative, of course, is to remove your rig whenever you leave the vehicle. There are also power/antenna disconnect brackets that can accommodate CB rigs.
- If you live in a high-theft area, you might choose a CB transceiver that is installed out of sight. For example, a model with a control head separate from a remotely mounted electronics package could fill the bill. The remote unit can be locked in your trunk.
- There is no questioning the value of an intrusion alarm installed in your vehicle. It not only protects your CB equipment, but may even save the car itself! These are available from many sources, but you might prefer to build your own. They take many forms, varying from a simple "lock-in relay" to sophisticated time-delay devices for both trip and automatic recycling. Some CB rigs incorporate a security mounting circuit which can be connected to the intrusion alarm to trigger it when the transceiver's mounting bolts are removed. It is also possible to have an alarm trigger when the transceiver's ground return lead is disconnected, although I'm not aware of a commercially available one.
- Check with your local police department to see if they have an "Operation Identification" plan. Some offer free decals similar to the one shown in Fig. 2. These decals, identifiable with a specific police organization, can be installed on a vehicle window. They are generally more effective deterrents than alarm warning decals that identify the type of alarm installed. (Here, the manufacturer's "advertisement" might be the tip-off to a smart burglar who knows how to bypass that particular alarm!)
- Efficient antennas are essential to effective mobile communications; but they tend to be very visible. For example, a pair of 108-inch phased whips mounted on a rear bumper practically "shouts out" the existence of a fancy rig. If you are willing to sacrifice a little performance, there are CB antennas that resemble the standard electric-powered auto antenna. Lowering the whip electrically into the cowling when you leave the car will hide the fact that you have a CB rig. (There are also nonelectric whips that can be pushed into the cowl manually.) "Flip-flop" attachments are available, too, to allow one to manually lower the antenna into a trunk without disconnecting it.
- There are certain "booby trap" devices marketed that I believe *should not be used.* One is a tear-gas canister that is widely advertised. It is attached to the back of the set, and a mechanical trigger releases the gas when the transceiver is removed. Even though some cities and states may not consider installation of this device a violation of its criminal code, you are needlessly endangering yourself by installing it. First of all, the unit might falsely trigger itself, giving you a dose of tear gas while driving—an invitation to disaster. Second, an inquisitive child, an innocent auto mechanic, or even a would-be thief might trip it, leaving you open to a civil lawsuit. If the thief is thus injured in pursuit of his "trade," it's very likely that, as soon as he is released on bond, he will file suit for personal injury. He might even win, and get a $100,000 judgment.
- How and where you leave your vehicle will have a great effect on how long you keep your rig. If you lock all doors, it will slow down the "honest" thieves. But car door locks offer no real barrier to professionals, who can open them faster that you can get your key in the lock! Your best bet is to park the car out of sight of the street. If you can't lock it in a garage at night, you might consider setting up an area alarm around your parking spot, using photo-relays, etc. In addition to an intrusion alarm, I now have a system that floodlights my parking area and sounds an audible alarm. A garage door control disarms the system when moving vehicles in or out.◈



Remove your rig by using special mount.

Fig. 2. A tag like this from your local police and affixed to your vehicle window can be a theft deterrent.



Trunk-lip mount flips antenna into trunk.

WHAT TO LOOK FOR WHEN BUYING A CB RADIO

NEVER before has there been such a wide choice of CB transceivers. There are 23-channel units, 40-channel units, and a variety of 3- to 6-channel units, divided into mobile units, base stations, and hand-held units. There are so many types that buyers are often bewildered. Here are some guidelines to simplify CB transceiver selection.

FCC Approval. Since November 22, 1974 all newly marketed CB transceivers have had to be type-accepted by the FCC. If you own an earlier, non-type-accepted transceiver, you must stop using it by November 23, 1978. So be wary if you plan to buy a "used" CB rig.

All transceivers manufactured after January 1, 1977 must meet tighter technical standards for type-acceptance and also must have receiver certification. This doesn't mean that one cannot use other type-accepted units, but there is a cut-off date on manufacture and sales. The manufacture of non-certified (but type-accepted) units must cease by August 1, 1977 and marketing must terminate by the end of the year. They can be resubmitted for type-acceptance and certified to ensure compliance with the latest FCC technical standards.

So, for your own protection, look at the transceiver identification plate and be sure that it bears an FCC data or FCC type number.

All mobile and base transceivers are rated at essentially 4 watts radio-frequency output, the legal limit (the old 5-watt input limit no longer applies, even if the actual output is between 3 and 4 watts). Nearly all have a sensitivity rating of 1 microvolt (μV) or better. Modulation capability is nearly always rated at 100 percent, even if it is much lower when voice modulated. Where transceiver specifications vary most widely is the selectivity rating (more about that later).

Spec sheets appear to read alike, except in regard to size, weight, and gadgetry—which do not contribute to performance. Here are tips on what to look for, with some of the "finer points" which do make a difference in performance.

Basic Requirements. An AM mobile transceiver has the following basic controls: volume (on-off switch), squelch control, and channel selector. Such frills as an S/RF meter, illuminated channel selector, and transmitter-on lamp do not contribute to performance. You can talk and listen as far without these convenience features.

Reports from public service monitors and police officers who use CB radios indicate that, in most cases, transmission capability is satisfactory. However, some receivers are inadequate, especially in regard to adjacent-channel interference (bleedover) rejection.

Modulation Level. The FCC requires all type-accepted CB transceivers rated at above 2.5 watts to include an automatic modulation limiter that prevents overmodulation (greater than 100 percent). Some can achieve only low positive (upward) modulation, but many can be modulated more than 100 percent negative (downward).

Negative overmodulation causes interruption of the transmitted signal on peaks and is one of the prime causes of bleedover and splatter, particularly when an improperly adjusted power microphone is used. Units type-accepted after January 1, 1976 must be incapable of greater than 100 percent positive and negative modulation.

New transceivers, type-accepted and certified after January 1977, must be designed to attenuate carrier frequency harmonics at least 60 dB below carrier level so that TVI (television interference) will be minimized. (The FCC plans to increase this standard in the future to further minimize TVI.) Accordingly, when output power is 4 watts, the power level of no harmonic may exceed 4 microwatts (4 μW) under the existing 60 dB rule.

Output Power. Even if the spec sheet states that transmitter output power is 4 watts, the FCC limit for AM Class D CB transmitters, all sets of the same make and model do not deliver 4 watts. The actual output power may be between 3 and 4 watts. The variation is caused by differences in transmitter transistor characteristics. But don't worry about it. The difference at a distant receiver could hardly be noticed by the ear or the S-meter.

Receivers. The FCC does not set CB receiver standards except for its interference-producing capability. The FCC is not concerned with receiver sensitivity and selectivity, but manufacturers are since they have to be competitive. Listen to the rig you plan to buy (you don't need a license to do so). Switch channels to check intelligibility of male and female voices and children's voices. If you plan to use an external speaker, try one out. In most instances, sound quality will be

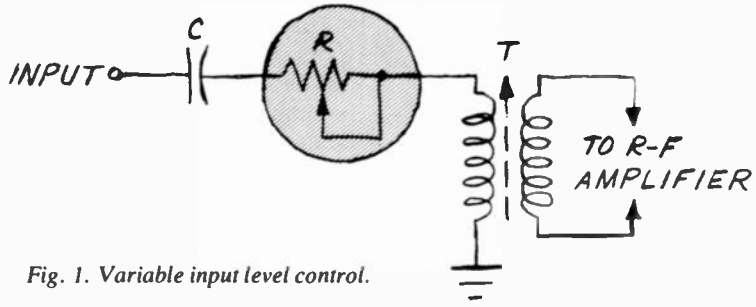


Fig. 1. Variable input level control.

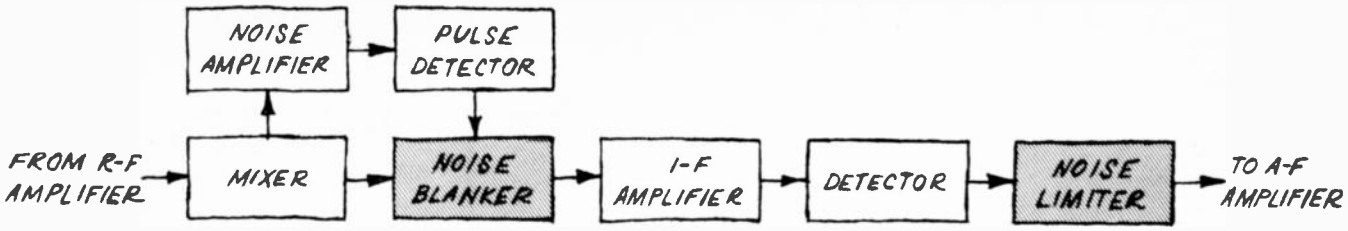


Fig. 2. Simplified block diagram showing location of noise blanker and noise limiter in receiver circuit.

improved. With very few rigs, however, the converse occurs.

Sensitivity. As stated earlier, most CB transceivers have a sensitivity rating of 1 microvolt or better—which is fine. When sensitivity is rated at 1 μV for 10 dB S + N/N, it means that an on-channel radio signal at the transceiver's antenna jack, having a level of 1 microvolt (1-millionth of 1 volt) will deliver 10 dB more audio to the speaker when modulated than when unmodulated. If sensitivity were significantly greater, receiving range may not necessarily be improved if the ambient electrical noise level masks very weak signals.

Selectivity. The better CB transceivers employ one or more selectivity filters that narrow the bandpass of the i.f. amplifier (s). If the ±10 kHz attenuation of the filter is 40 dB, for example, an adjacent-channel signal would have to be 100 times stronger (in voltage) than an on-channel signal to have the same effect at the output of the receiver and/or the automatic gain control (a.g.c.) circuit. If you're listening to a 5-microvolt signal, for example, the adjacent-channel signal would have to have a level of 500 microvolts at the receiver input. This doesn't mean the adjacent-channel signal will not affect your reception, but the 40-dB figure is a measure used by engineers. The higher the number, the less likelihood there is for bleedover of signals from channels on either side of the one switched in.

Even if a receiver has 60 dB adjacent-channel selectivity, an overly strong off-channel signal could overload the front end of your receiver and cause the a.g.c. to reduce sensitivity to on-channel signals. Since the CB channels are spaced only 10 kHz apart, it is difficult to design a receiver that will have both a sharp enough selectivity curve and immunity to strong off-channel signals without exceeding acceptable price limits for the general public.

On a spec sheet, the adjacent-channel (±10 kHz) rejection rating (in dB) is not the whole "selectivity" story. An important factor is how much of the signal passes through the i.f. filter's passband, as if it were a narrow doorway. The FCC permits only a maximum of ±4 kHz to do so. More often, CB manufacturers design receiver sections to allow only ±3 kHz to pass, since this is all that's really needed for intelligible voice communications. The leaves a 2-kHz guard band for each adjacent channel, thereby improving adjacent-channel rejection. A selectivity spec may also read ±3 kHz at −6 dB, with the −6 dB figure being the effective voltage point on the passband curve. So look for both ways to specify "selectivity," as one has an effect on the other. If this spec is less than ±2.5 kHz, for example, voice intelligibility would be impaired, while the adjacent-channel rejection figure would look especially good.

Only a limited amount of selectivity is provided by the receiver front end. A 23-channel receiver must pass all signals within the 26.96-27.26-MHz range, and a 40-channel unit must pass all signals within the 26.96-27.41-MHz range. The passband must be at least 450 kHz wide, although it is actually much wider since it would be very expensive to include an input filter that cuts off at 26.96 MHz and at 27.41 MHz. Since the r.f. amplifier and mixer input must be broadbanded, these stages do not add to adjacent-channel rejection; only to rejection of out-of-band signals.

Check image rejection too. The higher the number (−40 dB is better than −35 dB), the less possibility there is of another channel's signal sneaking through on the channel you are on.

When you tune an FM broadcast receiver, the r.f. amplifier and mixer input are tuned simultaneously to the frequency indicated by the dial. But in a CB receiver, channel selection is accomplished by changing the frequency of the local oscillator (s) without retuning the r.f. amplifier and mixer to a specific channel. The "front end" (where the antenna feeds in) is the mouth of the funnel whereas the r.f. amplifier (s) is the spout.

Input Level Control. One of the more notable features of some CB receivers is the so-called r.f. gain control, or at least a local/distance switch. Without this control, a very strong signal can overload the front end of a receiver. Some CB sets have an effective a.g.c. (automatic gain control) circuit that helps with this problem. It automatically reduces receiver amplification on strong signals. But, it might not totally prevent overload. A better way is to control the level of the signal at the receiver input.

The circuit of a continuously variable input level control is shown in Fig. 1. The signal from the antenna is fed through capacitor *C* and potentiometer *R* to the primary of r.f. input transformer, *T*. When the resistance of *R* is close to zero, the signal is not attenuated. As the resistance of *R* is increased, more of the signal is dropped across *R* and less of it reaches the primary of *T*. Thus, it varies the level of the signal reaching the receiver input, but does not vary the gain of the receiver. "Riding gain" is a popular, but inaccurate, term used in the audio field when audio level is controlled but not amplifier gain. For example, a receiver volume control is used to vary the level of the audio signal fed to the input of the audio amplifier, not the gain of the amplifier.

With a typical true r.f. gain control, a control is used to vary the gain of the field effect transistor (FET) that functions as the r.f. amplifier. As the control's resistance is increased, the source bias rises, causing the gate to become more negative with respect to the source, thereby reducing the gain of the FET. In addition to manual control of r.f. gain, a.g.c. voltage applied to the gate through a resistor automatically regulates the gain of the FET. This system costs more than the level control which, in turn, costs more than a local/distance switch setup.

Either an r.f. level control or an r.f. gain control enables a CB operator to offset the effects of overly strong signals. By reducing the gain of the r.f. amplifier or by adding attenuation in the input signal path, adjacent-channel bleedover and on-channel overload can be minimized.

Delta Tune. The "delta tune" feature included in many CB sets would not be at

RELATIVE MERITS OF FEATURES

Feature	Functions	*Improve Performance?
Amplified AGC	Improves immunity to overload by strong signals, and maintains more constant sound level from speaker as radio signal level varies.	YES
Channel Selector Illumination	Enables reading channel number in the dark.	NO
Clarifier Control	Enables clear reception of SSB signals.	ESSENTIAL (for SSB only)
Controls in Microphone	Enables remote control of transceiver.	NO
Crystal Synthesizer	Enables 23-channel operating using only about 14 crystals.	NO
Delta Tune	Enables clearer reception of off-frequency channels, and compensates for channel error.	SOMETIMES
Electronic Switching	Switches circuits from receive to transmit mode when PTT switch is keyed (more reliable because it eliminates need for relays).	NO
External Speaker Jack	Enables use of better-quality external speaker	YES
FET or MOSFET Amplifier	Provides greater immunity to interference and overload.	YES
FET or MOSFET Mixer	Provides greater immunity to intermodulation and overload.	YES
LED Channel Indicator	Provides electronic display of channel number.	NO
Microphone Gain Control	Enables adjustment of modulation level (can cause distortion if misused).	SOMETIMES
Modulation Lamp	Indicates that modulator is operating, but not actual modulation percentage.	NO
Noise Blanker	Blanks out noise pulses and reduces ambient noise.	YES
Noise Limiter	Reduces impulse-type noise by limiting amplitude of pulses.	YES
On-Off Lamp	Indicates that transceiver is turned on.	NO
PA Capability	Enables use of transceiver as a public address system.	NO
PLL Synthesizer	Enables use of few crystals for 23- or 40-channel operation.	NO
Polarity Protector	Protects transistors in the event battery cable leads are reversed.	NO
Positive/Negative Ground	Enables use of transceiver in any vehicle with 12-volt electrical system.	NO
Power Microphone	Provides stronger modulating signal to transmitter (can cause distortion if misused).	YES
Priority Channel Scan	Automatically scans a specific channel (such as 9) when transceiver set to any other channel.	NO
RF Gain Control	Enables reduction of receiver sensitivity to minimize overloading and bleed-over.	YES
RF Protector	Provides a warning and/or protects final r.f. power amplifier stage if antenna system SWR excessive.	NO
Selectivity Filter	Improves receiver selectivity	YES
Squelch	Mutes speaker when no signal is received.	ESSENTIAL
S/RF Meter	Indicates relative strength of received signal and relative output power.	NO
SSB Capability	Enables transmission and reception in LSB, USB and AM modes.	YES (in SSB mode)
SWR Meter	Indicates antenna system condition.	NO
Tone Control	Enables lowering of audio frequency response to suit ear or mask out high-frequency noise.	SOMETIMES
Transmit Lamp	Lights when transceiver keyed on.	NO
UL Approved	Certification that transceiver has been approved by Underwriters Laboratories.	NO
Voltage Regulator	Stabilizes voltage to critical stages.	YES

all necessary if all CB transmitters and receivers were absolutely on-frequency. But they aren't!

Assuming that your receiver's local oscillator (s) is on frequency, delta tune will enable you to offset the frequency error of a distant transmitter. On the other hand, if your receiver's local oscillator (s) is off-frequency, delta tune will enable you to offset the frequency error of your receiver. And, delta tune can help offset the frequency error of both the distant transmitter and your receiver. If the combined error is 2600 Hz, the i.f. (assuming it's 455 kHz) could be centered at 452.4 kHz or 457.6 kHz, with one of the sidebands extending beyond the i.f. bandpass. Typically, a delta tune control has a ±800 Hz to ±1000 Hz range.

With AM/SSB units, the control is called a "clarifier." In truth, the specification tolerance set down by the FCC is stringent enough to make the need for a delta tune control superfluous for AM units. It's imperative to have a clarifier control for SSB, though.

Channel Determination. Whereas 23-channel CB sets two years ago employed 14 crystals to enable transmission and reception on 23 channels, using the heterodyne principle for frequency synthesis, the late-model 23-channel sets and all known 40-channel sets employ a digital PLL (phase locked loop) frequency synthesizer. The latter requires only a few crystals for all-channel operation. This is important to the manufacturer since crystals cost money. But to the user it means little in terms of actual performance. It does, however, make it easy to obtain, as a byproduct, digital channel number readouts.

Noise Reducers. All CB transceivers today contain an automatic noise limiter (a.n.l.), either permanently connected internally or switchable. It does a good job of limiting pulse-noise interference. But, a noise blanker is far more effective. An a.n.l. is connected in the circuit after the detector. In contrast, the noise blanker, shown in Fig. 2, is connected ahead of the detector where it senses a noise pulse and cuts off the signal flow ahead of the detector. The deluxe CB sets often include both a.n.l. and a noise blanker. Switchable is better.

Indicators. You don't really *need* indicators except one that shows you which channel has been selected. Yet, most CB sets have an S/RF meter, and some deluxe units also have an SWR meter. Many also have a transmitter-on lamp, power-on lamp and/or modulation lamp. They're nice luxuries that are most useful when needed, which is once in a

BASIC CB TRANSCEIVER CONFIGURATION

Mobile Unit	Transceiver designed for installation in a vehicle; usually operates from a 12-volt d.c. electrical system.
Base Unit	Transceiver designed for use at a fixed location, normally operates from a.c. power line (some can also be operated from a 12 V d.c. source).
Walkie-Talkie	Handheld transceiver operable from self-contained battery.
Solid State	Transceiver uses only semiconductors, such as transistors, ICs and diodes, but not tubes.
Integrated Circuit(s)	Transceiver employs one or more integrated circuits (ICs) which may contain the equivalent of many transistors or diodes or both.
Hybrid	Transceiver uses one or more tubes in addition to semiconductors, such as transistors, ICs and diodes.

while. If you've got the extra money, though, they are worth having.

An S/RF meter indicates the relative level of an incoming signal in S units from S-1 (barely audible) to S-9 (extremely strong). Some are calibrated to indicate S-9 when a 50- or 100- microvolt signal is being received, where every S-unit below S-9 indicates a 5-dB (drop to 56 percent) weaker signal. But, don't bank on it. The meter calibration may be arbitrary. However, you can be sure that an S-8 signal is weaker than an S-9 signal. The main value of an S-unit display is being able to respond to a request for a radio check by saying "You're putting in an S-5 signal, Good Buddy." (Don't ever underestimate this "social" benefit!)

When transmitting, the S/RF meter indicates the "relative" output power of your transmitter, not the actual watts. If meter indication suddenly drops, you can suspect transmitter trouble. If it suddenly rises, chances are that something has happened to your antenna system.

Very few CB sets have a built-in SWR meter (a separate meter or one of the functions of a combination S/RF/SWR meter) that will alert you to antenna system malfunction. Unlike a detachable separate SWR meter, a built-in one is there all the time. It's a convenience to have it if you install your own antenna and for occasionally checking for possible antenna problems.

When you talk into the mike when transmitting, the S/RF meter indication should rise. (If it drops, have a technician check your rig because modulation percentage is more negative than positive.) If you select a CB set that has a modulation lamp, the lamp will flicker as you talk, indicating that modulation is being applied to the transmitter. But it doesn't indicate modulation percentage, either positive or negative. It only indicates that when you talk into the mike the modulator is working.

It's a handy indicator, but a radio check from another CB user can tell you if your modulation is OK. For example, if you get a report that you're putting out an S-9 signal, but your voice is weak, it is an indication of low modulation (low talk power).

When you push on the mike button to transmit, you will know if you're on the air if you get a response. A transmitter-on lamp will tell you that you have operated the PTT mike button, but won't tell you if your transmitter is operating (your S/RF meter will). The power-on lamp serves as a reminder that your CB set has been turned on. It could be the same one that illuminates the channel selector dial. Thus, if you can read the channel numbers you will know that the set is on.

One of the more interesting developments is the LED (light emitting diode) channel indicator. As you select channels, the number of the selected channel is displayed in glowing numerals as on an electronic calculator.

Transceiver Packaging. Remotely controlled mobile transceivers have been introduced of late to minimize CB radio theft. They come with a microphone that contains the basic operating controls and the channel indicator, generally a LED display. The transceiver box may be installed under the seat, hidden away under the dash, or in the trunk. It is connected to the microphone and through a long multi-conductor cable.

Also designed to make them more difficult to steal are the new in-dash CB transceivers that fit in the place intended for a car radio. They are available in combination with an AM radio, AM-FM stereo receiver, and AM-FM stereo receiver plus either a cassette or 8-track cartridge tape player. They usually cost more than a conventional mobile transceiver, but they save space and provide multiple functions.

Most popular by far, of course, are the conventional mobile transceivers that are designed for mounting under the dash or on the transmission hump. Using a quick-release mount, the transceiver can be removed and put in the trunk, or taken with you when the car is parked.

Most are designed for positive/negative ground electrical systems. Some

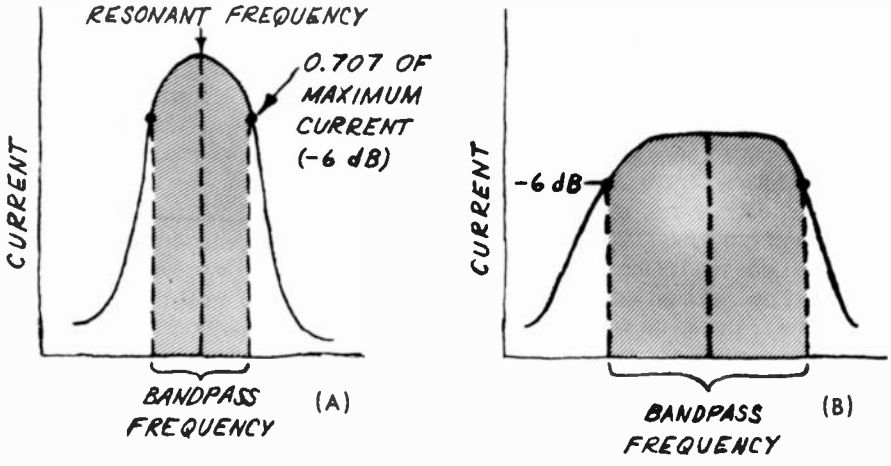


Fig. 3. (A) "Window" in which signal passes through receiver's tuned circuit. (B) Bandpass is wider, permitting broader range of frequencies to pass through. In tightly spaced channels, signals from adjacent channel would be passed to amplifier stages. More selective filters are used to avoid this, but if too selective would limit frequency range.

are designed only for use in vehicles with a negative-ground electrical system, which is used in most cars. The advantage of a pos/neg ground type of set is that it can be used in any vehicle with a 12-volt electrical system.

Base Stations. You can use a mobile transceiver as a base station by powering it from an electric outlet through an a.c. adapter. Some of these adapters contain a front-facing speaker that is connected to the external speaker jack on the transceiver. Even walkie-talkies can be used as base stations in conjunction with an a.c. adapter and an external antenna system.

More convenient and usually more attractive is a transceiver specifically designed for base-station use. It contains an a.c. power supply to enable direct operation from the power line. Some also have a built-in voltage regulator that prevents loss of sensitivity and output power when line voltage is normally low and protects transceiver components when line voltage is abnormally high. The regulator maintains transceiver performance that could be affected by dips and surges in power-line voltage. Base-station units generally have more control frills than mobile types and invariably incorporate a front-panel headphone jack and larger speaker.

AM or SSB? It is easy to decide whether you want one or more mobile units for use in cars, boats, and other conveyances and/or a base station for the home or office, or for both. Many prospective CB users have never heard of SSB (single sideband) CB sets. Others have and ask themselves "should I buy an AM or SSB rig?"

According to a high FCC official, more than 90 percent of CB sets are AM-only types. But according to several CB dealers, there are more inquiries about SSB sets than in the past and many AM-only users are upgrading to SSB. Why?

SSB is a form of AM (amplitude modulation) that is more efficient than double sideband (conventional) AM. The result is greater talk range and two separate SSB channels in the spectrum space that a single AM channel would occupy.

When you use AM, your transmitter generates a carrier and two sidebands (AM is sometimes called "double sideband;" SSB is actually "AM" too, but uses only one sideband). Both of the sidebands (upper and lower) contain the same information while the carrier contains no information. The latter simply serves as a vehicle to carry information. Unfortunately, this vehicle uses up most of the power, leaving little left for the intelligence (audio). For instance, if your carrier power is 3 watts, the power in each sideband will be less than 0.75 watt, and then only during those voice peaks at which positive modulation approaches 100 percent. Keep in mind, too, that only one sideband is finally used.

In an SSB transmitter, the carrier and two sidebands are also generated. However, the carrier and one of the sidebands are suppressed (not transmitted) and only one sideband, which contains all of the available power, is transmitted. No signal is transmitted except when you talk into the mike. You can observe this on a CB radio's S meter, where the indicator moves up and down scale as the other party talks and drops to zero when talk ceases. When receiving AM, in contrast, the indicator remains steady on an S number. Because of the nature of the SSB wave, the FCC allows SSB transmitter output up to 12 watts p.e.p. (peak envelope power), whereas AM carrier output power is limited to 4 watts rms (root mean square) maximum.

If SSB is so much better, why use AM at all? For two reasons: (1) To demodulate an SSB signal, the carrier that was suppressed at the transmitter must be re-created at the receiver. This circuitry costs money. (2) Operating an SSB transceiver requires a minor "skill." An SSB set has a clarifier control that must be adjusted to clarify the reproduced voice which otherwise might sound like Donald Duck or Tubby the Tuba, or be just plain unintelligible. This is a slightly bothersome requirement, especially when one is driving.

There are very few SSB-only transceivers. Most are combination AM/SSB units that are operable in any of these modes: AM, LSB (lower sideband) and USB (upper sideband), on all channels. Some manufacturers advertise that their 23-channel AM/SSB sets have 69-channel capability, or 40-channel rigs with 120-channel capability. This claim is not precisely correct. In the LSB mode, you occupy the lower half of the spectrum of a channel, and in the USB mode the upper half of the spectrum of a channel. The selected channel cannot be shared at the same time by an AM station when either or both SSB signals are present.

Although more costly, an SSB transceiver can give you greater range. Also, there are few children using SSB and operators are generally more serious and very interested in following FCC rules and regulations.

External Speakers. Most CB sets have an external speaker jack to which a remote speaker or low-impedance headphone can be connected. When either is plugged in, the built-in transceiver speaker is automatically disconnected. In a noisy environment this is a good feature. You can install a more efficient external speaker aimed to direct the sound at you.

Many CB sets also have a p.a. (public address) speaker jack. It enables use of the transceiver's audio amplifier as a p.a. amplifier. With the CB/PA switch set to the PA position and with an external speaker plugged into the PA speaker jack, your voice will be amplified and reproduced as you speak into the microphone. In the PA mode, the transceiver will not transmit. This facility isn't used too often, but it should be. For example, installing a speaker under the auto's hood will give you a fine "hailing."

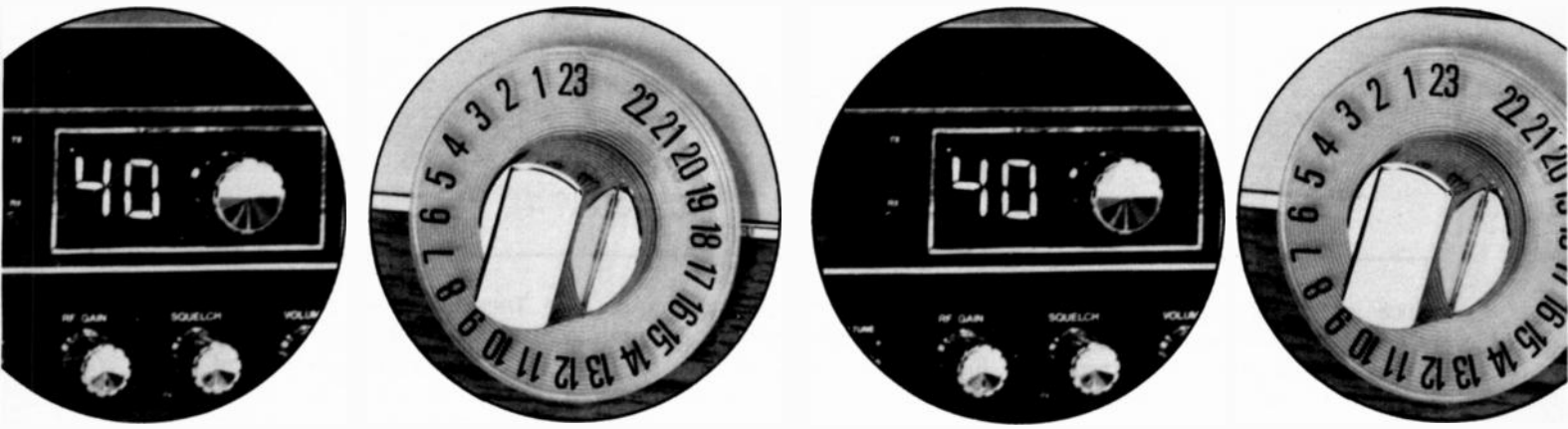
The Final Choice. Obviously, there are a host of factors to be considered when choosing a CB transceiver. These include size (do you have room under the dashboard, for example), aesthetics, brand name (are the manufacturer's models widely distributed), and dealer reliability, among them.

Be sure to check out magazine test reports such as those that appear in POPULAR ELECTRONICS, visit more than one dealer, check out the experiences of active CB-ers. If you don't know any of the latter, a CB dealer can generally tell you when a CB flea market or "coffee break" meet is being planned that's open to one and all.

There aren't many 23-channel units on the market now. Remaining ones are being sold at rock-bottom prices, but most don't perform up to the standards of the new 40-channel CB transceivers. Moreover, as more and more CB'ers use the added 17 channels to move away from the overcrowded ones, you'll be left out in the cold without them. Also, the 40-channel rigs enhance the radio communications environment because they cause less interference to other two-way radios, TV, and audio gear. More important to most people are the present extraordinarily low prices for 40-channel units, which are likely to rise substantially soon when distress sales of older 23-channel models no longer lure buyers.

And, if you're a "Cadillac" buyer with extra dollars to spend, do keep your eye on the high-technology 40-channel rigs that use microprocessors and calculator-like pushbuttons. ◇

PERFORMANCE CAPABILITIES OF 40-CHANNEL CB TRANSCEIVERS



RF power output and modulation capabilities of expanded-band transceivers are examined.

BY BILL SCHERER*

RUMORS have been circulating to the effect that the new 40-channel CB transmitters are not as "powerful" as those in former 23-channel transceivers. Deficiencies such as lower r-f output, low modulation, etc., are principally cited. To set the record straight, these statements are unfounded. As a matter of fact, even the FCC has seen fit to put these rumors to rest by issuing Public Notice No. 77385 titled "CB 40 Channel Power Limits Unchanged."

To make sure of the situation for ourselves, we tested three typical 40-channel AM transceivers and compared our results to those obtained with older 23-channel rigs. Two of the transceivers were mobile types, while the third was a base station. All three were FCC type-accepted.

What the FCC Rules Say. The FCC's technical regulations still hold for *both* 40- and 23-channel CB transceivers. Specifically, the r-f carrier output must be limited to 4 watts on AM, with modulation held to within 100% on both the negative and the positive peaks. Single-sideband output must be held to 12 watts maximum peak-envelope-power (PEP), and a means must be provided for preventing the modulation from exceeding this or the rated power of the transmitter.

In the past, FCC type acceptance was often predicated on the manufacturer's say-so. The manufacturer simply presented his data to the FCC and received type acceptance as a matter of course. The eventual result was that many AM transceivers never really met the regulation-specified parameters, although they reached the market with FCC approval. While these transmitters usually were within the 4-watt output power limit, severe overmodulation, particularly on the negative peaks, was often possible, especially when using "power" microphones. This caused clipping carrier breakup, which, along with frequently used compression, produced a somewhat higher average modulating power. The foregoing was obtained at the price of high distortion and severe adjacent-channel splatter,

Strict adherence to the modulation capabilities is now being enforced with the new 40-channel transceivers. Now, transceivers must undergo type-acceptance tests at the FCC labs or the equivalent labs in Japan. Any adverse perfor-

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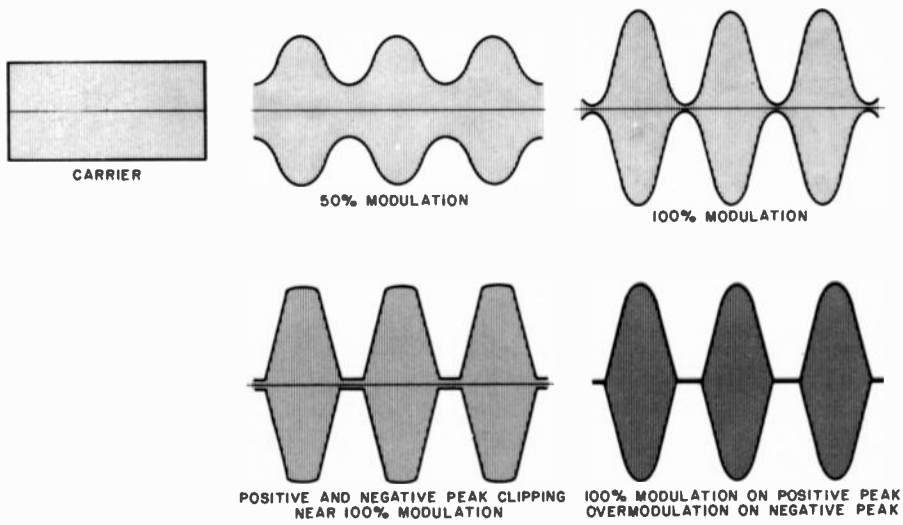


Fig. 1. AM r-f envelope displays on an oscilloscope with various degrees of modulation.

mance is no longer acceptable. This may have given rise to the false notion that the apparent average overmodulated power of older CB transceivers made them better than the new transceivers.

What We Observed. All three of the 40-channel AM transceivers we selected at random for our tests delivered 4 watts of r-f carrier output power. Transceiver A (mobile) employed a bootstrap automatic-modulation-control (amc) system at the microphone amplifier to hold the modulation on both peaks to just 100%. Even so, the excellent characteristics of the amc system allowed a very high *average* modulating power to be maintained within the required modulation limits, with very low distortion.

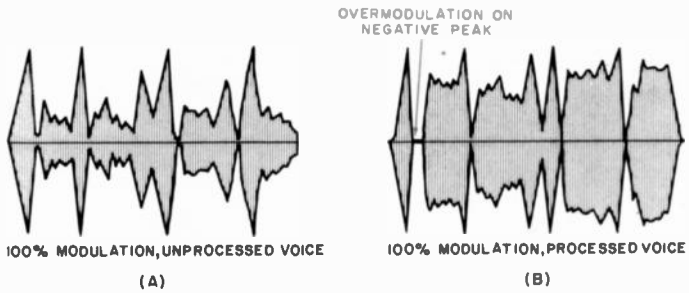


Fig. 2. R-f envelope display for complex wave (voice). Note higher average level for processed speech.

Transceiver B (base station) employed a low-level audio-frequency clipper and a low-pass filter (to minimize distortion products) that produced results similar to those obtained with Transceiver A, but with occasional peaks to 100%. Again, a high average modulating level was obtained.

Transceiver C (another mobile rig) employed still another type of amc system that also yielded high average modulation with an occasional insignificant degree of overmodulation on the negative peak.

All three of our test transceivers produced a high degree of clean, average modulated output power. The output in all three cases was as great as, if not greater than, that of most of the older 23-channel transceivers. Furthermore, no matter how loud we spoke into the microphone, we observed the same results, and the adjacent-channel splatter held to within 60 dB down (at greater than ±5000 Hz from the carrier frequency). Compare this figure with the 40-to-55-dB splatter figures obtained with many 23-channel transceivers of only last year and you will understand how much improved the new 40-channel tranceiver designs really are.

It should be noted that, for a given degree of relative average modulation, the aural difference between a 90% and a

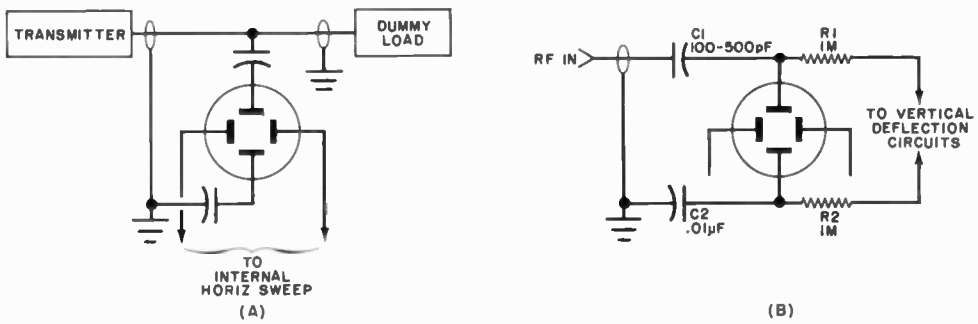
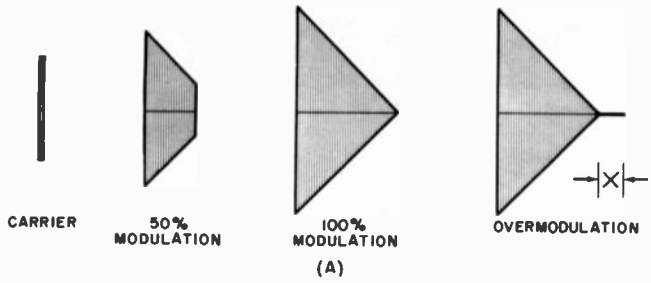
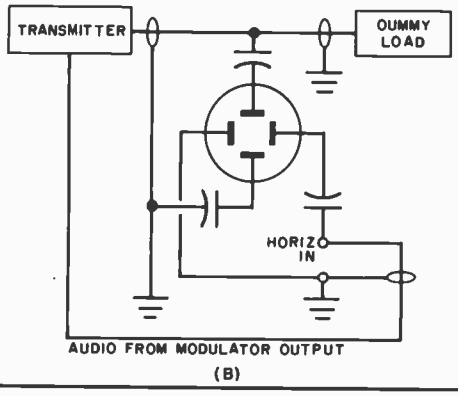


Fig. 3. Scope connections with r-f input connected directly to vertical plates (A) and temporary modification to scope not equipped for r-f inputs (B).





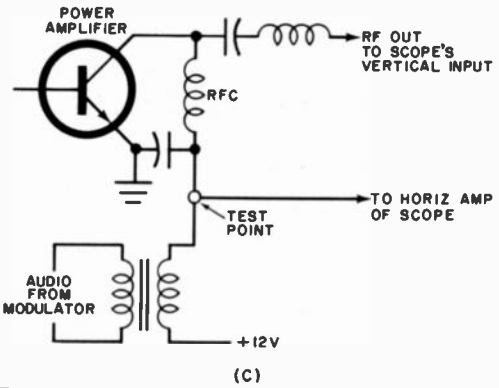


Fig. 4. Trapezoid displays (A) are obtained by feeding r-f to vertical plates and a sample of modulator's output to horizontal input (B). Hookups to transceiver are at (C). This is a more accurate method of indicating overmodulation, though r-f envelope displays are better for noting high average modulation.

100% modulated signal is minimal and insignificant. It amounts to less than 0.5 dB. Therefore, if your transceiver does not always quite reach a 100% modulation level, there is no need to be particularly concerned.

If you want more power (and range), you can always communicate via SSB, which is a considerably more efficient medium than AM. For a given expended power, SSB gives an effective signal-level increase of up to 9 dB over AM. This translates into an eight-fold relative power improvement, which is equivalent to raising the 4-watt output power of an AM transmitter to 32 watts. Additionally, by engaging the USB or LSB mode, a 40-channel transceiver yields up to 80 possible SSB communication channels, thereby saving spectrum space and thus alleviating user crowding.

Viewing Modulation Waveforms. Now let us see how various modulating conditions are displayed on the CRT of an oscilloscope. Typical r-f envelope patterns for a carrier modulated with a steady-amplitude, single-frequency test tone are shown in Fig. 1. The waveforms in Fig. 2 illustrate the display for a voice-modulated carrier without (A) and with (B) speech processing. These waveforms can be displayed by feeding the transmitter's output (using a dummy load in place of the antenna) directly to the vertical deflection plates of an oscilloscope (see Fig. 3A).

If your oscilloscope does not have provisions for direct r-f input, you can make the appropriate connections temporarily with isolating resistors (to prevent r-f energy from backing up into the other circuits in your scope) as shown in Fig. 3B.

The waveforms shown in Fig. 4A illustrate a trapezoid display that is obtained by feeding the r-f directly to the scope's vertical-deflection plates and applying a sample of the modulator's output signal to the scope's ac-coupled horizontal input. (See Fig. 4B for details.) The hookups to the transceiver are illustrated in Fig. 4C. Note that the modulator signal is picked off the test point on the +12-volt power bus side of the choke (rfc) in the power amplifier's collector circuit. (If the power-amplifier stage is emitter modulated, a similar test point in the emitter circuit is used for the modulator signal pickoff.) A test point is usually provided at the appropriate locations in the circuit.

The waveforms shown in Fig. 5 illustrate the r-f envelope displays of an SSB signal obtained with the scope setup shown in Fig. 3A. Two nonharmonically related test tones (such as 800 and 1800 Hz) are applied to the microphone input. Their levels are equalized to bring the displayed "valleys" together at the horizontal axis for this test.

In Conclusion. As you can see from the tests of three randomly selected new 40-channel AM CB transceivers (from different manufacturers), there are no real grounds for the rumors pertaining to inferior performance. This does not mean that every 40-channel CB transceiver exhibits top performance. There were, in truth, some models that performed poorly in the early FCC test program due to the zeal of some manufacturers to obtain quick FCC type acceptance. These models were generally warmed-over 23-channel designs which, in order to meet new FCC radiation and spurious response requirements, were less powerful than they should have been. (Lower than maximum power or modulation capabilities are not FCC test criteria.) But, by and large, the new transceivers are capable of superior performance when compared with the older 23-channel transceivers we have been using. ◇

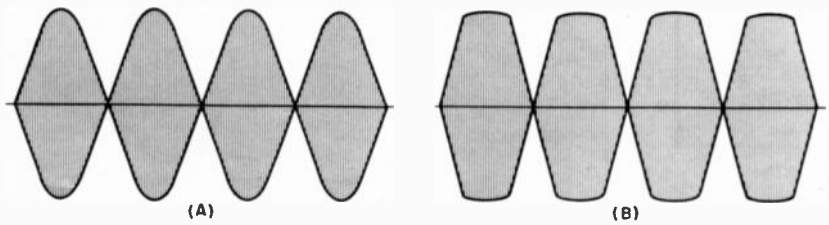


Fig. 5. R-f envelope displays of SSB signal: (A) shows good linearity and low distortion; (B) shows effects of excessive drive or overmodulation.

HOW TO CORRECT CB MOBILE NOISE

Identifying and eliminating electrical noise in automobiles.

ANTENNA limitations aside, electrical noise is the major factor that impedes mobile CB communications. In fact, it can be so severe that it will override a transceiver's noise-limiting or noise-blanking circuits.

Noise appears in several different forms, each coming from a different part of the vehicle's electrical system. Although this interference is a pesky critter to tame, it *can* be done very effectively if you track it down in a logical, consistent manner.

Identifying the Source. Each type of electrical noise you hear through the transceiver gives a clue to its identity by its characteristic sound. Let's briefly examine these sounds, and then we'll develop methods for dealing with them. It's very important to first find out where the interference is coming from—otherwise you'll quickly become frustrated.

- *Ignition noise,* the most common type, is a popping sound that increases in tempo with higher engine speeds. It occurs whenever the engine is running (even when car is standing still), but stops instantly when ignition is shut off at fast idle.
- *Generator and alternator* noise is a high-pitched musical whine, increasing in frequency with higher engine speed. It does *not* stop instantly when the ignition is shut off at fast idle.
- *Voltage regulator noise* is a ragged, raspy sound occurring at an irregular rate, and is usually heard in concert with generator or alternator whine. It too does not stop instantly when the ignition is shut off at fast idle.
- *Instrument noises* are hissing, crackling, or clicking sounds, occurring irregularly as the gauges operate, usually worse on rough roads. You can verify this source by jarring the dash. A loud intermittent hash, sometimes worse when the dash is jarred, is caused by the voltage limiter used with fuel and temperature gauges. This limiter is usually mounted on one of the instruments or behind the instrument cluster.
- *Accessories,* such as blower fans, windshield wipers, and turn signals will generate hash or clicks.
- *Wheels and tires* sometimes produce a ragged sounding pulse, irregular popping or a rushing sound. It usually occurs in dry weather and at higher speeds, and disappears when the brakes are lightly applied.
- *Frame and body noise* is produced when sections of the auto frame and body not properly bonded together intermittently come in contact with each other.

Tracing Elusive Noise. Sometimes you won't be able to locate the noise source immediately from the previous descriptions. If so, you should try these two tracing techniques. The first is called the "pigtail check." All that's needed is a conventional auto bypass capacitor, a short lead, and two clips—one large and one small. (The capacitor acts as a short circuit to noise, but is an open circuit to d.c.) Connect a large clip to the ground side of the capacitor, and the lead and small clip to the "hot" side. (See Fig. 1.) Securely attach the large clip to the vehicle ground (body or engine block), and clip the hot side to all +12-volt points under suspicion. If a device is generating noise, the noise should disappear when the device's positive supply is bypassed with the capacitor.

The sniffer coil is another noise detector, and is used with the transceiver or an auto radio. First, disconnect the antenna. Then wrap 50 turns of insulated (bell) wire into a coil two inches in diameter and mount it on a wooden pole. Using a few feet of lamp cord, connect one side of the coil to the receiver or transceiver antenna jack, and the other side to ground. (See Fig. 2.) Start the engine, turn on the radio (with the noise limiter or blanker *off*), and probe around the engine and car body with the coil. Bounce or shake the vehicle while probing. You will hear very high noise levels when the probe is near the source.

Interference Suppression. Now that you have located the point(s) from which the interference emanates, you can follow these steps to eliminate it.

Alternator. Clean the slip rings and make sure the brushes are making good contact. Install a 0.5-μF coaxial capacitor at the OUTPUT terminal, as shown in Fig. 3. Be sure the capacitor can handle the maximum alternator current. Do *not* connect a capacitor to the alternator FIELD terminal.

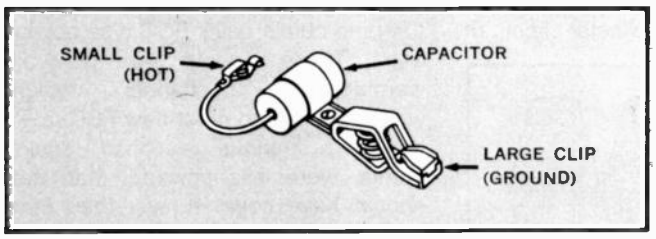


Fig. 1. The pigtail check. Clipping the capacitor across noisy electrical devices will silence them.

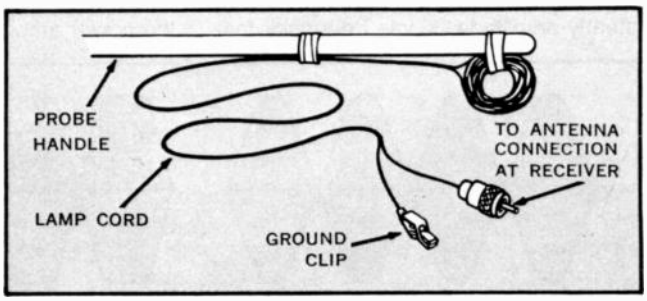


Fig. 2. Sniffer coil. Using coil with your transceiver will let you to track down noise sources.

All diagrams courtesy Champion Spark Plug Company, Toledo, Ohio.

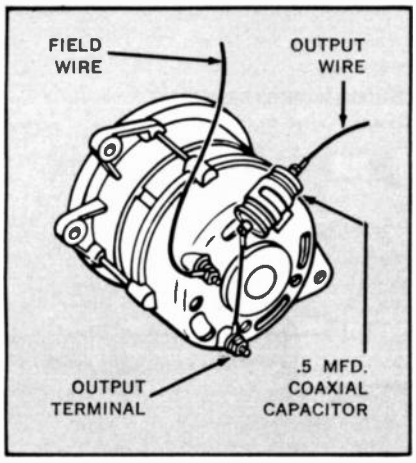


Fig. 3. Installing coaxial capacitor will silence alternator whine.

Generator. Clean the commutator and make sure the brushes are making good contact. If the commutator is badly worn, have the generator reconditioned. Then remove the factory-installed capacitor from the ARMATURE terminal, and install a 0.5-μF coaxial capacitor. Be sure it is rated to handle the maximum generator current. Do *not* connect a capacitor to the generator FIELD terminal.

Voltage Regulator. A typical generator regulator has three contacts. Install 0.5-μF coaxial capacitors as close as possible to the ARMATURE and BATTERY terminals. (See Fig. 4.) Some alternator regulators are solid-state, but most are single or double contact units. A single contact unit requires a 0.5-μF coaxial capacitor at the IGNITION terminal, and the double contact regulator requires a second capacitor at the BATTERY terminal. Be sure the coaxial capacitors are rated to handle the maximum generator or alternator current. Do *not* connect a capacitor to the regulator FIELD terminal. An RC filter should be connected from this terminal to chassis ground if additional suppression is required. It can be obtained from the regulator manufacturer or from an auto supply house.

Instruments. Gauges and sender units can usually be silenced by installing 0.5-μF capacitors at their terminals. If the voltage limiter is generating hash, install a 0.5-μF capacitor at the battery terminal of the limiter. Alternatively, a 0.1-μF disc capacitor can be connected directly across the limiter terminals. A stubborn case might require a hash choke (available commercially) in series with the battery lead.

Accessories. Blowers, windshield wipers, and turn signals can be suppressed by installing 0.25-μF capacitors at their terminals.

Frame and Body Bonding. Areas suspected of generating noise (or proven so by the sniffer coil) can be silenced by bonding to the main chassis ground. Unfortunately, this is often no more than a hit-or-miss proposition. Location of the bonding points is sometimes critical, and a few inches either way can make the difference between good results and none at all. Bonding kits are available from some radio manufacturers. Follow their directions carefully. Typical bonding locations include:

(a) Corners of engine to frame
(b) Exhaust pipe to frame and engine
(c) Both sides of hood
(d) Both sides of trunk lid
(e) Coil and distributor casings to engine and fire wall
(f) Air cleaner to engine block
(g) Battery ground to frame
(h) Manifold to engine and frame
(i) Steering column, oil gauge and other lines where they pass through fire wall
(j) Front and rear bumper supports to frame
(k) Radiator to supports

Heavy copper or aluminum braid should be used with self-tapping screws, tooth-type lockwashers, and wire lugs. Bonding straps must be as short and heavy as possible.

Wheels and Tires. Wheel static can be cured by installing static collector rings or springs inside the wheel caps. Tire static can be eliminated by putting antistatic powder inside each tire. This substance is available at auto supply houses, and comes supplied with an injector tool and instructions.

Ignition Noise. This is by far the most common and severe form of mobile electrical noise. It occurs when a high voltage is impressed across a spark plug, causing an electrical discharge containing energies that extend beyond the 27-MHz Citi-

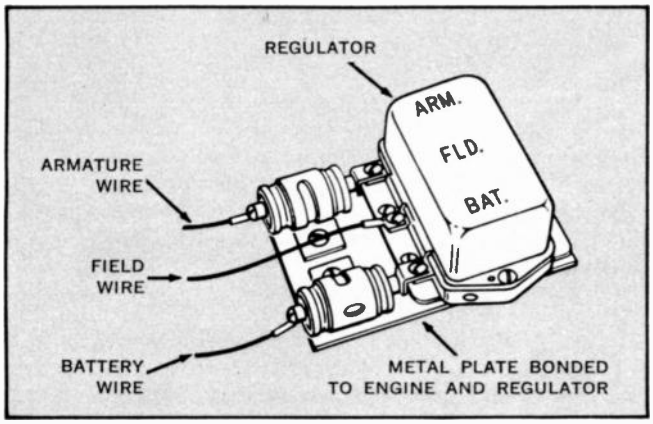


Fig. 4. Coaxial capacitors will eliminate noise from the voltage regulator.

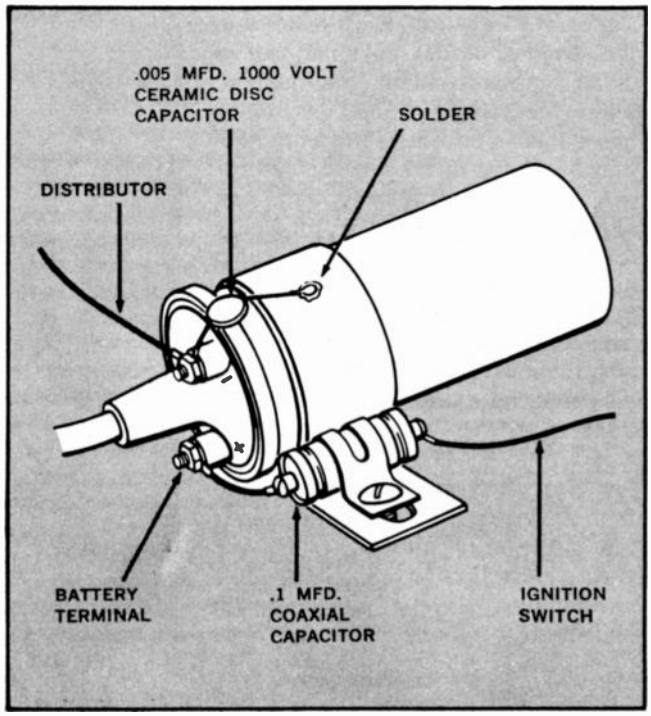


Fig. 5. Installing capacitors on the low-voltage side of the coil.

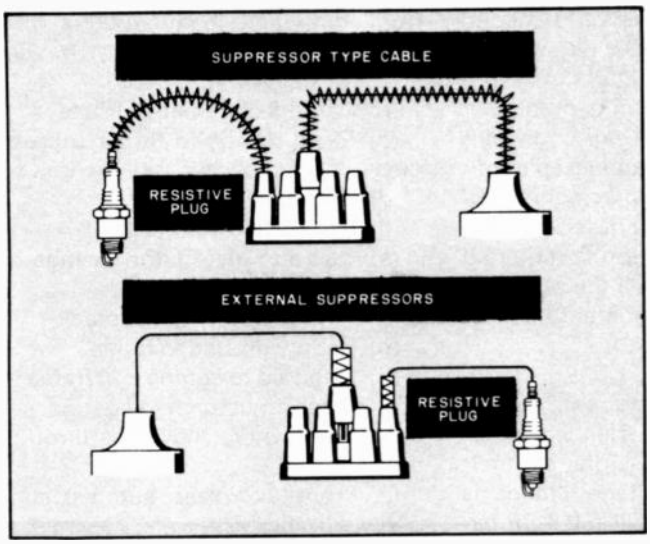


Fig. 6. Two ways to use resistive suppressors: (Top) resistive plugs and resistive cable, (Bottom) resistive plugs, external suppressors, and non-resistive cable.

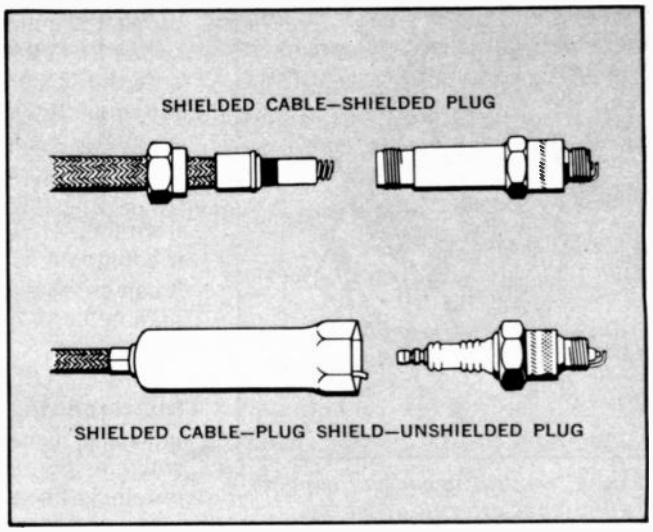


Fig. 7. Connecting high-tension leads to shielded or unshielded spark plugs. See text as to different ways this can be done: home-made "cans" or shielded plugs.

zens Band. To make matters worse, the high-tension lead running from the distributor to each plug acts as an antenna. You can't use capacitors to filter out the radio-frequency (r-f) energies, because they would make it harder for the plug to fire. Besides, the cost of capacitors that can withstand 30,000 or more volts is prohibitive.

However, capacitors can be used in the low-voltage ignition circuit which sometimes contributes to the interference. Install a 0.1-μF coaxial capacitor as close as possible to the BATTERY (+) terminal of the ignition coil, as shown in Fig. 5. Then install a 0.005-μF, 1000-volt disc ceramic capacitor at the coil DISTRIBUTOR terminal. Finally, remove the ignition coil and its mounting bracket. Clean the paint (if any) off the bracket and the engine block, polishing for a clean metal-to-metal connection. Then reassemble tightly. In many cases this helps reduce the amount of noise radiated by the ignition system.

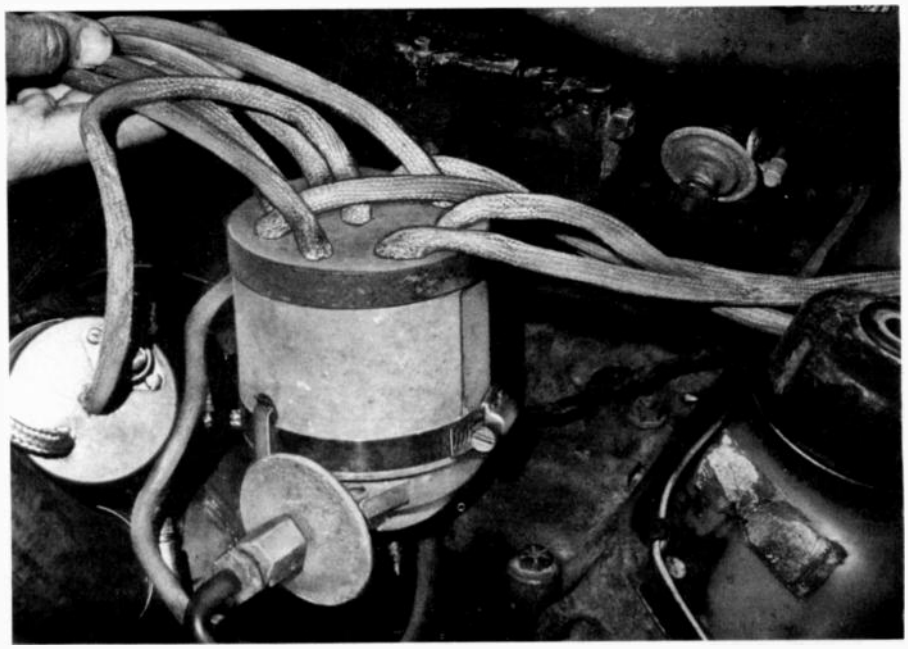
A distributor's breaker points can also cause interference, but it's easy to cure. First, make sure the points are in good condition. If they are burnt or pitted, replace them. Install a new condenser (capacitor) of suitable size (usually 0.18 to 0.25 μF). Make sure that there are no loose connections.

Ignition System Secondary. The high-voltage part of the ignition system is the worst offender. There are several ways of dealing with this problem. As we noted earlier, using capacitors is *not* one of them.

Suppressor resistors can be used to reduce the level of radiated interference, often with a good degree of success. Various types are manufactured. Some are separate components for use at distributor towers or spark plug terminals. They are often molded into the distributor rotor, towers, and even the center contact button. In European vehicles, they are used to some extent as original equipment. But in the U.S., such suppressors are available mainly as service items.

The most common high-voltage interference suppressor is resistance ignition cable. It contains resistive, carbon-impregnated strands instead of a wire conductor. Unfortunately, this wire is very fragile—it can be ruined by physically bending it. It also deteriorates when exposed to high temperatures over a period of time. Present SAE standards specify two resistance ranges for use in new vehicles. LR cable (3000 to 7000 ohms/foot) is more common, but HR (6000 to 12,000 ohms/foot) is sometimes used between the coil and distributor and for short plug cable. You can check the condition of the cable with an ohmmeter. If it reads about

Fig. 8. Shielding the distributor coil and high-tension leads with metal cans and copper braid. See text.



If you want a career in servicing two-way radio communications equipment...you'll have to get a First or Second Class FCC Radiotelephone License.

One good way to prepare for your license exam is a specialized home-study course from CIE..."the FCC License school."

There's a gigantic potential market out there for communications equipment service skills. (For example, there are about 4 million mobile transmitters that are licensed by the FCC.) And that's just the beginning. Radio systems are also used in air and railroad traffic control; police, fire-fighting, and rescue vehicles; ship-to-shore communications; dispatching of fleet vehicles, such as taxis and trucks; assigning field service specialists; security networks; satellite communications; and many other new and growing applications. But before you can start a career servicing any radio system, you must have at least a Second Class FCC Radiotelephone License.

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We've been helping people prepare for the government-administered FCC License examinations since 1934. Our record speaks for itself: in continuing surveys, nearly 4 out of 5 CIE graduates who take the exams get their FCC Licenses. No wonder the people who know us best think of us as "the FCC License school."

CIE independent study courses combine the necessary FCC License preparation with a thorough education in electronics technology. In fact, one course . . . "FCC License and Communications" . . . includes that in-depth instruction plus intensive training in the specific career skills needed to maintain and repair two-way FM radio equipment. In addition, CIE offers five other career courses which include FCC License preparation. Some even provide valuable "hands-on" training with professional equipment such as a solid-state oscilloscope, a Zenith color TV, and a color bar generator.

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Fig. 9. Metal can is used to shield top of coil, braid shields leads.

three times higher than it should, replace the entire set. This cable is available from auto supply houses and is inexpensive. Also, those cars not equipped with resistive cable can be switched over in a matter of minutes. Just remove all the old cables and replace them with a new resistive set.

Resistive spark plugs can also be used. They contain a built-in resistive element, and can be directly substituted for standard plugs. Voltage requirement levels for sparking are virtually the same for both types, so there will be no adverse effect on engine performance if the resistive plugs are used.

Some vehicles are produced with both resistive plugs and cable. Other suppression components can also be used. Make one of the following choices:

- Resistive plugs and resistive cable (See Fig. 6.)
- Resistive plugs with a 10,000-ohm suppressor in the center tower of the distributor, and 5000-ohm suppressors in the other distributor towers. Combining the two alternatives is *not* recommended.

Shielding. A very effective method of reducing interference is to shield the entire ignition system. The coil, distributor, high-tension leads and each spark plug are enclosed with metal shields, all of which are bonded to chassis ground. Here's how it's done.

First, replace all spark plugs, high-tension leads, points and condenser, and tune the engine. Next, slip copper braid (such as that inside good RG-8-U coaxial cable) over each spark plug cable, and over the wire going from the coil to the distributor. Then make enclosures for the coil and distributor out of copper flashing, with appropriate holes for all the wires entering and leaving. Solder the copper braids to these shields, and connect them to the engine block. Finally, the spark plugs are shielded. This can be done with home-made, slip-on metal tubes, or you can use shielded plugs (available in resistive and non-resistive configurations from auto stores), as shown in Fig. 7. Make sure that all shields and braids are tied together and to the engine block through good, lower-resistance connections. The finished product should look something like Figs. 8 and 9. If you don't want to get involved in metalworking, you can buy a shielded ignition kit. Check your local auto store or a mail-order catalog. But shielding is well worth the effort—it's probably the most effective step you can take to eliminate noise problems.

However, shielding can affect engine performance. As shown in Fig. 10, the voltage that the coil is able to deliver to the plugs is significantly reduced. For this reason it's most important that the engine operate efficiently. That's why I recommended an engine tune up as a preliminary to shielding. If you're going to go the shielding route, you might consider installing a capacitive discharge ignition (CDI) system. These circuits boost the voltage applied to the coil primary, and thus increase the available voltage at the spark gap. Secondary benefits, such as increased fuel economy, greater engine horsepower and torque, and reduced wear to plugs and points, will also be realized.

Transceiver Circuits. As we noted at the outset, transceivers have built-in noise limiters and/or noise blankers. These are useful to a certain degree, but you'll probably find that the nearby ignition system overwhelms them. The only choice that you can make if you want quiet mobile communications is to suppress and shield your own ignition system. Then let the rig's noise reducers deal with interference from the *other* fellow's car. ◈

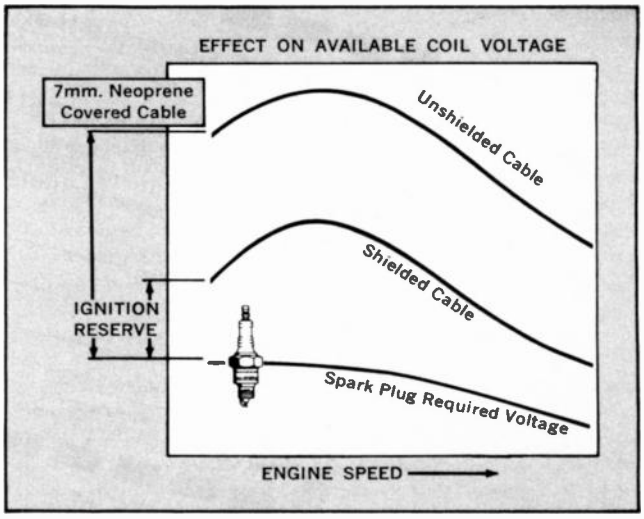


Fig. 10. Shielding reduces ignition reserve—the difference between required firing voltage and available voltage at the plug.

MOBILE CB ANTENNAS

Different types and performances

MOST of us are aware that no real antenna radiates isotropically (equally well in all directions). Even if there were such an antenna, its radiation characteristics would be distorted by many external physical factors, such as height, surrounding terrain, mineral deposits, towers, buildings, etc. In a mobile installation, many of these factors are constantly changing and cannot be controlled. However, when an antenna is mounted on a vehicle which is largely composed of metal, the metal components exert the major influence on the antenna's directional characteristics.

Radiation Patterns. A convenient way to describe an antenna's performance and directionality is by studying its radiation pattern. Ideally, we would like to display the antenna system's signal strength like contour lines on a map. That is, we would like to know at what distance(s) from the antenna we could expect to see the same signal strength, just as pressure "isobars" are plotted on a weather map. Unfortunately, this type of measurement is very difficult to perform. Instead, radiation patterns are developed by observing the signal intensity at a fixed radius from the antenna. These observations are then plotted so that the distance from the center point can be interpreted in terms of

decibels of signal strength (Fig. 1).

Why should we be concerned about the directional characteristics of a mobile antenna? Primarily, because as we ride along the highways, we talk to those in front of and behind us (assuming the road is not curved). A directional antenna will reduce interference from the sides as it increases our range in the needed directions. The efficiency of the antenna system has a much greater influence upon your range than the power output of your rig.

There are three important factors to consider when installing a mobile antenna:

- Be certain that the radiation pattern is either circular, or favors the fore-and-aft direction.
- Be sure that it is radiating as much of the r-f power supplied to it as possible.
- Keep the primary lobe of radiated energy as low as possible, closest to the horizontal plane.

Although we normally examine the radiation pattern by looking "down" onto the horizontal plane, we should not overlook the fact that the radiation pattern is actually three-dimensional. Most antennas have a doughnut-shaped pattern. It is important to keep the "doughnut" as squat as possible and thus have the major lobe (most of the signal) down on the horizon where your contacts are.

Antenna Types. Most radiation studies to date on CB mobile antennas have dealt primarily with classic antenna theory as described by Jasik in the *Antenna Engineering Handbook* (McGraw-Hill). These studies reveal a combination of factors that strongly favor the quarter-wave antenna for mobile use.

The half-wave dipole is far too unwieldy in size (18-feet) for use on vehicles, although physically shortened versions are available for use on wood and fiberglass boats and other vehicles without adequate ground plane surfaces. However, the metal mass of most vehicles will provide a ground plane, whether it is needed or not. Even fiberglass vehicles possess large metal parts which affect the antenna system.

On the other hand, the quarter-wave antenna requires a ground plane to reflect its mirror-image, making it "look" like a half-wave dipole. Ideally, the ground plane should extend at least a quarter wavelength in all directions from the antenna base. In practice, the ground plane is seldom as large (a circle 18 feet in diameter) as it should be. The ground plane should be a flat surface perpendicular to the axis of the antenna. A sloping ground plane will distort the radiation pattern by presenting the image of a bent dipole, and it will also modify signal polarization.

The sloping ground plane, such as might be encountered on a hatchback, will also tilt the major lobe both skyward in the front and into the ground towards the rear. The effects of an asymmetric or incomplete ground plane will normally tend to extend the major lobe in the direction of the largest ground plane area and suppress the lobe in the shortest direction of the ground plane.

Antenna Mounts. Ideally, the antenna should be placed at the geometric center of the highest horizontal metal surface, normally the roof. However, many people do not wish to punch holes in their automobiles, and instead mount the antenna on the trunk lid, the second most favorable location.

If the antenna is mounted on the left or right rain gutter or cowl, the pattern will be distorted, with the major lobe directed toward the opposite side of the car. A centerline location is far more desirable than either of these asymmetric locations. Similarly, an 108-inch whip mounted on the rear bumper will suffer the same deficiency. Even though it can offer a larger area for radiation and greater efficiency, its effectiveness is lost to the inadequate ground plane.

Another aspect which is important to an efficient antenna installation is the desirability of a "hard ground" directly to the ground plane at the antenna base, as well as through the coaxial antenna cable.

Dual Antennas. As more and more newcomers have joined the CB ranks this year, I have noticed a proliferation of dual, co-phased antennas on every type of a vehicle from 18-wheelers to Volkswagons. Why are these twin systems being installed? I guess

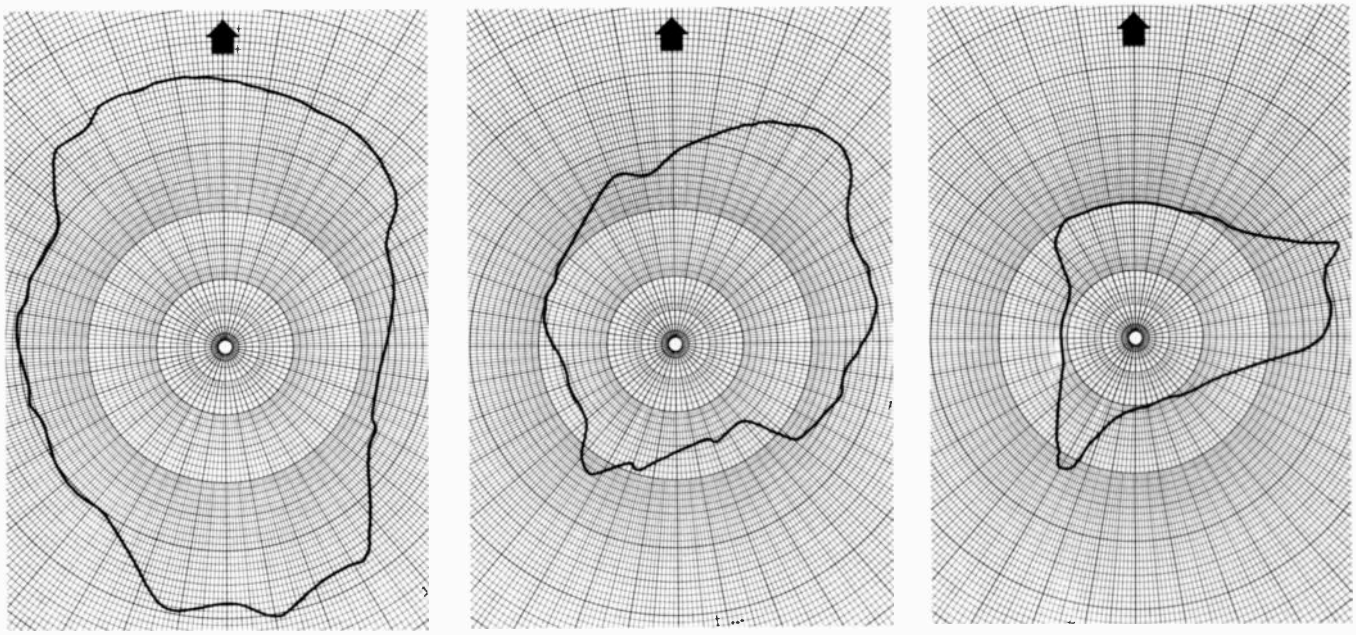


Fig. 1. Horizontal radiation patterns for vertical whip on roof center (left), trunk lip (center), left rear bumper (right). Arrows indicate front of vehicle.

the major reason is that uninformed operators feel that, "If one antenna can get my signal out five miles, two antennas ought to do twice as well." Unfortunately for those who have spent large sums to put two antennas on their vehicles, it is simply not true.

Antenna design engineers know that co-phased antennas mounted on a perfect ground plane and separated by a half wavelength (18 feet) will exhibit about 3 dB gain (or double the effective radiated power) over a single antenna. However, when the spacing between them is reduced to 10 feet, the gain is only about 1 dB (the minimum gain detectable). With smaller separations, the gain is even less and the radiated signal has about the same strength as that from a single, properly mounted antenna.

There are some circumstances in which dual antennas serve very useful purposes. But these situations are very limited and are difficult to handle in any other manner. For example, on an 18-wheeler that has a high metal box behind it, co-phased antennas mounted as far apart as possible on the side mirrors may be the only viable solution for "reaching around" the vehicle. Likewise, on a recreational vehicle with an upper cab entirely composed of fiberglass, side-mounted 108-inch whips might provide a good answer. However, they would definitely function most effectively if mounted as close as possible to the fore-n-aft center of the vehicle, rather than at one end. In this case, the reason for using co-phased antennas is to improve the radiation pattern, and power gain is not significant.

To be at all successful, dual antennas must be "co-phased" properly. That is, the coaxial feed cables must be of the correct impedance and exactly the correct length to cause the two antennas to radiate or pick up signals in such a manner that they will work together *additively*. It is imperative that the cables supplied by the manufacturer not be shortened, and I suggest that you do not try to make a harness unless you are well versed in antenna theory and practice.

I was astounded the other day to hear that some of my neighbors have "found a way to double their power legally." It seems that they have determined that there is no rule against operating two rigs from one vehicle each feeding a separate antenna but, using the same microphone.

There is only one trouble with their theory: it won't work. Unless the two transmitters are driven from a common frequency-determining device (and that *is* illegal), they will not operate at precisely the same frequency. The result will be a fluctuating signal as the two transmitters shift in and out of phase. This would produce unbelievably bad heterodynes. Also, doubling the output power will increase the received signal only 3 dB — about one half of an S unit. Don't do it!

Whips. Quarter-wave mobile antennas are generally classified in one of the following types:

- full-sized quarter-wave whip (108-inch length).
- base-loaded
- center-loaded
- top-loaded
- continuously loaded

The last three of these antenna types are sufficiently similar that they will be discussed as a single type.

Undoubtedly, the most efficient type is the full-length whip because it reaches higher, presents a greater radiation length than any of its loaded (physically shortened) cousins, and wastes no power heating up a coil. Unfortunately, a nine-foot antenna cannot be mounted in a position which will provide it with a full ground plane, as can many of its counterparts. Most of its plausible mounting locations result in radiation patterns which are badly distorted. For this reason, the shorter antennas are more popular and in most cases outperform the whip.

The workhorse of compact antennas has been the base-loaded whip. It requires an adequate ground plane and does not perform well without one. It features a low radiation angle, and is usually made of a slender steel spring shaft which offers little wind resistance and stands straight at highway speeds. The most favorable locations to mount a base-loaded antenna are the center of a steel roof or on the trunk lid of a sedan. It should be mounted on the vehicle's centerline.

The three final antenna types carry their loading coils higher on the antenna shaft. As a rule, the higher the coil is located, the more efficient the antenna. Therefore, they are more efficient than base-loaded whips. However, these antennas are more prone to damage from low obstructions than base-loaded ones. The vertical angle of radiation is generally higher for these antenna types, but they perform better in locations where the ground plane is poor and are better suited to mirror or gutter mounting. For this reason, they are usually found in co-phased arrays. They also work well where there is a good ground plane, but if their loading coils are bulky they will offer more wind resistance. However, some of the newer continuously loaded fiberglass antennas are nearly as slender as a base-loaded steel whip.

Other Considerations. Antennas that sway in the wind usually produce varying signal strengths at the receiver. Antennas which bend over backwards at highway speeds radiate obliquely polarized signals which are not well received by vertically polarized antennas. Whatever the antenna type, it is strongly recommended that it be well grounded at the antenna base as well as through the coax.

Now that 40 channels have been authorized for Class D, the bandwidth is increased to 0.405 MHz. Some antennas might not give adequate performance across the entire band. There should be no trouble with antennas in excess of three feet in length; but the shorter the antenna, the more critical tuning becomes. The center frequency of the extended band will fall between channels 20 and 21, whereas the older band center was at channel 13. If you get a 40-channel rig, retune the antenna for optimum performance at the new center frequency. However, if you have a mini-whip, you might find it difficult to achieve an acceptable SWR across the entire band.

Speaking of SWR, it should be checked when the antenna is installed, and checked again periodically to insure that the antenna is still functioning properly. The SWR should be held under 3:1; and unless the rig is SWR protected, a higher SWR might severely damage your transmitter.

Following the guidelines given here, you should be able to plan an efficient mobile antenna system and select the proper antenna for your vehicle. You should buy a commercially available antenna of proven performance. If the mounting instructions are followed carefully, anyone who can handle a screwdriver should be able to install an antenna properly. ◈

GLOSSARY OF CB TERMS

Adj. Channel Rejection. Adjacent channel rejection is the ability of a receiver to attenuate signals on channels adjacent to the one the transceiver is tuned to. Since most channels are spaced 10 kHz apart, adjacent channel rejection is the same as selectivity at ±10 kHz.

AGC. Automatic gain control is a means of controlling gain of the receiver section through feedback to suit the strength of the incoming signal. Ideally, the output level at the speaker should remain constant over a wide range of input signals. For low-level inputs, the feedback signal is small and gain is high. For stronger signals, the feedback loop cuts gain to prevent overload.

AF Response. In the receiver section, a measure of the uniformity or flatness of the AF output over the range of the human voice. In the transmitter, it indicates how uniformly the signal is modulated over the same range. Typical usage: ±X dB or from −X dB to +Y dB from 300 to 3000 Hz. Usual deviation limits are 3 or 6 dB.

AM. A method of transmitting information by amplitude modulating or varying the strength of a carrier wave in step with the modulating (voice) signal. The composite AM signal contains a carrier and two sidebands, which are mirror images of each other and contain the transmitted information.

AML. Abbreviation for automatic modulation limiting. A circuit that uses an AGC effect to prevent overmodulation. As a stronger voice signal is applied, this stage reduces the gain of the audio amplifier(s), keeping the modulation level below 100%.

Audio Output. The power in watts (W) that the transceiver will deliver to a speaker of a given impedance at a given level of distortion. Typical usage: 3 W into 8 ohms at 10% dist. Distortion can run as high as 10% without serious loss of voice intelligibility.

Base-Loaded Antenna. An antenna using a loading coil positioned at the bottom of the radiating element. Alternately, the loading coil may be located at the top of the radiating element (top-loaded) or in the center of it (center-loaded).

Beam Antenna. An antenna that favors one direction. It "beams" the output power of the transceiver, as the reflector of a flashlight concentrates light from a small bulb into a bright beam of light. The apparent increase in power is called the antenna *gain*, and the more it concentrates the signal, the more *directional* the antenna is. A beam antenna also favors received signals from the same direction.

Carrier Suppression. A measure of the attenuation of the carrier in an SSB transmitter. Good carrier suppression allows more power to be used for the sideband being transmitted and reduces interference.

Clarifier. A control on SSB transceivers. It is a fine-tuning control which must be carefully adjusted so the received signal sounds natural and is intelligible. Its effective range is usually ±600 to ±1500 Hz.

Coax. Popular term for coaxial cable, the transmission line used to couple signals from the transceiver to the antenna, and vice versa. It is made up of a center conductor embedded in plastic or foam insulation (dielectric), around which a copper or aluminum braid is woven. Foam cable is better than plastic, since the dielectric contains much air, which is a very good insulator. Premium coax uses a copper tube in place of a braid, and small glass or foam beads spaced at regular intervals to separate the inner conductor from the tube. All coax causes some signal loss, which is specified in dB per 100 feet. Its characteristic *impedance* in CB work is usually 50 or 52 ohms, and the cable is identified by an RG number. (RG-58-U is low-power 52-ohm coax, RG-8-U can handle higher power levels and has lower loss.)

Converter (CB). A device that converts CB signals to a frequency in the AM broadcast band. A *superheterodyne* circuit performs this function. Such converters are useful only for receiving CB signals, not transmitting them.

Co-Phase. A method of feeding two antennas simultaneously in such a way that the antennas interact and provide a desired pattern (directive or omnidirectional) depending on the distance between the two antennas.

Cross Modulation Rejection. The ability of a receiver to prevent the modulation of desired signals by strong signals on nearby frequencies.

Crystal. A quartz crystal which exhibits piezoelectric properties. That is, when physically compressed, a voltage develops across it. Crystals also behave as tuned circuits. With external components, they oscillate at a frequency determined by the size and shape of the crystal, the way it is cut, circuit parameters, etc. Crystals are often used to generate signals in oscillators, as well as in filters, mikes, and phones.

Crystal Controlled. A method of frequency generation by an oscillator circuit governed by a crystal.

Crystal Synthesized. A means of generating several different frequencies without using separate oscillators governed by *crystals* specially ground for each frequency. For example, a synthesizer composed of ten crystals (not all used simultaneously) can generate transmit and receive frequencies for the 23 CB channels. A more recent development, the digital synthesizer, uses only one reference crystal, a phase-locked loop, and a digital counter to generate a large number of stable frequencies. These circuits are used to reduce dependence on individual crystals, which are relatively expensive.

dB. An abbreviation for decibel, a measure of signal strength when compared to a specified reference. For voltage, the dB ratio is determined by the formula $dB = 20 \log V_1/V_2$. For power, the relation is $dB = 10 \log P_1/P_2$. When power is doubled, there is a gain of 3 dB. When power is multiplied by ten, the gain is 10 dB. Decibels are often used to express how much a stage will amplify a signal, how much greater a signal is than background noise (*S/N* or signal-to-noise ratio), or how an output varies over a given frequency range.

Delta Tune. A control or switch similar in function to a *clarifier*, found on many *AM* transceivers. It compensates for signals off the center frequency of a CB channel. Although its effective range is about the same as that of a *clarifier*, adjustment is not as critical.

Desensitization. The effect on the receiver section tuned to one channel that is caused by a strong signal on another channel. It is an *AGC*-type effect whereby the desired signal's strength appears to be decreased by the presence of a nearby signal. This effect will influence a receiver's overall *selectivity*.

Digital Frequency Synthesis. See *PLL*.

Dipole Antenna. A form of antenna consisting of a half-wavelength-long conductor. A horizontal dipole is somewhat directive (the direction of maximum radiation is perpendicular to the antenna), while a vertical dipole (coaxial antenna) is omnidirectional.

Distortion. An unwanted modification of a signal's phase and/or amplitude that occurs when an amplifier stage is behaving nonlinearly. All amplifiers display some nonlinearity, but good ones are designed so that the nonlinearities are as small as possible. A nonlinear amplifier will produce a signal that looks distorted when viewed on the oscilloscope, and that contains energy at frequencies other than that

of the input signal. *Harmonics* are such products, as are intermodulation distortion, phase distortion, etc. Nonlinearities occur in AF as well as RF amplifiers.

Dual-Conversion. See *Superheterodyne*.

Filters. In the broadest sense, filters are networks that favor or attenuate one group of frequencies more than others. A low-pass filter will allow all frequencies below a cutoff frequency to flow unimpeded, but will attenuate any above it. Such a filter is often placed at the output of a CB transceiver to attenuate any *harmonics* that could cause TV interference (TVI). A high-pass filter works in the opposite manner, passing all signals above the cutoff frequency. Bandpass filters allow signals between upper and lower limits to flow at the expense of signals outside the passband. Bandpass filters are used in the IF sections of receivers to boost *selectivity*. They are usually made in modular form, using *quartz crystal*, mechanical, or ceramic elements. Less critical filters, such as low-and high-pass types, are usually made from discrete coils and capacitors.

Frequency Tolerance. Indicates how much the actual frequency generated inside the transceiver for a particular channel will vary from the ideal value. This deviation can be caused by slight changes in the oscillating *crystal*, the surrounding circuitry, wide variations in ambient temperature, supply voltage, etc. The maximum legal frequency tolerance is ±0.005% or about 1350 Hz on the CB band.

Front-to-Back Ratio. The ratio of power radiated in the direction of maximum gain by an antenna to power radiated in the opposite direction.

Front-to-Side Ratio. The ratio of power radiated in the direction of maximum gain by an antenna to power radiated 90 or 270 degrees from this direction (from the sides of the beam).

Gain (Antenna). The apparent increase in power that an antenna develops, measured in *dB*. If an antenna has a gain of 3 dB, the *effective radiated power* of the CB transceiver/antenna combination is 8 watts (4 W × 2). There are not legal restrictions on antenna gain, but there are practical ones. The most important is physical size—high-gain antennas tend to be very large!

Gamma Match. A method of feeding the driven element of an antenna in such a way that the feedpoint location may be varied as a means of lowering the SWR.

Ground-Plane Antenna. A type of vertical antenna consisting usually of a quarter-wavelength vertical radiator and a number of radials (usually three or four). The radials provide an artificial ground, thus allowing the antenna to be mounted high in the air and maintain a low angle of radiation, and thus its gain.

Harmonics. Undesired signals that appear at multiples (2, 3, etc.) of the desired fundamental frequency. They are produced by nonlinear amplifiers and can cause interference to TV receivers and other services. The second harmonic is the strongest, followed by the third, then the fourth, and so forth. For example, the strong second harmonic (54 MHz) of a 27-MHz CB carrier can cause severe interference to TV channel 2 (54-60 MHz).

Image Response. Converter stages of receivers cause IF response at two frequencies, one above and one below the oscillator frequency. One of these frequencies represents the desired signal and the other is the image. Image response is a measure of how well the receiver attenuates the image.

Impedance. The opposition a circuit element, transmission line, or antenna displays toward an a.c. or RF signal. Although measured in ohms, like a resistance, it is a composite of resistive and reactive effects. The common impedance of CB gear is 50 or 52 ohms, and all equipment should be matched to this value.

Isotropic. An idealized antenna which radiates equally well in all directions. It is often used as a reference when evaluating antenna performance.

LED. A light-emitting diode that converts electrical energy into light. A seven-segment LED is often used to display the number of a channel on a digital frequency (PLL) CB transceiver, and as TX, RX, and mode indicators.

Loading Coil. A coil used in combination with a radiating element to produce an antenna which is resonant at the desired frequency. Loading coils permit the use of relatively short antennas, which are convenient for mobile use.

Modulation. A process by which intelligence is superimposed on an RF signal. This is done by varying a characteristic of the RF signal (in CB, the amplitude of the signal is modulated) in proportion to the frequency variations of the human voice. Too much modulation (greater than 100%) causes the generation of spurious emissions which can interfere with other CB'ers and radio services, and loss of intelligibility.

Modulation Indicator. A relative indicator (usually a small lamp) that glows brighter and brighter as the modulation level approaches 100%. It gives the operator some idea of how fully he is modulating the carrier.

Noise Blanker. Another circuit for reducing noise interference. It is usually placed in the RF section, or at the beginning of the IF section of the receiver, before the high-selectivity circuits. A noise blanker samples the received signal, and actually *squelches* the receiver for a very short period of time (the width of the noise spike). Noise blankers are more effective than noise limiters, but their circuitry is more complex.

Noise-Cancelling Mike. A microphone that is built in such a way as to minimize transmission of any background noise at the transmitting site.

Noise Limiter. Sometimes called a series-gate noise limiter, a circuit that shaves off the noise spikes riding on the desired signal. Usually, diodes are used to obtain the clipping action. When the circuit operates at a predetermined threshold without any user activation, it is called an automatic noise limiter or ANL. These diode noise limiters are usually in the IF or AF sections of the receiver.

Omnidirectional Antenna. An antenna that radiates equally well in all directions. Some omnidirectional antennas have *gain*.

PEP. Abbreviated form of peak envelope power. The power input or output of an SSB transceiver is measured in watts PEP. Unlike an AM transceiver, an SSB rig only develops output power when modulated, so that terms like "rms carrier power" are meaningless. (There is no carrier to speak of.) The only practical way of measuring SSB output power is by determining the power contained in the signal at the maximum (peak) amplitude. The peak envelope power of a given transmitter is closely related to the amount of distortion that is considered tolerable. It is hard to measure PEP accurately, especially under practical operating conditions. Envelope peaks occur sporadically and are short-lived. Almost all meter movements are too sluggish to catch them, and readings will be averaged over several cycles of the modulating signal. (Note that these remarks are made in the context of voice signals, not "pure" sine waves!) The relationship between average power or rms power and PEP varies widely with individual voice characteristics. When one person modulates a given transceiver, 12 W PEP of output power (the legal limit) might be developed, while the average power output is only 4 W. In that case the ratio of PEP to average power is 3:1. When someone else modulates the same transceiver, the PEP output might remain at 12 W, but the average power is only 3 W. In this case, the PEP/average ratio is 4:1. Other voices will develop lower values—say, 8 W PEP and 4 W average, or 2:1.

Phone Patch. A device for the interconnection of a CB transceiver and the telephone through an approved voice coupler (supplied by the telephone company). A phone patch allows a mobile CB'er to make a regular phone call, if he is in contact with a base station equipped with a patch. The base operator must operate certain controls to make a smooth patch. Unlike a regular telephone conversation, both parties *cannot* talk at the same time, and one cannot interrupt the other.

Pi Network. A tuned circuit at the output stage of a transmitter to match it to the antenna/feedline. Sometimes a transceiver will have screwdriver adjustments which allow the pi network to make the optimum *impedance* match for a given antenna.

PLL. A phase-locked loop is an electronic network consisting of a voltage controlled oscillator (VCO), a phase comparator, a low-pass filter, and an amplifier. The PLL can be used as an FM detector of extreme linearity, as a tunable filter, and as an extremely stable oscillator. When combined with an external reference oscillator and ÷*N* circuit, it will function as a *frequency synthesizer*, yielding stable outputs at various frequencies.

Polarization. The plane in which the electromagnetic field is set up by an antenna. For best reception, the receiving and transmitting antennas should have the same polarization. Most mobile antennas are vertically polarized, while some base antennas offer a choice of horizontal or vertical polarization.

Power Microphone. A microphone with a built-in preamplifier which provides stronger modulating signals to the transmitter.

PTT. Abbreviation for push to talk. Usually a pushbutton on the microphone case

that activates the transmitter when depressed.

Q Signals. A code in which a message is represented by three letters, the first of which is Q. Q signals have been used primarily by amateur radio operators, but they are often used by single-sideband CB operators.

Quad Antenna. A directional antenna consisting of a driven element and a number of reflectors and directors in the shape of square loops mounted on a common boom. Each loop has a circumference of approximately one wavelength. Element for element, a quad is lighter and provides more gain than a yagi antenna, but it is bulky and more fragile than a yagi.

RF Gain Control. A manual control that sets the gain of the receiver section. It is included on some transceivers to supplement the *AGC* circuit. Some signals are simply too strong for the *AGC* to handle, and will overload the receiver unless gain can be further reduced by this control.

RF Output. For an AM transmitter, this specification rates the amount of carrier (in watts) that is delivered to the antenna jack. The legal limit for AM is 4 W. and most transceivers deliver that amount (or close to it). The RF power output of an *SSB* transceiver is rated in watts *PEP*, as previously described.

RX Indicator. An indicator light which glows when the transceiver is operating in the receive mode.

"S" Meter. A meter that gives relative indications of the strength of received signals. It is calibrated in "S" units and dB. Nominally, each S unit equals 6 dB. Above S9, most meters are calibrated in 10-dB increments. Sometimes, a manufacturer will specify what input level (usually between 50 and 100 μV) is required for a reading of S9. But this can vary widely even among transceivers of the same model number. Again, S meters are intended to be relative, rather than absolute, indicators. They are useful to an extent in comparing the strength of two stations, or the performance of two antennas at one location.

Selectivity. Basically, this relates to how well a receiver, can differentiate between the signal to which the receiver is tuned and an adjacent one. It is also expressed as adjacent channel rejection. The figure (a ratio in dB) shows how much stronger an adjacent channel signal (10 kHz away) must be to interfere with intelligible reception of the desired signal. Sometimes, selectivity is stated as the IF passband; that is, the "window" the receiver can see through to detect signals of a specified strength. It is stated, "X kHz at Y dB down." For example, at X kHz away from the operating frequency a signal will be reduced in strength by Y dB. In AM transceivers a typical bandwidth is about 3 kHz at 6 dB down, and 30 kHz at —60 dB. For proper AM reception, the window should be no narrower than 2500 Hz (2.5 kHz). SSB requires greater selectivity for best results, and a rating of 2.1 kHz at 6 dB down is not uncommon.

Sensitivity. Another key receiver specification. It describes the minimum signal strength that the receiver can work with to provide an intelligible output at the speaker. The signal strength is measured in microvolts, and the second part of the rating is called the signal-to-noise *(S/N)* ratio (See S/N), expressed in dB. A transceiver with an *AM* sensitivity of 1 μV for a 10-dB S + N/N will produce an output that is ten times louder than the background noise. That's a typical figure, although some AM transceivers will produce a 10-dB S + N/N ratio with as little as 0.25 μV of signal applied to the input. *SSB* receivers are generally a little "hotter" than AM units, with ratings of 0.15 μV for 10 dB S + N/N regularly achieved. In general, any rating below 1 μV for a 10 dB S + N/N is adequate.

Single-Conversion. See *Superheterodyne.*

S/N. Abbreviation for signal-to-noise ratio. Expressed in *dB*, it relates how much louder a signal is than the background noise. It is measured at the speaker, and is used in sensitivity ratings. Often, *S + N/N* is used, as it is easier to measure. It is the ratio of the signal and background noise to the background noise, and will yield an apparently higher sensitivity than straight S/N.

Speech Compression. A means of boosting the average level of voice signals to provide increased "talk power" or higher average modulation levels. The human voice has a low average level with sharp, transient peaks. If the voice signal is not compressed, the carrier will not be modulated more than 20% or so most of the time, but will be fully modulated on voice peaks. Overall efficiency will be low. But if the peaks are clipped and the average level boosted, the average degree of modulation will rise. This form of processing is called speech clipping. Another technique, speech compression, has an *AGC*-type amplifier which cuts down gain on voice peaks while amplifying the average low levels. Clipping or compression can be introduced in the audio or RF sections of the transceiver. RF methods are more effective, and clipping produces better results than compression, but requires extensive shielding filtering within the transceiver.

Spurious Emissions. Undesirable RF energies appearing at the antenna jack. They often are at frequencies far removed from the operating channel. Harmonics, mixer products, and parasitic oscillations are all considered spurious emissions. They should all be at least 50 dB below the desired output signal.

Spurious Response. This describes how the receiver section handles undesired signals, especially ones generated inside the transceiver itself. Spurious response should be at least 25 or 35 dB down.

Squelch. A circuit that silences the receiver in the absence of signals above a certain level of signal strength. This *squelch threshold* is usually adjustable by a front-panel control. When properly adjusted it will stop background noise from reaching the speaker, but will activate the receiver when an intelligible signal is detected.

SSB. Abbreviation for single sideband. A type of amplitude modulation in which one sideband and the carrier are not transmitted. This gives SSB a 6:1 efficiency advantage over *AM*, and thus greater range per watt of output power. SSB occupies half of a conventional AM (double sideband) channel. So one can get 80 SSB frequencies while only 40 are available for DSB operation. Note that SSB can't be used at the same time as DSB, and vice versa. However, transceiver circuitry for SSB is more complex and tuning methods are more critical than for AM. For these reasons, additional controls like *clarifiers* must be included, making SSB units more expensive than AM transceivers with similar features.

Superheterodyne. A common type of receiver in which the incoming signal is translated in frequency by means of frequency converters or mixers. The signal is translated to an intermediate frequency or IF. A receiver that translates the signal frequency only once (and thus has one IF) is called a *single-conversion* receiver. One with two IF's is a *dual-conversion* receiver. IF stages are used to provide *selectivity* and good spurious signal rejection.

SWR. Abbreviation for standing wave ratio. When *impedances* within a communications system are not equal, reflections are set up, sending power back toward the transceiver away from the antenna. As a result, standing waves of voltage and current are set up on the transmission line. The SWR can be determined mathematically by the formula SWR = Z_1Z_2 with the higher impedance on top. So if a 50-ohm transmission line feeds a 50-ohm antenna, the SWR is 1:1 or "one to one." Under these conditions all power (neglecting feedline losses) delivered at the transceiver output reaches the antenna. If the antenna impedance is 100 ohms or 25 ohms, the SWR is 2:1. This figure is considered the upper limit that SWR should reach in a good communications system. SWR is usually measured by a reflectometer or SWR bridge. Such devices are available as external accessories, but are included in some CB transceivers.

Ten Code. Codified messages originally used in police work but now used by many CB'ers.

TVI. Television interference that is experienced when a CB transceiver is operated in the vicinity of a TV receiver. TVI can be attributed in some cases to inadequate sheilding or filtering in the TV receiver, and is not the fault of the transceiver or the operator. In some situations, TVI is caused by the radiation of undesired signals from the transceiver and then it is the CB'er's duty to clean up his signal either by having the set serviced or by installing a *filter* at the output of his rig.

TX Indicator. An indicator light which glows when the transceiver is operating in the transmit mode.

VOX. Voice-operated switch. When the operator speaks into the microphone, the VOX circuitry automatically activates the transmitter without depressing the PTT switch. When speech ends, the *VOX delay* circuit holds the transceiver in the transmit mode for an adjustable period of time. This prevents relay chatter between syllables or words.

Wattmeter. A device for measuring the power output of a CB transceiver. Unlike the common S/RF meter, which gives only a *relative* indication of the output, a wattmeter is calibrated in watts and will display the actual amount of power output with a given accuracy (usually ±10%).

Yagi Antenna. A directional antenna consisting of a driven element (dipole) and a number of other elements (reflector and directors) mounted in parallel on a common boom.

CB Mobile & Portable Transceivers

AIRCOMMAND

CB-640 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection –60 dB; image response –50 dB; audio output 4 W at 10% dist., RF output 4 W; spurious emissions –60 dB; max. modulation 100%; controls: RF gain, squelch, delta tune (±1.5 kHz), switchable ANL, switchable noise blanker, scan/hold control; S/RF/modulation/SWR meter (LED); channel 9 autoscan; PA capability with aux. input; digital channel display; external speaker jack; supplied with microphone; 13.8-V d.c. ±15% positive or negative ground, max. current drain 1.5 A; 2 7/16" H × 6 5/16" W × 9 1/16" D $229.95

CB-340 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection –60 dB; image response –50 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions –60 dB; max. modulation 100%; controls: RF gain, delta tune (±1.5 kHz), squelch S/RF/modulation/SWR meter (LED); ANL; noise blanker; external speaker jack; PA capability; digital channel display; supplied with microphone; 13.8-V d.c. ±15% positive or negative ground, max. current drain 1.5 A; 2 7/16" H × 6 5/16" W × 9 1/16" D $179.95

CB-140 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver

sensitivity 0.6 μV at 10 dB S + N/N; adj. channel rejection –60 dB; image response –50 dB; audio output 4 W at 10% dist.; spurious emissions –60 dB; max. modulation 100%; controls: squelch; S/RF/modulation/SWR meter (LED); ANL; noise blanker; external speaker jack; PA capability; digital channel display; supplied with microphone; 13.8-V d.c. ±15%, max. current drain 1.5 A; 2 7/16" H × 6 5/16" W × 9 1/16" D $139.95

ALARON

B-5750 AM-FM/Cassette/CB Transceiver
Combines AM-FM radio, cassette player, and 40-channel (PLL synthesized) mobile CB transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity –6 dB at ±5 kHz; adj. channel rejection –45 dB; RF output 3.5 W; max. modulation 90%; frequency tolerance ±0.005%; controls: squelch, delta tune (±1.5 kHz), channel selector on microphone; digital channel display on microphone; 11-16-V d.c.; 2 1/8" H × 7 1/4" W × 6 1/2" D $249.95

B-5200 AM-FM/CB Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile CB transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity –60 dB at ±10 kHz; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 90%; frequency tolerance ±0.005%; controls: squelch, delta tune (±1.5 kHz), switchable ANL, CB stand-by switch; S/RF meter; CB mode and TX indicators; digital channel display on microphone; 11-15-V d.c.; 2 1/8" H × 7" W × 5 7/8" D $189.95

B-4900 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity –6 dB at ±4 kHz, –40 dB at ±20 kHz; adj. channel rejection –30 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 90%; frequency tolerance ±0.005%; controls: squelch, RF gain, delta tune (±1.5 kHz), switchable ANL and noise blanker; S/RF meter; PA capability; digital channel display; TX and modulation indicators; external speaker jack; 13.8-V d.c.; 2 1/4" H × 7" 1/4 × 8 1/2" D $119.95

B-4075 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; RF output 4W; controls: squelch, delta tune; S/RF meter; PA capability; ANL; TX and RX indicators; PA and external speaker jacks; 12-V d.c. positive or negative ground $89.95

AUDIOVOX

MCB-3000 Mobile Transceiver
40-channel (PLL synthesized) coverage; volume, squelch, and RF gain controls; LED digital channel display; PA/CB switch; switchable ANL; built-in audio compression circuit; low-pass filter to reduce harmonics; TX and RX indicator lights; S/RF meter; dynamic PTT mike; 2" H × 6 3/4" W × 9" D $179.95

MCB-750 Mobile Transceiver
40-channel under-dash unit; 40-ch mechanical indicator; squelch; on/off/volume control; PA capability; SWR meter $139.95

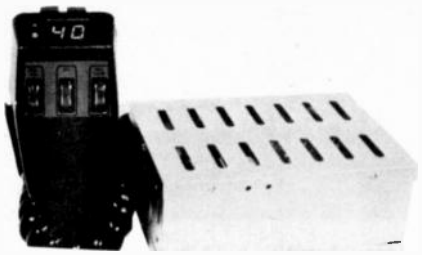
AUTOMATIC RADIO

MXC-3420B AM-FM/CB Mobile Transceiver
Combines AM-FM radio, cassette player, and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity –60 dB at ±10 kHz; image response –80 dB; spurious response –60 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions –60 dB at ±10 kHz; max. modulation 95%; frequency tolerance ±0.005%; controls: squelch, tone; digital channel display and channel selector on microphone; TX and RX indicators; ANL; external speaker jack; 13.8-V d.c., 2 A max. current drain; 2" H × 7 1/4" W × 7 1/8" D $384.95
UCX-3418. Similar to MXC-3420B but with 8-track player in place of cassette; 2 1/16" H × 7 1/4" W × 6 1/2" D $344.95

CBH-2265 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity –60 dB at ±10 kHz; image response –80 dB; spurious response –60 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions –60 dB at ±10 kHz; max. modulation 95%; frequency tolerance ±0.005%; controls: RF gain, delta tune (±2 kHz), squelch, switchable ANL; S/RF meter; digital channel display; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; with theft-proof slip-out bracket $202.50
DDC-3430. Similar to CBH-2265 but without RF gain or digital channel display; 2 1/4" H × 5 7/8" W × 7 3/4" D $151.95
UCB-3421. Similar to DDC-3430 but without delta tune or switchable ANL . . $121.95

BOMAN

CBM-6000 Highway Hide-Away
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver; RF output 3.5 W; max. modulation 100%; ANL; digital channel indicator, TX/RX



indicators, standby, squelch, up/down channel selector, and PTT controls all contained in microphone; can be mounted in any position to AM-FM radio, cassette or 8-track players, or in hide-away location; 13.8-V operation $329.95

CBM-6100. Similar to CBM-6000; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −50 dB at ±10 kHz; audio output 4 W; RF output 3.75 W; max. modulation 90%; microphone contains speaker $299.95

CBRT-8850 AM-FM/8-Track/CB Transceiver
Combines AM-FM/8-track stereo and 40-channel (PLL synthesized) CB transceiver; dual-conversion receiver; RF output 3.5 W; max. modulation 100%; controls: squelch, tone, antenna trimmer; CB monitor with standby control; TX/RX indicators; in-dash mounting; 13.8-V d.c. operation $389.95

CBRT-7750. Similar to CBRT-8850 but with cassette player; delta tune, local/distance switch; S/RF meter; TX indicator; PA capability; 13.8-V d.c. operation $389.95

CBR-9950. Similar to CBRT-7750 but without tape facilities, delta tune, or PA capability; with switchable ANL; four-speaker fader control $389.95

CBR-9940. Similar to CBR-9950 but without fader control and PA capability; with delta tune pushbutton control, and built-in ANL $359.95

CBR-9700. Similar to CBR-9940 but without pushbutton control $329.95

CBR-9600. Similar to CBR-9700; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −60 dB; audio output 3.5 W at 10% dist.; spurious emissions −65 dB $249.97

CB-930 Under-Dash Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −45 dB at ±10 kHz; audio output 4W; RF output 3.75 W; max. modulation 90%; controls: RF gain, squelch, switchable ANL and noise blanker, delta tune, CB monitor; modulation indicator; PA capability; S/RF/SWR meter; external speaker jack; digital channel display with dimmer control; 13.8-V d.c. operation $199.95

CB-920. Similar to CB-930 but without RF gain, delta tune, and CB monitor controls, modulation indicator, and SWR meter; with TX indicator and local/distance switch $169.95

CB-910. Similar to CB-920 but without noise blanker, local/distance switch, and digital channel display $149.95

AM/SSB

CB-950 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), single-conversion receiver sensitivity 0.25 μV at 10 dB S + N/N (SSB); selectivity −50 dB at ±10 kHz; audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); controls: clarifier (±600 Hz), switchable noise blanker and RF gain, squelch; AM modulation indicator; digital channel display with dimmer control; S/RF/SWR meter; PA capability; external speaker jack; 13.8-V d.c. operation $389.95

BRISTOL

BCB 227 Mobile Transceiver
40-channel capability (PLL synthesized); dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; audio output 3 W at 15% dist.; selectivity −6 dB at ±3 kHz; image response −60 dB; delta tune ±1 kHz; 4 W RF output; adj. channel rejection −60 dB; spurious emissions −60 dB at ±2.5 kHz mod.; spurious response −50 dB; 95% max. modulation; controls: switchable ANL, squelch; ext. speaker jack; PA capability; S/RF meter; 13.8-V d.c.; 2.25" H × 6.50" W × 7.75" D $199.00

BCB 228. Similar to 227 except has digital channel indicator; RF gain control; no delta tune $249.00

BROWNING

Sabre Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −55 dB; audio output 6 W; RF output 3.5 W; spurious emissions −60 dB; max. modulation 100%; controls: delta tune (±1.5 kHz), switchable ANL, squelch, tone, switchable noise blanker; S/RF/SWR meter; digital channel display with DIM/BRT control; PA capability; supplied with dynamic microphone, brackets, and hardware; 11.5- to 16-V d.c. positive or negative ground, max. current drain 1.5 A; 2⅜" H × 6⅛" W × 9⅜" D $239.95

SST Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −55 dB; audio output 6 W; RF output 3.5 W; spurious emissions −60 dB; max. modulation 100%; controls: delta tune (±1.5 kHz), squelch, switchable noise blanker; S/RF meter; PA capability; supplied with dynamic microphone, bracket, and hardware; 11.5- to 16-V d.c. positive or negative ground; 1.97" H × 5.5" W × 6.9" D $199.95

Brownie Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −40 dB; audio output 2 W; RF output 3.5 W; spurious emissions −60 dB; max. modulation 100%; controls: switchable ANL, squelch; S/RF meter; PA capability; supplied with dynamic microphone, bracket, and hardware; 12.4- to 15-V d.c. positive or negative ground; 2⅜" H × 6⅜₁₀" W × 9⅜" D $159.95

AM/SSB

Baron Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV (SSB); adj. channel rejection −50 dB; audio output 6 W; RF output 12 W (PEP), 3.5 W (AM); spurious emissions −60 dB; max. modulation 100%; controls: RF gain, clarifier (±1.5 kHz), switchable ANL, switchable noise blanker; S/RF/SWR meter; PA capability; digital channel display with DIM/BRT control; supplied with dynamic microphone, bracket, and hardware; 11.5- to 16-V d.c. positive or negative ground; 2⅜" H × 7" W × 12" D $429.95

CB CO-PILOT

Model 14T410 AM-FM/CB Transceiver
Combines AM-FM stereo receiver with 40-channel (PLL synthesized) CB transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −50 dB; image response −40 dB; spurious response −60 dB; audio output 3.5 W; RF output 3.5 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: CB monitor switch, tone, squelch, delta tune (±500 Hz); built-in ANL; digital channel display; external speaker jack; S/RF meter; mounts in dash; 13.8-V d.c. negative ground, 1.2-A max. current drain; 2¹⁄₁₆" H × 7⅛" W × 5⅛" D $269.95

Model 14T305 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −50 dB; image response −40 dB; spurious response −60 dB; audio output 3.5 W; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: volume, squelch, and channel selector built into microphone; RF gain, switchable ANL and noise blanker, delta tune (±800 Hz); S/RF/SWR meter; digital channel display with dimmer control; modulation indicator; PA capability; external and PA speaker jacks; supplied with microphone and mounting bracket; 13.8-V d.c. positive or negative ground; 2¼" H × 7⅛" W × 5⅛" D $209.95

Model 14T304 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sen-

sitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −50 dB; image response −40 dB; spurious response −60 dB; audio output 3.5 W; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL, local/distance switch; TX indicator; digital channel display with dimmer control; S/RF meter; external and PA speaker jacks; PA capability; supplied with microphone and mounting bracket; 13.8-V d.c. positive or negative ground; 2 15/16" H × 7" W × 8 1/4" D $189.95

Model 14T270 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −40 dB; spurious response −45 dB; audio output 3 W; RF output 4 W; controls: squelch, delta tune, switchable ANL and noise blanker, local/distance switch; modulation and receive indicators; S/RF/SWR meter; external and PA speaker jacks; PA capability; supplied with dynamic microphone and mounting bracket; 12- to 15-V d.c. positive or negative ground; 2 15/16" H × 7" W × 8 1/4" D $174.95

Model 14T260 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −40 dB; spurious response −45 dB; audio output 3 W; RF output 4 W; controls: squelch, RF gain, switchable ANL; TX indicator; S/RF meter; PA capability; external and PA speaker jacks; supplied with dynamic microphone and mounting bracket; 12- to 15-V d.c. positive or negative ground; 2 1/4" H × 6 3/8" W × 7 7/8" D $149.95

AM/SSB

Model 14T302 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±3 kHz (AM), −6 dB at ±2.1 kHz (SSB); adj. channel rejection −40 dB; image response −40 dB; spurious response −60 dB; audio output 3.5 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.005%; carrier suppression −50 dB; controls: switchable noise blanker, local/distance switch, clarifier (±1 kHz), squelch; modulation indicator; digital channel display with dimmer control; S/RF/SWR meter; PA capability; external and PA speaker jacks; 13.8-V d.c. positive or negative ground, 1.5-A max. current drain; 2 1/2" H × 7 1/2" W × 10 1/4" D . . $299.95

CLARION

PE-672E CB/AM-FM Stereo/Cassette
40-channel coverage (PLL synthesized); dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; squelch sensitivity 0.5 μV; image rejection −60 dB; IF rejection −70 dB; RF output 4 W; frequency tolerance 0.002%; controls: AGC, ANL, automatic noise blanker, squelch; tuned RF stage; cassette section features dial-in-door for easy viewing, automatic reverse for continuous play, locking fast-forward/fast-rewind control; tape eject; anti-theft remote transceiver $379.95

PE-621E. Similar to 672E except 8-track cartridge player $359.95

RE-367E. Similar to 672E except without tape unit; 5 pushbutton AM-FM station selector; up-front digital readout $329.95

RCJ-003 40-Channel Transceiver
40-channel coverage (PLL synthesized); dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; squelch sensitivity 0.5 μV; image rejection −60 dB; RF output 4 W; spurious suppression −70 dB; controls: automatic noise blanking, noise limiter, AGC; all controls on mike; anti-theft remote transceiver; digital readout; removable mike for added protection; 13.8-V d.c. negative ground $229.95

COBRA

47XLR AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV; selectivity −6 dB at ±5 kHz; image response −60 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; frequency tolerance ±0.005%; controls: channel selector, digital channel display with dimmer control, and squelch on microphone, Dynamike gain, monitor switch; S/RF meter; 13.8-V d.c. negative ground, 2-A max. current drain; 2" H × 7.25" W × 5" D $299.95

32XLR Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV; selectivity −6 dB at ±4 kHz, −50 dB at ±20 kHz; image response −40 dB; audio output 3 W; RF output 4 W; max. modulation 100%; controls: squelch, RF gain, Dynamike gain, delta tune (±1.5 kHz), switchable ANL and noise blanker, scan/hold switch; S/RF/SWR/modulation meter; digital channel display with dimmer control; channel 9 and TX indicators; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2.36" H × 7.52" W × 9.35" D $279.95

45XLR AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV; selectivity −6 dB at ±5 kHz; image response −60 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; frequency tolerance ±0.005%; controls: Dynamike gain, squelch, switchable ANL, monitor switch; S/RF meter; digital channel display with dimmer control; TX indicator; 13.8-V d.c. negative ground, 2-A max. current drain; 2.3" H × 7.125" W × 7.25" D $269.95

29XLR Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 1 μV; selectivity −6 dB at ±7 kHz, −60 dB at ±10 kHz; image response −50 dB; audio output 4 W; RF output 4 W; max. modulation 100%; controls: Dynamike gain, squelch, RF gain, delta tune (±1.5 kHz), switchable ANL and noise blanker, hash filter switch; S/RF/SWR meter; modulation indicator; digital channel display with dimmer control; PA capability; 13.8-V d.c. positive or negative ground; 2.2" H × 7.28" W × 9.53" D. $229.95

21XLR Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 1 μV; selectivity −6 dB at ±7 kHz, −40 dB at ±10 kHz; image response −80 dB; audio output 4 W; RF output 4 W; max. modulation 100%; controls: Dynamike gain, squelch, switchable ANL; S/RF meter; digital channel display with dimmer control; PA capability; 13.8-V d.c. positive or negative ground; 2.125" H × 6.25" W × 9.53" D $179.95

77X Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 1 μV; selectivity −6 dB at ±7 kHz, −60 dB at ±10 kHz; image response −50 dB; audio output 4 W; RF output 4 W; max. modulation 100%; controls: Dynamike gain, squelch, switchable ANL; S/RF meter; PA capability; 13.8-V d.c. positive or negative ground; 2.25" H × 5.75" W × 8.5" D $149.95

AM/SSB

132XLR Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV (AM), 0.25 μV (SSB); selectivity −6 dB at ±3.8 kHz and −50 dB at ±10 kHz (AM), −6 dB at ±2.2 kHz and −60 dB at ±5 kHz (SSB); image response −50 dB; audio output 3 W; RF output 4 W (AM), 12 W (PEP); carrier suppression −40 dB; controls: squelch, RF gain, Dynamike gain, voice lock (±1.5 kHz AM, ±1 kHz SSB), switchable ANL and noise blanker; S/RF/SWR/modulation meter; digital channel display with dimmer control; PA capability; TX and mode indicators; 13.8-V d.c. positive or negative ground; 2.36" H × 7.52" W × 10.94" D $399.95

138XLR Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.75 μV (AM), 0.25 μV (SSB); selectivity —6 dB at ±4.2 kHz and —60 dB at ±7 kHz (AM), —6 dB at ±4.2 kHz and —60 dB at ±7 kHz (SSB); image response —50 dB; audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); carrier suppression —40 dB; controls: Dynamike gain, squelch, RF gain, voice lock (±600 Hz), switchable ANL and noise blanker, tone; S/RF meter; digital channel display with dimmer control; TX indicator; PA capability; 13.8-V d.c. positive or negative ground; 2.375" H × 7.875" W × 10.5" D $349.95

COLT

SX-44 AM-FM/Tape/CB Transceiver
Combines AM-FM radio, tape player, and 40-channel (PLL synthesized) mobile transceiver; controls: squelch, delta tune, local/distant switch; ANL; noise blanker; S/RF meter; digital channel display on microphone; mounts in dash $339.95

SX-32 AM-FM/CB Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; controls: squelch, tone, stand-by switch; S/RF meter; digital channel display; stand-by, TX, and RX indicators; ANL; mounts in dash $299.95

450 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —5 dB at ±4 kHz, —50 dB at ±20 kHz; adj. channel rejection —50 dB; image response —50 dB; audio output 5 W at 10% dist.; RF output 4 W; max. modulation 95%; frequency tolerance ±0.005%; controls: squelch, microphone gain, delta tune (±1 kHz), RF gain, switchable ANL and noise blanker; S/RF/SWR meter; digital channel display; TX and RX indicators; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground, 2½" H × 7⅛" W × 8" D $229.95

290 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —5 dB at ±4 kHz, —50 dB at ±20 kHz; adj. channel rejection —50 dB; image response —50 dB; audio output 5 W and 10% dist.; RF output 4 W; frequency tolerance ±0.005%; controls: RF gain, squelch, delta tune (±1 kHz), switchable ANL and noise blanker; S/RF meter; digital channel display; TX indicator; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2⅛" H × 6¼" W × 8" D $199.95

350 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; RF output 4 W; controls: squelch; S, RF, and TX indicators; digital channel display; ANL; PA capability; positive or negative ground; 1.4" H × 4.5" W $199.95

220 Mobile Transceiver
40-channel compact mobile transceiver; S/RF meter; digital channel display; ANL; PA capability $149.95

280 Mobile Transceiver
23-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —50 dB at ±10 kHz; image response —50 dB; audio output 4.5 W at 10% dist.; RF output 4 W; frequency tolerance ±0.002%; controls: squelch, switchable ANL and noise blanker; S/RF meter; TX and RX indicators; PA capability; external speaker jacks; 13.8-V d.c. positive or negative ground; 2⁹⁄₁₆" H × 7⅞" W × 7¹¹⁄₁₆" D $129.95

PORTABLES

190 Hand-Held Transceiver
Six-channel (crystal controlled) hand-held transceiver; squelch, three-function meter; ANL; supplied with carrying case and strap; 12-V d.c. (battery) $99.95

AM/SSB

480 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity —5 dB at ±4 kHz, —50 dB at ±10 kHz; image response —50 dB; audio output 5 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 95%; frequency tolerance ±0.005%; controls: clarifier, squelch, switchable ANL and noise blanker, local/distant switch; S/RF meter; digital channel display; TX indicator; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2½" H × 7½" W × 10" D $339.95

CORNELL-DUBILIER

Mark 16 Mobile Transceiver
40-channel mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —6 dB at ±2 kHz, —50 dB at ±10 kHz; RF output 4 W; spurious emissions —60 dB; max. modulation 100%; controls: squelch, RF gain, delta tune (±1.5 kHz), switchable noise blanker; S/RF/SWR meter; TX and RX indicators; PA capability; digital channel display; 13.8-V d.c. positive or negative ground, 1.3-A max. current drain; 2.4" H × 7.1" W × 9.1" D $229.95

Mark 12 Mobile Transceiver
40-channel mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —6 dB at ±2 kHz, —50 dB at ±10 kHz; RF output 4 W; spurious emissions —60 dB; max. modulation 85%; controls: squelch; S/RF meter; TX indicator; PA capability; digital channel display; 13.8-V d.c. positive or negative ground; 2.4" H × 7" W × 7.7" D $149.95

AM/SSB

Mark 26 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity —6 dB at ±2 kHz and —50 dB at ±10 kHz (AM), —10 dB at ±2 kHz and —80 dB at ±10 kHz (SSB): RF output 4 W (AM), 12 W (PEP); spurious emissions —60 dB; max. modulation 100%; controls: RF gain, squelch, clarifier (±1.5 kHz), switchable noise blanker; S/RF/SWR meter; TX and RX indicators; PA capability; digital channel display; 13.8-V d.c. positive or negative ground, 2.2-A max. current drain; 2.4" H × 7.1" W × 10.8" D $374.95

COURIER

Nightrider 40Dr Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, squelch, switchable ANL and noise blanker, tone; channel selector and digital channel display on microphone; PA capability; S/RF meter; TX indicator; positive or negative ground $239.95

Classic PLL 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: local/distance switch, delta tune, squelch, switchable ANL; PA capability; S/RF meter; built-in a.c./d.c. power supply; TX indicator; positive or negative ground $219.95

Rangler 40D Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, squelch, switchable ANL and noise blanker, tone, local/distance switch; TX indicator; digital channel display; positive or negative ground $199.95

Blazer 400 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, squelch, switchable ANL; S/RF meter; digital channel display with dim/hi switch; PA capability; TX indicator; positive or negative ground $149.95

Renegade 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, squelch, switchable ANL; S/RF meter; TX indicator; positive or negative ground $129.95

Rogue 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; S/RF meter; ANL; PA capability; positive or negative ground $119.95

Rebel 40 Mobile Transceiver
40-channel (PLL synthesized) mobile

Compare two great power mikes.

New, clear case
limited edition now available.

We'd like you to compare these two mikes. Ours, the Telex CB-73 Double Header vs. the Turner RK-76, theirs.

Compare them here, or at your CB Pro Shop.

You'll be able to see the difference pretty fast. First off, ours is manufactured to aviation quality – the first available to CB users. And the best. There's a powerful difference between it and other CB microphones, including the Turner model.

We call ours the Double Header because you get selectable noise cancellation. This means you can use it as a conventional power mike, or a superior noise-cancelling power mike that punches you through crisp and clear. You don't get that choice with the Turner RK-76. In fact, on every point in the feature chart, the Telex CB-73 comes out on top.

While you're comparing, check the price. You won't find a better mike for the money.

While you're at your CB Pro Shop, check out the Telex power mike headsets and ask for your free copy of the "CB Power Mike Fact Book."

A clear case of superiority

Pre-Amplified Microphones	TELEX CB-73	TURNER RK 70/76
Suggested Retail Price	$42.95	$44.00
Aircraft Quality & style	YES	NO
Selectable Noise Cancelling	YES	NO
Front/Rear mount	YES	NO
Highest Output*	–43db	–49db
Dynamic Element**	YES	NO
8 foot cord	YES	NO

*–43db is 6db *stronger* than –49db. Re: IV/Microbar.
**Only Turner's most expensive base mikes use a dynamic element.

And hear the difference!

The Pilot People

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CIRCLE NO. 37 ON FREE INFORMATION CARD

transceiver; S/RF meter; squelch; PA capability $119.95

AM/SSB

Gladiator PLL 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, clarifier, squelch, switchable noise blanker; S/RF/SWR meter; PA capability; TX/RX indicators; positive or negative ground $429.95

Spartan PLL 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: clarifier, local/distance switch, switchable noise blanker; S/RF meter; PA capability; positive or negative ground $349.95

CPI

CP-400 AM/SSB Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); adj. channel rejection —80 dB; image response —70 dB; spurious response —70 dB; audio output 2 W at 3% dist.; RF output 4 W (AM), 12 W (PEP); spurious emissions —70 dB; controls: clarifier (±1.5 kHz), squelch, switchable noise blanker, two-position speaker switch, dual-control channel selector; S/RF meter; PA capability; supplied with preamp microphone; 11-15.5-V d.c., max. current drain 2.5 A; 2¼" H × 9" W × 11¾" D $599.00

CP-300. Similar to CP-400 but 23 channels $599.00

BA-5. Base station module for CP-400 and CP-300; front mounted speaker; electronically regulated power supply; built-in short circuit and line fuse protection $89.95

MB-1. Mobile mounting bracket for CP-400 and CP-300; locking $19.95

CRAIG

L600 AM-FM/C8 Mobile Transceiver
Combines AM-FM stereo receiver and 40-channel (PLL synthesized) CB transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —6 dB at ±2 kHz; adj. channel rejection —60 dB; image response —60 dB; audio output 8 W at 10% dist.; RF output 4 W; spurious emissions —60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, tone, local/distance switch, AM-FM push button; ANL; digital channel display; channel selector on microphone and transceiver; PA capability; modulation indicator; supplied with dynamic microphone and mounting hardware; 12-V d.c. negative ground, max. current drain 1.5 A; 2⅛" H × 7 1/16" W × 6¼" D $279.95

L101 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —6 dB at ±2 kHz; adj. channel rejection —60 dB; image response —60 dB; audio output 3.5 W at 10% dist.; RF output 4 W; spurious emissions —60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL; digital channel display with dimmer control; PA capability; modulation indicator; S/RF meter; supplied with dynamic microphone, mounting hardware, and reversible slide-out bracket; 13.8-V d.c. positive or negative ground, max. current drain 2 A; 2⅛" H × 6⅝" W × 8⅞" D $169.95

AM/SSB

L131 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.18 μV at 10 dB S + N/N (SSB); selectivity —6 dB at ±2 kHz; adj. channel rejection —60 dB; image response —60 dB; audio output 3.5 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); spurious emissions —60 dB; max. modulation 100%; frequency tolerance ±0.005%; carrier suppression —50 dB; unwanted sideband rejection —60 dB; controls: clarifier (±800 Hz), squelch, local/distance switch, switchable ANL and noise blanker; digital channel display with dimmer control; S/RF/SWR meter; PA capability; modulation indicator; supplied with dynamic microphone, mounting hardware, and reversible slide-out bracket; 13.8-V d.c. positive or negative ground, max. current drain 2.4 A; 2¼" H × 8½ W × 10¼" D $359.95

EICO

7723 Mobile Transceiver
23-channel synthesized operation; 4 W RF power output; sensitivity 1 μV at 10 dB S + N/N; S/RF meter; variable squelch; automatic modulation limiter; built-in speaker; dual conversion receiver; audio output 3 W at 10% dist.; on-the-air LED indicator; PA capability; plug-in mike; 13.8 V d.c. pos./neg. ground; 1¾" H × 5" W × 8½" D $69.95

EMERGENCY BEACON

RT-40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity —60 dB at ±10 kHz; image response —60 dB; spurious response —50 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions —60 dB; max. modulation 95%; frequency tolerance 0.005%; controls: squelch, switchable noise blanker, delta tune (±2 kHz); ANL; PA capability; digital channel display; external speaker jack; S/RF meter; supplied with dynamic microphone, mobile mounting bracket, and power cable; 11.5-14.5-V d.c. positive or negative ground, max. current drain 1.2 A; 2⅝" H × 7¾" W × 10¼" D $249.00

FANON

ID-40 AM-FM/CB Mobile Transceiver
Combines AM-FM receiver and 40-channel CB transceiver; controls: RF gain, switchable ANL, local/distance switch, squelch, channel 9 priority switch; S/RF meter; TX indicator; digital channel display and channel selector on microphone $249.95

Fanfare 190DF Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, squelch, tone, switchable ANL and noise blanker; S/RF meter; digital channel display and channel selector on microphone $239.95

Fanfare 185DF Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: squelch, switchable ANL and noise blanker, tone, local/distance switch; S/RF meter; PA capability; digital channel display; TX indicator; positive or negative ground $199.95

Fanfare 184DF Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, switchable ANL, squelch; PA capability; digital channel display with dim/hi switch; TX indicator $149.95

Fanfare 182F Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: RF gain, squelch, switchable ANL; S/RF meter; PA capability; positive or negative ground $129.95

Fanfare 125F
40-channel (PLL synthesized) mobile transceiver; S/RF meter; squelch; PA capability; positive or negative ground $119.95

Fanfare 100F
40-channel (PLL synthesized) mobile transceiver; S/RF meter; squelch $119.95

AM/SSB

Fanfare 350 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; controls: clarifier, squelch, switchable noise blanker, local/distance switch; S/RF meter; PA capability $349.95

FIELDMASTER

TR-40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual conversion receiver

sensitivity 0.5 μV at 10 dB S + N/N; selectivity −40 dB at ±9 kHz; RF output 4 W max.; digital dispersion; has ANL, noise blanker, variable squelch control, LED S/RF meter, PA/CB switch, external speaker and PA jacks; 2⅛" H × 6" W × 8½" D $189.95

Micro-Mini 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; sensitivity 0.5 μV at −10 dB

S + N/N; selectivity −40 dB at ±9 kHz; RF output 4 W max.; has variable squelch control, LED S/RF meter; LED channel selector, PA/CB switch, external speaker and PA jacks; 2" H × 4.4" W × 8" D. $159.95

TR-18P Mobile Transceiver
23-channel coverage with phase-locked-loop synthesizer; RF power output 4 W; sensitivity 0.7 μV at 10 dB S + N/N; selectivity −40 dB at ±8 kHz; image response −50 dB; dual-conversion receiver; spurious emissions −60 dB; has ANL, noise blanker, receiver fine tune, variable squelch, PA capability, S/RF meter, external speaker and PA output jacks; requires 1.8 A max. at 13.8 V d.c.; 2⅛" H × 6" W × 8½" D $139.95

Micro-Mini 23 Mobile Transceiver
23-channel coverage with phase-locked-loop synthesizer; RF power output 4 W; sensitivity 1 μV at 10 dB S + N/N; selectivity −30 dB at ±8 kHz; image response −40 dB; dual-conversion receiver; spurious emissions −50 dB; has ANL, receiver fine tune, variable squelch, PA capability, S/RF meter, external speaker and PA output jacks; requires 1.6 A max. at 13.8 V; 2" H × 4.4" W × 8" D $119.95

CB 7000 Mobile Transceiver
23-channel coverage with crystal synthesizer; RF power output 4 W; sensitivity 1 μV at 10 dB S + N/N; has dual-conversion receiver, delta tune, ANL, PA capability, transmit indicator, S/RF meter, variable squelch, built-in speaker; requires 10.8-15.6 V d.c.; 2 7/16" H × 6½" W × 9½" D $99.95

FULCOMM

16-8400 AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) CB transceiver; receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −74 dB; audio output 2.5 W RMS per channel; RF output 4 W; max. modulation 100%; controls: squelch, switchable ANL; S/RF meter; digital channel display; TX and RX indicators; CB stand-by; 11-14-V d.c. negative ground; chassis 2⅘" H × 7" W × 6" D $349.95

15-8200 AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 23 channel (PLL synthesized) CB transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −40 dB at ±10 kHz; audio output 3.5 W at 10% dist.; RF output 4 W; max. modulation 100%; controls: delta tune, squelch; ANL; S/RF meter; 3" H × 7½" W × 8" D $329.95

16-8200 AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 23-channel (PLL synthesized) CB transceiver; receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −40 dB at ±10 kHz; audio output 4 W RMS per channel; RF output 4 W; max. modulation 100%; controls: squelch, delta tune; ANL; S/RF meter; TX and RX indicators; CB monitor; antenna safety circuit; 13.8-V d.c. negative ground; 3" H × 7½" W × 8" D $239.95

15-4035 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −50 dB at ±20 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; controls: RF gain, squelch, switchable ANL, delta tune; TX and RX indicators; digital channel display; PA capability; external speaker jack; S/RF meter; 13.8-V d.c. positive or negative ground; 2" H × 6¼" W × 7¾" D $189.95

15-2335 Mobile Transceiver
23-channel mobile transceiver; receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −50 dB at ±20 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: RF gain, squelch, switchable ANL; modulation indicator; antenna warning light; S/RF meter; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2" H × 6¼" W × 7¾" D $179.95

15-2301 Mobile Transceiver
23-channel mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; controls: delta tune, squelch, switchable ANL; S/RF meter; modulation indicator; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2¼" H × 6¼" W × 7¾" D . $169.95

15-4030 Mobile Transceiver
40-channel mobile transceiver; receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −50 dB at ±20 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, local/distance switch; S/RF meter; TX and RX indicators; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2" H × 6¼" W × 7¾" D . . . $149.95

15-2330 Mobile Transceiver
23-channel mobile transceiver; receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −50 dB at ±20 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch; S/RF meter; TX indicator; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2" H × 6¼" W × 7¾" D $149.95

15-2302 Mobile Transceiver
23-channel mobile transceiver; receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −50 dB at ±20 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch; TX indicator; S/RF meter; PA capability; external speaker jack 13.8-V d.c. positive or negative ground; 2¼" H × 6¼" W × 7¾" D . $139.95

AM/SSB

15-2303 Mobile Transceiver
23-channel mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz, −50 dB at ±10 kHz (AM), −6 dB at ±1.2 kHz, −50 dB at ±2.3 kHz (SSB); audio output 3 W; RF output 4 W (AM), 12 W (PEP); controls; clarifier, squelch, RF attentuator, switchable noise blanker; TX indicator; S/RF meter; PA capability; external speaker jack; quick-release thumbscrew mounting; 13.8-V d.c. positive or negative ground; 2¼" H × 8" W × 9¾" D . . . $349.95

GEMTRONICS

GTX-55 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; image response −60 dB; spurious response −60 dB; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: RF gain, squelch, tone, switchable ANL and noise blanker; S/RF meter; PA capability; digital channel display; external and PA speaker jacks; 13.8-V d.c. operation $209.95

GTX-4040 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −60 dB at ±20 kHz; image response −60 dB; spurious response −60 dB; audio output 3 W; RF output 4 W; max. modulation 95%; frequency tolerance ±0.005%; controls: RF gain, squelch, switchable ANL; S/RF meter; PA capability; modulation indicator; external speaker jack; 13.8-V d.c. positive or negative ground $189.95

GTX-44 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; image response −60 dB; spurious response −60 dB; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: delta tune (±3 kHz), squelch, switchable ANL; S/RF meter; PA capability; external speaker jack; 13.8-V d.c. operation $169.95

AM/SSB

GTX-77 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N (AM), 0.3 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±2 kHz (AM), −6 dB at ±6 kHz (SSB); adj. channel rejection −60 dB; image response −60 dB; spurious response −60 dB; audio output 3 W; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; carrier suppression −40 dB; controls: clarifier (±800 Hz); squelch, tone; S/RF meter; SWR meter; ANL; noise blanker; PA capability; external speaker jack; 13.8-V d.c. operation $359.95

GENERAL ELECTRIC

3-5821 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −50 dB; image response −40 dB; spurious response −40 dB; audio output 2.2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 95%; frequency tolerance ±0.005%; controls: tone, squelch, RF gain, priority channel switch, switchable ANL and noise blanker, delta tune (±1.5 kHz), three-way PA switch; S/RF meter; modulation indicator; digital channel display; PA capability; PA and external speaker jacks; 13.8-V d.c., 1.2-A max. current drain; 2.37" H × 7.5" W × 9.75" D $239.95

3-5819 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV; adj. channel rejection −50 dB; image response −40 dB; spurious response −40 dB; audio output 2.2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 95%; frequency tolerance ±0.005%; controls: RF gain, squelch, three-way PA switch, switchable ANL and noise blanker, tone, delta tune (±1.5 kHz); S/RF/SWR meter; digital channel display; TX and antenna warning indicators; PA capability; PA and external speaker jacks; 13.8-V d.c., 1.2-A max. current drain; 2.5" H × 7.12" W × 8.5" D $219.95
3-5812. Same as 3-5819 but without SWR meter, digital channel display, or RF gain; 2.25" H × 6.5" W × 8" D $174.95
3-5811. Same as 3-5812 but without delta tune and switchable ANL and noise blanker; 2.25" H × 6.5" W × 8.75" D $149.95

PORTABLES

3-5975 Hand-Held Transceiver
Three-channel (crystal controlled) hand-held transceiver; single-conversion receiver; RF output 1.2 W; frequency tolerance ±0.005%; controls: squelch; battery indicator; TX and RX indicator; front-panel external power and earphone jacks; external antenna jack; 44-in telescoping antenna; supplied with channel 14 crystals; powered by eight "AA" cells (not included); 10" H × 3½" W × 2⅛" D . . . $48.00

3-5970 Hand-Held Transceiver
Two-channel (crystal controlled) hand-held transceiver; controls: squelch; battery indicator; TX and RX indicators; front-panel external power and earphone jacks; alert system for initiating calls; supplied with channel 14 crystals; 39-in telescoping antenna; 8¼" H × 3⅛" W × 1¾" D . . $30.00

AM/SSB

3-5825 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3.5 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); carrier suppression −40 dB; max. modulation 95%; frequency tolerance ±0.005%; controls: squelch, RF gain, clarifier (±1350 Hz), tone, switchable ANL and noise blanker; S/RF meter; digital channel display; TX and antenna warning indicators; PA capability; PA and external speaker jacks; 13.8-V d.c., 1.2-A max. current drain; 2½" H × 7½" W × 10⅝" D $329.95

HANDIC

240 AM-FM/CB Mobile Transceiver
Combines AM-FM receiver and 40-channel (PLL synthesized) CB transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S ± N/N; selectivity −60 dB at ±10 kHz; audio output 3.5 W at 10% dist.; RF output 4 W; max. modulation 80%; frequency tolerance ±0.005%; controls: squelch, delta tune (±1 kHz); S/RF meter; TX, RX, and stand-by indicators; digital channel display; 13.8-V d.c., 1.8-A max. current drain; 2" H × 7" W × 7⅜" D $259.95

199 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S+ N/N; selectivity −60 dB at ±10 kHz; audio output 3.5 W at 10% dist.; RF output 4 W; max. modulation 80%; frequency tolerance ±0.005%; controls: squelch, switchable ANL, delta tune (±1 kHz); external speaker jack; controls on microphone; 13.8-V d.c., 1.6-A max. current drain; 6" H × 2" W × 8" D. $239.95

230 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.6 μV at 10 dB S + N/N; selectivity −60 dB at ±10 kHz; audio output 3.5 W at 10% dist.; RF output 4 W; max. modulation 80%; frequency tolerance ±0.005%; controls: squelch, delta tune (±1 kHz), RF gain, tone, switchable ANL and noise blanker; S/RF meter; TX and RX indicators; digital channel display; external speaker jack; PA capability; 13.8-V d.c., 1.6-A max. current drain; 2" H × 6½" W × 7¼" D $199.95

PORTABLES

Hand-Held Transceivers
Four models available; battery-operated (10 nickel-cadmium cells); may be powered by Power Pack Sleeve for use as base; crystal controlled; ANL; squelch; external power supply, battery charger, earphone, and external speaker jacks.
Model 21. Two-channel; selectivity −40 dB at ±10 kHz; 8½" H × 2¾" W × 2¼" D; 1½ lbs $59.95
Model 32. Same except three-channel $69.95
Model 43C. Four-channel; selectivity −45 dB at ±10 kHz; microphone/speaker component; 10" H × 3" W × 2" D; 1 lb, 10 oz $89.95
Model 65C. Same except six-channel; 5 to 1 W power converter $109.95
Power Pack Sleeve. Accepts all Handic hand-held transceivers; permits mobile or base operation; recharger; fuse protected; ABS plastic construction $19.95

HY-GAIN

2703 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: RF gain, squelch, switchable ANL and noise blanker; S/RF/SWR meter; digital channel display; PA capability; TX and RX indicators; external speaker jack; 13.8-V d.c. positive or negative ground; 2¼" H × 7⅛" W × 9⅝" D $249.95

2716 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output

3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: squelch, channel 9 switch, switchable noise blanker; ANL; external speaker and AM-FM muting jacks; PA capability; TX and RX indicators; one-channel memory; 13.8-V d.c.; 2½" H × 8" W × 8¾" D $249.95

2679A Remote-Mount Transceiver
40-channel (PLL synthesized) remote-mount mobile transceiver; dual-conver-

sion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: on/off/volume, PTT, channel selector, squelch, digital channel display, TX indicator, and microphone/speaker element on microphone body; external speaker and AM-FM muting jacks; 13.8-V d.c. positive or negative ground; 2½" H × 8" W × 8¾" D . . . $239.95

2702 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: switchable ANL, squelch, RF gain; S/RF meter; PA capability; digital channel display; external speaker jack; 13.8-V d.c. positive or negative ground; 2¼" H × 6¾" W × 9⅛" D $199.95

2710 "Hide & Speak" Transceiver
40-channel (PLL synthesized) remote-mount mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: PTT, channel selector, squelch, on/off/volume, TX indicator, and microphone/speaker element on microphone body; ANL; external speaker and AM-FM muting jacks; 13.8-V d.c. positive or negative ground; 2½" H × 8" W × 8¾" D $199.95

2701 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: squelch; S/RF meter; ANL; external speaker jack; 13.8-V d.c. positive or negative ground; 2¼" H × 6⅜" W × 9⅛" D $139.95

2680A Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: squelch; ANL; external speaker jack; 13.8-V d.c.; 2¼" H × 6¾" W × 9⅛" D $129.95

437 Base Console
Base console for mobile CB transceivers; provides 13.8-V d.c., 1.5 A; front-panel power switch and pilot light; short circuit and overload protection; for use with Hy-Gain Models 2680A, 2701, and 2702; 115-V a.c.; 6⅜" H × 11½" W × 10" D $59.95

PORTABLES

1292 Hand-Held Transceiver
Six-channel (crystal controlled) hand-held transceiver; single-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −40 dB at ±10 kHz; image response −10 dB; audio output 2.3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency stability ±0.001%; controls: squelch, internal/external microphone/speaker switch; S/RF/battery meter; ANL; external microphone/speaker, battery charger, external antenna, and earphone jacks; 11-section 57-in telescopic antenna; supplied with carrying sling and crystals for channel 11 only; 12-V d.c.; 10½" H × 3" W × 3½" D $109.95

1291. Similar to 1292 but three-channel; audio output 0.8 W at 10% dist.; RF output 1 W $79.95

AM/SSB

2705 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±6 kHz (AM), −6 dB at ±2.4 kHz (SSB); adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.001%; carrier suppression −40 dB; controls: squelch, RF gain, clarifier (±600 Hz), RF gain, switchable noise blanker; S/RF meter digital channel display; PA capability; external speaker jack; ANL; 13.8-V d.c. positive or negative ground; 2¾" H × 8½" W × 11½" D . $369.95

J.I.L.

860CB CB/AM-FM Stereo/8-Track
Combines 40-channel CB coverage with AM-FM stereo receiver, and 8-track stereo cartridge player; CB function controls on mike include channel selector, LED channel readout, RF gain, PTT switch; front-

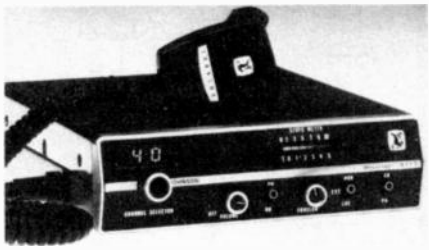
panel controls for squelch, standby monitor, RX & TX indicator lights; receiver has selector switch, manual tuning, local/distant switch, stereo indicator light, antenna trimmer; cartridge player has dial-in-door cartridge slot, channel indicator lights, manual track selector, volume with bass boost, balance & tone controls; 2" H × 7" W × 7" D $359.95

615CB. Similar to 860CB but includes stereo cassette player with eject/fast-forward button, tape play indicator in place of 8-track player; 2" H × 7½" W × 7" D $369.95

E. F. JOHNSON

Messenger 4170 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −60 dB at ±20 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable noise blanker, local/extended/normal switch; S/RF meter; ANL; digital channel display; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2.25" H × 8" W × 9.9" D $199.95

Messenger 4175. Same as 4170 but with



LED S/RF meter $199.95

Messenger 4140 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −60 dB at ±30 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL; S/RF meter; digital channel display with dimmer control; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2" H × 6.2" W × 8.9" D $149.95

Messenger 4145. Same as 4140 but with LED S/RF meter $149.95

Messenger 4120 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −60 dB at ±30 kHz; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch; digital channel display; external speaker jack; 13.8-V d.c. positive or negative ground; 2" H × 6.2" W × 8.9" D . $99.95

PORTABLES

Messenger 92 Hand-Held Transceiver
Five-channel (crystal controlled) hand-held transceiver; RF output 1.7 W; controls: squelch; LED battery indicator; flexible compact antenna; external antenna and speaker jacks; metal chassis and case $169.95

AM/SSB

Viking 4740 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.3 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±6 kHz, −60 dB at ±30 kHz; audio output 2 W; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable noise blanker, fine tune (±1350 Hz), RF gain; S/RF meter; ANL; digital channel display with dimmer control; mode indicators; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2.4" H × 7.5" W × 10.7" D $359.95

KALIMAR

K-740 Mobile Transceiver
40-channels with PLL; dual-conversion receiver; sensitivity 0.7 μV at 10 dB S + N/N; −55 dB adj. channel rejection; delta tune ±1 kHz; 3-W audio output; spurious emissions 70 dB; 3.6 W RF output; ±0.002% frequency tolerance, 85% modulation; PA capability; switchable ANL; squelch control; external speaker jack; S/RF meter; RF gain control; digital channel indicator; 13.8-V d.c. operation; 2⅞" H × 6½" W × 9½" D $239.95

K-747 Mobile Transceiver
23-channels with PLL; dual-conversion receiver; sensitivity 1 μV at 10 dB S + N/N; 3.5-W audio output; 4-W RF output; ANL; squelch control; S/RF meter; delta tuning; comes with mike, mike hanger, mobile mounting bracket; 13.8-V d.c. operation; 2⁷/₁₆" H × 6½" W × 9½" D $169.95

K-727. Similar to K-747 except does not have delta tune $149.95

KRACO

4090 AM-FM/8-Track/CB Transceiver
Combines AM-FM radio, 8-track tape player, and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −90 dB; image response −70 dB; spurious response −65 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 75%; frequency tolerance ±0.005%; controls: squelch, fine tune (±2 kHz), switchable noise blanker, stand-by switch; digital channel display on microphone; external speaker jack; 13.8-V d.c. positive ground, 1.7-A max. current drain; 2⅞" H × 7¼" W × 6" D $444.95

4088 AM-FM/CB Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; adj. channel rejection −100 dB; image response −50 dB; spurious response −65 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance 0.005%; controls: squelch, stand-by switch; digital channel display; TX and stand-by indicators; LED S/RF meter; 13.8-V d.c. positive ground, 1.7-A max. current drain; 2¾" H × 7¼" W × 6" D $377.95

4070 AM-FM/CB Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −85 dB; image response −45 dB; spurious response −66 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 80%; frequency tolerance ±0.005%; controls: squelch, stand-by switch; digital channel display; TX and stand-by indicators; S/RF meter; ANL; 13.8-V d.c. positive ground, 1.7-A max. current drain; 2" H × 7.6" W × 5.9" D $335.95

4005 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −100 dB; image response −95 dB; spurious response −65 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 90%; frequency tolerance ±0.005%; controls: squelch, fine tune (±1 kHz), switchable ANL and noise blanker, RF gain; TX and RX indicators; S/RF meter; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground, 1.5-A max. current drain; 2⅓" H × 7" W × 8½" D $219.95

4004 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 2.5 μV at 10 dB S + N/N; adj. channel rejection −70 dB; image response −70 dB; spurious response −65 dB; audio output 2.5 W at 10% dist.; RF output 4 W; max. modulation 70%; frequency tolerance ±0.005%; controls: squelch, delta tune (±1 kHz), RF gain, switchable ANL; digital channel display; S/RF meter; TX and RX indicators; PA capability; external speaker jack; 13.8-V d.c. positive ground; 1.5-A max. current drain; 2⅛" H × 6½" W × 8½" D $219.95

4030 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −70 dB; image response −80 dB; spurious response −65 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 90%; frequency tolerance ±0.005%; controls: squelch, delta tune, switchable ANL and noise blanker, RF gain; S/RF meter; PA capability; external speaker jack; 13.8-V d.c. positive or

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4020 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −75 dB; image response −80 dB; spurious response −65 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 90%; frequency tolerance ±0.005%; controls: delta tune, squelch, switchable ANL; S/RF meter; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground, 1.5-A max. current drain; 2¼" H × 6½" W × 8⅝" D $179.95

4010 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −75 dB; image response −80 dB; spurious response −65 dB; audio output 4 W at 10% dist., RF output 4 W; max. modulation 90%; frequency tolerance ±0.005%; controls: squelch; S/RF meter; ANL; external speaker jack; 13.8-V d.c. positive or negative ground, 1.5-A max. current drain; 2¼" H × 6⅞" W × 8¾" D. $139.95

KRIS

XL-40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −60 dB; image response −25 dB; spurious response −50 dB; audio output 3 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, two-position speaker switch, switchable ANL; PA capability; external speaker jack; S/RF meter; S-meter jack; TX indicator; 13.8-V d.c., max. current drain 2 A; 2.3" H × 6.5" W × 8.4" D. $179.95
XL-45. Similar to XL-40 but with switchable noise blanker; RF gain; microphone gain; TK BK switch; digital channel display $299.95
XL-50. Similar to XL-45 but with image response of −45 dB; spurious response −55 dB; separate S, RF, and modulation meters; tone control; LED dimmer switch; delta tune; TX/RX indicator; max. current drain 2.5 A; 3" H × 8.9" W × 9.5" D . $259.95

LAFAYETTE

HB-940 40-Ch Mobile Transceiver
40-channel coverage; digital synthesizer; 4-W RF output; 90% AM modulation; sensitivity 0.7 μV at 10 dB S + N/N; selectivity, −45 dB down at ±10 kHz; spurious response −50 dB; audio output 3 W into 8 ohms; LED digital channel readout; switchable noise blanker & ANL; SWR/Cal control; RF gain control; delta fine tuning; switchable CB/PA modes; variable squelch; TX & RX indicator lights; SWR/RF meter; range-boost circuit; comes with dynamic mike, mobile mounting bracket, d.c. line cord; 12-V d.c. positive- or negative-ground $199.95
HB-740. Similiar to HB-940 but without LED digital readout; has switchable local/distance functions $159.95
HB-640. Similar to HB-740 but without noise blanker, RX indicator light; has automatic modulation limiter $119.95

PORTABLES

Dyna-Com 23 CB Portable Radio
Hand-held, 23-channel crystal-controlled portable with external mike/speaker jack; operates from 12 nickel-cadmium rechargeable batteries or 10 "AA" alkaline or dry-cell batteries; optional eliminator/charger permits 117-volt a.c. base-station operation; combined S meter/battery-condition indicator; speech compressor; automatic noise limiter; variable squelch; PA facilities; dual-conversion superhet; 0.7 μV sensitivity at 10 dB S + N/N; supplied with all crystals $159.95

Dyna-Com 12A CB Portable Radio
Hand-held, 12-channel crystal-controlled portable with provision for optional external mike/speaker; operates on self-contained battery pack with provision for external 12-volt d.c. battery source, battery eliminator/charger for operation on 117-volt a.c. available as optional extra; combination battery/RF/S meter; variable squelch and volume controls; range-boost circuitry; pi-network antenna output; PA switch; superhet receiver with 0.7 μV sensitivity at 10 dB S + N/N; includes transmit/receive crystals for channel 10, telescoping whip antenna $109.95

Dyna-Com 3b
3-channel portable transceiver; sensitivity 1 μV at 10 dB S + N/N; selectivity −26 dB at ±10 kHz; adjacent channel rejection −26 dB. image response −18 dB; single-conversion receiver; has ANL, squelch, automatic modulation limiting, built-in speaker and S/RF meter (also monitors battery condition); comes with battery charger jack, crystals for one channel; external speaker/earphone and antenna jacks are built-in; operates from 13.8-V d.c. source or built-in battery pack; 10¼" H × 3½" W × 2 11/16" D $74.95

AM/SSB

Telsat SSB-120 Transceiver
40-channel coverage (PLL synthesized); dual-conversion AM receiver sensitivity 1 μV for 10 dB S + N/N, single-conversion SSB receiver sensitivity 0.25 μV for 10 dB S + N/N; audio output 3 W at 10% dist.; spurious response −60 dB; adjacent channel rejection −70 dB; image rejection 50 dB down; RF output 4 W (AM), 12 W PEP (SSB); clarifier range ±600 Hz; selectivity 6 kHz at 6 dB down (AM), 2 kHz at 6 dB down (SSB); 100% max. modulation; PA

capability; switchable noise blanker; controls: squelch; external speaker jack; RF gain; S/RF meter; SWR meter; fine tune control; tone/lo switch; CB/PA switch 13.8-V d.c. positive or negative ground; 2½" H × 7¾" W × 9½" D; 99-33631 W $249.95
Telsat SSB-80. Similar to SSB-120 except SSB receiver sensitivity 0.3 μV; clarifier range ±800 Hz; has no PA facilities; ANL built-in; no RF gain control; 3" H × 8¾" W × 10½" D, 99-33607 W $199.95

LAKE

5000 AM-FM Stereo/CB Transceiver
40-channel (PLL synthesized) coverage; receiver sensitivity 0.5 μV; selectivity −50 dB; image rejection 40 dB; audio output 2.2 W at 8 ohms; RF power output 3.7 W; harmonic suppression 60 dB; frequency tolerance ±0.004%; digital LED channel display; S/RF meter; local/distance switch; TX/stereo LED indicator; squelch control; 13.8-V d.c.; 2¼" H × 7¼" W × 5½" D $239.95
5050. Same as 5000 but with pushbutton control $259.95

750 Mobile Transceiver
40-channel (PLL synthesized) coverage; receiver sensitivity 0.5 μV for 10 dB S + N/N; selectivity −50 dB at 10 kHz; image rejection 70 dB; 3 W audio output into 8 ohms; RF power output 4 W; max. modulation 100%; harmonic suppression 66 dB; digital LED channel display; S/RF meter; noise blanker switch; CB/PA switch; TX and RX LED indicators; squelch control; delta tune; SWR warning indicator; detachable mike with locking ring; under-dash mounting bracket; 13.8-V d.c. positive or negative ground $159.95

850 Mobile Transceiver
40-channel (PLL synthesized) coverage; receiver sensitivity 0.7 μV for 10 dB S + N/N; selectivity −6 dB at 6 kHz, −60 dB at 20 kHz; 3 W audio output into 8 ohms; RF power output 4 W; 95% max. modulation; harmonic suppression −60 dB; ANL; CB/PA switch; built-in automatic level control; PA capability; delta tune; squelch control; detachable mike; under-dash mounting bracket; 13.8-V d.c. positive or negative ground; 2.4" H × 6.5" W × 7.75" D $149.95

650 Mobile Transceiver
40-channel (PLL synthesized) coverage; receiver sensitivity 1 μV; selectivity −60 dB; image rejection 50 dB; audio output 3 W into 8 ohms; RF power output 4 W; 100% max. modulation; LED channel display; S/RF meter; PA capability; TX LED

indicator; squelch control; detachable mike; 13.8-V d.c. positive or negative ground; 1⅞" H × 6⅝" W × 9" D . . $139.95

MEDALLION

63-030 CB/AM-FM Stereo Radio
Combines 40-channel (PLL synthesized) CB coverage with AM-FM stereo radio; 3-piece modular design; dual-conversion receiver; audio output 3 W at 10% dist.; spurious response −60 dB; ANL; squelch control; max. modulation 100%; 4 W RF output; two-speed, two-button channel changer on mike; CB monitor switch; five push-button tuning; local/distance switch; tone, balance & fader controls; LED channel indicator; 13.8 V d.c. in-dash unit measures 1¾" H × 7⅛" W × 4¾" D; circuit module 2¼" H × 6⅞" W × 8⅜" D $299.90

63-240 CB/AM-FM Stereo Radio
Combines 40-channel CB coverage with AM-FM stereo radio; in-dash mounting; PLL synthesizer; dual-conversion receiver; spurious response −60 dB; 4 W audio output at 10% dist.; sensitivity 0.7 μV at 10 dB S + N/N; selectivity −45 dB at ±10 kHz; max. modulation 100%; AGC; variable squelch; S/RF meter; local/distance, tone & fader controls; LED channel indicator; 13.8-V d.c. negative ground; 2¾" H × 7⅛" W × 6⅛" D $299.90

MIDLAND

77-899 AM-FM/CB Mobile Transceiver
Combines AM-FM receiver and 40-channel (PLL synthesized) CB mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: pushbutton channel selector, volume, and squelch on microphone; ANL; digital channel display; external speaker jack; AM-FM section mounts in dash; CB section mounts on firewall or in trunk; 13.8-V d.c. negative ground $359.95

77-955 Mobile Transceiver
40-channel (PLL synthesized) mobile three-component modular transceiver;

dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: on/off, channel selector, PA/CB/Ext CB on control head; PTT, volume, and squelch on microphone; S/RF meter; TX indicator; PA capability; PA and external speaker jacks; CB module mounts remotely; 13.8-V d.c. positive or negative ground $274.95

77-861 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −45 dB at ±10 kHz; spurious response −40 dB; audio output 3 W; RF output 4 W; spurious emissions −60 dB; max. modulation 95%; controls: up/down channel selectors on microphone and transceiver, squelch, RF gain, switchable ANL and noise blanker, hi-filter switch; digital channel display with dimmer control; S/RF meter; PA capability; PA and external speaker jacks; supplied with dynamic microphone, mounting bracket and hardware, d.c. power cable, owner's manual and FCC forms; 13.8-V d.c. positive or negative ground; 2¼" H × 7" W × 8¼" D $253.95

77-883 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: auxiliary volume control on microphone; squelch, tone, delta tune (±1 kHz), switchable ANL and noise blanker; S/RF/SWR meter; TX and antenna warning indicators; PA capability; PA and external speaker jacks; supplied with microphone, mounting bracket, and hardware; 13.8-V d.c. positive or negative ground; 2½" H × 6⅞" W × 8½" D . $229.95

77-861 Mobile/Portable Transceiver
40-channel (PLL synthesized) mobile/portable transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W (mobile), switchable 3.1/1.5 W (portable); controls: squelch, hi/lo power switch, "Check-Lite" button; S/RF/battery meter; speaker in microphone; ANL; telescoping antenna; external speaker, antenna, and power jacks; supplied with carrying case, shoulder strap and pad, microphone/speaker, antenna, mounting bracket and hardware, d.c. power cord, manual, and FCC forms; 13.8-V d.c. positive or negative ground or battery operation; 3¼" H × 4⅝" W × 7⅝" D overall; 3.25 lbs $207.95

77-825 Mobile Transceiver
40-channel (PLL synthesized) compact mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: squelch, PA/CB/Ext CB switch; digital channel display; TX indicator; S/RF meter; ANL; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2¾" H × 5⅜" W × 6⅝" D $174.95

77-830 Mobile Transceiver
40-channel (PLL synthesized) compact mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: squelch, hi-filter switch; S/RF meter; TX indicator; ANL; external speaker jack; top-view control panel; PA capability; 13.8-V d.c. positive or negative ground; 2" H × 5⅛" W × 9" D $149.95

PORTABLES

13-796 Hand-Held Transceiver
23-channel (crystal synthesized) hand-transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF input 2.5/5 W; controls: squelch, hi/lo power switch; S/RF/battery meter; ANL; PA capability; 57-in 11-section telescoping antenna; external speaker/microphone, antenna, PA speaker, power supply, and battery charger jacks; supplied with carrying case and shoulder strap; 12-V d.c. or battery powered; 8" H × 3" W × 3 3/16" D; 25 ounces $159.95

13-779 Hand-Held Transceiver
6-channel (crystal controlled) hand-held transceiver; single-conversion receiver sensitivity 1 μV at 10 dB S + N/N; RF output 4/2 W; max. modulation 100%; controls: squelch, hi/lo power, internal/external speaker/microphone; battery meter; ANL; 57-in 11-section telescoping removable antenna; external antenna, speaker/microphone, speaker/earphone, a.c. adapter, and battery charger jacks; supplied with carrying case, shoulder strap, antenna case, and crystals for channel 11; 12-V d.c.; 9 1/16" H × 3¼" W × 1⅞" D. $139.95

13-785 Hand-Held Transceiver
3-channel (crystal controlled) ultra-compact hand-held transceiver; single-conversion receiver sensitivity 1.5 μV at 10 dB S + N/N; RF input 5/2 W; controls: squelch, charge/power switch, hi/lo power switch; S/RF/battery meter; ANL; 56-in 13-section telescoping antenna; battery charger, a.c. adapter, earphone, external speaker, microphone, and antenna jacks; supplied with carrying case, earphone, and channel 11 crystals; 12-V d.c. battery-powered; 8" H × 3" W × 2¼" D; 25 ounces $119.95

AM/SSB

79-893 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; RF output 4 W (AM), 12 W (PEP); controls: microphone gain, squelch, RF gain, clarifier, tone, switchable noise blanker; S/RF meter; PA capability; supplied with microphone, d.c. power cord, mounting bracket, and hardware; 12-V d.c. positive or negative ground . . $369.95

79-892 Mobile Transceiver
40-channel mobile transceiver; RF output 4 W (AM), 12 W (PEP); controls; clarifier on microphone, RF gain, squelch, tone, switchable noise blanker; S/RF meter; PA capability; supplied with microphone,

d.c. power cord, mounting bracket, and hardware; 12-V d.c. positive or negative ground $339.95

MOTOROLA

All four of the company's 40-channel under-dash models feature digital phase-lock-loop synthesizer; dual-gate FET front end; plug-in power mike with built-in amplifier; top-fire speaker; illuminated S/RF meter; external PA and speaker capability; ANL; AGC.

4020. In addition to standard features has both "extender" noise blanker which rejects ignition noise in receiver and LED digital channel readout with dimmer $249.95

4010. Similar to 4020 but without "extender" but with LED readout with dimmer. $219.95

4005. Similar to 4020 but without LED digital readout $219.95

4000. Basic unit $189.95

PACE

8340 AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection –60 dB; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, stand-by switch; LED S/RF meter; digital channel display; TX and stand-by indicators; ANL; PA capability; external speaker jack; 13.8-V d.c.; 2¾" H × 7⅜" W × 7½" D $289.95

8047 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity –6 dB at ±5.5 kHz; adj. channel rejection –55 dB; image response –50 dB; audio output 3 W; RF output 4 W; spurious emissions –60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: Scan Alert controls (monitors channels 9, 19, and one of your choice), channel 9 switch, dual squelch, RF gain, delta tune (±2 kHz), switchable ANL and noise blanker; S/RF meter; Scan Alert and TX/antenna warning indicators; digital channel display; external speaker jack; PA capability; 13.8-V d.c. positive or negative ground; 1⅞" H × 6⅝" W × 9" D $259.95

CB 145C Mobile Transceiver
Combines National Weather Service receiver and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection –60 dB; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: RF gain, squelch, delta tune (±2 kHz), switchable noise blanker; S/RF meter; TX, RX, and mode indicators; PA capability; external speaker jack; 13.8-V d.c.; 2¼" H × 7½" W × 10" D $249.95

8046 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection –55 dB; image response –50 dB; audio output 3 W; RF output 4 W; spurious emissions –60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, RF gain, delta tune (±2 kHz), switchable ANL and noise blanker; S/RF meter; RX and TX/antenna warning indicators; digital channel display; PA capability; external speaker jack; 13.8-V

d.c. positive or negative ground; $229.95

8015 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5.5 kHz; adj. channel rejection −50 dB; image response −50 dB; audio output 5 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; controls: squelch, RF gain, delta tune (±1 kHz), switchable ANL; S meter; digital channel display; PA capability; external speaker jack; TX indicator; 13.8-V d.c. positive or negative ground; 2¼" H × 7" W × 10" D $209.95

C8 2300C Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.35 μV at 10 dB S + N/N; adj. channel rejection −50 dB; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, remote/local switch; S meter; PA capability; ANL; external speaker jack; 13.8-V d.c.; 2½" H × 6¾" W × 8" D $199.95

8041 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −55 dB; image response −50 dB; audio output 3 W; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, RF gain, delta tune (±2 kHz), switchable ANL; S/RF meter; RX and TX/antenna warning indicators; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; $199.95

CB 166C Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −50 dB; audio output 4 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL and noise blanker; S/RF meter; TX and RX indicators; PA capability; external speaker jack; 13.8-V d.c.; 1⅞" H × 6⅝" W × 8" D $189.95

8025 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −50 dB; image response −50 dB; audio output 4 W; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: squelch, switchable ANL and noise blanker; S/RF meter; TX and RX indicators; digital channel display; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 1⅞" H × 6⅝" W × 9" D $189.95

8010 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5.5 kHz; adj. channel rejection −65 dB; image response −50 dB; audio output 5 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; controls: squelch, switchable ANL; S meter; digital channel display; TX indicator; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2¼" H × 7" W × 10" D $169.95

8008 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −50 dB; image response −50 dB; audio output 4 W; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: squelch; S/RF meter; PA capability; external speaker jack; 13.8-V d.c. pos./neg. gnd. $139.95

PORTABLES

CB 155 Hand-Held Transceiver
Six-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.5 μV; RF output 4 W; max. modulation 100%; controls: squelch, hi/lo input power switch (1 or 5 W), power/charge switch; S/RF/battery meter; telescoping antenna; re-

mote microphone, speaker, PA speaker, adapter/charger, earphone, and external antenna jacks; PA capability; 12-V d.c. (battery or adapter); supplied with Texon carrying case with shoulder strap, earphone, and channel 11 crystals . . . $99.95

CB 150 Hand-Held Transceiver
Six-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.6 μV; RF output 4 W; controls: squelch, hi/lo input power switch (1 or 5 W), power/charge switch; telescoping antenna; ANL; earphone, charger, and external antenna jacks; 5-6-V d.c. (battery or adapter); supplied with Texon carrying case with shoulder strap, earphone, and channel 11 crystals $89.95

CB 125 Hand-Held Transceiver
Three-channel (crystal controlled) hand-held transceiver; receiver sensitivity 1 μV; RF input 3 W; max. modulation 100%; controls: squelch; battery indicator; telescoping antenna; remote speaker, earphone, adapter, external antenna, and charger jacks; 12-V d.c. (battery or adapter); supplied with Texon carrying case with shoulder strap, earphone, and channel 11 crystals $69.95

CB 115 Hand-Held Transceiver
Three-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.5 μV; RF input 2 W; max. modulation 100%; controls: squelch; telescoping antenna; external speaker, earphone, adapter, external antenna, and charger jacks; 12-V d.c. (battery or adapter); supplied with earphone $59.95

AM/SSB

CB 1000MC Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver; adj. channel rejection −40 dB; image response −40 dB; audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; carrier suppression −40 dB; frequency tolerance ±0.005%; controls: squelch, RF gain, clarifier (±1.2 kHz), switchable noise blanker; S/RF meter; TX, RX, and mode indicators; PA capability; ANL; external speaker jack; 13.8-V d.c.; 2¼" H × 7½" W × 10" D $399.95

PACER

XLR 29 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −6 dB at ±4 kHz, −40 dB at ±20 kHz; image response −30 dB; audio output 2.5 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, RF gain, delta tune (±1.5 kHz), switchable ANL and noise blanker; TX and modulation indicators; digital channel display; S/RF meter; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground, 1.5 A max. current drain; 2½" H × 8½" W × 8½" D $179.95

PALOMAR

4100 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −60 dB; image response −60 dB; RF output 4 W; max. modulation 100%; controls: RF gain, squelch, switchable ANL and noise blanker, delta tune (±1500 Hz); S/RF meter; TX indicator; PA capability; digital channel display; PA and external speaker jacks; 13.6-V d.c. positive or negative ground; 2¼" H × 7¼" W × 7½" D $239.95

49. Similar to 4100 but with modulation indicator; image response −50 dB; audio output 2.5 W $209.95

41. Similar to 49 but without modulation and TX indicators, noise blanker, RF gain, or delta tune; spurious response −60 dB; 2¼" H × 6" W × 7½" D $175.00

21 Mobile Transceiver
23-channel (crystal synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −6 dB at ±4 kHz, −40 dB at ±20 kHz; image response −30 dB; audio output 2.5 W; max. modulation 100%, frequency tolerance ±0.005%; controls: switchable ANL, microphone gain, squelch; S/RF meter; external speaker jack; 13.8-V d.c. positive or negative ground, 1.5-A max. current drain; 2¼" H × 5⅞" W × 8½" D $165.00

PANASONIC

RJ-3450 Remote-Mount Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; image response −45 dB; spurious response −45 dB; audio output 4 W (with external speaker), 0.2 W with built-in speaker at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL and noise blanker, channel 9 emergency switch, auto/manual scanner switch; digital channel display; controls on microphone; remote-mount transceiver; external speaker jack; 13.8-V d.c., 2.0-A max. current drain; 2⅞" H × 7⅝" W × 8¹¹⁄₁₆" D $229.95

RD-9340. 13-ft coax for trunk-mounting RJ-3450 . . . . . $19.88

RJ-3250 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; image response −45 dB; spurious response −45 dB; audio output 2 W at 10% dist.; RF output 4W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: delta tune (±1 kHz), squelch, switchable ANL and noise blanker, three-step RF gain; S/RF meter; antenna warning indicator; external speaker jack; PA capability; modulation meter; channel 9 emergency switch; digital channel display; TX indicator; 13.8-V d.c., 2.0 A max. current drain; overall size 2⁹⁄₁₆" H × 9" W × 10½" D $199.95

RJ-3150 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; image response −45 dB; spurious response −45 dB; audio output 2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: delta tune (±1 kHz), squelch, switchable ANL; S/RF meter; PA capability; external speaker jack; with easy release dual-position mounting bracket; 13.8-V d.c., 2.0-A max. current drain; 2⁹⁄₁₆" H × 8" W × 10½" D $159.95

RJ-3050 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; image response −45 dB; spurious response −45 dB; audio output 2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch; S/RF meter; ANL; external speaker jack; digital channel display; 13.8-V d.c., 2.0-A max. current drain; 2⁹⁄₁₆" H × 6⅞" W × 10½" D $129.95

AM/SSB

RJ-3700 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±5 kHz (AM), −6 dB at ±4 kHz (SSB); adj. channel rejection −55 dB (AM), −60 dB (SSB); image response −45 dB; spurious response −45 dB; audio output 2 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, clarifier, switchable ANL and noise blanker, RF gain; S/RF meter; modulation indicator; digital channel display; external speaker jack; PA capability; with quick-release mounting bracket; 13.8-V d.c. positive or negative ground, 3-A max. current drain; 2⁷⁄₁₆" H × 8¹¹⁄₁₆" W × 12⁵⁄₁₆" D $299.95

PEARCE-SIMPSON

"Leopard A" CB/AM-FM Stereo Mobile
In-dash 40-channel (PLL synthesizer) coverage plus AM-FM stereo reception; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −45 dB; selectivity −6 dB at ±5 kHz; delta tune ±5 kHz; image response −80 dB; audio output 3.5 W at 10% dist.; RF output power 4 W; spurious response −60 dB; 100% max. modulation; ANL; squelch; S/RF meter; radio includes balance & volume controls; AFC; local/distant selector, tone control, FM stereo indicator, rotary tuning control; two external 4-8 ohm speakers required; 13.8-V d.c. operation; 2 1/16" H × 7 1/8" W × 5 1/8" D $299.95

"Lion 40" Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; audio output 3 W at 10% dist.; adj. channel rejection −50 dB; selectivity −6 dB at ±5 kHz; image response −90 dB; delta tune ±1 kHz; spurious response −50 dB; frequency tolerance ±0.002%; PA capability; ANL; squelch; external speaker jacks; SWR & S/RF meter; RF gain control; 100% max. modulation; 2 1/4" H × 7" W × 8 1/2" D $249.95

"Super Tiger 40" Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; audio output 3 W at 10% dist.; RF power output 4 W; adj. channel rejection −50 dB; selectivity −6 dB at ±5 kHz; image response −80 dB; delta tune ±1 kHz; spurious response −60 dB; frequency tolerance ±0.002%; 100% max. modulation; PA capability; ANL; squelch; external speaker jack; SWR & S/RF meter; RF gain control; 13.8 V d.c. operation; 2 3/16" H × 6 7/8" W × 9 1/2" D $239.95

"Tiger 40" Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; 3 W audio output at 10% dist.; 4 W RF output; adj. channel rejection −50 dB; selectivity −6 dB at ±5 kHz; image response −80 dB; delta tune ±1 kHz; spurious response −50 dB; frequency tolerance 0.002%; 100% max. modulation; PA capability; ANL; squelch; external speaker jack; S/RF meter; RF gain control; 13.8 V d.c.; 2 1/4" H × 6 7/8" W × 8 1/4" D $229.95

AM/SSB

"Super Panther SSB 40" AM/SSB Mobile
40-channel (PLL synthesized) coverage plus USB & LSB; dual-conversion receiver sensitivity (AM) 1 μV at 10 dB S + N/N, single-conversion (SSB) 0.3 μV; audio output 3 W at 10% dist.; RF power output 4 W (AM), 12 W PEP (SSB); adj. channel rejection −60 dB; selectivity −6 dB at 6 kHz (AM), −6 dB at 2 kHz (SSB); image response −60 dB; clarifier range ±800 Hz; spurious response −60 dB; carrier suppression −40 dB down; frequency tolerance ±0.002%; max. modulation 100%; PA capability; ANL; squelch; external speaker jack; S/RF meter; 13.8 V d.c.; 2 1/2" H × 7 1/4" W × 9 7/8" D $369.95

JC PENNEY

6225 AM-FM/CB Mobile Transceiver
Combines AM-FM receiver and 40-channel transceiver; dual-conversion receiver sensitivity 1 μV; adjacent channel rejection −100 dB; RF output 4 W; max. modulation 90%; controls: squelch, fine tune, local/distance switch, stand-by switch; ANL; S/RF meter; digital channel display; 12-V d.c.; 2 11/16" H × 7 1/2" W × 5 15/16" D $229.95

6221 Mobile Transceiver
40-channel mobile transceiver; dual-conversion receiver sensitivity 0.35 μV; selectivity −50 dB at ±10 kHz; adj. channel rejection −60 dB; audio output 5W; RF output 4 W; max. modulation 90%; controls: RF gain, squelch, fine tune, switchable ANL and noise blanker; S/RF meter; modulation indicator; channel-9 scanner; PA capability; aux. jacks; digital channel display; 12-V d.c.; 2 1/2" H × 7 3/3" W × 9 1/16" D $169.00

6218 Mobile Transceiver
40-channel mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −55 dB; RF output 4 W; max. modulation 100%; controls: RF gain, delta tune, squelch, tone, switchable ANL and noise blanker; S/RF/SWR meter; PA capability; digital channel display; external speaker and PA speaker jacks; 12-V d.c. positive or negative ground; 65 mm H × 175 mm W × 211 mm D $149.99

6214 Mobile Transceiver
40-channel mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −55 dB; RF output 4 W; max. modulation 100%; controls: squelch, delta tune, switchable ANL and noise blanker; S/RF meter; external speaker and PA speaker jacks; TX indicator; PA capability 12-V d.c. positive or negative ground; 57 mm H × 163 mm W × 199 mm D $109.99

AM/SSB

6247 Mobile Transceiver
40-channel mobile transceiver; dual-conversion AM/single-conversion SSB receiver sensitivity 0.5 μV at 10 dB S/N (AM), 0.25 μV at 10 dB S/N (SSB); selectivity −6 dB at +4 kHz, −3.8 kHz; adj. channel rejection −50 dB; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; controls: squelch, fine tune, RF gain, switchable ANL and noise blanker; S/RF meter; PA capability; external speaker and PA speaker jacks; digital channel display; 12-V d.c. positive or negative ground; 65 mm H × 155 mm W × 248 mm D . . $219.99

PRESIDENT

"Teddy R" Mobile Transceiver
40-channel coverage; RF power output 4 W; sensitivity 0.5 μV; adjacent channel rejection −60 dB; spurious emissions −65 dB; has channel selector, volume, squelch, delta tune, meter mode, mike gain, RF gain, SWR calibrate controls; PA/CB, noise blanker on/off, tone control switches; combination S/RF modulation/SWR meter; antenna, mike, PA, external speaker jacks; requires 13.8-V d.c. positive- or negative-ground; 2 3/4" H × 7 5/16" W × 9 5/8" D $229.95

"Honest Abe" Mobile Transceiver
40-channel unit; RF power output 4 W; sensitivity 0.5 μV; adjacent channel rejection −60 dB; spurious emissions −65 dB; controls include channel selector, volume, squelch, delta tune, mike gain, RF gain; has PA/CB ANL, on/off, meter mode switches; combination S/RF modulation meter; antenna, mike, PA, external speaker, power supply jacks; operates on 13.8-V d.c. positive- or negative-ground; 2 3/4" H × 7 5/16" W × 9 5/8" D $199.95

"John Q" Mobile Transceiver
40-channel coverage; RF power output 4 W; sensitivity 0.5 μV; adjacent channel rejection −60 dB; spurious emissions −60 dB; has channel selector, volume, squelch, mike gain, PA/CB, ANL, on/off, and local/distant controls; digital channel display; S/RF meter; PA and external speaker jacks; requires 13.8-V d.c. positive- or negative-ground; 2 1/8" H × 6 1/4" W × 9 3/8" D. $169.95

AM/SSB

"Grant" Mobile
40-channel AM plus LSB and USB; 4-W RF output (AM), 12-W PEP (SSB); sensitivity 0.5 μV (AM), less than 0.5 μV (SSB) at 10 dB S + N/N; adjacent channel rejection −60 dB; controls for channel selection, volume, squelch, mode selection, mike gain, ±1.25 kHz clarifier; PA/CB, noise blanker on/off, local/distant switches; digital channel display; S/RF meter; jacks for antenna, mike, PA, external speaker; requires 13.8-V d.c. positive- or negative-ground; 2 3/8" H × 7 7/8" W × 10 5/8" D $339.95

RAY JEFFERSON

CB-B45 Mobile Transceiver
40-channels (PLL synthesized); dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; 3 W audio output; RF output 3-4 W; PA capability; controls: CB/PA switch;

noise blanker & limiter; variable RF & gain controls; has digital readout; S/RF meter; delta tune; SWR meter; 13.6 V d.c.; comes with PTT mike, mounting gimbal, mike hanger; 2½" H × 7" W × 8½" D . . . $199.95

CB-740. Similar to CB-845 but squelch sensitivity 0.5 μV to 300 μV; does not have delta tune, SWR meter, noise limiter or variable RF gain and tone controls; 13.8-V d.c. positive or negative ground; 2¼" H × 6" W × 8" D $149.95

AM/SSB

CB-7120 AM/SSB Transceiver
40 channels (PLL synthesized); dual-conversion receiver sensitivity 0.7 μV (AM), 0.2 μV (SSB) at 10 dB S + N/N; squelch sensitivity 0.2 μV to 300 μV; audio output 3 W; RF power output 3-4 W (AM), 12 W PEP (SSB); controls: CB/PA switch; clarifier; TX indicator light; external speaker option; push button mode switch; comes with S/RF meter; PTT mike, mounting gimbal, mike hanger; 13.8-V d.c.; 2½" H × 8" W × 9" D $299.95

REALISTIC

TRC-457 AM/SSB Mobile Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −70 dB at ±10 kHz; image response −80 dB; audio output 5 W; RF output 4 W (AM), 12 W (PEP); spurious emissions −65 dB; max. modulation 100%; controls: clarifier (±1.25 kHz), switchable ANL and noise blanker, squelch, RF gain; S/RF and SWR meters; digital channel display; digital clock (12- or 24-hr time); PA capability; external speaker and headphone jacks; 117-V a.c. or 13.8-V d.c., 1.6-A max. current drain; 4" H × 15" W × 11½" D. $419.95

TRC-458 AM/SSB Mobile Transceiver
40-channel (PLL syntehsized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −70 dB at ±10 kHz; image response −80 dB; audio output 4 W; RF output 4 W (AM), 12 W (PEP); spurious emissions −65 dB; max. modulation 100%; controls: clarifier (±1.25 kHz); switchable ANL and noise blanker, squelch, RF gain; S/RF meter; digital channel display; PA capability; external speaker and headphone jacks; 117-V a.c. or 13.8-V d.c., 1.6-A max. current drain; 4" H × 13½" W × 11½" D. $349.95

TRC424 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.18 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −60 dB; audio output 5 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; frequency tolerance ±0.002%; controls: squelch, RF gain, delta tune (±1.3 kHz), switchable noise blanker; S/RF

meter; digital channel display; PA capability; external speaker jack; 13.8-V d.c., 1.5-A max. current drain, 2 3/16" H × 6⅜" W × 8½" D $169.95

TRC-461 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −60 dB; audio output 5 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; frequency tolerance ±0.002%; controls: all on detachable microphone; external speaker jack; built-in ANL and noise blanker; 13.8-V d.c., 1.5-A max. current drain; 1½" H × 5¼" W × 7" D $169.95

TRC-452 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −65 dB; image response −45 dB; audio output 5 W; RF output 4 W; spurious emissions −40 dB; max. modulation 100%; frequency tolerance ±0.002%; controls: squelch, RF gain, switchable ANL; S/RF meter; TX indicator; PA capability; external speaker jack; 13.8-V d.c., 1.8-A max. current drain; 2" H × 5⅞" W × 7½" D $139.95

TRC-467 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −80 dB; audio output 5 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; frequency tolerance ±0.002%; controls: squelch, switchable ANL; S/RF meter; TX indicator; external speaker jack; 13.8-V d.c., 1.85-A max. current drain; 2 3/32" H × 5¼" W × 9½" D $119.95

TRC-468 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −60 dB; audio output 5 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; frequency tolerance ±0.002%; controls: squelch; TX indicator; PA capability; external speaker jack; ANL; 13.8-V d.c., 1.3-A max. current drain; 1⅞" H × 5⅜" W × 8⅜" D $99.95

AM/SSB

TRC-449 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.4 μV at 10 dB S + N/N (AM), 0.2 μV at 10 dB S + N/N (SSB); selectivity −65 dB at ±10 kHz; image response −80 dB; audio output 4 W; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; max. modulation 100%, controls: clarifier (±1.25 kHz), switchable noise blanker, squelch, RF gain; S/RF meter; digital channel display with dimmer control; PA capability; external speaker jack; 13.8-V d.c., 2-A max. current drain; 2⅜" H × 7⅞" W × 10½" D $299.95

TRC-448 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N (AM), 0.5 μV at 10 dB S + N/N (SSB); selectivity −60 dB at ±10 kHz; image response −50 dB; audio output 4 W; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.002%; controls: clarifier (±1.5 kHz), squelch, RF gain; S/RF meter; digital channel display; PA capability; ANL and noise blanker; 13.8-V d.c. operation $259.95

REGENCY

CB-601 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −7 dB at ±7 kHz; adj. channel rejection −60 dB; image response −55 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: RF gain, squelch, tone, switchable noise blanker; ANL; digital channel display with DIM control; S/RF meter; external speaker jack; PA capability; security or quick-connect hardware supplied; 13.8-V d.c. operation . . $199.00

CB-501 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±7 kHz; adj. channel rejection −55 dB; image response −50 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: squelch, switchable ANL; digital channel display with DIM control; S/RF meter; external speaker jack; PA capability; security or quick-connect hardware supplied; 13.8-V d.c. operation $179.00

CB-401 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±7 kHz; adj. channel rejection −50 dB; image response −50 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: squelch, switchable ANL; S/RF meter; digital channel display; external speaker jack; PA capability; 13.8-V d.c. operation $149.00

ROBYN

GT-410D Mobile Transceiver
40-channel (PLL synthesized) coverage; built-in BFO to permit USB & LSB reception; dual-conversion receiver sensitivity 0.5 μV; adjacent channel & image rejection −55 dB; 4 W audio output; RF power output 4 W; spurious & harmonic −60 dB; 100% max. modulation; automatic channel scanning; channel-9 priority; mike controlled channel selection; illuminated SWR and S/RF meters; TX & RX lights; LED digital channel display; features meter calibration, power & volume controls; delta tune, combination squelch & tone control, adjustable RF gain and ANL; 13.8-V positive or negative ground; 2⅝" H × 8⅝" W × 8¾" D $259.95
SX-12. Base module with digital alarm clock & power supply which permits GT-410D to be used as base station . . $109.95
SX-402D. Similar to GT-410D except without RF gain control, automatic channel

scanning, or channel-9 priority; has mike gain control; 2⅝" H × 7¾" W × 8½" D. $239.95
SX-10. Base module with digital alarm clock & power supply which permits SX-402D to be used as base station . . . $99.95

SX-401 Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.5 μV; adj. channel & image rejection −55 dB; 4 W audio output; RF output power 4 W; 100% max. modulation; spurious & harmonic −60 dB; controls: delta tune, volume, squelch, meter calibration; push-button switches for power, tone control; RF gain; CB/PA selection, external speaker; TX & RX lights; illuminated channel selector; mike gain control; 13.8-V negative or positive ground; 2⅝" H × 7¾" W × 8½" D $179.95
SX-10. Base module with digital alarm clock & power supply to permit SX-401 to be used as base station $99.95

TR-210D Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.5 μV; adj. channel & image rejection −55 dB; audio power output 4 W; RF power output 4 W; 100% max. modulation; spurious & harmonics −60 dB; controls: tone, concentric power/volume/squelch; CB/PA selection, external speaker, ANL & RF gain switches; illuminated S/RF meter; LED digital channel display; 13.8-V positive or negative ground; 2½" H × 6½" W × 8¾" D $179.95

DG-130D Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.5 μV; adj. channel & image rejection −55 dB; audio power output 4 W; RF power output 4 W; 100% max. modulation; spurious & harmonics −60 dB; LED digital channel display; TX & RX lights; illuminated S/RF meter; push-pull squelch & tone control; power & volume switch; CB/PA selection, external speaker, and ANL switches; 13.8-V positive or negative ground; 2⁹/₃₂" H × 6⁹/₆₄" W × 7¹⁷/₃₂" D $159.95
LB-120. Similar to DX-130D but with vertical S/RF meter; no LED digital readout; has wood-grain front panel $149.85
SX-7. Base module with power supply & speaker permits DX-130D & LB-120 to operate as base stations $89.95

WV-110 Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.5 μV; adj. channel & image rejection −55 dB; audio power output 4 W; RF power output 4 W; 100% max. modulation; spurious & harmonics −60 dB; features CB/PA selector, external speaker switch; ANL, adjustable squelch controls; illuminated S/RF meter & channel selector; 13.8-V positive or negative ground; 2⁹/₃₂" H × 6⁹/₆₄" W × 7¹⁷/₃₂" D $139.95
WV-110P. Similar to WV-110 except packaged with plug-in mike, trunk/roof-mount antenna, weatherproof PA speaker, all necessary hardware $159.95
SX-7. Base module with power supply & speaker permits WV-110 & WV-110P to be used as base stations $89.95

ROYAL SOUND

RS-546 Mobile Transceiver
23-channel (crystal synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −63 dB at ±10 kHz; adj. channel rejection −32 dB; image response −32 dB; spurious response −50 dB; audio output 2 W at 10% dist.; RF output 4 W; max. modulation 100%; squelch; ANL; S/RF meter; PA capability; external speaker jack; 2" H × 5.2" W × 7.1" D $150.00
M-336. Similar to RS-546 but spurious response −48 dB; max. modulation 80%; without S/RF meter; 1⅜" H × 4½" W × 5¾" D $129.00

ROYCE

1-617 AM-FM/CB Mobile Transceiver
Combines AM-FM radio and 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 4 W; RF output 4 W; spurious emissions −60 dB; max. modulation 80%; controls: squelch, CB stand-by switch, local/distant switch; S/RF meter; digital channel display; TX and stand-by indicator; in-dash mounting . . . $329.95

1-682 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 6 W at 6% dist.; RF output 4 W; spurious emissions −60 dB; controls: RF gain, delta tune, squelch, switchable ANL; S/RF meter; volume control on microphone; digital channel display with dimmer control; TX indicator; PA capability; PA and external speaker jacks; 12-V d.c. positive or negative ground, 1.8-A max. current drain $219.95

1-678 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 6 W; RF output 4 W; spurious emissions −60 dB; controls: RF gain, delta tune, squelch, switchable ANL; S/RF meter; TX indicator; PA capability; volume control on microphone; PA and external speaker jacks; 12-V d.c. positive or negative ground; 2⅜" H × 7⁹/₁₆" W × 8¹³/₁₆" D $189.95

1-680 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 6 W at 6% dist.; RF output 4 W; spurious emissions −60 dB; controls: squelch, switchable ANL; S/RF meter; digital channel display; TX indicator; PA capability; PA and external speaker jacks; 12-V d.c. positive or negative ground, 1.8-A max. current drain; 2⅜" H × 8⁹/₁₆" W × 8¹³/₁₆" D $189.95

1-675 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 6 W; RF output 4 W; spurious emissions −60 dB; controls: squelch, delta tune, local/distant switch, switchable ANL; S/RF meter; TX indicator; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2⅜" H × 7⁹/₁₆" W × 8¹³/₁₆" D $169.95

1-673 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 6 W; RF output 4 W; spurious emissions −60 dB; controls: squelch, switchable ANL; S/RF meter; TX indicator; PA capability; external speaker jack; 13.8-V d.c. positive or negative ground; 2⅜" H × 7¹/₁₆" W × 8¹³/₁₆" D $149.95

1-648 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at

10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −50 dB; spurious response −45 dB; audio output 3 W at 8% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch; S/RF meter; PA capability; PA and external speaker jacks; positive or negative ground $136.95

PORTABLES

1-408 Hand-Held Transceiver
Six-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.7 μV at 6 dB S + N/N; RF output 1 or 3 W; controls: squelch, power/charge switch; S/RF/battery meter; ANL; external antenna, earphone/external speaker, external microphone, a.c. adapter/external power/charger jacks; telescoping antenna; PA capability; supplied with case and channel 11 crystals; 9¼" H × 3⅛" W × 2⅛" D; 30 oz $109.95

1-406 Hand-Held Transceiver
Three-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.7 μV at 6 dB S + N/N; RF output 1 or 3 W; controls: squelch, power/charge switch; ANL; earphone/external speaker, a.c. adapter, battery charger/external power, and external antenna jacks; telescoping antenna; supplied with case and channel 11 crystals; 9¼" H × 3⅛" W × 2⅛" D; 30 oz $94.95

1-590 Hand-Held Transceiver
Three-channel (crystal controlled) mobile transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6.5 kHz; RF output 4 W; controls: squelch, ANL; external speaker and jack; power and TX indicators; 12-V d.c. positive or negative ground; 2½" H × 4" W × 6½" D $64.95

1-402 Hand-Held Transceiver
Three-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.75 μV at 6 dB S + N/N; RF output 1.35 W; controls: squelch, tone; ANL; external antenna, earphone/external speaker, a.c. adapter, battery charger/external power jacks; telescoping antenna; supplied with channel 11 crystals; 8" H × 3" W × 2⅛" D; 20 oz $59.95

1-400 Hand Held Transceiver
Two-channel (crystal controlled) hand-held transceiver; receiver sensitivity 0.75 μV at 6 dB S + N/N; RF output 650 mW; controls: squelch; ANL; earphone, external speaker, battery charger, and external power jacks; telescoping antenna; supplied with channel 11 crystals; 7⅞" H × 2⅝" W × 2¼" D $46.95

AM/SSB

1-632 Mobile Transceiver
40-channel mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.2 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±5 kHz (AM), −6 dB at ±1.8 kHz (SSB); audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; controls: squelch, clarifier (±1.5 kHz), pushbutton mode selector; S/RF meter; TX indicator; PA capability; PA and external speaker jacks; 12-V d.c. positive or negative ground; 2⅜" H × 8" W × 9⅛" D $309.95

RYSTL

CB-4010 CB Transceiver
40-channel (PLL) transceiver; sensitivity 0.5 μV at 10 dB S + N/N; 3 W audio output; 4 W RF output; spurious emissions −65 dB; 95% max. modulation; has PA capability; switchable ANL; built-in noise blanker; variable squelch control; external speaker jack; S/RF meter; digital LED channel readout; delta tune; PTT mike; 10.5-16-V d.c. positive or negative ground; 2⅛" H × 6¼" W × 8" D $199.95

SBE

Key/Com 1000 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −70 dB at ±10 kHz; image response −60 dB (first), −50 dB (second); spurious response −60 dB; audio output 3 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 95%; frequency tolerance ±0.005%; controls: keyboard-entry channel selector, RF gain, switchable noise blanker, variable NL, squelch, delta tune (±1.5 kHz); S/RF meter; TX and RX indicators; digital channel display; PA capability; external speaker jack; 10-channel memory with selectable priority channel; 13.8-V d.c., 1.9-A max. current drain; 2.12" H × 5.87" W × 8.75" D $279.95

Touch/Com 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −60 dB; audio output 3.5 W at 10% dist.; RF output 4 W; controls: channel selector, PTT, fast-scan control, and squelch on microphone; microphone gain, tone, delta tune, switchable NL, and local/distance switch on transceiver; S/RF meter; TX indicator; digital channel display on microphone; PA capability; 13.8-V d.c., 1.9-A max. current drain; 2.4" H × 6.7" W × 9.4" D $259.95

Stowaway Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −60 dB at ±10 kHz; image response −60 dB (first), −50 dB (second); spurious response −60 dB; audio output 2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 95%; frequency tolerance ±0.005%; controls: on/off, volume, squelch, channel selector, and PTT on microphone; ANL; S/RF meter (LED) on microphone; remote mount (trunk); 13.8-V d.c., 1.6-A max. current drain; 1.77" H × 5.9" W × 7" D $249.95

Formula D Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −60 dB; audio output 3.5 W at 10% dist.; RF output 4 W; controls: delta tune, squelch, tone, PA gain, local/distance switch, switchable NL; S/RF meter; TX indicator; external speaker jack; 13.8-V d.c.; 2.3" H × 6.6" W × 9.1" D $229.95

Cortez Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −60 dB; audio output 3 W at 10% dist.; RF output 4 W; controls: RF gain, delta tune, squelch, switchable NL; S/RF meter; TX and RX indicators; digital channel display; PA capability; external speaker jack; 13.8-V d.c.; 2.125" H × 5.875" W × 8.75" D $219.95

Aspen Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −60 dB; audio output 3 W at 10% dist.; RF output 4 W; controls: squelch, local/distance switch; S/RF meter; TX and RX indicators; digital channel display; ANL; external speaker jack; 13.8-V d.c.; 2.12" H × 5.87" W × 8.75" D $189.95

Tahoe Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −60 dB; audio output 2 W at 10% dist.; RF output 4 W; controls: squelch; S/RF meter; TX indicator; digital channel display; PA capability; external speaker jack; 13.8-V d.c., 1.6-A max. current drain; 1.375" H × 4.5" W × 7.25" D $179.95

Malibu 40 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −55 dB; audio output 2 W; RF output 4 W; controls: squelch; S/RF meter; external speaker jack; 13.8-V d.c., 1.5-A max. current drain; 2.2" H × 6.3" W × 7.9" D $159.95

AM/SSB

Sidebander V Mobile Transceiver
40-channel (PLL synthesized) mobile

transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −65 dB at ±10 kHz; image response −70 dB; spurious response −60 dB; audio output 3 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 95%; frequency tolerance ±0.005%; controls: RF gain, squelch, clarifier (±1.5 kHz), switchable NL and noise blanker; S/RF meter; digital channel display; PA capability; RX indicator; channel 9 priority monitor; external speaker jack; 13.8-V d.c., 2.7-A max. current drain; 2.3" H × 6.6" W × 9.1" D $419.95

Sidebander IV Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; single-conversion receiver sensitivity 1 μV at 10 dB S + N/N (AM), 0.5 μV at 15 dB S + N/N (SSB); adj. channel rejection −65 dB; RF output 4 W (AM), 12 W (PEP); controls: RF gain, squelch, clarifier, switchable NL and noise blanker; S/RF meter; TX indicator; PA capability; external speaker jack; 13.8-V d.c., 2.5-A max. current drain; 2.3" H × 6.6" W × 9.1" D $379.95

SEARS

62676 AM-FM/CB Transceiver
40-channel (PLL synthesized) mobile

transceiver with AM-FM stereo radio; accessary on/off switch for use with VOX-controlled headset, power telephone, and power mike; LED stereo and digital channel displays; CB stand-by switch; PA capability; switchable ANL and noise blanker; antenna warning LED indicator; for in-dash or under-dash mounting .. $269.99

28-62674 FM/CB Transceiver
40-channel (PLL synthesized) mobile transceiver with FM mono radio; receiver sensitivity 0.6 μV at 10 dB S + N/N; selectivity −60 dB at ±10 kHz; RF output 4 W; max. modulation 100%; controls: squelch, fine tune, CB stand-by; digital channel display; S/RF/SWR meter; PA capability; antenna warning light; ANL; PA and external speaker jacks; 12-V d.c. positive or negative ground; 2⅜" H × 8½" W × 8½" D $178.99

61-3808 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −50 dB at ±10 kHz; RF output 4 W; max. modulation 100%; controls: RF gain, delta tune, squelch, switchable noise blanker; digital channel display with dimmer control; S/RF/SWR meter; PA capability; PA and external speaker jacks; 12-V d.c. pos./neg.gnd 2½" H × 7½" W × 9½" D . $149.50

61-3807 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −50 dB at ±10 kHz; RF output 4 W; max. modulation 100%; controls: squelch, RF gain, switchable ANL; S/RF meter; PA capability; PA and external speaker jacks; digital channel display with dimmer control; 12-V d.c. positive or negative ground; 2¼" H × 7¼" W × 9⅛" D $119.50

61-3806 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −50 dB at ±10 kHz; RF output 4 W; max. modulation 100%; controls: squelch; ANL; external speaker jack; 12-V d.c. positive or negative ground; 1⅞" H × 5¼" W × 8⅜" D .. $99.50

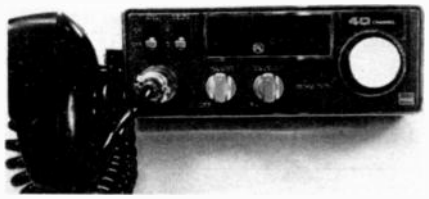
AM/SSB

61-3826 Mobile Transceiver
40-channel (PLL synthesized) mobile

transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −50 dB at ±10 kHz; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; controls: local/distance switch, fine tune, switchable noise blanker, squelch; S/RF meter; PA capability; PA/external speaker jack; SWR alert lamp; ANL; 12-V d.c. positive or negative ground; overall size 3⅛" H × 8¾" W × 11" D $249.50

SHARP

CB2460 40-Ch Mobile Transceiver
40-channel coverage; digital synthesizer; 4-W RF output; sensitivity 0.7 μV at 10 dB S + N/N; adjacent channel rejection −50 dB; selectivity −50 dB at 3kHz, −60 dB at 10 kHz; image response −60 dB; delta tune ±1 kHz; dual-conversion receiver; 3 W audio output at 10% dist.; spurious emissions −60 dB at any frequency; spurious response −60 dB; frequency tolerance ±0.003%; 100% max. modulation; PA capability; built-in ANL; squelch; external speaker jack; S/RF meter; LED digital



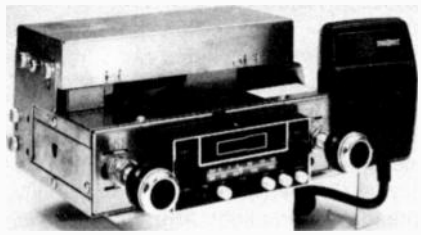
channel indicator (flashes on Ch 9); 13.8 V d.c.; 2¼" H × 5¾" W × 7⅞" D $149.95
CB2260. Same as CB2460 except without digital channel indicator $139.95

CB-800 Transceiver
23-channel mobile transceiver; 3-W RF power output; sensitivity 0.7 μV at 10 dB S + N/N; adj. channel rejection −60 dB; selectivity −60 dB at 3 kHz −50 dB at 10 kHz; image response −60 dB; delta tune ±1 kHz; spurious emissions −50 dB at any freq. except fundamental; spurious response −60 dB; max. current drain 1.2 A; dual-conversion receiver; audio output 3 W at 10% dist.; digital synthesizer; ½" LED channel indicator; flashing channel 9 and PA indicator; ext. speaker & PA speaker jacks; detachable mike; ANL; squelch; automatic modulation limiter; built-in speaker; S/RF meter; 13.8 V d.c.; 2¼" H × 5¾" W × 7⅞" D $149.95
CB-760A. Similar to CB-800 except without LED's; red channel 9 indicator $139.95
CB-700. Similar to CB-760A except does not have ANL, PA jack, or S/RF meter $119.95

AD-112 Base Station Adapter
Designed to permit the company's mobile transceivers to be used as base stations; plugs into a.c. power line; on-off lever switch; power indicator (LED); 12-V d.c. output terminals; 3" H × 5½" W × 6⅜" D $29.95

SPARKOMATIC

In-Dash Stereo/CB
All units combine an AM-FM radio with a 40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; adj. channel rejection −50 dB; image response −55 dB; spurious response −60 dB; audio output 4.5 W at 10% dist.; RF output 4 W; spurious emissions −70 dB; frequency tolerance ±0.005%; controls: squelch, stand-by switch, switchable noise blanker; channel selector, digital channel display, PTT, and RF gain on microphone; TX and RX indicators; requires external speaker; 13.8-V d.c., 1.9-A max. current drain.
SR-48/CBM-1. Includes cassette player;



2" H × 6¾" W × 7¼" D $319.95
SR-46/CBM-1. Includes 8-track player; 1¾" H × 7½" W × 6¾" D $299.95
SR-44/CBM-1. Push-button radio; 1¾" H × 5¾" W × 7¼" D $289.95

CB-2040 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; adj. channel rejection −50 dB; image response −55 dB; spurious response −60 dB; audio output 3 W at 10% dist.; RF output 4 W; spurious emissions −70 dB; frequency tolerance ±0.005%; controls: squelch, delta tune, switchable ANL and noise blanker; S/RF meter; digital channel display; TX and RX indicators; push-button channel selector; PA capability; PA and external speaker jacks; 13-8-V d.c. pos./neg.gnd; 2¼" H × 7" W × 8¾" D . . $159.95

CB-1040 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection − 45 dB; image response −50 dB; spurious response −55 dB; audio output 3 W at 10% dist.; RF output 4 W; spurious emissions −65 dB; frequency tolerance ±0.005%; controls: squelch, switchable ANL; S/RF meter; digital channel display; TX indicator; PA capability; PA and external speaker jacks; 13.8-V d.c. pos./neg.gnd; 2¼" H × 6¼" W × 9" D . . $129.95

STANDARD

Horizon 29-A Mobile Transceiver
40-channel transceiver with phase-locked loop synthesizer; 26.965-27.405 MHz frequency range; 500 ohm dynamic microphone; 4 W max. RF output; sensitivity 0.5 μV at 6 dB S + N/N; audio output 5 W at 10% dist; squelch control; delta tune control; RF gain control; hailer switch; noise blanker; automatic noise limiter; channel selector; on/off volume control; 12 V d.c. −16 V d.c. power supply; 2" × 7" × 8" $229.95

SURVEYOR

2630 AM-FM Stereo/CB Transceiver
40-channel (PLL synthesized) coverage; LED channel indicator; delta tuning; tone modulator; TX indicator light; in-dash mounting; preset standby mode breaks into AM-FM when CB transmissions received $279.50

2770 Mobile Transceiver
40-channel (PLL synthesized) coverage; two separate modules (one to be mounted in trunk or under hood, other with all controls in mike); on-off, volume, squelch controls on mike; ANL; pushbutton channel selector with digital readout; RF gain control; TX and RX indicator; quick disconnect attachment $249.50

TEABERRY

4004 "T" Bear Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; image response −60 dB; audio output 2 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.003%; controls: RF gain, tone, squelch, switchable noise blanker; S/RF meter; digital channel display with dimmer switch; modulation indicator; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2¼" H × 7½" W × 10¼" D $199.99

4008 "T" Hawk Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −55 dB; image response −50 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.003%; controls: RF gain, squelch, delta tune (±1.4 kHz), switchable noise blanker; S/RF meter; digital channel display; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2⅛" H × 6½" W × 9 3/16" D $189.99

4005 Titan "T" Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −6 dB at ±7 kHz; adj. channel rejection −60 dB; image response −50 dB; audio output 2 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.003%; controls: squelch, switchable ANL; S/RF meter; digital channel display with dimmer switch; modulation indicator; PA capa-

bility; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2¼" H × 7¼" W × 9¼" D $179.99

4006 Racer "T" Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −65 dB; image response −50 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.003%; controls: squelch, delta tune (±1.4 kHz), switchable ANL; S/RF meter; modulation indicator; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2 3/16" H × 6½" W × 9¼" D $169.99

AM/SSB

4001 Stalker One Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±6 kHz; adj. channel rejection −60 dB; image response −40 dB; audio output 3 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.003%; controls: squelch, clarifier (±1.5 kHz), local/distance switch, switchable noise blanker; S/RF meter; TX and RX indicators; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2⅜" H × 7¾" W × 10⅝" D $349.99

4012 Ranger "T" Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.25 μV at 10 dB S + N/N (AM), 0.15 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±6 kHz; adj. channel rejection −70 dB; image response −40 dB; audio output 3 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.003%; controls: squelch, RF gain, clarifier (±500 Hz), switchable noise blanker; S/RF meter; TX indicator; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground; 2¾" H × 7⅞" W × 9⅞" D $329.99

TEXAS INSTRUMENTS

SM-172 AM/SSB Mobile Transceiver
40-channel computer-controlled AM/SSB mobile transceiver; receiver sensitivity 0.6 μV at 10 dB S + N/N (AM), 0.4 μV at 10 dB S + N/N (SSB); adj. channel rejection 60 dB; image response −60 dB; audio output 3 W into 3.2 ohms at 5% dist.; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; carrier suppression 40 dB; max. modulation 100%; frequency tolerance ±0.002%; all transceiver functions controlled and monitored from control head: five-digit LED channel number, SSB mode, signal strength, and SWR display; channel select, volume, squelch, PTT, busy and empty channel scan, digital selective call; automatic clarification with other TI CB radios; computer-monitored SWR shuts down transmitter and displays warning if SWR is too high; modular design consists of transceiver unit, control head, and speaker; 13.8-V d.c. positive or negative ground $325.00

TRAM

042 Mobile Transceiver
40-channel; 4 W audio output at 10% dist.; sensitivity 0.5 μV at 10 dB S + N/N; adj.

channel rejection −70 dB; delta tune range ±1.5 kHz; RF output 4 W; combination meter for power output, SWR, or S meter functions; PA capability; ANL; adjustable squelch; RF gain control; PTT mike; 13.8-V d.c. positive or negative ground; 2⅛" × 7" W × 9¼" D $250.00

D12 Mobile Transceiver
40-channels with PLL; 3 W audio output at 10% dist.; sensitivity 0.7 μV at 10 dB S + N/N; adj. channel rejection −55 dB; RF output 4 W; CB/PA and local/distance switches; volume/mike gain and ANL/squelch controls; PTT mike; 13.8-V d.c. positive or negative ground; 2⅛" H × 5½" W × 6⅞" D $165.00

AM/SSB

D62 AM/SSB Mobile Transceiver
40-channels with PLL; features include ANL, RF noise blanker, RF gain control, SWR meter, mike gain control; antenna monitor warns of antenna system failure; LED digital channel display; 13.8-V d.c. positive or negative ground $450.00

ULTRA

402 Mobile Transceiver
40-channel mobile transceiver; controls: squelch, RF gain, delta tune, switchable ANL and noise blanker; TX, RX, and modulation indicators; S/RF meter; digital channel display; PA capability . . . $159.95

401 Mobile Transceiver
40-channel mobile transceiver; controls: delta tune; squelch; S/RF meter; ANL; TX indicator; PA capability $129.95

AM/SSB

405 Mobile Transceiver
40-channel mobile transceiver; controls: RF gain, squelch; S/RF meter; noise blanker; TX and PA indicators; PA capability $229.95

UTAC

TRX-500 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −60 dB at ±10 kHz; adj. channel rejection −50 dB; image response −50 dB; audio output 4 W; RF output 4 W; max. modulation 95%; controls: RF gain, microphone gain, squelch, switchable ANL, delta tune (±10 kHz), switchable noise blanker; S/RF and SWR meters; PA capability; external speaker jack; digital channel display; two channel VHF; 2½" H × 6⅞" W × 8¾" D $269.95
TRX-400. Similar to TRX-500 but without delta tune or VHF $239.95

VECTOR

780 Mobile Transceiver
40-channels (PLL synthesized); dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±2.8 kHz; image response −80 dB; spurious response −80 dB; audio output 5 W at 10% dist.; RF output 4 W; spurious emissions −70 dB TX; max. modulation 100%; frequency tolerance ±0.002%; controls: ANL switch; NB switch; squelch; external speaker jack; S/RF meter; RF gain control; digital channel indicator; PA capability; internal/external speaker switch; delta tune; channel scan & speed control; push button microphone channel control; instant Ch 9 button; 13.8-V d.c.; 2⅞" H × 6⅜" W × 8" D $239.00
770. Same as 780 except without delta tune or noise blanker; has tone control switch; TX light $189.00

XII Mobile Transceiver
40-channel (PLL synthesized); dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −3 dB at ±3 kHz; adj. channel rejection −50 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −70 dB; max. modulation 100%; controls: switchable ANL & noise blanker; squelch; external speaker jack; S/RF meter; RF gain control; has PA facilities; digital channel indicator; tone control; TX & mod. lights; 13.8-V d.c. positive or negative ground; 2¼" H × 6½" W × 8½" D $219.00
X. Similar to XII but without noise blanker or tone control $209.00

XTAL

XC8-880 AM-FM/8-Track/CB Mobile
Combines 40-channel (PLL synthesized) transceiver, AM-FM stereo receiver, and 8-track player; receiver sensitivity 1.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −60 dB; spurious response −50 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: AM/FM push-button, squelch, tone, standby, LOC/DX switch; digital channel display and channel selectors on microphone; ST, TX, RX indicator lights; ANL; supplied with microphone; 13.8-V d.c. positive or negative ground, max. current drain 1.2 A; 2½" H × 7" W × 7¾" D $349.95

XC8-88 AM-FM/8-Track/CB Mobile
Combines 23-channel transceiver, AM-FM stereo receiver, and 8-track player; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −60 dB; audio output 4 W at 10% dist.; RF output 4 W; controls: squelch; ANL; supplied with microphone; 13.8-V d.c. positive or negative ground; 2¾" H × 7½" W × 7⅜" D $349.95

XC8-28 AM-FM/8-Track/CB Mobile
Combines 23-channel transceiver, AM-FM stereo receiver, and 8-track player; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −45 dB; RF output 4 W; supplied with microphone; 13.8-V d.c. negative ground; overall size 2¼" H × 7¾" W × 8" D $289.95

XC8-40 Modular Mobile Transceiver
40-channel (PLL synthesized) modular mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −50 dB; spurious response −50 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls (on microphone): squelch, on-off/volume, channel selector; digital channel display and TX/RX indicator lights on microphone; ANL; external speaker jack; supplied with microphone; 13.8-V d.c. negative ground, max. current drain 1.6 A; 1⅝" H × 7⅛" W × 6¼" D $199.95

XC8-71 Mobile Transceiver
40-channel (PLL synthesized) mobile transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±4 kHz, −30 dB at ±10 kHz, −60 dB at ±40 kHz; adj. channel rejection −60 dB; spurious response −50 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: switchable ANL, squelch, delta tune, aux. volume control on microphone; S/RF meter; PA capability; external speaker jack; supplied with microphone; 13.8-V d.c. negative ground, max. current drain 1.4 A; 2⅜" H × 7½" W × 8½" D $179.95

DIRECTORY OF MANUFACTURERS *continued from page 6*

Why buy GE CB? That's what Howard Cosell wanted to know.

"Finally, a company I've actually heard of is making CBs. (A subject, I freely acknowledge, I know little about.) But neither do a lot of people, so on behalf of everyone, I questioned General Electric. Their answers make it abundantly clear why GE is expert in CB."

COSELL: Give me one persuasive reason to buy GE CB versus another make.

GE: Performance. For instance, our new 40-channel models are as powerful as our 23's yet exceed FCC guide lines on interference.

COSELL: Another reason?

GE: Quality. All GE sets are made with specially designed heavy-duty parts. They continue to perform from 20 below zero to 120 above.

COSELL: Impressive. Does GE have any features I won't find in every brand on the shelf?

GE: Sure. For example: an antenna warning indicator that lets you know if you're not hooked up right or transmitting with enough power ... a channel priority feature that automatically and continuously monitors any channel you select... a switchable noise suppressor...

COSELL: That's terrific. Now, what have you guys done to make sure your new 40-channel units don't turn out to be turkeys?

GE: Researched the devil out of them. With new products, GE's procedure is to place hundreds of units in a test market, then survey the owners and investigate any complaints. We tear down the entire set to find out what's wrong. Once we've isolated the problem we can eliminate it.

COSELL: One last question. Do your designers ever think about the guy who'll be using your units?

GE: Absolutely! He's why we do all we can to make our numbers extra legible ... why we position our controls so they're easily reached ... why GE mikes are designed for either hand ... we even backlight our meters to improve readability.

COSELL: Where does Cosell come out after investigating the subject with my usual thoroughness? *GE. That's more than you can say about any other CB.*

GENERAL ELECTRIC

Audio Electronics Products Department, Syracuse, N Y 13201

CIRCLE NO. 5 ON FREE INFORMATION CARD

CB Base Station Transceivers

ALARON

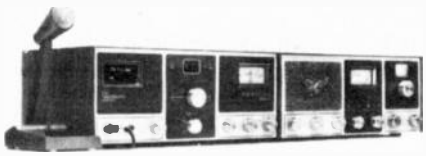
B-5050 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; RF output 4 W; max. modulation 90%; controls: squelch, local/distance switch; S/RF meter; PA capability; ANL; TX and RX indicators; PA speaker and front-panel headphone jacks; 115-V a.c. or 12-V d.c. $129.95

BOMAN

CHB-990 Base Transceiver
40-channel (PLL synthesized) base transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −60 dB; audio output 4 W at 10% dist.; RF output 3.5 W; spurious emissions −65 dB; max. modulation 100%; controls: RF gain, squelch, tone, switchable ANL and noise blanker, delta tune; S/RF meter; external speaker and headphone jacks; digital channel display; PA capability; 12-V d.c. or 115-V a.c. operation $269.95

BROWNING

Golden Eagle Mark IV SSB/AM Base
Comprised of separate transmitter and receiver; dual-conversion receiver 40-chan-



nel (crystal controlled) and continuously tunable (26.965 to 27.595 MHz); sensitivity 0.32 μV at 10 dB S + N/N; adj. channel rejection −65 dB; audio output 4 W; controls: RF gain, tone, switchable AGC, switchable ANL, squelch, bandspread, dual noise limiter; S meter; 40-channel (PLL synthesized) transmitter; RF output 12 W (PEP), 4 W (AM); spurious emissions −60 dB; max. modulation 100%; frequency stability ±0.002%; carrier suppression −70 dB; controls: scan rate, AM/SSB spotting, channel reset, LO/HI channel selector; FWD-REF RF/modulation/plate current meter; digital channel display; 117-V a.c.; 6¾" H × 15½" W × 10" D (each unit) $895.00

CB CO-PILOT

Model 14T303 Base Transceiver
40-channel (PLL synthesized) base transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S/N; adj. channel rejection −40 dB; audio output 3 W; RF output 4 W; max. modulation 100%; controls: tone, switchable ANL and noise blanker, delta tune, RF gain, squelch; TX/RX indicators; S/modulation and RF/SWR meters; digital channel display; external speaker, PA speaker, and headphone jacks; PA capability; supplied with microphone; 12-V d.c. positive or negative ground or 120-V a.c. operation; 4¼" H × 10⅛" W × 12¼" D $239.95

COBRA

89XLR Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; receiver sensitivity 1 μV; selectivity −6 dB at ±7 kHz, −60 dB at ±10 kHz; image response −50 dB; audio output 4 W; RF output 4 W; max. modulation 100%; controls: Dynamike gain, squelch, RF gain, delta tune (±1.5 kHz), tone, switchable ANL; S/RF and SWR/modulation meters; digital channel display; PA capability; 120-V a.c. or 13.8-V d.c. positive or negative ground; 5.75" H × 13.375" W × 12.625" D $289.95

86XLR Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; receiver sensitivity 1 μV; selectivity −6 dB at ±4 kHz, −50 dB at ±10 kHz; image response −40 dB; audio output 2 W; RF output 4 W; max. modulation 100%; controls: Dynamike gain, squelch, delta tune (±1 kHz), switchable ANL; S/RF meter; external speaker jack; 120-V a.c. or 13.8-V d.c. positive or negative ground; 5.91" H × 10.24" W × 8.27" D. $199.95

AM/SSB

135XLR Base Station Transceiver
40-channel (PLL synthesized) base station

transceiver; receiver sensitivity 0.75 μV (AM), 0.25 μV (SSB); selectivity −6 dB at ±3.8 kHz and −50 dB at ±10 kHz (AM), −6 dB at ±2.2 kHz and −60 dB at ±5 kHz (SSB); image response −50 dB; audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); carrier suppression −40 dB; controls: squelch, Dynamike gain, RF gain, voice lock (±1.5 kHz AM, ±1 kHz SSB), automatic turn-on, switchable ANL and noise blanker; S/RF/SWR meter; digital channel display; TX and mode indicators; PA capability; digital clock; 120-V a.c. or 13.8-V d.c. positive or negative ground. . $519.95

139XLR Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; receiver sensitivity 0.75 μV (AM), 0.25 μV (SSB); selectivity −6 dB at ±4.2 kHz and −60 dB at ±7 kHz (AM), −6 dB at ±4.2 kHz and −60 dB at ±7 kHz (SSB); image response −50 dB; audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); carrier suppression −40 dB; controls: Dynamike gain, squelch, RF gain, voice lock (±600 Hz); switchable ANL and noise blanker; S/RF and SWR/modulation meters; digital channel display; PA capability; 120-V a.c. or 13.8-V d.c. positive or negative ground. $449.95

COLT

800 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −5 dB at ±4 kHz, −50 dB at ±20 kHz; image response −50 dB; audio output 5 W at 10% dist.; RF output 4 W; max. modulation 95%; frequency tolerance ±0.005%; controls: squelch, tone, delta tune (±1 kHz), switchable ANL; S/RF meter; digital channel display; TX and RX indicators; external speaker jack; front-panel headphone jack; 117-V a.c. or 13.8-V d.c. positive or negative ground. $259.95

CORNELL-DUBILIER

Mark 20 Base Station Transceiver
40-channel base station transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±2 kHz, −70 dB at ±10 kHz; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: tone, squelch, RF gain, fine tune (±1.5 kHz), IF gain, switchable ANL; S/modulation, RF, and SWR meters; TX and stand-by indicators; PA capability; digital channel display; front-panel headphone jack; 115-V a.c. or 13.8-V d.c. negative ground, 1.7-A max. current drain. $329.95

COURIER

Conqueror 40D Base Transceiver
40-channel (PLL synthesized) base trans-

ceiver; controls: RF gain, tone, switchable ANL; digital clock; built-in a.c./d.c. power supply; S/RF meter; digital channel display; PA capability; TX/RX indicators $269.95

Caravelle 40D Base Transceiver
40-channel (PLL synthesized) base transceiver; controls: RF gain, tone, switchable ANL; built-in a.c./d.c. power supply; S/RF meter; digital channel display; PA capability; TX/RX indicators $239.95

AM/SSB

Centurion PLL 40 Base Transceiver
40-channel (PLL synthesized) base transceiver; controls: clarifier, RF gain, switchable noise blanker; S/RF meter; PA capability; built-in a.c./d.c. power supply; TX indicator $569.95

CRAIG

L231 AM/SSB Base Transceiver
40-channel (PLL synthesized) base transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.18 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±2 kHz; adj. channel rejection −60 dB; image response −60 dB; audio output 3.5 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; max. mqdulation 100%; frequency tolerance ±0.005%; carrier suppression −50 dB; unwanted sideband rejection −60 dB; controls: clarifier (±800 Hz), RF gain, squelch, two-position antenna switch, switchable ANL and noise blanker; digital channel display; S/RF and SWR meters; modulation and mode indicators; digital clock; external speaker jack; supplied with dynamic microphone; 120-V a.c. or 13.8-V d.c. operation, max. current drain 2.4 A; 5 1/16" H × 17 1/16" W × 10 1/2" D $499.95

FANON

Fanfare BBODF Base Transceiver
40-channel (PLL synthesized) base transceiver; controls: RF gain, squelch, tone, switchable ANL; S/RF meter, TX/RX indicators; PA capability; digital channel display; built-in a.c./d.c. power supply $239.95

FIELDMASTER

PRO 400 AM/SSB Base Station
Three-unit base station composed of CB transceiver, 10-channel programmable VHF monitor receiver, and matching speaker/digital clock; transceiver has 40-channel coverage in AM, LSB and USB modes with phase-locked-loop synthesizer; RF power output 4 W (AM), 12 W PEP (SSB); sensitivity 1 μV at 10 dB S + N/N (AM), 0.5 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±3 kHz, −30 dB at ±10 kHz (AM), −6 dB at ±2.1 kHz, −50 dB at ±6 kHz (SSB); image response −50 dB; delta tune range ±2.5 kHz; audio output 5 W at 10% distortion; carrier suppression −50 dB; unwanted sideband suppression −50 dB; spurious emissions −40 dB; audio response 300-2700 Hz (SSB), 300-3000 Hz (AM); has AGC, noise blanker, variable squelch, tone control, built-in speaker, seven-segment LED channel display, S/RF meter, VSWR bridge, audio compression, PA capability dual-conversion receiver; transceiver unit measures 5.9" H × 13.8" W × 7.9" D, consumes 40 W max. at 117-V a.c., also accepts 12-V d.c. supplies; VHF monitor covers 30-50, 144-148, 148-178, 450-470, and 470-512 MHz $849.95

GEMTRONICS

GTX-5000 Base Transceiver
40-channel (PLL synthesized) tube transceiver; dual-conversion receiver sensitivity 0.8 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; image response −60 dB; spurious response −60 dB; audio output 4 W; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: fine tune (±1 kHz), squelch; S/RF meter; TX and RX indicators; PA capability; digital channel display; ANL; noise blanker; external speaker jack; 105-120-V a.c. or 13.6-V d.c., 7 A max. current drain $329.95

GENERAL ELECTRIC

3-5B71 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sen-

sitivity 1 μV at 10 dB S + N/N; adj. channel rejection −50 dB; image response −40 dB; spurious response −40 dB; audio output 2.2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 95%; frequency tolerance ±0.005%; controls; squelch, tone, RF gain, delta tune (±1.5 kHz), switchable ANL; S/RF meter; digital channel display; PA capability; front-panel headphone jack; TX and modulation indicators; PA and external speaker jacks; 117-V a.c. or 13.8-V d.c., 1.2-A max. current drain $249.95

HANDIC

4005 Base Station Transceiver
40-channel base station transceiver; RF output 4 W; max. modulation 100%; controls: squelch, switchable ANL; S/RF/SWR meter; external speaker jack; selective call; 3 1/2" H × 17" W × 8" D .. $279.95

3605 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.6 μV at 10 dB S + N/N; selectivity −60 dB at ±10 kHz; audio output 3.5 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, delta tune (±1 kHz), switchable noise blanker; S/RF meter; ANL; PA capability; external speaker jack; selective call; 3" H × 13" W × 8 3/4" D ... $249.95

HY-GAIN

3114 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: squelch, switchable ANL, RF gain, delta tune (±400 kHz), tone; S/RF/SWR/ modulation meter; external speaker jack; PA capability; digital channel display; digital clock; 117-V a.c.; 4 3/4" H × 16" W × 11" D $249.95

3107 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.001%; controls: squelch, delta tune (±400 kHz); S/RF meter; digital channel display; 117-V a.c.; 4 3/16" H × 8 1/4" W × 12 3/8" D $219.95

AM/SSB

310B Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −6

dB at ±6 kHz (AM), −6 dB at ±2.4 kHz (SSB); adj. channel rejection −50 dB; image response −35 dB; spurious response −40 dB; audio output 3 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.001%; carrier suppression −40

dB; controls: squelch, switchable ANL and noise blanker, RF gain, tone, clarifier (±600 Hz); S/modulation and RF/SWR meters; external speaker jack; PA capability; digital channel display; TX and RX indicators; digital clock; 117-V a.c. or 12-V d.c.; 4¾" H × 16" W × 11" D . . $499.95

E.F. JOHNSON

Messenger 4250 Base Station Transceiver
40-channel (PLL synthesized) mobile transceiver; receiver sensitivity 0.5 μV

at 10 dB S + N/N; audio output 3 W; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, speaker/handset switch; S/RF meter; digital channel display with dimmer control; PA capability; external speaker jack; radiotelephone design $259.95

Messenger 4230 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz, −60 dB at ±60 kHz; audio output 3W; RF output 4W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL, local/extended/normal range switch; LED S/RF meter; digital channel display with dimmer control; PA capability; external speaker jack; 117-V a.c.; 4.16" H × 11" W × 12.175" D $199.95

KRACO

4045 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.6 μV at 10 dB S + N/N; adj. channel rejection −80 dB; image response −80 dB; spurious response −70 dB; audio output 4 W at 10% dist.; RF output 4 W; max. modulation 90%; controls: squelch, delta tune (±1 kHz), switchable ANL; S/RF meter; PA capability; external speaker jack; 117-V a.c. or 13.8-V d.c. positive or negative ground. 1.5-A max. current drain; 3¾" H × 12¼" W × 9⅝" D $279.95

LAFAYETTE

Telsat 1140 40-Ch Base Station
40-channel coverage (PLL synthesizer); dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; selectivity −45 dB at 10 kHz; image rejection −40 dB; delta tune ±1.2 kHz; spurious rejection −50 dB; RF power output 4 W; 100% max. modulation; PA capability; switchable ANL; squelch; external speaker/PA jack; SWR meter; S/RF meter; has modulation and channel indicators; phone jack; has CB/PA, tone, local/distant, delta tune switches; 117-V, 50/60 Hz a.c. or 13.8 V d.c.; 4¼" H × 12¼" W × 10⅛" D; 99-33581W $169.95

AM/SSB

Telsat SSB-140 Base Station
40-channel coverage (PLL synthesizer); dual-conversion receiver sensitivity 1 μV for 10 dB S + N/N (AM), 0.25 μV (SSB); adj. channel rejection −70 dB; selectivity 6 kHz at 6 dB down (AM), 2 kHz (SSB); audio output 3 W at 10% dist.; RF power output 4 W (AM), 12 W PEP (SSB); carrier suppression 40 dB down; 100% max. modulation; PA capability; ANL; switchable noise blanker; squelch control; external speaker jack; SWR and S/RF meters; RF gain control; LED digital readout; phone jack; antenna warning light; 117 V, 50/60 Hz or 13.8 V d.c.; 4¾" H × 15¾" W × 12¼" D; 99-33649W $299.95

MIDLAND

76-863 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: squelch, delta tune, switchable ANL and noise blanker; S/RF meter; TX and antenna warning indicators; PA capability; PA and external speaker jacks; supplied with a.c. and d.c. power cords; 115-V a.c. or 12-V d.c. negative ground; 4⁵⁄₁₆" H × 12⅛" W × 8⁹⁄₁₆" D $263.95

76-858 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver

sensitivity 0.7 μV at 10 dB S + N/N; RF output 4 W; controls: squelch, hi-filter switch; S/RF meter; TX indicator; PA capability; external speaker jack; supplied with microphone and a.c. and d.c. power cords; 117-V a.c. or 13.8-V d.c. positive or negative ground; 4¾" H × 11¼" W × 8½" D $231.95

PACE

8155 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −55 dB; image response −55 dB; audio output 4 W; RF output 4 W; spurious emissions −65 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, RF gain, tone, fine tune (±2.5 kHz), switchable ANL and noise blanker; S/RF meter; digital channel display with dimmer control; PA capability; external speaker jack; front-panel headphone jack; 117-V a.c. or 13.8-V d.c. positive or negative ground; 5" H × 10¼" W × 11½" D. $349.95

AM/SSB

CB 1000BC Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver; adj. channel rejection −40 dB; image response −40 dB; audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, clarifier (±1.2 kHz), RF gain, switchable noise blanker; S/RF/SWR meter; TX, RX, and mode indicators; PA capability; digital clock; external speaker

jack; 117-V a.c. or 13.8-V d.c.; 3½" H × 14¼" W × 10¾" D. $499.95

PALOMAR

HF-50 Base Station Transceiver
40-channel base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±3 kHz; adj. channel rejection −60 dB; RF output 4 W; max. modulation 100%; controls: RF gain, squelch, microphone gain, tone, switchable ANL; S/RF meter; TX and RX indicators; digital channel display; external speaker jack; 115-V a.c. operation; 9" H × 12½" W × 10" D $295.00

PANASONIC

RJ-3660 PSB/CB Base Station Transceiver
Combines public service band receiver and 40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; image response −45 dB; spurious response −45 dB; audio output 2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: switchable ANL and noise blanker, dual squelch, channel 9 emergency switch, CB monitor switch, RF gain; S/RF and modulation meters; digital channel display; external speaker jacks; antenna warning indicator; built-in whip for PSB receiver; 120-V a.c. or 13.8-V d.c., 2-A max. current drain; 5¼" H × 13⁵⁄₁₆" W × 8¹¹⁄₁₆" D $279.95

RJ-3600 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; image response −45 dB; spurious response −45 dB; audio output 2 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, switchable ANL and noise blanker, RF gain control; antenna warning indicator; digital channel display; external speaker jack; 120-V a.c. or 13.8-V d.c., 2-A max. current drain; 5¼" H × 13⁵⁄₁₆" W × 8¹¹⁄₁₆" D $249.95

PEARCE-SIMPSON

"Jaguar 40" Base/Mobile Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; 4 W audio output; RF power output 4 W; adj. channel rejection −70 dB; selectivity −6 dB at 5.6 kHz; image response −80 dB; delta tune ±1 kHz; spurious emissions −70 dB; spurious response −80 dB; frequency tolerance ±0.002%; 100% max. modulation; PA capability; ANL; squelch; external speaker jack; SWR & S/RF meter; RF gain control; 117-V a.c. or 13.8 V d.c. operation; 4½" H × 12¾" W × 9¾" D $339.95

AM/SSB

"Super Bengal SSB 40" AM/SSB
40-channel (PLL synthesized) coverage plus USB & LSB; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N (AM), single-conversion 0.25 μV (SSB); 3 W audio output at 10% dist.; selectivity −6 dB at ±6 kHz (AM) −6 dB at ±2.5 kHz (SSB); RF power output 4 W (AM), 12 W PEP (SSB); image response −50 dB; clarifier range ±800 Hz; spurious response −60 dB; carrier suppression −40 dB; max. modulation 100%; PA capability; ANL; squelch; external speaker jack; SWR meter; S/RF meter; RF gain control; 117-V a.c. or 13.8-V d.c. operation; 3⅝" H × 12¾" W × 9¾" D $429.95

JC PENNEY

6237 Base Transceiver
40-channel base transceiver; dual-conversion receiver sensitivity 0.5 μV; selectivity −60 dB at ±10 kHz; audio output 5 W; RF output 4 W; max. modulation 90%; controls: switchable ANL, delta tune, squelch; S/RF meter; TX and modulation indicators; PA capability; headphone and aux. jacks; digital channel display; 12-V d.c. or 110-120-V a.c.; 3⁹⁄₁₆" H × 11⁷⁄₁₆" W × 9¹⁄₁₆" D $169.99

AM/SSB

6241 Base Transceiver
40-channel base transceiver; dual-conversion receiver sensitivity 0.5 μV (AM), 0.2 μV (SSB); selectivity −50 dB at ±10 kHz (AM), −60 dB at ±10 kHz (SSB); adj. channel rejection −60 dB; audio output 5 W; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; controls: RF gain, squelch, fine tune, tone, switchable ANL and noise blanker; S/RF/SWR meter; digital channel display; PA capability; aux. jacks; 12-V d.c. or 120-V a.c. operation; 2¾" H × 8⅞" W × 12⁷⁄₁₆" D $279.99

PRESIDENT

"Dwight D" 40-Ch Base Station
40-channel coverage; digital synthesizer; 4 W RF output; spurious & harmonic suppression −60 dB; receiver sensitivity 0.5 μV; spurious rejection −55 dB; adj. channel rejection −60 dB; squelch range 1-1000 μV; built-in ANL; noise blanker with manual override, RF gain control; SWR/Mod and S/RF output meters; digital clock; digital channel display; comes with external speaker, plug-in mike, mobile mounting bracket, d.c. power cord and plug; 13.8-V positive/negative ground and 117-V a.c. operation; 4¾" H × 15" W × 11½" D; speaker 4¾" H × 5¾" W × 11½" D $329.95

"Zachary T" CB Base Station
40-channel coverage with PLL synthesizer; RF power output 4 W; sensitivity 0.5 μV; adjacent channel rejection −60 dB; spurious emissions −65 dB volume, squelch, mike gain, RF gain controls; PA/CB and ANL switches; S/RF meter; jacks for antenna, RF gain, PA, external speaker, phone, and mike; operates from a 117-V a.c. or 13.8-V d.c. source; 4¾" H × 13½" W × 11½" D $249.95

AM/SSB

"Washington" 40-Ch AM/SSB
40-channel AM plus LSB and USB; 4-W RF output (AM), 12-W PEP (SSB); sensitivity 0.5 μV (AM), less than 0.25 μV (SSB) at 10 dB S + N/N; adjacent channel rejection −60 dB; controls for channel selection, volume, squelch, mike gain, RF gain; switches include PA/CB, noise blanker on/off; operates on 117-V a.c. or 13.8-V d.c.; 5" H × 13½" W × 11" D $429.95

RAY JEFFERSON

CB-702 Marine CB Transceiver
40-channels (PLL synthesizer) plus three VHF/FM Wx receive; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N (CB), 2 μV (Wx); 3 W audio output; RF power output 3-4 W; max. modulation 85-100%; squelch sensitivity 0.5 μV; controls: RF gain; noise limiter; front-panel speaker; PA capability; S/RF meter; plug-in PTT mike; 115-V a.c. $279.95
CB-712. Mobile version of CB-702; same except does not have noise limiter; comes with mounting gimbel & mike hanger; 13.6-V d.c.; 3" H × 7½" W × 9" D . . $229.95

REGENCY

CB-701 Base Transceiver
40-channel (PLL synthesized) base transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −7 dB at ±7 kHz; adj. channel rejection −60 dB; image response −60 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −60 dB; max. modulation 100%; controls: RF gain, squelch, microphone gain, switchable ANL; modulation indicator; S/RF meter; digital channel display with DIM control; PA capability; external speaker jack; 117-V a.c. or 13.8-V d.c. operation $219.00

ROBYN

T-240D Base-Station Transceiver
40-channel (PLL synthesized) coverage; dual-conversion receiver sensitivity 0.8 μV for 10 dB S + N/N or 30% modulation; adj. squelch; automatic floating noise limiter; direct image 70 dB; audio output 4 W; RF power output 4 W; 100% max. modulation; hum −45 dB; harmonic suppression −60 dB; pi-network antenna match 30 to 70 ohms; built-in high-pass filter; features instant-on/volume switch; squelch & tone control; fine tuning & adjustable RF gain; PA capability; multi-color function lights; LED digital channel readout; illuminated S/RF meter; 117-V, 50/60 Hz a.c. operation or 12-V d.c. (negative-ground only); 5" H × 12" W × 8¼" D $299.95

AM/SSB

SB-520D AM/SSB Base-Station Transceiver
40-channel (PLL synthesized) coverage plus USB & LSB; dual-conversion receiver sensitivity 0.5 μV; adj. channel & image rejection −60 & −50 dB, respectively; audio power output 4 W; RF power output 4 W; 100% max. modulation; spurious & harmonic −60 dB; LED digital channel display; illuminated SWR & S/RF meters; TX & RX lights; CB/PA selector, noise blanker, meter function, and external speaker switches; power/volume switch; squelch control; signal clarifier; adjustable RF gain; meter calibration control; a.c./d.c. operation $369.95

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- Intermodulation sweep to show distortion caused by excessive resonances in tone arm and cartridge.
- 1,000-Hz reference tones to determine groove velocity.
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ROYCE

1-625 Base Station Transceiver
40-channel base station transceiver; dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; audio output 4 W; RF output 4 W; spurious emissions −60 dB; controls: squelch, RF gain, delta tune, switchable ANL, tone; S/RF, calibration, and SWR meters; TX indicator; PA capability; external speaker jack; front-panel headphone jack; digital channel display with dimmer control; 115-V a.c., 60 Hz or 12-V d.c. positive or negative ground; 4¾" H × 15" W × 10½" D $349.95

1-621 Base Station Transceiver
40-channel base station transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±5 kHz; adj. channel rejection −55 dB; audio output 3 W; RF output 4 W; spurious emissions −60 dB; controls: squelch, tone, delta tune (±1.5 kHz), switchable noise blanker; S/RF meter; TX and RX indicators; PA capability; PA and external speaker jacks; 117-V a.c. or 12-V d.c. positive or negative ground; 4½" H × 12" W × 8" D $219.95

AM/SSB

1-641 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.2 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±5 kHz (AM), −6 dB at ±1.8 kHz (SSB); audio output 3.5 W; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; controls: tone, clarifier (±1.5 kHz), squelch, switchable noise blanker, pushbutton mode selectors; S/RF meter; digital channel display; TX and RX indicators; PA capability; PA and external speaker jacks; front-panel headphone jack; 117-V a.c. or 12-V d.c. positive or negative ground; 2⅜" H × 8" W × 9⅛" D $399.95

SBE

Trinidad III Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sen-

sitivity 0.5 μV at 10 dB S + N/N; adj. channel rejection −55 dB; audio output 3 W at 10% dist.; RF output 4 W; controls: squelch, delta tune, switchable ANL; S/RF/SWR meter; digital channel display; modulation indicator; PA capability; emergency d.c. operation; 115-V a.c. or 13.8-V d.c.; 5.75" H × 17.75" W × 8.75" D $279.95

SONAR

FS-2340 Base Transceiver
40-channel (PLL synthesized) base transceiver; hybrid circuitry; dual-conversion receiver sensitivity 0.4 μV at 10 dB S + N/N, 1 μV at 20 dB S + N/N; selectivity −6 dB at ±2.5 kHz, −60 dB at ±7.5 kHz; adj. channel rejection −80 dB; image response −60 dB; audio output 2.5 W at 10% dist.; RF output 4 W; max. modulation 100%; controls: RF gain, squelch, fine tuning (±4 kHz), switchable ANL; digital channel display; S/RF meter; external speaker jack; built-in low-pass filter; 120-V a.c.; 5¾" H × 11¾" W × 11¾" D $495.00

SPARKOMATIC

CB-5100 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 0.7 μV at 10 dB S + N/N; adj. channel rejection −55 dB; image response −60 dB; spurious response −65 dB; audio output 4 W at 10% dist.; RF output 4 W; spurious emissions −72 dB; frequency tolerance ±0.005%; controls: squelch, fine tuning (±1 kHz), tone, switchable ANL and noise blanker, local/distance switch; S/RF and SWR meters; digital channel display; digital clock; TX, RX, and antenna warning indicators; modulation percentage indicator; PA capability; PA and external speaker jacks; front-panel headphone jack; 117-V a.c.; 5½" H × 15¾" W × 11¼" D..... $349.95

CB-5000 Base Station Transceiver
40-channel (PLL synthesized) base station transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; adj. channel rejection −45 dB; image response −50 dB; spurious response −55 dB; audio output 3 W at 10% dist.; RF output 4 W; spurious emissions −65 dB; frequency tolerance ±0.005%; controls: squelch, switchable ANL; S/RF meter; digital channel display; TX indicator; PA capability; PA and external speaker jacks; front-panel headphone jack; 117-V a.c. or 13.8-V d.c.; 4¼" H × 13" W × 8" D..... $149.95

STONER

PRO-40 SSB Base Transceiver
40-channel (PLL synthesized) SSB-only transceiver; single-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±2.1 kHz, −60 dB at ±4 kHz; adj. channel rejection −90 dB; image response −75 dB; spurious response −80 dB; RF output 12 W (PEP); spurious emissions −60 dB; max. modulation 100%; frequency tolerance ±100 Hz; carrier suppression −40 dB; controls: microprocessor channel selection, clarifier range ±0.5 kHz, switchable dual noise blanker, discriminator-type squelch, RF gain, adjustable audio notch filter; digital frequency and channel display; S/RF and SWR meters; headphone and external speaker jacks; provision for external AM operation; 117-V a.c.; 5¼" H × 15½" W × 11" D $995.00

SURVEYOR

2790 Base-Station Transceiver
40-channel (PLL synthesized) coverage; LED channel readout; TX to RX indicator; switchable noise blanker; triple-function SWR meter; built-in power supply. $299.50

TEABERRY

4007 "T" Command Base Transceiver
40-channel (PLL synthesized) base transceiver; receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −6 dB at ±7 kHz; adj. channel rejection −65 dB; image response −70 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls: squelch, microphone gain, RF gain, tone, delta tune (±1.5 kHz), switchable noise blanker; S/RF/modulation meter; digital channel display; PA capability; PA and external speaker jacks; front-panel headphone jack; digital clock; 13.8-V d.c. positive or negative ground or 117-V a.c.; 4¾" H × 15" W × 11½" D $299.99

4011 Model "T" Base Transceiver
40-channel (PLL synthesized) base transceiver; receiver sensitivity 0.8 μV at 10 dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −55 dB; image response −70 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.005%; controls; squelch, fine tune (±1.5 kHz); digital channel display; S/RF meter; TX, RX, and modulation indicators; PA capability; PA and external speaker jacks; 117-V a.c. operation; 5" H × 12" W × 8¼" D $289.99

4009 "T" Control Base Transceiver
40-channel (PLL synthesized) base transceiver; controls: squelch, RF gain, delta tune, switchable ANL; digital channel display; S/RF meter; TX and modulation indi-

cators; PA and external speaker jacks; front-panel headphone jack; PA capability; 4 1/16" H × 11⅜" W × 9⅞" D .. $259.99

4003 "T" Dispatch Base Transceiver
40-channel (PLL synthesized) base transceiver; receiver sensitivity 0.5 μV at 10

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dB S + N/N; selectivity −6 dB at ±6 kHz; adj. channel rejection −60 dB; image response −40 dB; audio output 3 W at 10% dist.; RF output 4 W; max. modulation 100%; frequency tolerance ±0.003%; controls: squelch, switchable ANL; S/RF meter; PA capability; TX indicator; PA and external speaker jacks; 13.8-V d.c. positive or negative ground or 117-V a.c.; 4¾" H × 13" W × 10¼" D $219.99

AM/SSB

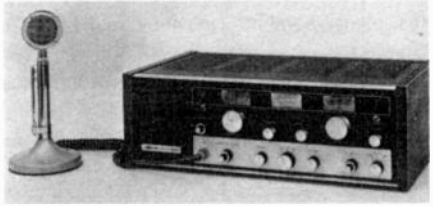
4002 Stalker Two Base Transceiver
40-channel (PLL synthesized) base transceiver; receiver sensitivity 0.5 μV at 10 dB S + N/N (AM), 0.25 μV at 10 dB S + N/N (SSB); selectivity −6 dB at ±6 kHz; adj. channel rejection −70 dB; image response −40 dB; audio output 3 W at 10% dist.; RF output 4 W (AM), 12 W (PEP); max. modulation 100%; frequency tolerance ±0.003%; controls: squelch, RF gain, clarifier (±1.5 kHz); switchable noise blanker; S/RF and SWR meters; TX and RX indicators; switchable noise blanker; PA capability; PA and external speaker jacks; 13.8-V d.c. positive or negative ground or 117-V a.c.; 5½" H × 13⅜" W × 11¼" D $439.99

TEXAS INSTRUMENTS

SM-172 AM/SSB Base Transce ver
40-channel computer-controlled AM/SSB base transceiver; receiver sensitivity 0.6 μV at 10 dB S + N/N (AM), 0.4 μV at 10 dB S + N/N (SSB); adj. channe rejection 60 dB; image response −60 dB; audio output 3 W into 3.2 ohms at 5% dist.; RF output 4 W (AM), 12 W (PEP); spurious emissions −60 dB; carrier suppression 40 dB; max. modulation 100%; frequency tolerance ±0.002%; all transceiver functions controlled and monitored from control head: five-digit LED channel number, SSB mode, signal strength, and SWR display; channel select, volume, squelch, PTT, busy and empty channel scan, digital selective call; automatic clarification with other TI CB radios; computer-monitored SWR shuts down transmitter and displays warning if SWR is too high; modular design consists of transceiver unit and control head; 117-V a.c. $375.00

TRAM

0201 AM/SSB Base Station
23-channel; audio output 4 W at 10% dist. into 4 ohms; sensitivity 0.1 μV at 10 dB



S + N/N (SSB), 0.35 μV (AM); selectivity −60 dB at 4.65 kHz (SSB), −70 dB at 20 kHz (AM); RF output 12 W (PEP), 4 W (AM); controls: mike gain, transmitter tone, receiver tone, clarifier, RF noise blanker, variable ANL, optional foot-switch, crystal/manual switch RF gain, two-speed reverse vernier tuning; comes with GD104 mike; 117-V a.c.; 7½" H × 21½" W × 13" D $895.00

ULTRA

403 Base Transceiver
40-channel base transceiver; controls: RF gain, tone, delta tune, squelch, switchable ANL; S/RF meter; SWR meter; digital channel display; TX, RX, and modulation indicators; PA capability $229.95

AM/SSB

406 Base Transceiver
40-channel base transceiver; controls: RF gain, squelch, fine tune, switchable ANL

and noise blanker, tone; S/RF meter; SWR meter; digital channel display with dimmer control; RX, TX, PA, and mode indicators; digital clock; headphone jack . . . $389.95

UTAC

Studio/6000 Base Transceiver
40-channel (PLL synthesized) base transceiver; dual-conversion receiver sensitivity 1 μV at 10 dB S + N/N; selectivity −60 dB at ±10 kHz; adj. channel rejection −50 dB; image response −50 dB; audio output 4 W; RF output 4 W; controls: RF gain, microphone gain, squelch, touch channel change control (up and down), switchable ANL and noise blanker; S/RF and SWR meters; PA capability; external speaker jack; digital channel display; two channel VHF; 5¼" H × 24" W × 9½" D $329.95

VECTOR

790 Base-Station Transceiver
40-channels (PLL synthesized); dual-conversion receiver sensitivity 0.5 μV at 10 dB S + N/N; selectivity −6 dB at ±2.8 kHz; spurious response −80 dB; audio output 5 W at 10% dist.; RF output 4 W; spurious emissions −70 dB TX; mod. 100%; frequency tolerance ±0.002%; controls: PA, ANL switch; squelch; external speaker jack; SWR meter; S/RF meter; RF gain control; has digital channel indicator; PA capability; headphone jack; TX & PA lights; 117-V a.c. or 13.8-V d.c. operation; 4½" H × 12¾" W × 9½" D. $269.00

CB Mobile Station Antennas

ABLE

Model ATL 10-4
Base-loaded; 52-in whip; stainless-steel construction; spring trunk-lip mount; comes with 17-ft RG-58/U cable . . $35.95

Fiberglass Antennas
Antennas are double-loaded with fiberglass whips; 17-ft RG-58/U cable with connectors is included.
AST 10-8. 48-in whip; adjustable mirror-mount $26.95
ADT 10-8. Same except co-phased; 18-ft harness $49.95
AFTL 10-4. 48-in whip; trunk-lip mount $25.95
CO-AFTL 10-4. Same except co-phased $49.95
SMHM 10-2. 48-in whip; swivel mount; fits ½-in hole $24.95
AST-12. 12-in whip; adjustable mirror-mount $19.95
ADT-12. Same except co-phased; 18-ft harness with 3 connectors $39.95
AFTL-12. 12-in whip; trunk-lip mount $19.95
CO-AFTL-12. Same except co-phased $34.95
AFHM-12. 12-in whip; fits ½-in hole $15.95
AF ⅜-24. 48-in whip; ⅜-24 thread base replacement whip $12.95
AF ¼-20. Same except fits ¼-20 thread base $12.95
AF 12-¼. 12-in whip; ¼-20 thread base replacement whip $9.95
AF 12-⅜. Same except fits ⅜-24 thread base $9.95

The company also offers an extensive line of antenna accessories and mounts.

ALARON

TMM-80 Dual Whips
Top-loaded twin mirror-mount whips; element length 50 in; max. SWR 1.5:1; stainless steel; adjustable whips and mounting bases; 18-ft coax with PL-259 . . . $19.95

MM-70 Mirror Mount
Top-loaded mirror-mount whip; element length 50-in; max. SWR 1.5:1; stainless steel; adjustable whip and mounting base; 13-ft coax with PL-259 . . . . . $11.95

TLS-100 Mobile Whip
Bottom-loaded trunk-lid-mount whip; element length 43½ in; stainless steel; adjustable whip with shock-spring base; 16-ft coax with PL-259 . . . . . $9.95

GTC-50 Mobile Whip
Center-loaded gutter-mount whip; element length 22 in; max. SWR 2:1; stainless steel; adjustable whip with spring-clamp mount; 10-ft coax with PL-259 . . . . . $7.45

AMERICAN ELECTRONICS

Mobile Whip Line
The company offers ten top-loaded, 46-in whips; stainless-steel construction; 1.5:1 SWR; all come with coax cable, tunable tips, ⅜-in dia. loading coils.
93-058. Cowl-mount, 108-in coax $18.45
93-104. Rain-gutter mount, 216-in coax, foldover base adapter $23.95
93-114. Universal mount, 216-in coax, foldover base adapter $25.95
93-136. Universal mount, 216-in coax $19.45
93-146. Dual universal mount, co-phasing harness, two 144-in "V" coax $35.45
93-154. Dual mirror/luggage rack, co-phasing harness, two 144-in "V" coax $26.95
93-190. Mirror/luggage rack mount, 216-in coax $15.45
93-180. Rain-gutter mount, 216-in coax $16.95
93-314. Trunk-lip mount, 216-in coax $16.95
93-324. Dual-loaded whips, dual-trunk-lip mount, co-phasing harness, 144-in and two 144-in coax $30.45
They offer ten center-loaded, 29-in whips; stainless-steel construction; 1.5:1 SWR; all come with 216-in coax cable, tunable tips.
93-105. Rain-gutter mount, foldover adapter $22.45
93-120. Magnetic mount, no-mar contact surface $20.95
93-115. Universal mount, foldover adapter $16.95
93-137. Universal mount $17.95
93-147. Dual-loaded whips, co-phasing harness, two 144-in "V" coax cables $29.95
93-155. Dual-loaded whips, dual-mirror mount, co-phasing harness, two 144-in coax $23.95
93-181. Gutter mount $15.45
93-191. Mirror/luggage-rack mount $13.95
93-315. Trunk-lip mount $15.45
93-325. Dual trunk-lip mount; co-phasing harness; two "Y" type 144-in coax cables $27.45
They offer six center-loaded, 61-in whips, stainless-steel construction; 1.5:1 SWR, all come with 216-in coax cable, tunable tips.
93-102. Gutter-mount, foldover adapter $24.95
93-112. Universal mount, foldover adapter $31.95
93-134. Universal mount $24.95
93-184. Rain-gutter mount $22.95
93-188. Mirror/luggage rack mount $20.95
93-312. Trunk-lip mount $22.45
93-152. Dual-loaded whips, dual-mirror/luggage rack mount, co-phasing harness, two 144-in "V" cables $38.45
93-153. Dual mirror/luggage rack mount, 59-in whip, co-phasing harness, two 144-in V coax cables $43.45
93-322. Dual-loaded whips, dual trunk-lip mount co-phasing harness, two 144-in and one 144-in "Y" cable $41.95
93-189. Mirror/luggage rack mount, 59-in whip $24.95

ANIXTER-MARK

HW Heliwhip Antennas
Top-loaded, 50-ohm imp., molded fiberglass whips with "Static Sheath" to improve S/N ratio up to 20 dB; can be mounted on trunk lip, cowl, fender, or hood; 40-channel coverage except HW-11SL-18 which is tunable to 40 channels.
HW-11-SL18. 18 in; 2:1 SWR across 350 kHz $6.95
HW-11-S2. 24 in; 2:1 SWR across 350 kHz; 1 dB gain over isotropic $8.00
HW-11-S3. 36 in; 2:1 SWR across 400 kHz $7.25
HW-11-S4. 48 in; 2.1 SWR across 500 kHz $7.75
HW-11-S5. 60 in; 2:1 SWR across 700 kHz; 2 dB gain over isotropic $9.75
HW-11-S6. 72 in; 2:1 SWR across 1000 kHz $8.50
HW-11-3. 36 in; 2:1 SWR across 400 kHz; 1.5 dB gain over isotropic $12.75
HW-11-4. 48 in; heavy-duty; 2:1 SWR across 1000 kHz $12.50
HW-11-5. 60 in; 2:1 SWR across 700 kHz; 2 dB gain over isotropic $13.90
HW-11-6. 72 in; heavy-duty; 2:1 SWR across 1000 kHz $14.00
HW-11-8. 96 in; heavy-duty; 2:1 SWR across 2500 kHz $16.50

Mark III-IV Heliwhip Co-Phase Antennas
Top-loaded, 50-ohm imp., fiberglass co-phase whips with mounts and 20-ft co-phase harness; 40-channel coverage.
CHW-S4 Mark III. 48 in; 2:1 SWR across 1 MHz; 1.75 dB gain over isotropic; mirror mount $39.95

CHWT-S4 Mark III. Same but trunk mount $44.20
CHWT-11-4 Mark IV. Same but heavy-duty mirror mount $54.95
CHW-11-4 Mark IV. Same but chrome-plated mounts $54.95
CHWG-S3 Mark III. 36 in; 2:1 SWR across 500 kHz; 1.5 dB gain over isotropic; gutter mount $38.25

Mark Kilowhip Antennas
Heavy-duty versions of HW Heliwhips.
KW-11-4. 48 in; 2:1 SWR across 400 kHz; 1.75 dB gain over isotropic $22.60
KW-11-6. 72 in; 2:1 SWR across 700 kHz; 2 dB gain over isotropic $24.70

AAC-11-4 Antenna
Top-loaded; fiberglass and brass; trunk-lip mount; 40-channel coverage; 54 in; 1.1:1 SWR; 2 dB gain over isotropic; 18-ft coax $36.00
HWC-11-4. Same but Heliwhip and spring only $20.50

AAF-11-3 AM-FM/CB Disguise Antenna
Bottom-loaded; stainless steel; cowl mount; 36 in; 1.2:1 SWR; 1.5 gain over isotropic; 6-ft coax $34.95
AAF-11-4. Similar but telescoping mast 22 to 55 in $34.95

AAG-S3 Antenna
Top-loaded; fiberglass; trunk-lip mount; 36 in; 2:1 SWR across 400 kHz; 1.5 dB gain over isotropic; 8-ft coax $21.25
AAG-S4. Similar but 48-in gutter mount; 2:1 SWR across 500 kHz; 1.75 dB gain over isotropic $21.25

AAL-S3 Antenna
Top-loaded; fiberglass; trunk-lip mount; 36 in; 2:1 SWR across 400 kHz; 1.5 dB gain over isotropic; 18-ft coax ... $24.95
AAL-S4. Similar but 48 in; 2:1 SWR across 500 kHz; 1.75 dB gain over isotropic $24.95
AAL-D-S4. Same but deluxe mount $25.95

AAM-11-S3 Antenna
Top-loaded; fiberglass; mirror mount; 36 in; 2:1 SWR across 400 kHz; 1.5 dB gain over isotropic; 8-ft coax $21.95
AAM-11-S4. Similar but 48 in; 2:1 SWR across 500 kHz; 1.75 dB gain over isotropic $21.95
AAM-11-4. Same but heavy-duty .. $26.50

AAS-11-5 Antenna
Base-loaded; stainless steel; trunk-lip mount; 60 in; 1.2:1 SWR; 1 dB gain over isotropic; tunable $31.75

AAT-S3 Antenna
Top-loaded; fiberglass; trunk-groove mount; 36 in; 2:1 SWR across 400 kHz; 1.5 dB gain over isotropic; 18-ft coax $23.50
AAT-S4. Similar but 48 in; 2:1 SWR across 500 kHz; 1.75 dB gain over isotropic $23.50

SS-11-5 Antenna
Bottom-loaded; stainless steel; mounts in any position; 60 in; 1.2:1 SWR; 1 dB gain over isotropic; tunable $14.50

MAR-11-3 Antenna
Top-loaded; fiberglass; roof/trunk/hood magnetic mount; 36 in; 1.4:1 SWR; 1.5 dB gain over isotropic; 18-ft coax ... $24.95

M-11-B Marine CB Antenna
Eight-foot half-wave antenna with deluxe ferrule; permits operation on wood or fiberglass boats as well as mast-mounted; top-loaded; load coil wound on low-loss fiberglass; fiberglass tube with polyolefin; bottom ferrule machined brass with triple-plated chrome finish; ferrule threaded 1"-14 to mate with all marine mounts; launcher-matching cable to insure low VSWR across 40 CB channels $79.95

M-11-6 Marine CB Antenna
Six-foot half-wave antenna with mount; 5-ft. coax cable terminating in SO-239 connector; includes "Quick-On" connector for quick antenna removal from base $41.50

ANTENNA INCORPORATED

Mobile CB Antenna Line
All units feature VSWR of 1.5:1 or less; coaxial cable included except as noted.
11004. AM/FM/CB antenna; cowl-mount; 32-in disguise whip; stainless-steel; no field tuning; special cable harness $34.95
11101. Cowl-mount; base-loaded; 34-in whip; stainless-steel; shock spring; 17-ft coax $25.95
12510. Roof-mount, base-loaded, stainless-steel 34" whip; 3/8" snap-in mount; 17-ft coax; in-line connector $21.25
12520. Roof-mount, base-loaded, fiberglass 34" whip; 3/8" snap-in mount; 17-ft coax $24.40
12610. Universal hatchback mount, base-loaded; stainless-steel 34" whip; 17-ft coax $25.95
12611. Dual universal hatchback mount; base-loaded; stainless-steel 34" whip; 17-ft coax harness $47.95
13010. Roof-mount, center-loaded, stainless-steel 22" whip; 3/8" snap-in mount; 17-ft coax $20.50
13110. Gutter-mount, center-loaded, stainless-steel 22" whip; semi-permanent mount; 10-ft coax $21.50
13210. Gutter-mount, center-loaded, stainless-steel 22" whip; spring gutter mount; 10-ft coax $21.50
13111. Gutter-mount, base-loaded, stainless-steel 34" whip; semi-permanent gutter mount; 10-ft coax $25.95
13114. Center-loaded; dual gutter-mount; 22" stainless-steel whip; 17-ft coax harness $35.95
13212. Base-loaded; spring gutter-mount; 34" stainless-steel whip; 17-ft coax $25.95
13510. Roof- or trunk-mount, base-loaded, stainless-steel 34" whip; magnetic mount; 17-ft coax $28.88
13511. Roof- or trunk-mount, center-loaded, stainless-steel 22" whip; magnetic mount; 17-ft coax $28.88
14010. Mirror-mount, top-loaded, fiberglass 48" whip; single mirror mount; 17 ft coax $29.95
14110. Same as 14010 except dual-mirror mount $39.95
14011. Mirror-mount, base-loaded, stainless-steel 34" whip; single mirror mount; 17-ft coax $28.88
14111. Same as 14011 except dual-mirror mount $39.00
16010. Full-size, body-mount, stainless-steel 102" whip; swivel ball & spring; no coax cable $24.75
16020. Same as 16010 except 96" fiberglass whip $25.95
16012. Quarter-wave; 102" stainless-steel split whip; body-mount; no coax .. $26.95
16013. Same as 16012 except bumper-mount $30.95
16011. Full-size, bumper-mount, stainless-steel 102" whip; bumper mount & spring; no coax cable $28.88
16021. Same as 16011 except 96" fiberglass whip $31.88
17610. Base-loaded; trunk-lip mount; stainless-steel 34" whip; 17-coax; in-line connector; preassembled mount .. $25.95
17620. Base-loaded; trunk-lip mount; fiberglass 33" whip; 17-ft coax $28.88
17720. Top-loaded; trunk-lip mount; 48" fiberglass whip; 17-ft coax $23.95
38820. Top-loaded, marine half-wave 84" fiberglass whip; 7-ft coax $39.95

ANTENNA SPECIALISTS

MR415 Antenna
Mirror-mount antenna for diesel trucks; 54-in stainless-steel whip; center-loaded; 1.75:1 SWR in 40 channels; comes with 17-ft coax $59.95

MS315 Antenna
T-handle clamp mirror-mount; 50-in stainless-steel whip; center-loaded; 1.75:1 SWR in 40 channels; comes with 17-ft coax and in-line connector $41.95

M313 Antenna
Five-position, flipper, gutter-mount; 47-in stainless-steel whip; center-loaded; 2.0:1 SWR in 40 channels; comes with 17-ft coax $39.95

MR267 Antenna
AM/FM/CB antenna; cowl-mount; 47-in stainless-steel whip; center-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 17-ft coax .. $37.95

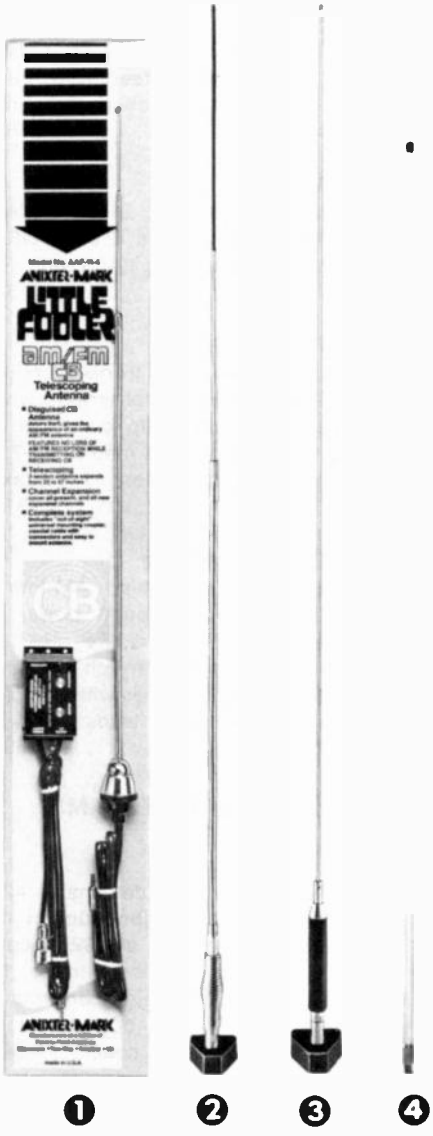
MR312 Antenna
Antenna for use on hatchback cars; 51-in stainless-steel whip; center-loaded 1.75:1 SWR in 40 channels; comes with 17-ft coax $36.95

The best performing CB antennas are made by ANIXTER-MARK

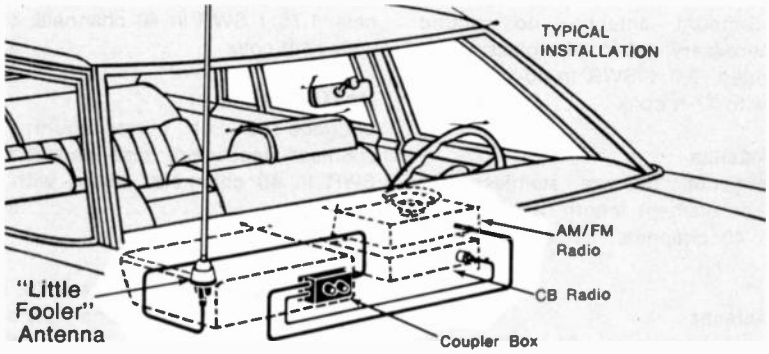
The right CB antenna is durable and compatible with your transceiver.

For the clearest sound, match a quality transceiver with a quality antenna. Anixter-Mark makes the match easy because Anixter-Mark has over 25 years of engineering and manufacturing experience in specialized communication antennas . . . from CB's to satellites.

Match your system to one of these Anixter-Mark quality antennas and see how CB is supposed to sound.



"The Little Fooler"™ because you've got something to hide.



1. "The Little Fooler"™

CB/AM/FM antenna keeps your CB a secret, because it doesn't look like a CB antenna. It looks like an ordinary telescopic AM/FM antenna, but punches out clear CB signals simultaneously without disturbing radio reception. Plus easy coupler adjustment tunes a VSWR of 1.2 to 1 on any one of the 40 channels. Easy to mount too with "out-of-sight" universal mounting coupler and coaxial cable.

2. "The Champ"™

A fully adjustable top loaded antenna that compliments even the sportiest car. The loading coil is wound on a high quality fiberglass whip attached to a heavy chrome plated metal mast and sturdy spring. Adjusts to any one of the 40 channels. Easy to install to trunk lip and transceiver.

3. "The Long Gainer"™

A stainless steel base loaded antenna that's easy to tune. A simple turn of the frequency adjustment screw brings in all the channels across the band. Snaps easily to any trunk lip—no drilling needed.

4. "The *Heliwhip*"™

The original top loaded fiberglass antenna designed and engineered by Anixter-Mark. A covering of tough plastic STATIC SHEATH eliminates the effects of precipitation static and with Anixter-Mark's "Little Devil" adapter the "Heliwhip" can be used with all popular mounts.

All Anixter-Mark antennas are ready for channel expansion now. Anixter-Mark also manufactures a full line of base station antennas.

ANIXTER-MARK

Manufacturers of a Full Line of Point-To-Point Antennas
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CIRCLE NO. 34 ON FREE INFORMATION CARD

MR510 Antenna
Trunk-lip or roof-top mount antenna; 45-in stainless-steel whip; base-loaded; 1.5:1 SWR in 40 channels; comes with 17-ft coax $36.75

M-480 Antenna
Roof-top mount for recreational and off-the-road vehicles; for thick (up to 3/8") roof mounting; 53-in fiberglass whip; base-loaded; comes with 17-ft coax $34.95

M-485 Antenna
Bumper-mount; full-size whip; 108-in max element length; 1.5.1 SWR in 40 channels; comes with 17-ft coax $34.95

MR306 Antenna
Universal-mount antenna; no ground plane necessary; 53-in fiberglass whip; base-loaded; 2.0:1 SWR in 40-channels; comes with 17-ft coax $32.95

M-486 Antenna
Bumper-mount; full-size stainless-steel whip; max element length 108-in; 1.5:1 SWR in 40 channels; comes with 17-ft coax $32.00

M-488 Antenna
Gutter-mount antenna; 21-in stainless-steel whip; center-loaded; 2.0:1 SWR in 23 channels; comes with 17-ft coax $32.00

MR247 Antenna
Camper-mount for flat surfaces; 47 1/2-in stainless-steel whip; base-loaded; 1.75:1 SWR in 40 channels; comes with 17-ft coax $30.75

MS264 Antenna
AM/FM/CB antenna; cowl-disguise mount; 47-in stainless-steel whip; coupler-loading; 2.0:1 SWR in 40 channels; comes with 17-ft coax $29.95

MR275 Antenna
Trunk-lip mount; 50-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; includes swivel whip adapter to adjust to vertical; comes with 17-ft coax $25.95

MR304 Antenna
Trunk-lip mount; 46-in fiberglass whip; base-loaded; 1.75:1 SWR in 40 channels; comes with 17-ft coax $29.95

MR-276 Antenna
Trunk-lip waterproof-mount; 47-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 17-ft coax $27.95

M-1 Antenna
Full-sized whip antenna mounts on vehicle body; max element length 108-in; stainless-steel whip; 1.5:1 SWR in 40 channels $27.75

MR176 Antenna
Trunk-lip or roof waterproof-mount with stainless-steel spring; 48-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 17-ft coax $24.95

MR431 Antenna
Waterproof-mount for use on hatchback; 51-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 17-ft coax $26.95

MR128 Antenna
Waterproof cowl-mount fits 7/8-in to 15/16-in hole and adjusts up to 35 degrees to keep antenna vertical; 47-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 17-ft coax $25.95

MR210 Antenna
Luggage-rack or mirror-mount; 49-in stainless-steel whip; base-loaded; 1.75:1 SWR in 40 channels; comes with 17-ft coax $25.95

MR303 Antenna
Roof-mount; 46-in fiberglass whip; base-loaded; 1.7:1 SWR in 40 channels comes with 17-ft coax $24.95

MS178 Antenna
Die-cast ceramic magnetic-mount; 47-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 24-ft coax .. $24.75

M-542 Antenna
"Quick Break" hatchback-mount; 50-in stainless-steel whip; center-loaded; 1.5:1 SWR in 23 channels, 2.0:1 SWR in 40 channels; comes with 17-ft coax .. $24.75

MS180 Antenna
Five-position flipper gutter-mount antenna; 47-in stainless-steel whip; center-loaded; 1.5:1 SWR in 23 channels, 2.0:1 SWR in 40 channels; comes with 10-ft coax $22.95

MR124 Antenna
Waterproof roof-mount; installs in 3/4" hole; 47-in stainless-steel whip; base-loaded; 1.5.1 SWR in 23 channels; 1.75:1 SWR in 40 channels; comes with 17-ft coax $22.50

MS131 Antenna
Temporary gutter-mount; 49-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels, 2.0:1 SWR in 40 channels; comes with 17-ft coax $21.95

MR130 Antenna
Gutter-mount installs in 3/8-in hole; 48-in stainless-steel whip; base-loaded; comes with 17-ft coax $20.95

MR310 Antenna
Trunk-lip mount; 47-in stainless-steel whip; center-loaded; 1.75:1 SWR in 40 channels; comes with 17-ft coax .. $19.95

M-316 Antenna
Mirror-mount; 50-in stainless-steel whip; center-loaded; 1.75:1 SWR in 40 channels; comes with 10-ft coax $19.95
M-326. Same as the M-316 except includes T-handle clamp mount $19.95

M-432 Antenna
Hatchback mount; 50-in stainless-steel whip; center-loaded; 1.5:1 SWR in 23 channels, 1.75:1 SWR in 40 channels; comes with 17-ft coax $19.95

M-440 Antenna
Magnetic ceramic-mount with scratch shield; 39-in stainless-steel whip; base-loaded; 1.5:1 SWR in 23 channels; comes with 12-ft coax $15.95

M-489 Antenna
Temporary gutter-mount; 21-in stainless-steel whip; center-loaded; 2.0:1 SWR in 23 channels; comes with 12-ft coax $15.50

M-376 Trunk-Lip Mount
Base-loaded 38-in whip; trunk-lip mount; 1.75:1 SWR; stainless-steel spring; swivel-whip adapter adjusts whip to vertical; in-line connector 2-ft from mount; 17-7 ph stainless-steel construction; 17-ft coax $31.50

M-600 CB/AM-FM Antenna
Telescopic 46 1/2-in whip; AM-FM/CB coupler; rear-fender mount; power retractable antenna; requires 7/8" dia. hole; dash-mounted rocker switch; chrome-plated construction; comes with complete harness including power leads & coax $69.95

ANTENNA SYSTEMS

40-D Mobile Antenna
Disguised antenna with detachable 42-in whip; stainless-steel construction; 40 channel operation; 1.75 av. SWR; cowl/front fender mount; fits 7/8-in to 1-in mounting hole; has high-performance matching network with outputs for CB and AM/FM; comes with coax ... $34.95

ANTLER

Mobile CB Antenna Line
All units feature moisture sealed coils; chrome-plated brass coil fittings; chrome-plated heavy gauge steel mounting hardware; stainless-steel whips; matched coax assembly including connector and terminal lugs.
1C10. 44-in no-hole, trunk-mount, 18-ft coax $24.95
1C11. No-hole trunk-mount, base-loaded; pre-wired fiberglass whip $27.50
1C18. Roof- or trunk-mount; fiberglass ...

. . . . . $28.95

1C19. Roof/no-hole, trunk-mount combination $26.95

1C20. Roof-mount $21.50

1C21. Snap-in roof-mount; base-loaded; pre-wired fiberglass whip $23.95

1C30. Gutter-mount/center-load . $22.95

1C32. Twin gutter-mount $31.95

1C40. Single trucker, mirror-mount $24.95

1C42. Twin trucker, mirror-mount . $38.95

1C51. 48-in fiberglass whip $11.95

1C56. 102-in stainless-steel whip . $10.95

1C57. Full-size quarter-wave whip; fiberglass; mounts with ball, bumper mount, or bracket (not included) $11.95

1C70. Base-load, gutter-mount . . $24.95

1C75. Base-loaded stainless steel whip; mounts on mirror or luggage rack $24.95

1C80. 44-in magnetic-mount, base-load $27.50

1C90. Center-loaded stainless steel whip; no-hole trunk-lip mount; 40-channel coverage $24.95

Mobile CB Accessories

1C29. Coil-spring-whip assembly . $15.95

1C54. Chrome-plated spring assembly for 102-in whip; 3/8-24 stud $6.99

1C55. 2" Chrome body mount ball for 102-in whip $2.95

1C65. Bumper-mount for 102-in whip $13.95

ARCHER

21-904A Mobile Antenna
Bottom-loaded roof mount mobile whip; element length 46 in; stainless steel; 16-ft coaxial cable $18.95

21-906A Mobile Antenna
Center-loaded roof mount mobile whip; element length 26 in; stainless steel; 16-ft coaxial cable $16.95

21-908A Mobile Antenna
Bottom-loaded trunk mount (no-hole) mobile whip; element length 48 in; stainless steel; 16-ft coaxial cable $21.95

21-909A Mobile Antenna
Center-loaded gutter mount mobile whip; element length 28 in; stainless steel; 10-ft coaxial cable $17.95

21-912A Marine Antenna
Full-size flat-surface mount marine whip; element length 102 in; fiberglass; 16-ft coaxial cable $31.95

21-915A Mobile Antenna
Full-size bumper mount mobile whip; element length 102 in; stainless steel $19.95

21-925A Mobile Antenna
Bottom-loaded roof mount mobile whip; element length 44 in; fiberglass; 16-ft coaxial cable $19.95

21-926A Mobile Antenna
Bottom-loaded trunk mount (no-hole) mobile whip; element length 46 in; fiberglass; 16-ft coaxial cable $21.95

21-927A Mobile Antenna
Full-size bumper mount mobile whip; element length 102 in; fiberglass . . $22.95

21-928 Mobile Antenna
Top-loaded cowl mount mobile whip; element length 37 in; stainless steel; 5-ft coaxial cable $11.95

21-930 Mobile Antenna
Top-loaded cowl or side mount mobile whip; element length 50 in; stainless steel; 68-in coaxial cable with PL-259 connector $18.95

21-940 Mobile Antenna
Bottom-loaded magnetic mount mobile whip; element length 40 in; stainless steel; 10-ft coaxial cable $21.95

21-941 Mobile Antenna
Center-loaded mirror mount mobile whip; element length 56 in; stainless steel; 10-ft coaxial cable $21.95

21-942 Dual Mobile Antennas
Center-loaded mirror mount co-phased mobile whips; element length 57 in; stainless steel; 18-ft co-phasing harness and connectors $34.95

21-943 Dual Mobile Antennas
Center-loaded trunk mount co-phased mobile whips; element length 37 in; stainless steel; 20.5-ft co-phasing harness and connectors $29.95

21-944 Mobile Antenna
Center-loaded bumper mount mobile whip; element length 56 in; stainless steel. $24.95

21-970 Retractable Mobile Antenna
Center-loaded fender mount retractable mobile whip; element length 33 in; stainless steel; motorized antenna extends and retracts electrically; 18-ft coaxial cable. $59.95

21-975 Mobile Antenna
Bottom-loaded trunk mount (no-hole) super flexible mobile whip; element length 42 in; graphite construction; 16-ft coaxial cable $29.95

21-1094 Mobile Antenna
Full-size body mount mobile whip; element length 102 in; stainless steel. $14.95

ARMSTRONG & ASSOCIATES

Mobile Antenna Line
All antennas feature stainless-steel whips

and rods; stainless-steel hardware; connectors installed; coax with 95% braid coverage to minimize RF and stranded center conductor for flexibility; pre-tuned to Ch. 20.

TLS. Shunt-fed, base loaded; 42-in whip; 0.093-in steel trunk-lip mount; max. SWR 1.5:1 at band edges, flat at center; 18-ft coax; swivel ball standard; two-turn quick-disconnect coil $32.50

TL. Same as TLS except without whip shock spring $30.50

MBS. Shunt-fed, base-loaded, 50-in whip; magnetic-mount (not recommended for use on vinyl roofs); max. SWR 1.8:1 at band edges, flat at center; 18-ft coax $32.50

MB. Same as MBS except without whip shock spring $30.50

SS. Shunt-fed, base-loaded, 42-in whip; surface mount; max. SWR 1.5:1 at band edges, flat at center $28.50

S. Same as SS but without whip shock spring $26.50

MCSS. Single center-loaded 45-in whip; quick disconnect mirror mount; max. SWR 1.6:1 at band edges, flat at center; 18-ft coax; standard ball assembly; aerodynamic drag coil form; optional hardware to adapt to RV's, gutter, or trunk-groove mounting $28.00

MCPS. Same as MCSS except co-phased center-loaded; 18-ft coax each leg $56.00

MCSL. Same as MCSS but designed for 18 wheelers or other tall vehicles .. $28.00

MCPS. Same as MCPS but designed for 18 wheelers or other tall vehicles .. $56.00

MTS. Single top-loaded, 21-in whip; quick disconnect mirror mount; max. SWR 3.2:1 at band edges, flat in center; 18-ft coax $26.00

MTP. Same as MTS except co-phased with dual 18-ft coax cables $52.00

GS. Single top-loaded 21-in whip; fold-down and removable gutter mount using Dzus fastener; may be removed with quarter-turn twist or tilted down 90 degrees; max. SWR 3.2:1 at band edges, flat at center; 18-ft coax $24.50

GP. Same as GS except co-phased; dual 18-ft coax $49.00

TGS. Single center-loaded 45-in whip; trunk-groove mount; max. SWR 1.6:1 at band edges, flat in center; 18-ft coax $25.00

TGP. Same as TGS except co-phased; dual 18-ft coax $50.00

RVBS. Shunt-fed, base-loaded 42-in whip; RV mount with 90-degree fold-down capability; max. SWR 1.5:1 at band edges, flat at center; 18-ft coax $32.50

RVB. Same as RVBS except without spring $30.50

RVT. Single top-loaded 21-in whip; RV mount with 90-degree fold-down capability; 18-ft coax $24.50

RVIP. Same as RVT except co-phased; dual 18-ft coax $49.00

RVC. Single, center-loaded 45-in whip; RV mounting; max. SWR 1.6:1 at band edges, flat at center; 18-ft coax ... $26.50

RVCP. Same as RVC except co-phased $53.00

AUDIOVOX

MA-40 Electric CB/AM-FM Antenna

Completely automatic electric antenna; extends & retracts with ignition switch; built-in relay prevents damage to output transistors as CB operates only when antenna is fully extended; can be adjusted to any height for optimum AM or FM reception; installs in front or rear of most cars; comes with signal-splitting coupler with fine tuning; top load with positive SWR adjustment $69.95

MA-30. Similar to MA-40 but does not extend or retract automatically $59.95

C8X-115 Disappearing Antenna

Pilfer-proof design; built-in safety dummy load to prevent damage to output transistors; top-load with positive SWR adjustment; mast retracts completely; 34½-in four-section extended height; 72-in cable $24.95

AUTOMATIC RADIO

ACC-2216 AM-FM/CB

Center-loaded stainless-steel whip; fender/trunk mount; 41-in element length; extends 17½ in below mount; electrically controlled; locks in retracted position; 17-ft coax $59.95

ACE-2214. Similar to ACC-2216 but for CB only $49.95

ACR-2210. Similar to ACC-2216 but manually controlled; 40-in element length; extends 13¾ in below mount $39.95

ADC-1194. Similar to ACR-2210 but for CB only $29.95

CMA-1186

Base-loaded stainless-steel and fiberglass co-phased whips; mirror mount; 52¼-in element length; 17-ft coax $42.95

MCA-1182. Similar to CMA-1186 but single element $22.95

RTA-1184. Similar to MCA-1182 but roof/trunk mount $24.95

CGA-1187

Center-loaded stainless-steel and fiberglass co-phased whips; gutter mount; 24-in element length; 17-ft coax with connectors $42.95

GMA-1191. Similar to CGA-1187 but 52¼-in element length; single element; no connectors $22.95

C8A-1177

Base-loaded stainless-steel whip; roof/trunk mount; 43¼-in element length; 17-ft coax; factory-installed connectors $20.95

TCA-1180. Similar to CBA-1177 but without coil, coax, or connectors $18.95

MMA-1189

Center-loaded stainless-steel whip; magnetic mount; 24-in element length $20.95

AVANTI

AV-529 Truck Antenna

Dual antenna consisting of two fiberglass "Racer 4" mobiles; truck mirror mounts; co-phasing harness $53.95

AV-527. Base-loaded mobile with Racer 27 antenna with no-hole trunk mount; comes with 17-ft coax, PL-259 ..... $32.95

AV-537. Base-loaded mobile with Racer 27 antenna with fold-down thumbscrew camper mount; comes with 17-ft coax, PL-259 ..... $34.95

AV-727. Base-loaded mobile with Racer 27 antenna; magnet-mount; comes with 17-ft coax, PL-259 ..... $32.95

Fazer Mobile Antennas

Top-loaded; stainless-steel construction; unity gain; 1.5:1 SWR over 23 channels, 1.45:1 SWR over 40 channels; coax included.

AV-535. 18-in max element length; gutter-clip mount; 24-ft co-phase harness; 23-channel operation $42.95

AV-524. 48-in max element length; gutter-clip mount; 9-ft coax; 40-channel operation $23.95

AV-520. 18-in max element length; trunk-lip mount; 17-ft coax; 23-channel operation $23.95

AV-523. 48-in max element length; trunk-lip mount; 17-ft coax; 40-channel operation $22.95

AV-522. 18-in max element length; gutter-clip mount; 9-ft coax; 23-channel operation $21.95

"Hippo" Mobile Antennas

All units feature tunable tip with sliding stainless-steel tuning rod for proper resonance; A.B.S. housing covers coil for protection against elements.

Hippo 5. Base-loaded with snap mount; 5-ft long; comes with 17-ft coax and connector $35.50

Hippo 6. Top-loaded with ⅜"-24 thread; 6-ft long $26.95

Hippo 4. Top-loaded with ⅜"-24 thread; 4-ft long $25.95

Racer 27 Mobile System

Quarter-wave whip; 17-7 PH stainless-steel radiator; stainless-steel spring; whip 48-in; chrome-plated brass base with A.B.S. to form base and cover coil; VSWR 1.3:1; imp. 50-52 ohms; comes with 17-ft RG-58/U coax; requires ½-in hole. $25.95

AV-369 "Gatorwhip"

Combines 5-ft military-grade fiberglass bottom with 4-ft stainless-steel top; tunable to 1.1:1 VSWR can be tuned from 25-40 MHz for business use; standard ⅜"-24 thread fits all popular body and bumper mounts; can be co-phased with AV-504 harness $22.50

Racer Mobile Antennas
Top-loaded, inductively shortened, quarter-wave antennas; SWR tunable to 1.1:1; stainless-steel and chromed brass hardware; setscrew adjustment for positive locking of tuning tip; impervious to moisture, corrosion, salt air, or fumes; military-type fiberglass; can be co-phased with various mounts and harnesses; 3/8"-24 thread fits standard mounting brackets.
Racer 4. 48 inches long $17.25
Racer 6. 72 inches long $18.50
Racer 105. 105 inches long, non-tunable $18.50

BLAZER

Blaster Antenna Line
All units feature VSWR of 1.5:1 or better; impedance 50-52 ohms; 18-ft RG-58/U cable or phasing cables for twin mounts; stainless-steel whip; max. overall length including coil, spring and base 36".
B-1100. Deck or roof-mount $19.95
B-1121. Snap-in deck- or roof-mount, spring $23.45
B-1101S. Deck or roof-mount, spring, swivel $26.45
B-1231S. Quick-removal gutter/luggage mount, spring, swivel $34.95
B-1310. Mirror or side mount $26.95
B-1400. Trunk-lid mount $23.95
B-1401. Trunk-lid mount, spring .. $27.95
B-1501. Magnetic mount, spring .. $28.95
B-2101S. Twin roof/deck mount, springs, swivels $52.95
B-2310. Twin mirror/side mount .. $53.95
B-2400. Twin trunk-lid mount $47.95

Booster Antenna Line
All units feature VSWR of 1.5:1 or better; impedance 50-52 ohms; 18-ft RG-58/U cable; stainless-steel whip, overall length from base to static ball including spring 22" max.
B-4110. Roof or deck-mount $18.95
B-4131. Snap-in roof or deck-mount, spring $21.95
B-4211. Quick-removal gutter/luggage mount, spring $22.95
B-4301. Mirror/side-mount, spring $26.45
B-4411. Trunk-lid mount, spring .. $26.95
B-4510. Magnetic mount $23.95
B-4201S. Gutter/luggage mount, spring, swivel $25.95
B-4111S. Roof or deck mount, spring, swivel $24.95
B-8211. Quick-removal twin gutter/luggage mount, spring $45.95
B-8411. Twin trunk-lid mount, spring $54.95
B-8301. Twin mirror/side mount, spring $52.95

Brute Antenna Line
All units feature VSWR of 1.5:1 or better; impedance 50-52 ohms; 18-ft RG-58/U cable; stainless-steel whip, max. overall length from base to static ball 52".
B-3203. Gutter/luggage mount, spring $27.95
B-3203S. Gutter/luggage mount, spring, swivel $30.95
B-3303S. Mirror/side mount, spring, swivel $34.95
B-3210S. Quick-removal gutter/luggage mount, swivel $23.95
B-6203. Twin gutter/luggage mount, spring $56.95
B-6300S. Twin mirror/side mount, swivel $55.95
B-6303S. Twin mirror/side mount, spring, swivel $69.95
Blazer also offers an extensive line of mounts.

BOMAN

CB/AM/FM Mobile Antennas
Mobile antennas designed to operate with AM/FM-MPX combination CB radios.
CAMP-45. Fully-automatic motor-driven antenna extends when ignition switch is turned on, retracts when car is "shut off" $61.95
CAMP-43. Automatic motor-driven antenna; fully tunable; comes with 16-in coax, PL-259 and 3-position switch $59.95
CAMP-40. Automatic motor-driven antenna; factory pre-tuned; comes with mounting hardware, coax, PL-259 and 3-position switch $49.95
CAR-35. Center-loaded antenna disappears into fender; stainless-steel construction; 54-in whip; fully tunable; comes with coupler, coax cable and connectors $45.95
CAR-33. Center-loaded; fender-mount; 43½-in whip; transmit signal light; automatic relay switch; comes with mounting hardware $39.95
CAR-30. Center-loaded; stainless-steel construction; 52-in whip; cowl or fender mount; fingertip tuning; comes with coupler, coax and connectors ... $34.95

CABM-27 Mobile CB Antenna
Dual, center-loaded antenna; Western mirror-mount; comes with tuned 38-ft co-phased harness, mounting hardware and PL-259 connectors $59.95
CATM-26. Similar to CABM-27, except 33-ft co-phased harness $43.95
CATM-25. Similar except fingertip tuning $36.95

CAFT-2B Mobile Antenna
Dual mobile antenna; Western-type mount; fiberglass construction; fingertip tuning; includes co-phased harness and connector; no drilling $38.95

CANT-22 Mobile Antenna
Center-loaded antenna designed for fastback cars; trunk-edge mount; adjustable swivel ball; transmitting signal light; 43½-in whip; fingertip tuning; comes with mounting hardware $24.95

CANT-20. Similar except 57-in whip; 180 degree swivel ball $21.95

CAMG-5 Mobile Antenna
Base-loaded; magnetic-mount for trunk or rooftop mounting; 42-in whip; stainless-steel construction; shock spring; round base; fingertip tuning; 16½-ft coax, PL-259 connector $24.95
CAMG-6. Similar except 40½-in whip; flat chrome base; 16-ft coax $23.95
CANT-21. Similar except 43½-in whip; plastic base $23.95
CAT-15. Similar except chrome base cup $23.95

CARTER-CRAFT

90-510 Twin Trucker Antenna
Center load, 23-40 channel coverage; 72-inch element; 2 dB gain over isotropic; max. SWR 1:2; horiztonal or vertical mounting; mirror-mount; stainless steel construction; comes with 18-ft coax cable; molded co-phase harness; all connectors $39.95

90-515 Trunk/Roof Antenna
Center load, 23-40 channel coverage; 32-in whip; 2 dB gain over isotropic; max. SWR 1:2; six-pole magnet holds up to 120 mph through unpadded vinyl top; stainless-steel construction; comes with 18-ft coax $29.95

90-505 Trunk/Roof Antenna
Base load, 23-40 channel coverage; 54-in whip; 2 dB gain over isotropic; max. SWR 1:2; comes with 18-ft coax $24.95

90-507 Gutter-Clamp Antenna
Center load, 23-40 channel coverage; 44" whip; 2 dB gain over isotropic; chrome-plated gutter clamp; for vans, station wagons, RV's; stainless-steel construction; comes with 12-ft coax $21.95

CHANNEL MASTER

5013A Co-Phased Antennas
Dual center-loaded antennas; stainless-steel construction; 48-in adjustable whips; chrome-plated swivel mount for trunk-groove mounting; 1.4:1 SWR; comes with co-phasing harness $39.95
5014A. Same except mirror-mount $39.95

Model 5031 Mobile Antenna
Undercover mount folds completely out-of-sight; base-loaded; stainless-steel construction; 44⅜-in whip; 1.5:1 SWR; comes with 17-ft coax $34.95
5032. Co-phased version of 5031 ..... $65.95

Model 5029
Base-loaded; magnetic-mount; stainless-steel construction; 46-in whip; 1.5:1 SWR; comes with 24-ft coax $32.95

Model 5033 Mobile Antenna
Center-loaded; undercover mount folds out-of-sight; stainless-steel construction; 48-in whip; 1.4:1 SWR; comes with 17-ft coax $29.95
5034. Co-phased version of 5033 .. $54.95

Model 5000
Base-loaded; trunk-lip mount with shock spring; stainless-steel construction; 44⅜-in whip; 1.5:1 SWR; comes with 17-ft coax $26.95
5003. Same except trunk-groove mount $26.95
5004. Co-phased version of 5003; phasing harness $49.95
5008. Similar to 5001 except mirror-mount $26.95
5007. Co-phased version of 5008; phasing harness $49.95
5005. Similar to 5001 except with snap-in mount $22.95

5010A Mobile Antenna
Center-loaded; trunk-lip mount; stainless-steel construction; 48-in adjustable whip; 1.4:1 SWR; comes with 17-ft coax $22.95
5012A. Same except trunk-groove mount $22.95
5016A. Similar to 5010A except with pre-assembled harness $21.95

Model 5025
Center-loaded; window-mount; stainless-steel construction; 20-in adjustable whip; 1.5:1 SWR; comes with factory assembled harness $21.95
5026. Co-phased version of 5025; phasing harness $39.95
5020. Similar to 5025 except gutter-mount $20.95
5021. Co-phased version of 5020; phasing harness $39.95

Model 5044
Full-size whip; fiberglass construction; 96-in element length; ⅜-24 thread fits all standard mounts $12.95

Model 5042
Full-size whip; stainless-steel construction; 102-in element length; 1.2:1 SWR; ⅜-24 thread fits all standard mounts $10.95

5018A Mobile Antenna
Center-loaded whip; stainless-steel construction; 48-in element length; 1.4:1 SWR; weather sealed coil; ⅜-24 thread $10.50

CIBCO

DX-16 Whip Antenna
Center-loaded whip; 25-in element; 4 dB gain over isotropic; 1.5 SWR in vertical position; 17-7 ph construction; dual mirror mount; comes with 18-ft coax $39.95

DX-400 Disguised Antenna
Base-loaded whip; 40-in element; 2 dB gain over isotropic; 1.5 SWR in vertical position; cowl mount (disguise); 17-7 ph construction; no coupler or tuner; Ford/Chrysler trim available extra; 6-ft coax $26.95

DX-10-11 Trunk-Lip Mount
Base-loaded whip; 48-in element; 3 dB gain over isotropic; 1.5 SWR in vertical position; trunk-lip mount; 17-7 ph construction; easy disconnect; coil-spring loaded contact; 18-ft coax . $27.95-$24.95

DX-45-46 Magnetic-Mount Antenna
Base-loaded whip; 48-in element; 3 dB gain over isotropic; 1.5 SWR in vertical position; 110-lb rated magnet; 17-7 ph construction; 17-ft coax $21.95

COURIER

ACB-14A Motorized AM/FM/CB Antenna
26.9-27.505 MHz frequency range; 39.4-in overall length; 18-ft cable and connector; weight 3.3 lbs $69.95

ACB-13T Double Co-Phased Antenna
26.9-27.505 MHz frequency range; 51.2-in overall length; 18-ft cable and connector; weight 3.3 lbs $38.95

ACB-15 Trunk-Lid Mount
Antenna features 26.9-27.505 MHz frequency range; 44.5-in overall length; 18-ft cable and connector; weight 2.3 lbs $21.95

ACB-12 Cowl Mount Antenna
26.9-27.505 frequency range; 40-in overall length; 6-ft cable and connector; weight 1.6 lbs $19.95

ACB-11 Gutter-Mount Antenna
26.9-27.505 MHz frequency range; 30.5-in overall length; 12.5-ft cable and connector; weight 1.3 lbs $19.95

CUSHCRAFT

CM-421 Twin Buster
Co-phased, no-hole trunk mount; 48-in fiberglass whips; comes with co-phase harness and connectors; pre-assembled $36.50
CM-422. Same except with tunable tip whips $39.50

CM-423 Truck Buster
Fiberglass co-phased 48-in. whips; nickel-plated mirror mounts; coax connectors; phasing harness; pre-assembled $34.50
CM-424. Same except with tunable tip whips $38.50

CSQ-11 Squalo
Horizontally polarized antenna with suction cups for car-top mounting; 50-in square; comes with short aluminum boom

for mast or tower mounting; preformed and partially pre-assembled; 52-ohm; SWR 1.5:1 ..... $28.50

CM-406 Adjuster Buster
Tunable tip whip with 10-ft. cable and Jiffy mirror mount $24.50

CM-403 Trunk Buster
Fiberglass 48-in. whip; no-hole trunk-lip mount; foam pad protects finish; comes with 15-ft. cable and connector ... $22.50
CM-404. Same except with tunable 48-in. whip $24.50

CM-405 Uni Buster
48-in fiberglass whip with 10-ft. cable and Jiffy mirror mount $22.50

CM-402 Top Buster
Solid fiberglass shaft; sealed radiator; flexible; resists corrosion; stainless-steel tip for tuning; 48-in. overall $12.50
CM-401. Similar to CM-402 except top loaded, high-Q coil; 48-in. overall $10.50

EICO

CA-10 Trunk Lip/Roof Antenna
Quarter-wave, base-loaded whip antenna; stainless-steel construction; 42 in long; designed for no-hole quick mount on trunk lip or on rooftop with ⅜" hole; comes with 18-ft coax cable $19.95

CA-20 Gutter-Mount Antenna
Center-loaded whip antenna; stainless-steel construction; 18 in long; gutter-clip mount; comes with 9-ft coax cable $14.95

EV GAME

10-500 "Breaker Beam" Antenna
Motor-driven CB/AM/FM mobile antenna; retracts automatically when vehicle ignition is switched off; transmit-actuated neon lamp glows when microphone is in use; 40-channel operation; center-loaded; cowl mount; 40-in tunable whip; stainless-steel construction; comes with cables $79.00

FANON

BL-ACB-14A Motorized AM/FM/CB Antenna
26.9-27.505 MHz frequency range; 39.4-in overall length; 18-ft cable and connector; weight 3.3 lbs $69.95

BL-ACB-13T Double Co-Phase
26.9-27.505 MHz frequency range; 51.2-in overall length; 18-ft cable and connector; weight 3.3 lbs $38.95

BL-ACB-15 Trunk Lid Mount
26.9-27.505 MHz frequency range; 44.5-in overall length; 18-ft cable and connector; weight 2.3 lbs $21.95

BL-ACB-12 Cowl Mount
26.9-27.505 frequency range; 40-in overall length; 6-ft cable and connector; weight 1.6 lbs $19.95

BL-ACB-11 Gutter Mount
26.9-27-505 MHz frequency range; 30.5-in overall length; 12.5-ft cable and connector; 1.3 lbs weight $19.95

FIELDMASTER

MF-311T Twin Whips
Twin-phased whips; for mirror mount; overall length 50.4 in.; nominal feedpoint impedance 50 ohms; VSWR 1.5:1 at resonant frequency; center-loaded stainless-steel radiator; comes with coaxial phasing harness and connector, mounting hardware $34.95

MF-311 Whip
Base-loaded whip; for rooftop or trunk mount; overall length 42 in.; nominal feedpoint impedance 50 ohms; VSWR 1.5:1 at resonant frequency; stainless-steel whip and base spring; chrome-plated brass mounting cap; comes with coaxial cable and connector $19.95

MF-311B Bumper-Mount Whip
Full-size quarter-wave stainless-steel whip; for bumper mount; overall length 102 in.; chrome-plated steel base spring and swivelball $14.95

MF-4 Whip
Top-loaded; 4-ft whip; fiberglass construction $12.95

FULCOMM

15-2211 Dual Truck Antenna
Clamps to outside mirrors of diesels, pickups, vans, campers; center-loaded 55-in whips; tempered steel construction; locknuts for adjusting to minimum SWR; 12-ft co-phased wiring harness; PL-259 connectors $69.95

15-2290 Electric AM-FM/CB Antenna
Center-loaded retractable antenna; 45-in element length; tunable SWR, min. 1.2:1; front or rear fender mount; with coax cable and connector $59.95

15-2299 Dual Truck Antenna
Center-loaded, twin tempered-steel whips; mirror-mount; tunable SWR; comes with 12-ft coax, twin-phased coax harness $41.95

15-2296 Trunk/Roof Mount
Base-loaded, 40-in tempered-steel whip; trunk- or roof-surface mount; comes with 17-ft coax cable, stainless-steel shock spring; magnetic mount $27.95

15-2298 Trunk/Roof/Trunk Lip Mount
Base-loaded tempered-steel whip; 40-in high; SWR 1.5:1; mounts on trunk lip, trunk, or roof surface; comes with 17-ft coax cable, stainless steel shock spring $19.95

15-2297 Gutter-Mount Antenna
Center-loaded, 20-in gutter-mount antenna; tempered-steel construction; comes with 12-ft coax cable $15.95
15-2292. Same except magnetic roof mount $17.95

GC

Whip Antennas
18-2000. Top-loaded 48" whip; optional mounting position; fiberglass-covered stainless steel; 2 dB gain over isotropic; 1.2 SWR $10.95
18-2023. Bottom-loaded 46" whip; optional mounting; stainless-steel rod; 1.5 SWR (rooftop); comes with 17-ft. RG-58/U cable $18.25
18-2025. Bottom-loaded 48" whip; optional mounting; stainless-steel rod; 1.5 SWR (rooftop); comes with 17-ft. RG-58/U coax $20.70
18-2050. Top-loaded 19" whip; gutter mount; stainless-steel rod; 1.75 SWR; comes with 17-ft. RG-58/U coax .. $18.20
18-2040. Center-loaded 50" whip; optional mounting position; stainless-steel rod; 1.5 SWR max $13.20
18-2066. Top-loaded 36" whip; optional mounting position; fiberglass-encased stainless-steel rod; 1.5 SWR max .. $17.90
18-2064. Top-loaded 48" whip; optional mounting position; fiberglass construction; 1.5 SWR max.; factory pre-tuned $13.90
18-2060. Top-loaded whip; 54" convertible to 96"; optional mounting position; fiberglass; 1.5 SWR in bumper position; two pieces (54" loaded stub, whip top) $30.65
18-2070. Top-loaded 96" whip; optional mounting position; fiberglass construction; 1.5 SWR in bumper position $17.30
18-2077. Center-loaded 23" whip; magnetic mount; stainless-steel construction; 17-ft coax $18.30

GENERAL ELECTRIC

EA6B×45 Mobile Antenna
Base-loaded mobile whip; element length 41 in; 1.5:1 SWR; magnetic mount; non-corrosive construction; 5-m coax . $34.97

EA68×44 Mobile Antenna
Base-loaded mobile whip; element length 41 in; 1.5:1 SWR; roof, trunk, or gutter mount; non-corrosive construction; 5-m coax $27.97

HUSTLER

DFG "Double Talk"
42-in twin antennas designed specifically

for rain-gutter mounting on station wagons, truck cabs and VW's, and other unusual body styles; fiberglass construction; 40 channel operation; to be used in pairs with phasing harness for exact match and minimum standing-wave ratio $48.65

SDTs "Double Talk"
48-in twin center-loaded whips; trunk-groove mounts; stainless-steel construction 40 channel operation; full coverage signal patterns; comes with 17-ft dual coax cable $47.85

HTM-1 "Twin Huskies"
Designed especially for trucks; twin 51-in antennas; slotted mirror-mounts for attachment to all West Coast style mirrors; non-corrosive superflex stainless-steel radiators; 40 channel operation; oversize power resonators; positive lock-in tip rods; 17-ft coax to each antenna .. $47.75
HSM-1. Single Husky for RV's and vehicles with single West Coast style mirror; 12-ft coax $23.85

FGB-27M CB/AM/FM Antenna
Center-loaded; 44-in whip; adjustable cowl-mount; stainless-steel construction; 40 channel operation; adjustable SWR; comes with 5-ft coax $42.00

DTG "Double Talk"
Twin 25-in center-loaded antennas; rain-gutter mount;. usable on station wagons and panel trucks; 12-ft phasing harness; including coax connector $36.75

XBL-3
Base-loaded; 48-in whip; roof or deck mount; stainless-steel construction 40 channel operation; Mil Spec coax connectors (factory attached); 17-ft coax .. $34.10
XBLT-3. Similar to XBL-3 except with trunk-lip mount $35.10
XBL-4. Similar to XBL-3 except with 180 degree swivel $35.55
XBLT-4. Similar to XBL-4 except with trunk-lip mount $36.55

HQ-27M "Power Packer"
Trunk-lip mount; 55-in whip; knob-adjusted 180 degree swivel; stainless-steel construction; 40 channel operation; oversize resonator; no holes to drill; comes with 17-ft coax; all connectors soldered $29.55

CB-111 "Original Hustler"
Center-fed loaded mast-antenna; 74-in long; fender or deck mounting; chrome-plated brass and aluminum construction; 40 channel operation; 1.2:1 SWR; foldover mast for garaging; coax cable not included $27.85
CB-211. Similar to CB-111 except for bumper mount $27.85

TLA-27Ls
Center-loaded trunk-lip mounting antenna; 48-in radiator; stainless-steel construction; 40 channel operation; includes 17-ft cable and connector $23.65

TLS-27L
Center-loaded; 30-in whip; trunk-lip mount; chromed brass and stainless-steel construction; comes with 17-ft coax cable $21.95

RTS-27L
Center-of-roof mounting; center-loaded; 25-in radiator; chrome-plated brass tubing with adjustable stainless-steel tip rods; comes with 17-ft coax cable and connector $20.85

FGB-27Ls
Center-loaded; 48-in whip; 32-degree adjustable cowl-mount; 40 channel operation; comes with 5-ft coax and factory installed connectors $19.85

RTG-27L
Center-loaded gutter-clamp antenna; 25-in long radiator; adjustable stainless-steel tip rod; includes 12-ft cable and connector $19.65

FG-27s
Center-loaded; 48-in whip; fits any standard mobile mount, 3/8"-24 base; adjustable stainless-steel tip rod; 40 channel operation $10.20

HY-GAIN

Hellcat 1
Base-loaded whip; max. element length 54 in.; rooftop mount; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; stainless steel whip; comes with 18-foot coaxial cable and connector $21.95

Hellcat 2
Base-loaded whip; max. element length 24 in.; rooftop mount, nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; stainless steel whip; comes with 18-foot coaxial cable and connector $21.95

Hellcat 3
Base-loaded whip; max. element length 35 in.; magnetic mount; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; stainless steel whip; comes with 16-foot coaxial cable and connector $24.95

Hellcat 4
Base-loaded whip; max. element length 54 in.; trunk-lip mount; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; stainless steel whip; comes with 20-foot coaxial cable and connector $26.95

Hellcat 5
Same as the Hellcat 1, but without stainless steel spring $18.95

Hellcat 6
Base-loaded whip; element length 54 in.; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; has foldover mount for installation on top or side of camper; stainless steel whip; comes with 18-foot coaxial cable and connector $35.95

Hellcat 7
Base-loaded whip; max. element length 54 in.; roof-top mount with foldover adapter; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; comes with 18-foot coaxial cable and connector $27.00

Hellcat 10
Base-loaded whip; element length 54 in.; stainless-steel whip and base spring; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; comes with 18-foot coaxial cable and connector $23.95

Hellcat X
Base-loaded whip; element length 49 in.; stainless steel whip with swivel trunk-lip mount; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; comes with 20-foot coaxial cable and connector $19.95

Mother Trucker II
Two center-loaded whips with coaxial phasing harness; overall height 75 in.; mirror mount; nominal feedpoint impedance 52 ohms; stainless-steel whip $59.95

Gypsy II
Two helically loaded fiberglass whips with 22-foot coaxial phasing harness; maximum element length 48 in.; mirror or rack mount; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency $44.95

Ten Pounder
Bottom-loaded whip; loading coil is helically wound into lower fiberglass whip section; upper section is stainless steel, overall height 80 in.; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; for use with any mount that accommodates a 3/8-24 thread $29.95

Son-of-a-Guns
Bottom-loaded whips; max. element length 57 in.; for roof-top (Model 509) or trunk-lip (Model 510) mounting; stainless-steel whips; roof-top mount has stainless-steel base spring; nominal feedpoint impedance 52 ohms; VSWR 1.5:1 at resonant frequency; comes with coaxial cable and connector $35.95

Model W102
Full-sized quarter-wave stainless-steel whip; max. element length 102 in.; nominal feedpoint impedance 52 ohms; for

use with any mount that accommodates a 3/8-24 thread $10.95

424 Motorized Antenna
Top-loaded, retractable motorized whip for AM-FM/CB; front or back fender mount; chrome-plated steel construction; 2.0:1 max. SWR; comes with 18-ft coax $79.95

426/428 Antenna
Base-loaded "disguised" whip for AM-FM/CB; 37" max. element length; cowl front or back mount; stainless-steel construction; 2.0:1 (or less) max. SWR; comes with 18-ft coax $29.95

538 Antenna
Top-loaded 36" whip; gutter mount; fiberglass mast, steel base; 2.0:1 SWR; comes with 15-ft coax $22.95
539. Same except dual unit; 18-ft coax $44.95

537 Antenna
Gutter-clip, foldover, zinc-plated steel whip; requires 3/8" mounting hole . . $3.95

INSIDER

48A Hidden Antenna
40-channel coverage; installs inside vehicle; entire car body acts as capture area; no coils to burn out; no-holes mounting; stainless-steel construction; 1.5:1 SWR; mounts in trunk of auto; comes with 21-ft coax $25.95
48B. Same as 48A except mounts inside car; 9-ft coax $25.95

JFD

All antennas have sealed heavy-duty wound copper wire base coil; non-corrosive, rust-proof 34 1/2" stainless-steel whips; d.c. grounding; removable coil and rod assembly; heavy-duty shock springs; copper conductors; chrome-plated brass machined fittings; come complete with mount, cable, connectors, and hardware.
10-MR. Center-loaded dual twin-mirror mount; horizontal or vertical mount; omnidirectional coverage; center loading; dual phasing harness includes pre-assembled 8-ft impedance matching coax from each antenna plus 14-ft cable with preattached connectors for solderless connection $53.00
10-RV. Marine or RV mount; flips down 90 degrees from vertical to horizontal position for clearance: 17-ft RG-58/U coax with pre-assembled PL-259 connector on one end $37.80
10-MM. Base-loaded magnetic mount; removable when required; 17-ft RG-58/U coax with pre-assembled PL-259 connector on one end $33.00
10-RT. Base-loaded combination roof/trunk mount; no-hole installation; chrome-plated brass mounting cup; 17-ft coax with PL-259 connector $28.95
10-LM. Base-loaded luggage/mirror mount; heavy-gauge bracket; adjustable mount; non-slip bracket; 17-ft coax with PL-259 connector $27.40

J.I.L.

FAA-1001 Power Antenna
Covers CB and AM-FM stereo frequencies; fully automatic; operates from ignition switch or "on-off" switch of car stereo; extends to 42 in, retracts out of sight into fender; operates on 12-V d.c. positive or negative ground; VSWR 1.5:1 on CB; isolation (CB from AM-FM) 30 dB . . $79.95

KALIMAR

SA-400 Rooftop Antenna
Base-loaded, 44-in stainless-steel whip; leak-proof rubber gasket; installs in 3/8-in hole; no soldering required; rooftop mounting provides omnidirectional radiation; factor matched to 50 ohms for all CB transceivers $29.95

S-100 Trunk-Mount Antenna
Adjustable mounting bracket for use on tractors, RV's, trucks, or where flat surface is not available; corrosion-proof stainless-steel whip; no soldering required; comes with cable, connector, and instructions $17.95

KRACO

2411 Motor-Driven Telescopic
In-line loaded fender-mount retractable antenna; element length 39 in; max. SWR 1.5:1; stainless steel; combination AM-FM/CB; 10 1/2-ft coax $69.95

2404 Mobile Whip
Center-loaded mirror-mount whip; element length 50 in; max. SWR 1.87:1; stainless steel; 17-ft coax $44.95

2401 Mobile Whip
Bottom-loaded trunk-mount whip; element length 44 in; max. SWR 1.5:1; fiberglass; 17-ft coax $34.95

2409 Magnetic Mount
Bottom-loaded magnetic-mount whip; element length 44 in; max. SWR 1.58:1; fiberglass; 17-ft coax $34.95

2408 Magnetic Mount
Center-loaded magnetic-mount whip; element length 25 1/4 in; max. SWR 1.5:1; stainless steel; 17-ft coax $22.95

2424 Mobile Whip
Bottom-loaded trunk-mount whip; element length 33 in; max. SWR 1.5:1; stainless steel; 17-ft coax $22.95

2407 Mobile Whip
Center-loaded gutter-mount whip; element length 32 in; max. SWR 1.5:1; stainless steel; 11-ft coax $20.95

LAFAYETTE

Criterion Starfire III
Center-loaded dual-phased system designed for large trucks, RV's, etc.; dual-track mirror mount installs on round or square tubing up to 1" dia.; mounts rotate horizontally or vertically on West Coast mirror frames; includes heavy-duty loading coils, resonators, stainless-steel elements, matched phasing harness, coaxial connectors on both ends; 54" high; 42-01760 WV $59.95

Criterion Starfire I
Adjustable cowl-mount for front, rear fender or deck mount; includes stainless-steel tapered whip, chrome-plated shock spring, weatherproof base-loaded matching coil, 17-ft coax cable, solderless coaxial connector; 46" high; for 7/8" to 15/16" mounting hole; 42-01745 WV $21.95

Criterion Trunk-Lip Mount
Rapid-grip trunk-lid mount mobile with coax guard; no holes to drill; 52-in stainless-steel tapered whip with chrome-plated shock spring; weatherproof base loading coil with d.c. ground; includes 17-ft RG-58/U cable, solderless coaxial connector; 99-33177 WV $27.95

Criterion Starfire IV
Mobile rooftop mount; VSWR 1.5:1; stainless-steel tapered whip; chrome-plated shock spring & trim parts; weather-proof loading & matching coil; snap-in mount for 3/8" dia. hole; with 17-ft cable & solderless coaxial connector; 42-01778 HWV $18.95

LAKE

210 Antenna Converter
Permits radio antenna to serve as CB antenna; converter is connected to CB transceiver and car radio; no visible external equipment to identify CB installation; tuning setscrew permits adjustment of SWR; indicator light for proper antenna tuning; CB/car radio switch; comes with mounting screws and bracket; 1 1/2" H × 2 3/4" W × 3 1/2" D $19.95

MAYCOM

GW-40 Champ
Top-loaded mobile antenna; stainless steel construction; element length 39-51 in (adjustable); 3/8-24 ferrule; tunable $19.25

GW-60 Big Gainer
Bottom-loaded mobile antenna; stainless steel construction; 3/8-24 ferrule; adjustable for 40-channel coverage $16.50

GW-102 MayPole
Full-size quarter-wave mobile whip; element length 102 in; fiberglass construction; performance comparable to 3/8-wave antenna $14.95

Helical Whips
Top-loaded mobile whips; molded fiberglass construction; 50-ohm imp.; dielectric plastic covering serves as static shield reducing precipitation static resulting in up to 20 dB noise level reduction; standard- or heavy-duty diameters; some models available in choice of nine colors; 3/8-24 ferrule.
GW-11-8. Heavy duty gray fiberglass; 8-ft length $17.95
GW-11-6. Same but 6-ft length ... $16.25
GW-11-5. Same but 5-ft length ... $14.85
GW-11-4. Same but 4-ft length ... $14.25
GW-11-3. Same but 3-ft length ... $13.50
GW-11S-6. Standard duty white fiberglass; 6-ft length; available in nine colors $11.95
GW-11S-4. Same but 4-ft length .. $10.95
GW-11S-3. Same but 3-ft length; white only $9.25
GW-11SL-18. Same but 18-in length $8.50

GW-11-8M Marine CB Antenna
Top-loaded marine CB antenna; element length 8 ft; static shielded; 3 dB gain; 1 1/2-in brass base, triple plated (chrome and nickel), with 1-14 standard marine thread; fiberglass construction; terminates in SO-239 connector $79.95

GW-11-6M Marine CB Helical
Special design mounts anywhere; element length 6 ft; fiberglass construction; static shielded; supplied with antenna mount and 50-ohm imp. matching section $36.95

GW-24 Antenna Hoop
Increases mobile antenna performance caused by improper ground plane; stainless steel construction; clamps to metal or fiberglass antennas $3.95

MURA

CBA-1 Gutter-Mount Antenna
21-inch antenna attaches to vehicle's gutter via sturdy clamp; 12-inch, high tensile-strength, stainless-steel whip; heavy gauge copper, center-loaded coil; PL-259 type plug; 9-foot coax $18.95

CBA-2 Trunk/Roof-Mount Antenna
Mobile antenna attaches to trunk lid without screws or drilling; can also be installed on rooftop; 45-inch, 17-7 stainless-steel whip; heavy-duty, stainless-steel tension spring; base loaded; rubber-rimmed brass chrome-plated base; PL-259 connector; 15-foot coax $26.95

CBA-3 Twin Mirror-Mount Antenna
Designed for trucks and vehicles with paired, outside rear-view mirrors; no-holes mirror installation; 17-7 stainless-steel whip; center-loaded; PL-259 connectors; 18-foot co-phased coax $45.95

CBA-4 Mobile Antenna
Twin gutter-mount antenna; chrome-plated brass and stainless-steel construction; tunable for low SWR; clip-on mount $29.95

CBA-6 Mobile Antenna
Trunk-mount antenna; copper coil helically wound on solid fiberglass core; stainless-steel whip adjustable for lowest SWR $19.95

PACER

Top-Loaded Mobile Antennas
PTM-48. Trunk-mount with spring; rapid-grip mount for installation without holes; adapter permits removal of antenna; 20-ft RG-58/U cable with PL-259 connector $29.95
PTM-19. Same except with 19-in antenna $25.95
PGM-19. Gutter-mount; tunable top-loaded 19-in fiberglass antenna with aluminum mounting bracket; no-holes installation; adapter permits removal of antenna; 17-ft white RG-58/U cable with PL-259 connector $24.95
PDG-19. Same except dual gutter mounts; two 19-in antennas; diplexer phasing harness $44.95
PDM-48. Dual mirror-mounts with spring; two 48-in antennas; adapter permits removal of antenna; 10 1/2-ft RG-59/U white diplexer cable harness; PL-259 connector $44.95
PMM-48. Same except single 48-in antenna; 10 1/2-ft RG-58/U white cable; PL-259 connector $29.95
PBM-72. 72-in antenna; heavy-duty swivel ball for side mount installation on vans and RV's, adapter permits removal of antenna; 20-ft RG-58/U white cable with PL-259 ..... $29.95
PBM-96. Same except with 96-in quarter-wave whip $29.95
PBU-72. Bumper-mount; heavy-duty stainless-steel adjustable mount; 72-in antenna; 20-ft RG-58/U white cable; PL-259 connector $29.95
PBU-96. Same except with 96-in quarter-whip antenna $29.95
PBU-48. Same except with 47-in antenna; designed for Corvettes and VW's .. $34.95
PMG-19. Magnetic and weatherproof mount; low-profile 19-in antenna covers 40 channels; prewired with 15-ft RG-58/U cable; PL-259 connector $24.95

Base-Loaded Mobile Antennas
P-100. Base-loaded; rapid-grip mount; no-holes; radiating element enclosed in fiberglass; comes with mounting hardware and cable $17.95
P-100-S. Same except trunk-lid mount with spring $19.95
P-200. Roof-mount; snap-in hole mount; comes with mounting hardware and cable. $17.95
P-200-S. Same except equipped with 2 1/2-in stainless-steel spring $19.95
Individual fiberglass antennas without cable or hardware.
P-48. ..... $12.95
P-19-R. $12.95
P-48R. $14.95
P-72. ..... $13.95
P-96. ..... $12.95

PCM-33 AM-FM/CB Cowl Mount
33-in black fiberglass antenna for cowl mounting; top loaded; fingertip tuning; comes with splitter and 7 1/2-ft cable harness $34.95
PCM-33-S. Same except with stainless-steel spring $39.95

PAL

"Firestiks"
Top-loaded, heavy-duty whips; fiberglass construction; tuned from 26.965-27.405+ MHz; 1.5:1 av. SWR; 1/8-24 threaded base; fits any single or co-phased antenna system; red with white tip or white with red tip.
KW-3. With 3-ft whip $13.95
KW-5. With 5-ft whip $15.95
KW3-R. Trunk-lip mount, dual 3-ft whips $45.85
KW3-R-469. Dual-mirror or side mount; 3-ft co-phased whips $53.95
KW5-R-469. Same except 5-ft co-phased whips $57.95
KW3-R-478. Single trunk-lip mount; with 3-ft whip $28.95
KW5-R-478. Same except with 5-ft whip $30.95
KW3-R-468. Single mirror or side mount; 3-ft whip $27.95
KW5-R-468. Same except with 5-ft whip $29.95
K-9. 18-ft co-phasing harness $10.95
K-10. V-bar mount to make rabbit ears $2.95

PANASONIC

TA-CB100 Mobile Antenna
40-channel trunk-lid antenna; neon lamp for transmission test; pre-fixed connector. $19.88

RAIDER

800 Twin-Trucker Antenna
Stainless-steel whips and masts; designed to be mounted on West Coast style mirrors; overall height 58-in; VSWR 1.5:1; front/back directional pattern; comes with 18-ft dual coax phasing harness; PL-259 plugs at both ends $39.95
900. Single trucker; overall height 55 3/4-in; omnidirectional pattern; resonator; comes with 14-ft coax cable and plugs .. $24.95

120 Omnidirectional
Omnidirectional fiberglass 102-in whip

antenna; VSWR 1.5:1; input imp. 50 ohms; comes with dual chain bumper mount, chrome-plated shock spring, gutter clip, 17-ft coax cable, PL-259 plug ... $34.95
130. Similar to 120 except has 3/8"-24 thread chrome-plated stud instead of chain bumper mount $12.95

750 Magnet-Mount Antenna
Center-loaded; full-size magnet holds through standard vinyl non-padded roof; 1.5:1 VSWR; comes with cable and PL-259 connector $23.95

110 Truck-Mount Antenna
Stainless-steel whip; overall height 44-inch; VSWR 1.5:1; omnidirectional pattern; input imp. 50 ohms; no-holes mounting; comes with chrome-plated shock spring and base cup, solderless connectors, 17-ft coax cable, PL-259 plug $21.95

700 Rooftop-Mount
Stainless-steel whip; overall height 42-in; VSWR 1.5:1; omnidirectional pattern; input imp. 50 ohms; comes with chrome-plated shock spring, snap-in mount; solderless connectors, 17-ft coax cable, PL-259 plug $19.95

600 Gutter-Mount Antenna
Omnidirectional 18-in center-loaded antenna; gutter mount for use on RV's, vans, pickups, and cars; comes with chrome-plated shock spring, 10-ft coax cable, PL-259 plug; can be tuned by raising or lowering whip within loading coil $19.95

115 Truck-Mount Antenna
No-hole trunk-mount antenna uses printed circuit board instead of wound loading coil; 39-in whip; VSWR 1.2:1 or better; fully assembled base and cable; comes with 18-ft coax and PL-259 connector $18.95

140 Hand-Held Antenna
Omnidirectional, loaded-coil replacement antenna for hand-held transceivers; fits over retracted built-in antenna and secured with thumbscrew; VSWR 1.5:1; overall height 14½ in $5.95

RCA

Mobile Antenna Line
Each antenna is preassembled; no-hole mounting; stainless steel elements; weather-resistant loading coils; adjustable elements; blister-packed with all mounting hardware, Allen wrench, and coax cable with connectors attached.
14T150. Trunk-lip mount; base-loaded; 50-ohm imp.; 45-in length; 17-ft coax $21.95
14T151. Gutter-mount; center-loaded; 50-ohm imp.; 28-in length; 11-ft coax $14.95
14T152. Magnetic mount; center-loaded; 50-ohm imp.; 28-in length; 11-ft coax; not recommended for use on vinyl or fiberglass $19.95
14T153. Dual mirror mount; center-loaded; 45¾-in length; 40-channel operation; with co-phasing harness and 12-ft coax $39.95
14T162. Trunk-lip mount; base-loaded; 46½-in length; 40-channel operation; 18-ft coax $24.95

RIVERSIDE

"Whirly Bird II"
Omnidirectional; 40-channel coverage; four tapered stainless-steel whips tunable by means of patented full-resonance tuning ring; fiberglass loading coil; SWR 1.05:1 at band center, 1.45:1 on channel 1 or 40; trunk lip mount; no holes to drill; comes with 16.5-ft coax cable $39.95

"Sonic" Mobile Whip
Base-loaded ¼-wave whip; 46-in length; fiberglass loading coil; SWR 1.05:1 at band center, 1.45:1 on channel 1 or 40; patented tuning ring for maximizing output; trunk-lip mount; easy-off mount; 16.5-ft coax $29.95

RMS

CBRD-1 Replacement Whip Antenna
Designed as a replacement for most portable receivers, transceivers, and walkie-talkies; is flexible, unbreakable, continuously loaded; insulated vinyl coating; clamp with setscrew $14.50

ROYAL SOUND

Base-Loaded Mobile Antennas
Company offers seven base-loaded mobile whip antennas; all with stainless-steel construction (except as noted); all supplied with coax.
AFCB-3. Bumper mount; 1.3 SWR max. $80.00
AFCB-2. Bumper mount; 1.3 SWR max. $60.00
AFCB-1. Bumper mount; 1.4 SWR max. $40.00
ABM-2. Full-size whip; bumper mount; 1.4 SWR max.; fiberglass construction $35.00
ABI-1. Same as ABM-2 except stainless-steel construction $35.00
ATM-1. Trunk-lip mount; 38-in element length; 1.5 SWR max.; 72-in coax .. $32.00
AMM-1. Magnetic-mount; 23-in element length; 1.4 SWR max.; 72-in coax .. $24.00

Center-Loaded Mobile Antennas
Company offers four center-loaded mobile whip antennas; all supplied with coax.
AMRM-2. Twin mirror-mount; fiberglass construction; 40-in element length; 180-in coax; 1.4 SWR max. $60.00
AGC-2. Gutter clip-mount; stainless-steel construction; 23-in element length; 1.5 SWR max.; 72-in coax $45.00
AMRM-1. Mirror-mount; fiberglass construction; 40-in element length; 1.4 SWR max.; 180-in coax $32.00
AGC-1. Gutter clip-mount; stainless-steel construction; 23-in element length; 1.5 SWR max.; 72-in coax $24.00

ROYCE

2-200A Mobile Whip
Bumper mount mobile whip; element length 102 in; stainless steel whip with chrome plated spring; installs with stainless steel strap mount, no holes required; complete with all hardware and instructions (requires cable) $24.95

2-202A Mobile Whip
Body mount mobile whip; element length 102 in; stainless steel whip with chrome plated spring; mounts through car body; complete with all hardware and instructions (requires cable) $24.95

2-212A Magnet Mount
Center-loaded magnet mount mobile whip; element length 20 in; stainless steel whip with chrome base; mounts on smooth metal surface; complete with 17-ft polyfoam cable and PL-259 ..... $21.95

2-214 Co-Phased Whips
Top-loaded gutter mount mobile whips; three-piece mounting brackets with chrome plated shock springs; complete with 12-ft co-phased cable and connector $35.95

2-220 Replacement Radiator
Center-loaded replacement radiator; element length 48 in; fiberglass core with stainless steel whip section; 3/8-24 thread $13.95

2-222 Mobile Whip
Trunk-lip mount mobile whip; uses 2-220 radiator; chrome plated brass cup; complete with hardware, 17-ft foam cable, and PL-259 connector $27.95

2-223 Knight Riders
Mirror mount co-phased mobile whips; uses 2-220 radiators; complete with hardware, 17-ft co-phased foam cable, and PL-259 connector $23.95
2-224. Similar to 2-223 but with high-efficiency coil system; 18-ft co-phased foam cable $47.95

2-226 Mobile Whip
Base-loaded rooftop or deck mount mobile whip; element length 36 in; stainless steel with chrome plated shock spring; requires 3/8-in hole for mounting; complete with 17-ft foam cable and connector $22.95

2-227 Mobile Whip
Base-loaded trunk mount mobile whip; element length 36 in; stainless steel whip

with chrome plated shock spring; complete with 17-ft foam cable and connector $26.95

2-234 Marine CB Antenna
Marine CB whip antenna; element length 60 in; fiberglass construction; high-efficiency coil system; complete with 17-ft cable and PL-259 connector $54.95

SHAKESPEARE

Model 4039
Center-loaded marine CB antenna; fiberglass construction; 10-ft 6-in whip; style 366 ratchet-mount (not included); 1.5:1 SWR; comes with 7-ft coax $33.95

Model 464
Top-loaded co-phased antennas; trunk-mount; fiberglass construction; 48-in whip; 1.5:1 max. SWR; comes with 21-ft 6-in coax $31.95
464-1. Same except mirror-mount, attaches to any horizontal bar up to ¾" dia.; includes 10-ft 6-in coax $34.95

4156-1 Black Knight
Base-loaded; trunk-lid mount; graphite tip; preassembled with cable and connectors $29.95

4125-1 White Knight
Trunk-lip mount; removable fiberglass tip; comes with cable and preassembled mount $26.95

Model 4050
Full-length RV antenna; fiberglass construction; base-mount; 36-in whip; 2.0:1 SWR; includes 7-ft coax $24.95

***VIP 173-4**
Top-loaded; cowl, trunk, ball and spring or mirror-mount; fiberglass construction; 48-in whip; 1.5:1 SWR; comes with cable $24.95

Model 181
Capacitive-load; bumper-mount; fiberglass construction; 102-in whip; 1.2:1 SWR $12.95

Model 10-3
Ball, cowl or bumper-mount; fiberglass construction; 96-in whip; 1.5:1 SWR $10.95

4148 Mighty Mite Antenna
Single or co-phased antenna; normal mode full helical 24-in radiator; fiberglass construction; tunable tip $10.95
4148-M. Same except with magnetic mount and cable $22.95
4148-1. Same except with gutter-mount $19.95

SHARP

CA12 Mobile Antenna
Base-loaded 35" whip antenna; fiberglass construction; max. SWR 2:1 over 40 channels; 18-ft coax cable; comes completely assembled; base & mount $20.00

SURVEYOR

5019 Mobile Antenna
Base-loaded magnetic mount; 35-in fiberglass whip; protective vinyl bottom protects car finish; 40-channel coverage; comes prewired with 17-ft coax .. $24.95

SYLVANIA

Mobile Antenna Line
All models feature sealed, heavy-duty wound copper-wire base coils; non-corrosive, rustproof 37-in solid stainless-steel radiator whip and spring; d.c. grounding; removable coil and rod; covers all AM and SSB channels; supplied complete with mount, cable, connectors, and hardware; base-loaded models may be used as rooftop antenna by drilling one ⅜" hole; universal size base fittings.
SYL-MR. Dual twin-mirror-mount; vertical or horizontal mounting; center loaded; factory tuned dual phasing harness includes 8-ft RG-58/U coax from each antenna plus 14-ft RG-59/U coax with preattached connectors $53.00
SYL-MM. Base-loaded; magnetic mount; 18-ft RG-58/U coax with factory preassembled PL-259 type connector on one end $33.00
SYL-RV. Base-loaded; flips down 90 degrees from vertical to horizontal position; for RV's, trailers, motor homes, and campers; same connectors as MM $37.80
SYL-RT. Base-loaded combination roof/trunk mount; no-holes trunk lid leakproof mount; can be permanently installed; mounting cap with rubber gasket for mar-free installation; same connectors as MM 28.95
SYL-LM. Base loaded luggage/mirror mount; adjustable mount attaches to horizontal or vertical parts (up to 13/16" o.d.) of mirror or luggage mounts; same connectors as MM $27.40

TARGET

Mobile CB Antenna Line
Company offers extensive line of mobile antennas; maximum height 43-inches; all come with tapered stainless-steel whips; SWR 1.5:1 or better; 52 ohms nominal impedance; chrome-plated steel mounting hardware; PL-259 connector; 17-ft coax.
CB-35. Fold-down side-mount; snaps into position $26.95
CB-20. Rain-gutter/luggage carrier mount; no drilling $25.45
CB-30. Mirror-mount $24.95
CB-5. Adjustable trunk-lip mount; for use with hatchback and fastback automobiles $24.00
CB-25. Trunk-groove mount $23.15
CB-10. Trunk-lip mount; uses two set screws; no drilling $23.15
CB-15. Snap-in mount; ⅜-inch holes $21.00

CB 160
Single-trucker 51-inch antenna; SS high efficiency center-loaded; stainless-steel mounting brackets; heavy-duty waterproof coil; horizontal or vertical mirror-mount; SWR 1.5:1 or better; PL-259 connector; 17-ft. coax $19.90
CB 162. Double-trucker; same as CB 160 except has 2 complete antennas; 17-ft. dual co-phased coax $39.60

CB-320
Center-loaded 36" whip; fold-down side mount for RV's; nickel-chrome steel & fiberglass construction; 1.5:1 SWR; comes with 18-ft coax cable $25.85

CB-380
Top-loaded 48" whip; mirror mount; stainless steel & fiberglass construction; 1.5:1 SWR; 18-ft coax cable $22.00

CB 90
19-inch antenna; gutter/luggage rack-mount; SS high efficiency center-loaded; adjustable for minimum SWR; heavy-duty chrome-plated mounting hardware; PL-259 connector; 10-ft. cable $16.60

CB 85
19-inch antenna; clip-on gutter-mount; SS high efficiency center-loaded; adjustable for minimum SWR; heavy-duty chrome-plated mount; PL-259 connector; 10-ft. coax $16.60

PC5
Base-load 34" whip; adjustable trunk-lip mount; vertical positioning on any style trunk; high efficiency printed circuit; SWR 1.5:1 or better; chrome-plated mounting hardware; preassembled 17-ft. cable with PL-259 connector $17.50

Magnetic Mount Antennas
All use a multi-pole ceramic magnet and vinyl covering to protect painted surfaces; have tunable tips; 1.5:1 SWR over 40 channels; constructed of ABS, chrome brass and stainless-steel; 17-ft coax.
CB-330. 36" whip; 37½-in element length; PL-259 connector; top load $26.00
CB-332. Same as CB-330 except 27-in whip; 28½-in element length $24.25
CB-334. Similar to CB-332 except center load; 24" whip; 26-in element length $22.65

TENNA

TBE-1 Electric CB/AM-FM Antenna
Center-loaded, 41-in whip; rear fender or trunk cowl mount; electrically operated; signal splitter; switch turns radio on/off; stainless-steel construction; SWR 1.5:1; comes with connectors and 18-ft coax $69.95

CBE-10 Power Antenna
Retractable electric antenna designed for fender mounting; antenna extends to full length at flick of switch turning radio on; retracts and turns radio off at same time; center-loaded; SWR fine tuner; low VSWR $59.95

TBD-1 Disappearing CB/AM-FM
Center-loaded, 34-in whip; rear fender, trunk, or cowl mount; disappears; signal splitter; SWR 1.5:1; comes with connectors and 17-ft coax $34.95
CB511. CB-only version of TBD-1; 35-in whip $24.95

TBA-1 CB/AM-FM Antenna
Center-loaded, 45½-in whip; front cowl mount; stainless-steel construction; SWR 1.0:1; removable mast; signal splitter; connectors and 4-ft coax included. $25.95

Mobile Antenna Line
All parts are stainless-steel; whips are made of 17-7 PH stainless-steel; all coax cable is RG-58/U.
CB-411-2. Dual-assembly for installation on West Coast mirrors; pre-tuned; center load; comes with co-phased coax $41.58
CB-411. Same except single antenna $29.92
CB-103. Trunk-lip or rooftop mounting; pre-tuned; will stand up at high speed $24.91
CB-311. Center-loaded coil; adjustable bracket to fit different rain-gutter mounting situations $18.25

TIGER

Mobile Antenna Line
40-channel coverage; all have ⅜"-24 solid brass mounting studs; chrome plating; solid core fiberglass shafts; dielectric plastic wrap; top-loaded.
THW-4. Hide-Away mount; mounts on underside of trunk lid; comes with 48-in antenna, 18-ft coax, PL-259; assembled $25.95
TSM-3. 36-in replacement antenna . $6.50
TSM-T4. Trunk-lip mount; 48-in antenna; antenna removable from mount; assembled $21.95
TTL-4. Twin mirror-mounts; two 48-in antennas; plated hardware; fits mirror or racks; comes with co-phasing harness, PL-259 connector, hardware; assembled $39.95
TSL-4. Single mirror-mount; 48-in antenna; comes with 18-ft coax, connectors; assembled $21.95
TGM-4. Gutter-mount; one 48-in antenna; comes with 18-ft coax, PL-259; assembled $21.95

TURNER

Gutter-Mount Antennas
SK500. Single 47-in antenna with air coil center loading; adjustable mounting bracket; 18-ft RG-58/U coax cable with antenna and connectors; PL-259 and UG-175/U for radio connection ... $25.95
SK502. Dual co-phase antenna assembly with harness; same antennas as SK500 but includes two quarter-wave RG-59/U coax cables Y'd to 12-ft RG-58/U cable; PL-259 radio connector $50.00

Mirror-Mount Antennas
SK801. Single stationary antenna fastens to mirror strut with clamp; can be installed and removed without tools; center-loaded with low-drag air coil; 10-ft cable; standard PL-259 connector $23.50
SK802. Twin-Kicker dual co-phased antennas with tuned coax harness; two stainless-steel center-loaded antennas $47.00
SK811. Single adjustable antenna; can be lowered as much as 16 in; supplied with 10-ft cable and PL-259 connector $31.00
SK812. Twin-Kicker dual co-phased antennas with adjustable mounts; harness consists of quarter-wave leads Y'd into 12-ft cable with standard PL-259 connector $62.00
SK850. Mount clamps directly to horizontal mirror struts; heavy-duty steel construction; antenna loading coil; stainless whip $23.50
SK855. Same as 850 except dual stainless whips $47.00
FG850. Same as 850 except fiberglass whip $17.50
FG855. Same as 850 except dual fiberglass whips $35.00
SK860. Chrome-plated steel bracket; can be mounted vertically or horizontally; tuning tip for obtaining desired VSWR; stainless-steel whip $29.50
SK866. Same as SK860 except dual stainless whips $59.00
FG860. Same as 860 except fiberglass whip $23.50
FG866. Same as 860 except dual fiberglass whips $47.00
SK870. Mounts with two hooks and spring mechanism (encased in aluminum tube); tuning tip; stainless whip $31.50
SK877. Same as 870 except dual stainless whips $63.00
FG870. Same as 870 except fiberglass whip $25.50
FG877. Same as 870 except dual fiberglass whips $51.00

Trunk-Mount Antennas
SK200. Trunk-lip assembly including mount, base, screw-on antenna coil; stainless-steel antenna; 18-ft cable and connectors; 46 in $25.95
SK201. With swivel ball; can be adjusted and locked on slanted surface; 46 in $28.95
SK210. With stainless-steel shock spring threaded to loading coil and antenna rod; 46 in $27.95
SK211. Includes adjustable swivel ball and shock spring with threaded connections; adjustable swivel ball can be locked to assure vertical polarization $30.95

Roof-Mount Antennas
SK100. Roof mount with threaded connections at base; easily removed for low clearance; spring-loaded cable-to-coil contact; 46 in from top of base to antenna tip $21.95
SK101. Antenna with swivel ball; adjustable for correct vertical polarization; 46 in $24.95
SK110. Same as SK100 but with stainless-steel shock spring, no swivel $23.95
SK111. Combines adjustable swivel ball and shock spring features; 46 in .. $26.95

Bumper-Mount Antennas
SK300. Complete bumper-mount antenna assembly; 102-in from bracket to antenna tip $24.95
SK310. Antenna assembly with heavy-duty stainless-steel shock spring; 106 in $31.00

"Yellow Jackets" Antenna Line
All antennas are 23/40 channel units; of fiberglass construction; have micro-tunable stinger (tip).
FG-310. Full-size whip; 102-in; bumper mount with spring $30.00
FG-450. 30-in whip; gutter mount with swivel ball $18.00
FG-455. Same as FG-450 but co-phased pair $32.00
FG-500. 46-in whip; trunk groove mount $18.50
FG-502. Same as FG-500 except co-phased pair $37.00
FG-850. 46-in whip; mirror mount $17.50
FG-855. Same as FG-850 except co-phased pair $35.00
FG-900. 30-in whip; magnetic mount $25.00
FG-200. 46-in whip; trunk lip mount $19.00
FG-201. Same as FG-200 except with swivel ball $20.00
FG-210. Same as FG-200 except with spring $20.00
FG-460. 30-in whip; fold-down gutter mount with swivel ball $22.50

VALOR

VE-027-FR Electric Antenna
Five-section stainless-steel antenna retracts electrically; 50-ohm imp.; 2 to 1 SWR; 48-in length; supplied with extension cables for front (20 in) or rear (220 in) mounting; RG-58/U cable and PL-259 connector $69.95

636 Mobile Antenna
Tunable whip; trunk/bumper mount; top-loaded; 50-ohm imp.; 6-ft length; fiberglass construction with metal tip; ⅜-24 threaded base fitting $16.50
634. Similar to 636 but 4-ft length; trunk mount $15.50

633. Similar to 634 but 3-ft length; unlimited mounting position $14.50

334 Mobile Antenna
Quarter-wavelength whip; bumper mount; 50-ohm imp.; fiberglass construction; ⅜-24 threaded base fitting $15.50
333. Similar to 334 but with loading coil; 4-ft length $13.50
333½. Similar to 333 but 2-ft length $12.50

VMT-001 Magnet Mount
Top-loaded magnetic mount; fiberglass construction; supplied with 18-ft coax and PL-259 ..... $27.95

337-72″ Road Hog Antenna
Top loaded; 50-ohm imp.; 72-in length; ⅜-24 heavy chrome-plated ferrules $24.95
336-60″. Similar to 337-72″ but 60-in length $22.95
335-48″. Similar to 336-60″ but 48-in length $19.95

WILSON

TM-1 Dual Mount Trucker's Antenna
Center-loaded, 54″ whip antenna; dual-mirror mount; 17-7 PH stainless-steel construction; +1 dB gain over isotropic; SWR 1.5:1 in mirror-mount position; co-phased mounts on horizontal or vertical bars of mirror; adjustable tip rod; weatherproof coax connectors; comes with dual 18-ft cables $37.95

MM-1 Sportster
Base-loaded mobile antenna; 70 lb magnetic mount; tip and radiators constructed from 17-7 PH stainless-steel; coax included $29.95

AM-1 Mobile Antenna
Base-loaded, 42″ whip; trunk-lip or rooftop mount; 17-7 PH stainless-steel construction; unity gain over isotropic; SWR 1.5:1 in either position; comes with weatherproof coax connector; 16-ft, 6-in coax cable $23.95

WINEGARD

Mobile CB Antenna Line
All antennas feature 1.5:1 max. SWR; stainless-steel shock springs; triple chrome-plated brass fittings; and come with RG-58/U coax and connectors.
MR-100. Base-loaded; mirror and luggage-rack mount; stainless-steel whip; height 45½-in; 17-ft coax $27.95
MR-300. Similar to MR-100 except center-loaded; height 57-in $23.50
MR-303. Dual version of MR-300; co-phasing harness $48.95
MR-500. Top-loaded; mirror-mount and luggage-rack mount; fiberglass whip; height 48-in; 17-ft coax $27.50
MR-505. Dual version of MR-500; co-phasing harness $53.75

CB Base Station Antennas

ABLE

ABA 10-2 Base Antenna
8-ft fiberglass base station antenna for hideaway application in attics, trailer homes and apartments; comes with coax hookup terminals $29.95

ALARON

PB-88 Indoor Base Antenna
Center-loaded transceiver-mounted whip; element length 25 in; stainless steel; adjustable whip mounts directly on transceiver using elbow base and PL-259 ..... $7.45

AMERICAN ELECTRONICS

93-373 Base-Station Antenna
Omnidirectional, ground-plane, 5/8-wave antenna; overall height of radiator 22-ft, 6-in; 100 mph max. wind survival; surface area 1.4 sq ft; double-thick aluminum construction; 50-ohm feedpoint imp.; shunt reactance feed; 4-dB gain over isotropic; max. SWR 1.5:1; vertical polarization; 40-channel capability; comes with SO-239 cable connector $46.45

93-385 Base-Station Antenna
Omnidirectional, ground plane, 1/4-wave antenna; overall height of radiator 9-ft; tubular aluminum construction; shunt reactance feed; 50-ohm feedpoint imp.; max. SWR 1.5:1; vertical polarization; 40-channel capability; comes with SO-239 cable connector $18.45

ANIXTER-MARK

MK-V Base Station Antenna
Colinear array with two in-phase elements; feedpoint internally at center of antenna; low angle radiation; maximum omnidirectional gain through use of 20-ft antenna length; VSWR 1.2:1 at edges of band, 1.5:1 across 800 kHz, 2.0:1 across 1200 kHz for other low-power services adjoining Citizens Band; 52-ohm match across band; three-wire cage acts as electrical sleeve to isolate antenna from support structure; aluminum and galvanized steel pipe construction; terminated in SO-239 connector $56.95

AMB-2 Base Station Antenna
Half-wave single 18-ft element; feedpoint imp. 50 ohms; launcher harness feed; gain over isotropic 4 dB; max SWR 1.2:1; d.c. ground; static sheath $49.75

MK-IIP Base Station Antenna
Features company's "Static Sheath" covering entire radiating portion of antenna providing electrical insulation and eliminating static interference for improved S/N and receiver sensitivity (up to 20 dB); half-wave vertical radiator; 50 ohm impedance match; VSWR 1.5:1 across band; d.c. ground $46.75

CBB-1-P "Beacon" Antenna
Half-wave (17-foot) radiator, voltage fed at bottom high-imp. point through special quarter-wave launcher-matcher section of RG-8/U cable, VSWR 1.5:1 from 26.5-27.5 MHz; gain 1 dB over standard ground plane with 9-ft radials; d.c. ground for lightning protection; comes with U-bolt mounting hardware $30.80

HWD-11 Base Station Antenna
Fiberglass molded dipole with helical-wound end loading sections; designed especially for apartment dwellers; can be mounted on small mast and projected out from balcony or window; horizontal or vertical polarization; 8 ft $25.90

HW-11-18R Base Station Antenna
Top-loaded Heliwhip attaches directly to transceiver; 18-in element; 2:1 SWR across 250 kHz; PL-259 attached; 1 dB gain over isotropic $9.95

ANTENNA INCORPORATED

22630 Base-Station Antenna
5/8-wave, ground-plane, 19-ft antenna; aircraft seamless aluminum construction; 50 ohms; PL-259 feed; 4 dB gain over isotropic $39.95

22530 Base-Station Antenna
Quarter-wave, ground-plane, 9-ft antenna; aircraft seamless aluminum construction; 50 ohms; PL-259 feed; unity gain over isotropic $14.25

ANTENNA SPECIALISTS

M-216 "Big Daddy"
Five-element yagi base station antenna; max. element length 18-ft, 22-ft boom length; aluminum construction; 50 ohm feedpoint impedance; gamma match; 15.5 dB gain over 1/4 wave ground plane; 25 dB front-to-back ratio; 1.5:1 or less SWR; vertical and horizontal polarization; assembled weight 40 lbs $219.95

MS-119 Base Station Antenna
Omnidirectional and directional antenna, control box permits switching; 3 elements; max. element length 18-ft; aluminum construction; 50 ohm feedpoint impedance; split feed; 5.75 dB gain over 1/4 wave ground plane in omnidirectional mode, 8.75 dB gain over 1/4 wave ground plane in directional mode; front-to-back ratio 23 dB; 1.5:1 or less SWR; vertical polarization; d.c. ground in omnidirectional mode; assembled weight 17 lbs .. $129.95

M-215 "Boss 303"
Three-element yagi antenna; max. element length 18-ft; 10-ft, 3-in boom length; aluminum construction; 50 ohm feedpoint impedance; gamma match; 9.75 dB gain over 1/4 wave ground plane; 25 dB front-to-back ratio; 1.5:1 or less SWR-vertical and horizontal polarization; assembled weight 11 lbs $109.95

M-134 Base Station Antenna
Five-element directional-beam antenna; max. element length 18-ft; 22-ft boom length; aluminum construction; 50 ohm feedpoint impedance; gamma match; 14.5 dB gain over 1/4 wave ground plane; 25 dB front to back ratio; 1.5:1 or less SWR; vertical or horizontal polarization; assembled weight 18 lbs $89.95

M-201 Base Station Antenna
Four-element beam antenna; max. element length 18-ft; 12-ft, 6-in boom length; aluminum construction; 50 ohm feedpoint impedance; gamma match; 11 dB gain over 1/4 wave ground plane; 25 dB front-to-back ratio; 1.5:1 or less SWR; vertical or horizontal polarization; assembled weight 6 1/2 lbs $64.95

M-202 Base Station Antenna
Three-element beam antenna; 18-ft max. element length; 9-ft, 1-in boom length; aluminum construction; gamma match; 9.75 dB gain over 1/4 wave ground plane; 50 ohm feedpoint impedance; 25 dB front-to-back ratio; 1.5:1 or less SWR; vertical or horizontal polarization; assembled weight 6 lbs $56.95

M-227 "Mighty Magnum II"
Omnidirectional antenna with dual phasing coil; aluminum construction; 50 ohm feedpoint impedance; tapped autotransformer; 4 dB gain over 1/4 wave ground plane; 1.5:1 or less SWR; vertical polarization; d.c. ground; loading coil; assembled weight 7 lbs $44.95

M-400 "Starduster"
Omnidirectional antenna; aluminum con-

struction; 50 ohm feedpoint impedance; split dipole; 5 dB gain over ¼ wave ground plane; 1.5:1 or less SWR; vertical polarization; comes with SO-239 connector; assembled weight 3½ lbs . $44.95

M-117 "Super Magnum"
Omnidirectional antenna; aluminum construction; tapped autotransformer; 3.75 dB gain over ¼ wave ground plane; 1.5:1 or less SWR; vertical polarization; loading coil; d.c. ground; assembled weight 7 lbs. $39.95

M-409 Apartment Window Antenna
Omnidirectional with two 4½-ft loaded elements stacked to perform as loaded half-wave; unity gain; performance depends on mounting location and apartment house configuration; stainless-steel construction; assembled weight 4 lbs. $39.95

M-417 "Polecat"
Omnidirectional base station antenna; aluminum construction; 50 ohm feedpoint impedance; tapped autotransformer; 3.75 dB gain over ¼ wave ground plane; vertical polarization; comes with SO-239 connector; d.c. ground; assembled weight 5 lbs. $26.75

M-184 Base Station Antenna
Omnidirectional antenna; aluminum construction; 50 ohm feedpoint impedance; split feed; 1.5:1 or less SWR; vertical polarization; comes with SO-239 connector; assembled weight 3 lbs. . . $16.95

M-203 Antenna
Portable base station antenna for temporary operation of transceiver; omnidirectional; stainless-steel; 1.5:1 or less SWR; vertical polarization; center-loaded; d.c. ground; assembled weight 1 lb $9.95

ANTLER

B-12 Base Station Antenna
Omnidirectional base antenna; three-element radiator; 8-ft 4-in max. element length; 6-ft 3-in turning radius; 50-ohm imp.; vertical polarization; d.c. ground; aluminum construction $37.95

ARCHER

21-901 Ground Plane Antenna
Quarter-wave ground plane; beta match; SWR 1.5:1 across 40 channels; aluminum construction; omnidirectional; incorporates three 108-in radials; accepts PL-259 connector; mounts on 1⅝-in OD (or less) mast $12.95

21-902 Ground Plane Antenna
Half-wave ground plane; 52-ohm imp.; SWR 1.5:1 across 40 channels; aluminum construction; omnidirectional; end-fed, four-section radiator with static dissipator; incorporates three 55-in radials and loading coil; accepts PL-259 connector; mounts on 1⅝-in o.d. (or less) mast $24.95

21-933 Beam Antenna
Three-element beam; gamma match; SWR 1.5:1 across 40 channels; aluminum construction; directional; 12-ft boom with three 18-ft elements; includes hardware for horizontal or vertical mounting $39.95

21-1133 Ground Plane Antenna
Five-eighths-wave ground plane; 50-ohm imp.; SWR 1.5:1 across 40 channels; aluminum construction; omnidirectional; end-fed, five-section, 20-ft radiator with static dissipator; incorporates three 103-in radials and loading coil; accepts PL-259 connector; mounts on 1⅝-in o.d. (or less) mast $34.95

AVANTI

AV-146 Moonraker 6
Six-element dual-polarity beam combining five sets of crossed-dipole-type elements and quad-type reflector; gain 17 dB over isotropic; front-to-back separation 44 dB; VSWR 1.2:1; imp. 50-52 ohms; side rejection 24 dB; 31.5-ft boom with fiberglass rods as inner guy wire supports for boom; 3/16" solid fiberglass rods interlock elements; 24-inch, ⅛" dia. stainless-steel wire tips to reduce wind load area and ice prone surfaces; tunable gamma match on both vertical and horizontal elements; requires heavy-duty rotor; wind load of beams 6.9 sq. ft; weight 39 lbs; comes with switchbox which makes contact on one polarity before it breaks contact on the other $404.00
Moonraker 4. Similar to above except gain 14.5 dB over isotropic; front-to-back separation 38 dB; vertical to horizontal separation 25 dB; power multiplication 28 times; medium- to heavy-duty rotor required; boom length 16.5 ft; weight 24 lbs; comes with switchbox $170.50

AV-120-2 P.O.L. II Antenna
Polar-diversity-loop antenna; cross arm spread and height 13-ft; aperture 90 sq ft; boom length 4-ft, 10-in; dual-polarity; forward gain 12 dB over isotropic; front-to-back ratio 32 dB; polarity isolation 23 dB vertical to horizontal; VSWR 1.2:1; suggested coax foam-filled RG-8/U; 50-52 ohms imp.; requires light- or medium-duty rotor; d.c. ground; power multiplication 16 times; comes with AV-501 single-switch switchbox; weight 13.5 lbs $117.50
AV-130. Stacking kit for above antenna; comes with co-phasing harness; requires heavy-duty rotor $104.75

AV-150 Astro Beam
Three-element beam with company's "Astro Plane" antenna as driven element; aircraft-quality aluminum tubing construction; hubs of weather-resistant Cycolac; forward gain 11 dB over isotropic; rejection 40 dB plus signal drop front-to-back; imp. 50-52 ohms; boom length 10½ ft; vertical beam; VSWR 1.3:1; turning radius 63 in; power multiplication 12.6 times; light- to medium-duty rotor can be used (including inexpensive TV rotors); weight 14 lbs $79.95

AV-170 Sigma 5/8
5/8-wave ground-plane antenna; 22-ft high; 5.14 dB gain over isotropic; VSWR 1.3:1; power multiplication 3.3 times, imp. 50-52 ohms; omnidirectional; radials 9 ft; weight 9 lbs; aluminum, aluminum castings, stainless-steel, fiberglass construction $59.50

AV-101 Astro Plane
Omnidirectional; vertical polarization; top loaded; 4.46 dB gain over isotropic; pretuned for SWR 1.2:1; imp. 50-52 ohms; power multiplication 2.8 times; total length 12 ft; weight 4 lbs; needs no rotor $39.95

AV-160 Ramrod
Full half-wave antenna adjustable from 27-170 MHz; omnidirectional for CB base-station use; unity gain with either horizontal or vertical polarization (depending on mounting) $20.50

CHANNEL MASTER

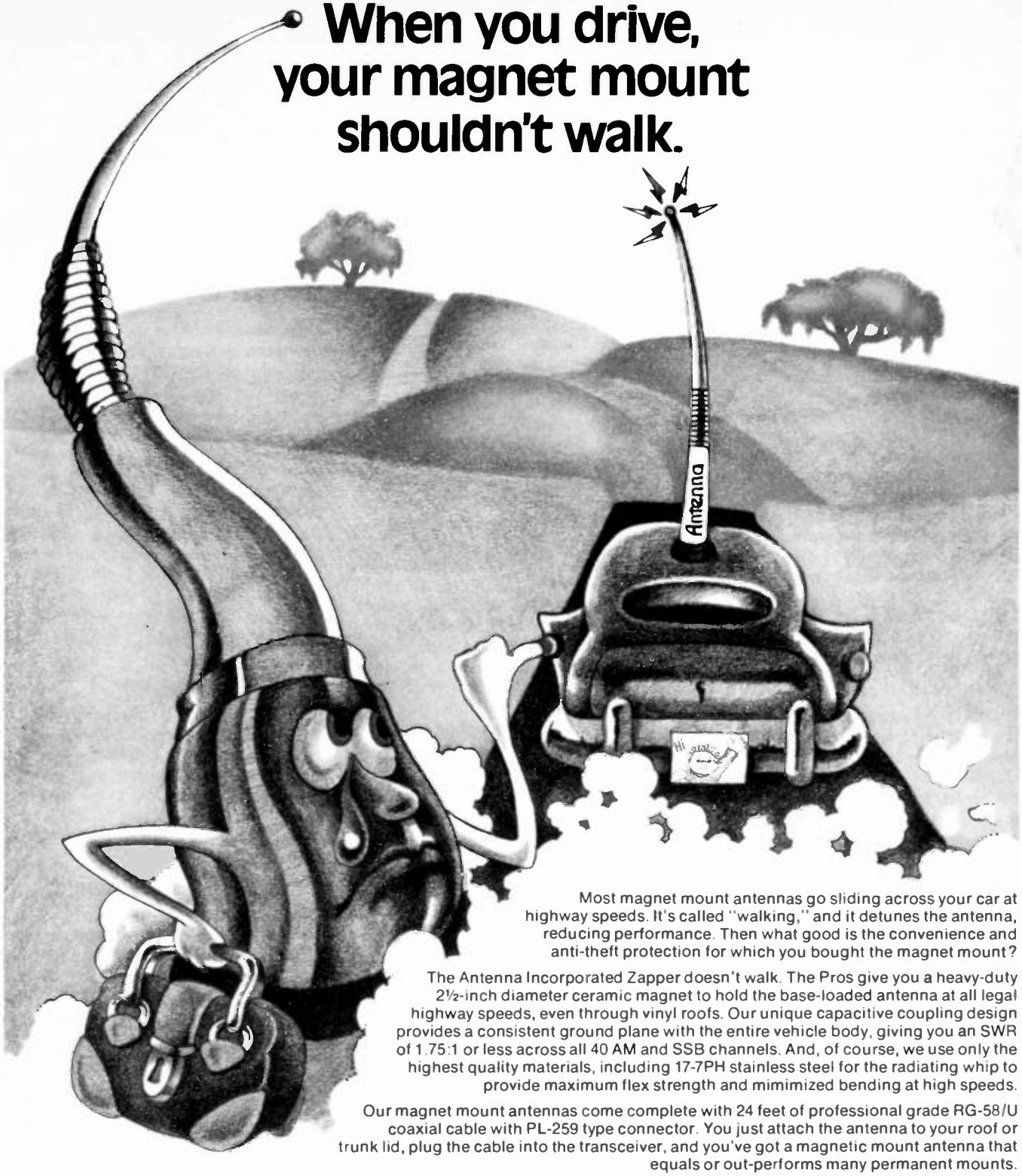
5052 Base Station Antenna
Half-wave dipole base antenna; 4 elements; max. element length 8-ft; fiberglass construction; center-fed; .83 sq. ft surface area; 60 mph windloading; 50 ohm feedpoint imp. at 10-ft; 5 dB gain over ¼-wave ground plane; 1.5:1 SWR; vertical polarization; weight 4 lbs $54.95

5050 Half-Wave Dipole
Base antenna; 4 elements; max. element length 16-ft; aluminum construction; center-fed; 1.5 sq. ft surface area; 60 mph windloading; 50 ohm feedpoint imp. at 10-ft; 5 dB gain over ¼-wave ground plane; 1.5:1 SWR; vertical polarization; assembled weight 4 lbs $49.95

5058 5/8-Wave Colinear Antenna
Four elements; max. element length 22½-ft; 2.1 sq. ft surface area; 60 mph windloading; aluminum construction; coil match end-fed; 50 ohm feedpoint imp. at 10-ft; 5 dB gain over ¼-wave ground plane; 1.5:1 SWR; vertical polarization; d.c. ground; assembled weight 10 lbs $49.95

5056 Half-Wave Colinear Ground Plane
Four telescoping sections; 17½-ft max. element length; 1.5 sq. ft surface area; aluminum construction; coil match end-fed; 60 mph windloading; 50 ohm feedpoint imp. at 10-ft; 4 dB gain over ¼-wave ground plane; 1.5:1 SWR; vertical polari-

When you drive, your magnet mount shouldn't walk.



Most magnet mount antennas go sliding across your car at highway speeds. It's called "walking," and it detunes the antenna, reducing performance. Then what good is the convenience and anti-theft protection for which you bought the magnet mount?

The Antenna Incorporated Zapper doesn't walk. The Pros give you a heavy-duty 2½-inch diameter ceramic magnet to hold the base-loaded antenna at all legal highway speeds, even through vinyl roofs. Our unique capacitive coupling design provides a consistent ground plane with the entire vehicle body, giving you an SWR of 1.75:1 or less across all 40 AM and SSB channels. And, of course, we use only the highest quality materials, including 17-7PH stainless steel for the radiating whip to provide maximum flex strength and mimimized bending at high speeds.

Our magnet mount antennas come complete with 24 feet of professional grade RG-58/U coaxial cable with PL-259 type connector. You just attach the antenna to your roof or trunk lid, plug the cable into the transceiver, and you've got a magnetic mount antenna that equals or out-performs many permanent mounts.

Ask your CB dealer for the Zapper (Model 13510), and take your new magnet mount antenna for a ride —instead of a walk.

You deserve the best. You get it from the Antenna pros.

Incorporated **Antenna**

23850 Commerce Park Road, Cleveland, Ohio (216) 464-7075
In Canada: E.S. Gould Marketing Co. Ltd., 109 Montee De Liesse, Montreal, Quebec H4T 1S9 Canada
Antenna Incorporated, International Division, P.O. Box 1002, Rockville Centre, New York 11571

CIRCLE NO. 21 ON FREE INFORMATION CARD

zation; d.c. ground; loading coil, assembled weight 7 lbs $39.95

CUSHCRAFT

CFB-B Superfire
3-element horizontal/vertical power beam; selectable horizontal, vertical, or axial polarization; front-to-back ratio 30 dB, front-to-side 40 dB; forward gain 12.5 dB; heavy-duty seamless aluminum construction; boom 16-ft × ¾-in; longest element 18-ft; turn radius 12-ft; uses two 52-ohm feedlines with any standard coax switch; weight 25 lbs $149.95
CFS-1. In-line three-rocker coax switch available as an optional extra; for desk or wall mount.

CB-115 Beam Antenna
Five-element beam; forward gain 10.5 dB; front-to-back ratio 28 dB; VSWR 1:1; boom 20-ft × 1¾-in; element diameter ¾"-½"; turn radius 12-ft; solid-hold telescope clamps; weight 20 lbs $99.95
CB-114. 4-element beam; forward gain 9.5 dB; front-to-back ratio 26 dB; boom 16-ft × 1⅝-in; turn radius 8-ft; weight 14 lbs $69.95
CB-11. 3-element beam; forward gain 8 dB; front-to-back ratio 22 dB; boom 10 × 1½-in; turn radius 5-ft; weight 10 lbs $54.95

CB-2KD Dual-Beam Stak Pak
For use with 3-, 4-, or 5-element beams to provide up to 3-dB signal increase; includes heavy-duty seamless aluminum horizontal support boom with diagonal braces; coaxial phasing harness with preassembled connectors; adjustable to 2½ in o.d. mast mount, all hardware .. $69.95

CX-1000 Antenna
Heavy-duty, high-efficiency antenna for AM or sideband use; end-fed with coax stub system for good match and low ohmic losses $39.95

CR-1 Ringo Antenna
Half-wave base antenna; "power ring" tuning for 3.75 dB gain; 10-inch ring dia.; can be installed in various positions; direct d.c. ground; low angle of radiation; will withstand winds of 80 mph; 17-ft, 10-in high $29.95

CGPA Ground Plane
Can be set for any service in 27-50 MHz range; comes with element setting chart; for two-way radio or monitor applications $40.00

TS-1 Trik Stik Antenna
All-purpose antenna for high or low monitor, CB, etc.; universal mount $15.95

FINCO

Stinger 540 Antenna
Five-element yagi; 19-ft element length; 21-ft boom length; turning radius 10.7 ft; aluminum construction; surface area 5.7 sq ft; wind loading 153 lbs at 80 mph; gamma feed; 50 ohm feedpoint imp; gain over isotropic 14.6 dBi; front-to-back ratio 25 dB, front-to-side 30 dB; half-power beamwidth 48-degrees E plane; max. SWR 1.25:1 at 36 ft; polarization same as mounting plane; square boom; self-aligning elements; assembled weight 16.8 lbs $75.95

Stinger 440 Antenna
Four-element yagi; 19-ft element length; 14.3-ft boom length; turning radius 7.2 ft; aluminum construction; surface area 4.4 sq ft; wind loading 118 lbs at 80 mph; gamma feed; 50 ohm feedpoint imp.; gain over isotropic 12.6 dBi; front-to-back ratio 23 dB, front-to-side 30 dB; half-power beamwidth 53 degrees E plane; max. SWR 1.25:1 at 36 ft; polarization same as mounting plane; square boom; self-aligning elements; assembled weight 12.6 lbs $59.95

Stinger 340 Antenna
Three-element yagi; 19-ft element length; 10-ft boom length; turning radius 5.04 ft; wind loading 86 lbs at 80 mph; surface area 3.2 sq ft; aluminum construction; 50 ohm feedpoint imp; gain over isotropic 10.4 dBi; gamma feed; front-to-back ratio 20 dB, front-to-side 30 dB; half-power beamwidth 60 degrees E plane; max. SWR 1.25:1 at 36 ft; polarization same as mounting plane; square boom; self-aligning elements; assembled weight 10 lbs $49.95

Stinger 300 Antenna
⅝-wave ground plane; radiator 22.3 ft; wind loading 58.9 lbs at 80 mph; 50 ohm feedpoint imp.; inductance loop feed; gain over isotropic 5.50 dBi; max. SWR 1.25:1; vertical polarization; static discharge hat; aluminum construction; assembled weight 10 lbs $48.95

Stinger 200 Antenna
Half-wave ground plane; radiator 16.21 ft; wind loading 36 lbs at 80 mph; 50 ohm feedpoint imp.; inductance loop feed; gain over isotropic 5.00 dBi; max. SWR 1.25:1; vertical polarization; static discharge hat; aluminum construction; assembled weight 7.75 lbs $39.95

Stinger 100 Antenna
Quarter-wave ground plane; radiator 8.3 ft; wind loading 25.7 lbs at 80 mph; 50 ohm feedpoint imp.; direct feed; gain over isotropic 5.0 dBi; max. SWR 1.25:1 vertical polarization; static discharge hat; aluminum construction; assembled weight 3.5 lbs $31.95

Stinger W-40 Window-Mount Antenna
Half-wave loaded dipole; element length 3.9 ft; feedpoint imp. 50 ohms; beta feed; gain over isotropic 2.05 dBi; max. SWR 1.8:1; vertical or horizontal polarization; d.c. ground; low profile; fits most windows; aluminum construction $18.95

GOLD LINE

GLC-1107 Indoor CB Antenna
Portable indoor base-station antenna; covers 40 channels; mounts on window or wall; tuning controls and meter for accurate tuning for maximum power output on all 40 channels $29.95

HUSTLER

27TD "Super Swamper"
Colinear 0.64 wavelength, single element antenna; heat-treated aluminum; vertical polarization; d.c. ground; shunt fed; 50 ohms imp.; greater than 4.25 dB gain; 1.5:1 or better SWR over 40 channels; 108-in radials; 22-ft ¾-in element height; weight 9.5 lbs $63.55

27JR "Jam Ram"
Colinear 0.64 wavelength, single element antenna; heat-treated aluminum; vertical polarization; d.c. ground; shunt fed; 50 ohms nominal imp.; 1.2:1 or better SWR over 40 channels; 108-in radials; 19-ft 10¾-in element height; weight 7.9 lbs. $52.95

HP-27 "Homing Pigeon"
Indoor, single-element base station antenna; mounts between floor and ceiling of a room like pole lamp; vertical polarization; d.c. ground; 2:1 or better SWR over 40 channels; comes with 17-ft Mil Spec RG58-U coax and factory-installed connectors; weight 4 lbs $42.95

TMR-27
Portable direct-connection antenna; adjustable stainless-steel tip; max. element length 21-in; vertical polarization; d.c. ground; 2:1 or better SWR; comes with factory-installed right angle connector; no cable needed $10.95

HY-GAIN

Big Gun II Cubical Quad
Four-element cubical quad antenna; 14.6 dB gain over isotropic; half-power beam width 49 degrees; front-to-back ratio 38.7 dB; twin driven elements; vertical-horizontal separation 18 dB; feedpoint impedance 52 ohms nominal; VSWR 1.5:1 at resonant frequency; boom length 20 feet; boom diameter 2 inches; accommodates masts from 1¼ to 2½ inches; turning radius 11 feet; surface area 5.7 sq. feet; weight 39 lb.; wind survival 90 mph; stranded aluminum wire elements, all-aluminum frame $189.95

SDB 6 Super Duo-Beam
Twin "stacked" three-element yagi beams; 12.7 dB gain over isotropic; front-to-back ratio 23 dB; feedpoint impedance

52 ohms nominal; VSWR 1.5:1 at resonant frequency; boom length 12 ft. 2 in.; cross boom length 14 ft.; max. element length 18 ft. 6½ in.; boom diameter 1¼ in; cross boom diameter 2 in.; turning radius 9 ft. 6 in.; accommodates masts from 1¼ in. to 2½ in.; surface area 6.1 sq. ft.; maximum wind survival 100 mph; weight 33.2 lb. $129.95

Eliminator II Cubical Quad
Two-element quad with twin driven elements; 9 dB gain over isotropic; front-to-back ratio 30 dB; vertical-to-horizontal separation 15 dB; feedpoint impedance 52 ohms nominal; VSWR 1.5:1 at resonant frequency; overall spreader lengths 12 ft. 9¼ in. (driven element), 12 ft. 8¼ in. (reflector); boom diameter 1¼ in.; accommodates masts from 1¼ in. to 1⅝ in.; turning radius 9 ft. 2 in.; surface area 3 sq. ft.; wind survival 90 mph; weight 13.7 lb.; stranded aluminum wire elements and taper swaged spreaders $89.95

Long John Beam
Five-element yagi beam; 12.3 dB gain over isotropic; front-to-back ratio 31 dB; feedpoint impedance 52 ohms nominal; VSWR 1.5:1 at resonant frequency; boom length 24 ft.; max. element length 21 ft.; turning radius 14 ft.; surface area 5.34 sq. ft.; maximum wind survival 90 mph; weight 23 lb.; boom and elements made of aluminum, insulators molded of Cycolac, steel hardware is iridite treated; driven element at d.c. ground through beta match $89.95

411 5-Element Yagi
Five-element yagi beam; 10 dB gain over isotropic; front-to-back ratio 22 dB; feedpoint impedance 52 ohms nominal; VSWR 1.5:1 at resonant frequency; boom length 17 ft.; max. element length 21 ft.; turning radius 10 ft.; surface area 3.86 sq. ft.; max. wind survival 90 mph; weight 14.1 lb.; constructed of aluminum tubing; all hardware iridite treated; driven element at d.c. ground through beta match $59.95

Golden Penetrator
Omnidirectional base antenna; 5.1 dB gain over isotropic; composed of four quarter-wave radials and a ⅝-wave radiator, gold iridite plated; feedpoint impedance 52 ohms nominal; VSWR 1.2:1 at resonant frequency; radiator at d.c. ground; overall radiator height 22 ft. 9½ in.; radial length 8 ft. 9 in.; wind survival 100 mph; accepts masts from 1¼ in. to 1⅝ in.; weight 12.4 lb $59.95

CB 3 Yagi Beam
Three-element yagi beam; 8.2 dB gain over isotropic; front-to-back ratio 20 dB; feedpoint impedance 52 ohms nominal; VSWR 1.5:1 at resonant frequency; boom length 8 ft.; max. element length 18 ft.; turning radius 4 ft.; max. wind survival 80 mph; surface area 3 sq. ft.; weight 6.6 lb.; all-aluminum construction; iridite treated hardware $49.95

The Penetrator Super CLR
Omnidirectional base-station antenna; 5.1 dB gain over isotropic; feedpoint impedance 52 ohms nominal; VSWR 1.2:1 at resonant frequency; composed of four quarter-wave radials and a ⅝-wave radiator with capacitive hat; overall radiator height 22 ft. 9½ in.; radial length 8 ft. 9 in.; wind survival 100 mph; accepts masts from 1¼ in. to 1⅝ in.; weight 12.4 lb.; radiator at d.c. ground $49.95

4BB Omnidirectional
Loaded, half-wave dipole; 10½-ft element length; wind loading 80 mph; chrome-plated brass ferrules, fiberglass mast, stainless-steel whip and Lexan ratchet mount; feedpoint 50 ohms tunable (factory pretuned with 50-ft coax); ground independent feed (usable with any length coax, no ground plate or radials required); 2:1 max. SWR at any height; vertical polarization; comes with all hardware, matching network, and ratchet mount; 5.9 lbs assembled weight . $49.95

CLR2 Base Antenna
Omnidirectional base antenna; 4 dB gain over isotropic; feedpoint impedance 52 ohms nominal; VSWR 1.04:1 at resonant frequency; composed of three quarter-wave radials and a ⅝-wave radiator with capacitive hat; overall radiator height 19 ft. 10 in.; radial length 8 ft. 6 in.; accepts mast from 1½ in to 1⅝ in.; wind survival 80 mph; weight 7.8 lb.; aluminum construction $39.95

The Silverrod
Omnidirectional base antenna; 3.8 dB gain over isotropic; feedpoint impedance 52 ohms nominal; VSWR 1.2:1 at resonant frequency; composed of three short, curved radials and a half-wave radiator; matching transformer places the radiator at d.c. ground; overall radiator height 17 ft 8 in; accepts masts up to 1⅝ in.; wind survival 80 mph; weight 5.1 lb.; aluminum construction $29.95

CBGP Base Antenna
Omnidirectional ground plane antenna with three quarter-wave radials and a quarter-wave radiator; feedpoint impedance 52 ohms nominal; VSWR 1.2:1 at resonant frequency; radiator is d.c. grounded through beta match; radiator and radial length 9 ft.; accepts masts from 1¼ in. to 1⅝ in.; wind survival 80 mph; weight 3.1 lb.; aluminum elements, Cycolac base insulator, and iridite-treated hardware $16.95

JFD

10-BS Base-Station Antenna
Omnidirectional transmit and receive; full aperture, half-wave dipole; SWR 1.5:1 or less on all channels; 17-ft vertical whip radiator; 6-ft wing span; feedpoint unit can be secured by 1¼-in o.d. tubing or threaded 1-in waterpipe; corrosion- and wind-proof construction; comes with mounting hardware and assembly/installation instructions $44.85

KODIAK

Full-Wave Quads
All models constructed of aircraft aluminum, have corrosion-resistant hardware, stainless-steel fasteners, high-tensile Copperweld wires; equipped with tuning stubs to enable user to adjust output for optimum efficiency; diagonal polarization for reduced fading; d.c. ground; max. SWR 1.5:1 (40 channels); max. element size 9-ft square.

DX-4. Four elements; 12-ft, 3-in boom; turning radius 9-ft, 8-in; surface area 7.24 sq. ft; assembled weight 15 lbs; 52-ohm to 75-ohm linear balun; gain over isotropic 16 dB; front-to-back & front-to-side ratios 35-40 dB; half-power beamwidth 50 degrees $180.50

DX-3. Three elements; 7-ft, 8-in boom; turning radius 7-ft, 5-in; assembled weight 5.23 lbs; gain over isotropic 14 dB; front-to-back 30-35 dB, front-to-side 35-40 dB; half-power beamwidth 55 degrees $146.50

DX-2. Two elements; 3-ft, 4-inch boom length; turning radius 5-ft, 3-in; assembled weight 7 lbs; surface area 3.31 sq. ft.; gain over isotropic 12 dB; front-to back 25-30 dB, front-to-side 35-40 dB; half-power beamwidth 60 degrees $112.50

Inverted-V Antenna
Omnidirectional long-wire antenna; dipole element; comes with Amphenol connectors, insulators, Copperweld wire, RG-58/U coax; ½ lb assembled weight $15.95

KRACO

2410 Base Antenna
Vertical half-wave; element length 10 ft; max. SWR 1.98:1; aluminum; tuning ring $48.95

LAFAYETTE

Criterion Starfire V
Half-wave center-fed base station antenna; 5 dB gain; VSWR 1.5:1; withstands 100 mph wind; span less than 6 ft; 17 ft high; radials 8-ft, 10 in long; seamless aircraft aluminum tubing; mounts on 1¼" mast or threaded 1" water pipe; waterproof coaxial connector; comes without cable; 42-01786WV $44.95

3-Element Vertical
Directional pattern; forward gain 8 dB, front-to-back ratio 22 dB; 50-ohm feedline match; comes with bracket for vertical

or horizontal mounting; 1½" o.d. aluminum boom 8-ft long; ⅝" to 7/16" o.d. elements approx. 16½-ft long; less mast and coax; 42-02206W $42.95

Deluxe Range-Boost/II
End-fed, half-wave omnidirectional antenna; 4 dB gain; has hi-Q impedance matching coil; VSWR 1.4:1; loaded ground radials; seamless aircraft tubing and corrosion-proof steel; withstands 100 mph winds; direct-ground lightning protection; overall height 18 ft; stainless-steel mounting hardware will take up to 1½" mounting mast; less mast and coax; 42-01604W $39.95

Range-Boost/II Antenna
End-fed, half-wave antenna; anti-static cloverleaf ball design; 3.75 dB gain; VSWR 1.5:1; phasing transformer rubber covered for moisture resistance; vertical consists of 3 seamless aluminum tube sections topped by solid aluminum 108" top section; three 54" radials; direct-ground lightning protection; 17-ft, 6-in overall length; accepts up to 1½" masts; less mast and coax; 42-01448W ... $28.95

MAYCOM

GW-V Deluxe Colinear Beacon
Omnidirectional antenna; element length 20 ft; heavy-duty construction; two in-phase elements with center feed point; low angle of radiation; low VSWR over wide bandwidth; 52-ohm imp $59.95

GW-11P Super Beacon
Half-wave omnidirectional antenna; element length 19 ft; low angle of radiation; static shield reduces precipitation static resulting in up to 20 dB noise level reduction; 52-ohm imp $51.95

GW-1P Beacon
Half-wave omnidirectional antenna; low VSWR; 17-ft two-section aluminum radiator; 52-ohm imp $34.95

MONOBEAM

"Gladiator 720" Base-Station Antenna
Cross-polarized on the X, Y and Z planes for maximum radiation and omnidirectional reception; consists of triple section Cycolac center insulator and six full-length aircraft-aluminum elements with Cycolac static discharge balls on each end; mounts vertically from tripod or mast; 19.2 dB gain over isotropic; 1:2 or 1:0 VSWR; 90 mph wind rating; feedline RG/58, RG/59, RG/8, RG/11 as required; suggested mount, BSM-1000 ..... $129.95
"Trojan 360c". Similar to 720 but in two planes; 10 dB gain over isotropic .. $99.95
"Centurion 360". Similar to 360c but mounts vertically from window sill, vertically or horizontally from mast or tripod; 15.4 dB gain over isotropic; comes preassembled $89.95

"Avenger 180c" Compact Antenna
Single-plane antenna can be mounted on window sill, roof gable, fence, pole, mast or tripod; vertical or horizontal polarization; Cycolac center insulator with SO-239 connector; up to 9.2 dB gain over isotropic; 1.3:1.0 VSWR; 90 mph wind rating; weight 2 lbs $59.95
"Hercules 180". Similar to 180c; single plane; weight 2 lbs. 13 oz. $49.95

BSM-1000 Universal Mounting Bracket
Designed to be used with any of the above antennas; Cycolac construction; comes with U bolts and stainless-steel screws $15.95

MURA

CBA-10 Base-Station Antenna
Full ¼-wave ground plane; omnidirectional radiation from five 104-in arms which make up vertical radiator and horizontal ground plane; lightweight, corrosion resistant aluminum construction ... $39.95

PACER

Base-Station Antennas
PBS-3. "AntennaMent" indoor/outdoor fiberglass base-station antenna for apartment dwellers; 4 dB gain; 64-in high; also for campers; prewired with SO-238 connector at feedpoint; 40 channel coverage $44.95
PBS-3-X. Same except with addition of 10½-ft cable; PL-259 connectors $49.95
PBS-1. "Sunburst" military-grade fiberglass antenna; protection against electrical shock; half-wave dipole with full aperture design for 5.0 dB; no coils or matching devices; 16-ft high; mount designed to accept threaded 1-in water pipe or 1½-in steel tubing; 1000 watt capacity; prewired with SO-238 connector at feedpoint $44.95
PBS-4. "Gemini" military-grade fiberglass antenna; gain 12-dB; front-to-back ratio 30 dB; SWR 1.1:1; end-fire array; two elements; 16-ft high × 9-ft wide; mounts on 1½-in dia. tubing; prewired with PL-259 connector; 100 watt input; covers entire CB band $109.95
PIK-18. Base-station installation kit; contains three 6-ft telescoping anodized aluminum masts, mounting bracket, 50-ft RG-58/U cable $29.95
PBS-5. "Big Kicker" military-grade fiberglass and aluminum antenna; half-wave vertical; mounts directly onto a 1¼-in mast; factory pretuned for low SWR $34.95

PAL

"UFO" Base-Station Antenna
Loaded whip; top-mounted loading coil; four 5-ft elements; 1.5:1 max. SWR; 90% fiberglass construction; 5 dB gain over isotropic; designed for temporary or permanent installation; without coax $69.95

RAIDER

400 Crossbow Directional
Overall height 12-ft; three 18-ft elements; min. gain 9 dB; front-to-back ratio 25 dB; VSWR 1.5:1; base input imp. 50 ohms; adaptable for use with rotator; comes with all mounting hardware $54.95

550 Omnidirectional
Omnidirectional 0.64 wavelength antenna; overall height 23-ft, 3½-in; wind survival 90 mph; VSWR 1.5:1; base input imp. 50 ohms; d.c. grounding; all-aluminum construction; pre-drilled, de-burred holes for easy assembly $49.95

505 Half-Wave Colinear
Overall height 15-ft; 7-ft 9-in vertical radiator; fiberglass construction; VSWR 1.2:1; 50-52 ohms imp.; 5.0 dB gain; "U" bolt mount clamp fits 1¾" diameter mast; weight 2¾ lbs $46.95

200 Omnidirectional
Ground-plane antenna; three aluminum quarter-wave, 108-in radials; quarter-wave vertical radiator; VSWR 1.5:1; base input imp. 50 ohm; comes with SO-239 connector; U clamp fits masts up to 1⅝-in dia.; static discharge protector .. $24.95

RCA

Model 14T161
Half-wave vertical; 50-ohm imp.; 17-ft 10-in length; ring-match loading; accepts PL-239 ..... $32.95

Model 14T160
Quarter-wave ground plane; 50-ohm imp.; 108-in vertical radiator; quarter-wave radials; all-aluminum construction; accepts PL-239 ..... $16.95

RIVERSIDE

"Super Rangemaster"
Omnidirectional; 40-channel coverage; 9-ft radials, 34-in top elements; overall height 13-ft; requires self-supporting 1¼" dia. tubular mast, 10-ft high (not supplied); feed cable runs down inside of mast (not supplied); top elements screw directly into loading coils; bracket accommodates 1¼" mast; comes with PL-259 connector $54.95

SHAKESPEARE

4104 Directional Yagi Antenna
4 elements, 1 driver, 1 reflector and 2 directors; fiberglass construction; polycarbonate feeding; 91-in max. element length; 15-ft 8-in boom; 26 dB front-to-

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CB 772

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back ratio; 22 dB side rejection; 50-ohm nominal imp.; 2.0:1 SWR; 100 mph windloading; weight 9 lbs. 4 oz $94.95

Model 176
Two-element antenna; fiberglass construction; 18-ft 6-in max. element length; 50-ohm feedpoint imp.; "V" polarization; 125 mph windloading; weight 8 lbs. 5 oz; comes with RG-58/U coax $42.95

Model 4061
Two-element half-wave antenna; 16-ft max. element length; 50-ohm feedpoint imp.; "V" polarization; 125 mph windloading; RG-58/U coax..... $32.95

SIGNAL ENGINEERING

"White Lightning" Base Antenna
Four-element quad; 14-ft max. element length; 15-ft boom length; 4.2 sq. ft surface area; vertical or horizontal polarization; max. SWR 1.3:1; wind loading 84 lbs at 60 mph; 50 ohms feedpoint imp.; signal feed system; gain over isotropic 14.6 dB; front-to-back & front-to-side ratios 38 dB; half-power beamwidth 40 degrees; d.c. ground to boom; aluminum & fiberglass construction; comes pre-tuned for all 40 channels; 20 lbs assembled weight $144.95

"Superhawk" Base Antenna
Two-element quad; 14-ft max. element length; 5-ft boom length; 1.8 sq. ft surface area; vertical or horizontal polarization; max. SWR 1.3:1; wind loading 36 lbs at 60 mph; 50 ohms feedpoint imp.; signal feed system; gain over isotropic 10.6 dB; front-to-back ratio 32 dB, front-to-side 20 dB; half-power beamwidth 50 degrees; d.c. ground to boom; aluminum & fiberglass construction; comes pre-tuned for all 40 channels; 8 lbs assembled weight $72.95

SYLVANIA

SYL-BS Omnidirectional Antenna
Full-aperture half-wave dipole; power gain 12 dB average above ¼-wave base-loaded mobile antenna, 4 dB above ¼-wave base antenna; SWR 1.5:1 on all channels; 17-ft whip radiator; less than 6-ft wingspan; feedpoint unit can be secured by 1¼-in o.d. tubing or threaded 1-in waterpipe; windproof construction; lightweight aluminum tubing; radials d.c. grounded to mast for lightning protection (mast should be connected to good ground); comes with mounting hardware, factory marked dimensions $44.85

TURNER

Ultrakicker Beam Antenna
Five-element base-station antenna with eight-direction beam control; 8.3 dBi gain in directional mode; 3 dBi in omni mode; electronic switching for directional control to any of eight primary compass points; remote switching unit with lighted direction indicator; discrimination 25 dB max. rejection; VSWR 1.5:1 wind loading 100 mph +; height 20 feet; width 14 feet; mast size 2" o.d.; weight 42 pounds $299.95

Trikicker Beam Antenna
Three-element beam antenna with twin balanced-fed folded dipoles as an active center element; outer director and reflector elements spaced to optimize beam gain; gain 9.3 dB over an isotropic; VSWR 1.5:1; discrimination 20 dB max. rejection; wind loading 100 mph +; height 20 feet; width 14 feet; mast size 2" o.d.; weight 32 pounds $129.95

SK-22B Base-Station Antenna
Designed for omnidirectional performance; gamma matching system eliminates critical mast length problems; 4 dB gain over isotropic; VSWR 1.1:1; tapered 13-ft mast and 10-ft radials form ⅝ wave antenna assembly; mounting hub accepts standard 1-in threaded pipe or 1¼" aluminum tubing masts; total height 20 ft, mast 13 ft above hub; width 14 ft $44.95

VALOR

640 "Super Extractor"
0.64-wavelength collinear ground plane; 50-ohm imp.; 1.05 to 1 VSWR at midband; 5 dB gain over quarter-wave; d.c. grounded; 23-ft 3½-in length; four radials; aluminum construction; wind survival to 90 mph; weight 9 pounds $59.95

641 "Super Spider"
Ground plane; 40-channel coverage; 1.5 to 1 SWR; 5 dB gain over simple ground plane; 16-ft length; three radials; weather and corrosion resistant $39.95
644 "Super Spider II." Same as 641 but with two-piece radials $39.95

643 "Mini-Spider"
Ground plane; 40-channel coverage; 1.5 to 1 SWR; 6-ft length; three radials; weather and corrosion resistant $39.95

642 "Super Stick"
Portable base station antenna; 40-channel coverage; 1.5 to 1 SWR; 16-ft length; no radials; d.c. grounded; weather and corrosion resistant $34.95

639 Tag-A-Long
Portable base-station antenna; attaches to transceiver antenna jack with PL-259; small size facilitates use where space is at a premium $12.95

WILSON

"Super Laser" 500
Sixteen-element yagi-quad; boom length 40 ft; max. element length 17-ft, 5-in; turning radius 21-ft, 8-in; assembled weight 70 lbs; wind loading 160 lbs at 80 mph; surface area 10 sq ft; A/C aluminum 6061 T6 construction; feedpoint imp. at 45-ft 50 ohms; gamma match; 18 dB gain over isotropic; front-to-back and front-to-side ratio 50 dB; max. SWR 1.5:1; vertical or horizontal polarization (switchable); d.c. grounded elements; quad reflector, yagi parasitic elements; fiberglass spreaders; requires 3" o.d. boom $465.00
12-Element Laser. Similar to Super Laser but with 12 elements; max. element length 17-ft, 5-in; boom length 31 ft; turning radius 17-ft, 8-in; assembled weight 45 lbs; wind loading 120 lbs at 80 mph; surface area 7.5 sq ft; gain over isotropic 17 dB; front-to-back and front-to-side ratio 40 dB; 2" o.d. boom $289.00
Shooting Star. Similar to 12-Element except 8 elements, 16-ft boom length; 11-ft, 8-in turning radius; 29 lbs assembled weight; wind loading 80 lbs at 80 mph; surface area 5 sq ft; gain over isotropic 14.5 dB; front-to-back ratio 38 dB, front-to-side 25 dB; 2" o.d. boom $149.00
Y-Quad. Similar to Shooting Star except 4 elements; 6-ft boom length; 9-ft turning radius; 12 lbs assembled weight; wind loading 40 lbs at 80 mph; 2.5 sq ft surface area; gain over isotropic 10.5 dB; front-to-back ratio 25 dB, front-to-side 30 dB; 1⅝" o.d. boom $84.00

M108C Base-Station Antenna
8-element yagi; max. element length 19-ft; boom length 40-ft turning radius 24-ft; assembled weight 60 lbs; wind loading 80 lbs at 80 mph; surface area 4 sq ft; A/C aluminum 6061 T6 construction; feedpoint imp. 50 ohms; gamma match; gain over isotropic 18 dB; front/back and front/side 50 dB; max. SWR at 45-ft mounting height 1.5:1; vertical or horizontal polarization; d.c. ground; adjustable from 26.5-30 MHz; 3" boom $295.00
M106C. Similar to M108C except 6 elements; boom length 31 ft; turning radius 17 ft; asembled weight 36 lbs; wind loading 60 lbs at 80 mph; gain over isotropic 17 dB $165.00

V 5/8 Omni Antenna
Loop-loading ⅝ vertical omnidirectional antenna; one vertical, 4 horizontal elements; max. element length 21-ft; assembled weight 7 lbs; gamma match; 52-ohm feedpoint imp; gain over isotropic 5.14 dB; max. SWR 1.1:1; vertical polarization; d.c. ground; adjustable system; hub design for radials $49.00

V-1 Vertical Ground Plane Antenna
Omnidirectional ⅝ wave vertical ground plane antenna; 21-ft high; loop loading with adjustable capacitive coupling; 3 dB gain over isotropic; 1.1:1 SWR; 26.5 to 29 MHz frequency range; weight 5 lbs. $29.00

CB Microphones, Headsets, Speakers

ATLAS SOUND

AP-15 Extension Speaker
15 W, 8 ohm ext. speaker; sound level 121 dB at 4-ft on axis; 110° dispersion; voice-emphasis compression driver; all-metal baked epoxy finish; watersealed, weatherproof for PA use; 275-14,000 Hz; 9" D × 8" W × 8" H; gray finish $30.65
AP-15C. Beige finish $30.65
AP-15-4. 4 ohms, gray finish $32.75

SC-15 Extension Speaker
15 W, 8 ohm ext. speaker; sound level 120 dB at 4-ft on axis; 130° dispersion; impact-molded re-entrant driver; for indoor/outdoor installation; 315-14,000 Hz; 6⅞" dia. × 6⅝" D; beige finish $23.25
SC-15-4. 4 ohms $25.35

WR-5 Extension Speaker
5 W, 8 ohm ext. reflex-type speaker; sound level 105 dB at 4-ft on axis; 120° dispersion; all-metal construction; 6" dia. × 4" D; beige finish $18.25

AUDIOVOX

CBS-5 External CB Speaker
External CB speaker; nominal input 5 W; high-low hash eliminator to reduce background static; 8 ohms; 4 × 6-in speaker; 5 × 7-in cabinet; comes with 8-ft cord with ⅛" plug, mounting hardware $17.95

CBS-20 CB/PA Speaker
Weatherproof 4½-in horn with 3½ × 3-in bell; frequency range 800-6000 Hz; nominal input 5 W; 8-ohms; comes with mounting hardware, 12-ft cord with ⅛-in plug $11.50

CBS-1 Mini Portable Speaker
Compact, fully portable unit; comes with mike stand for floor mounting and clip for sun-visor mounting; 3-in speaker, 4 × 4-in cabinet; 3 W nominal input; 8 ohms; comes with 8-ft cord with ⅛" plug $11.50

AUTOMATIC RADIO

PAS-2103 All-Weather PA Horn
5-in diameter indoor/outdoor PA horn; aluminum construction; swivel mounting bracket; wiring and hardware included $10.50

FSC-2101 CB Extension Speaker
4-in by 6-in speaker; heat-resistant ABS case; aluminum 360 degree swivel mounting bracket; 8-ohm imp.; wiring and hardware included; 4⅝" H × 6⅜" W × 3⅛" D $10.50

TSC-2102 CB Extension Speaker
5-in diameter speaker; slim-line high impact plastic case; aluminum 360 degree mounting bracket; wiring and hardware included; 8-ohm imp.; 4⅞" H × 5⅞" W × 1¾" D $8.25

BIG BRUTE

CB Speakers
CBM. Features 10-oz magnet; 3" × 5½" speaker; 4 & 8 ohm imp.; high-impact housing; black "U" bracket tiltable for convenient mounting $14.95
CBT. Features 8-oz magnet; 4" air-suspension speaker; 4 & 8 ohm imp.; high-impact housing with pedestal; mounts in any position $14.95

BOMAN

SK-69TR-40 Trisonic Speaker
All-in-one dynamic speaker; 40 oz. ceramic magnet circuit; air suspension 6" × 9" woofer cone; 3" powerful midrange; 2" high-frequency tweeter $59.95

Coaxial Speakers
Flush mount speakers with 40 oz. ceramic magnet circuit.
SK-525CX-20. Air suspension 5¼" woofer cone; 2" high-frequency coaxial tweeter $29.95
SK-69CX-20. Air suspension 6" × 9" woofer cone; 3" high-frequency tweeter .. $24.95

PM-1 CB Power Mike
Automatic background noise canceller; sliding volume control; PTT switch $29.95

CBS-40 External Speaker
5 W slim-line speaker; 5" × 7" cone; large magnet circuit; black matte and chrome housing; can be mounted at any angle $23.95

CBS-30 External PA Horn Speaker
5 W, 8 ohm speaker; brushed chrome PA horn; can be used as indoor/outdoor speaker; weather-resistant anodized metal housing; full-swing swivel bracket for mounting $16.95

CBS-20 External CB Tach Speaker
8 W, 8 ohm; 3" round weather-resistant speaker; 3 oz. ceramic magnet; swivel mount $14.95
CBS-10. Similar to CBS-20 except versatile mount; 5 W $11.95

MH-1 Magnetic Microphone Holder
Adheres to metal or plastic dashboards $2.95

COBRA

CA-60 "Dynamike Plus"
Amplified base station microphone; adjustable gain control; PTT with locking lever; TX indicator; adjustable tilt head; 12 to 72-in coiled cable with prewired connector $44.95

CA-50 "Dynamike Plus"
Amplified mobile microphone; adjustable gain control; PTT; 12 to 72-in coiled cable with prewired connector $24.95

CA-30 Speaker
Base station speaker; 8-ohm imp.; walnut wood grain styling $19.95

CA-10 Speaker
Mobile speaker; 8-ohm imp.; Lexan construction; 6-ft cord with 3.5-mm plug $14.95

DX MAGNUS

Speech processor system with microphone; preamplifier provides high-level modulation; variable output impedance; output level control; TX indicator; automatic circuitry protection; high- and low-pass noise filters; supplied with mounting bracket; wires permanently to automobile electrical system (12.2- to 13.8-V d.c.). $49.95

EICO

RS-12 CB Extension Speaker
Designed for CB voice reception; weather-resistant plastic cabinet; position-locking bracket; 8-ohm imp., 5 W power capacity; comes with 6-ft cord & mini plug; 5" H × 6" W × 2" D $12.95

PM-4 "Power Mike"
Amplified mike; has easy-to-adjust volume control on housing; uses 9 V transistor battery; wired for relay and electronically switched CB transceivers $24.95

PAS-10 CB Paging Speaker
5 W, 8 ohm speaker; 5½-in diameter; 6-in length; weatherproof reflex horn .. $10.95

ELECTRO-VOICE

625ST Handset
Dynamic noise-cancelling handset, cancels sound more than ¼-in away; output —60 dB; shaped response 300-4000 Hz;

high- or low-impedance models available; on/off switch; nonreflective finish; integral cable $105.00

620L Dynamic Microphone
Dynamic noise-cancelling element, cancels sound more than ¼-in away; output —57 dB; shaped response 200-4000 Hz; low-impedance; on/off switch; gray finish; integral cable $60.00

619 Dynamic Microphone
Dynamic base station microphone; output —57 dB; shaped response 70-10,000 Hz; high- or low-impedance models available; PTT switch can be placed in base or in riser; gray and satin-chrome finish; integral cable $55.50

602F Dynamic Microphone
Dynamic noise-cancelling element, cancels sound more than ¼-in away; output —60 dB; shaped response 200-4000 Hz; high- or low-impedance models available; on/off switch; gray finish; integral cable. $48.00

600E Dynamic Microphone
Dynamic element; output —55 dB; shaped response 100-7000 Hz; high- or low-impedance models available; on/off switch; gray finish; comes with integral cable. $39.00

EMPIRE

Paging Speaker
5-in, 10-W, 8-ohm speaker; weather-resistant; for PA applications; bracket for underhood mounting $9.95

FIELDMASTER

MF-100 External Speaker
8 W, 8 ohm; 3-in magnetic speaker; 5-in black metal housing; chrome-plated mounting bracket; 6-ft cord and speaker jack $12.95

GC

18-000 Power Base Mike
Built-in two-stage amp increases transceiver range by boosting modulation up to 50 times; push-to-talk bar can be locked; adjustable microphone output; sensitivity —40 dB (1000 Hz); frequency response 300-5000 Hz; impedance 600 ohms; amp. voltage gain 0-15 dB; uses standard 9-V battery; comes with 6-ft shielded coiled cord (1 shield & 3 cond.) $44.45

18-010 Power Hand Mike
Designed especially for CB transceivers; power amplified; output level adjust with slide volume control; solid-state circuitry to withstand temperature extremes; sensitivity —42 dB; frequency response 300-5000 Hz; output imp. 600 ohms; amp. voltage gain 0-12 dB (adjustable); comes with 6-ft shielded coiled cord (1 shield & 3 cond.) $27.30

18-034 Noise-Cancelling Mike
Compact hand mike in A.B.S. case; cancels background noise of engine, wind, road noise; can be connected for relay or electronic switching; comes with 6-ft coiled cord $10.75

18-565 Remote CB Speaker
Designed for use inside car or at base stations; any-angle mount; black A.B.S. resin case; 8-ohms; prewired with 8-ft cord/miniature plug; adapter included for standard ¼-in phone jack; plugs into external speaker or headphone jack $11.40

18-560 CB/PA Speaker
Weatherproof speaker; designed for mounting in grille; PA or monitoring of CB transceiver; any-angle mount; 8-ohms; 5-W power capacity $12.10

JFD

CB27 Power Mike
Variable-gain power microphone- dynamic cartridge; transistor amplifier; includes 5-ft coiled cord $26.60

CB25 Microphone
Standard mike uses dynamic element low-impedance cartridge; includes option of relay or electronic switching; 5-ft coiled cord $15.15

KRIKET

3085 "KAMEL" Hump-Mount Speaker
Speaker/base unit to accommodate transceiver and mike; "teeth" in speaker base holds unit in place for driving; entire unit can be removed by unplugging antenna and power leads for storage in car trunk; air-sealed speaker within acoustic fiberboard enclosure; 3½" waterproof cone, 3 oz. ceramic magnet; power handling 5 W rms; response 150-10,000 Hz; comes with connector cord with mini-plug; black Duralex; overall size 7⅝" H × 8" W × 11½" D $29.95

3055 Base-Station Speaker
Designed for base-station use; has 5" waterproof-cone speaker; will handle 7 W rms; response 80-10,000 Hz; 8 ohms; comes with removable base; 6-ft cord with mini-plug; 5⅝" H × 5½" W × 4⅝" D $24.95

3035 Mobile Speaker
Can be mounted in most positions with

360-degree rotation of speaker and/or bracket; 3½" weatherproof-cone speaker; power handling 5 W rms; response 150-10,000 Hz; imp. 8 ohms; 6-ft cord with mini-plug 4½" H × 5¼" W × 4¼" D $17.95

3045 External PA Speaker
Waterproof external or PA speaker; 3½" water-resistant cone; 5 W rms; frequency response 150-10,000 Hz; 8 ohms; miniature phone jack; Duralex Copolymer construction; 7" H × 5 1/16" W × 4¾" D .. $21.95

3065 Flush-Mount Speaker
Impervious to water damage (as might occur with flush-mount speakers placed in vehicle doors); 3½" weather resistant cone; 5 W rms; frequency response 150-10,000 Hz; 8 ohms; miniature phone jack 5½" H × 5⅞" W × 3¼" D $16.95

1020 Hump-Mount Console
Portable CB console with storage compartment; rests on transmission hump; "teeth" in base prevent movement while driving; slot pattern on back permits mounting of any CB bracket to place transceiver at 45 degree angle; entire unit can be removed by unplugging antenna and power leads for easy storage in trunk; Duralex Copolymer construction; 7" H × 8" W × 12" D $14.95

KRIS

416-400 Base Preamp Microphone
Dynamic, omnidirectional base-station mike with 0-24 dB gain transistorized preamp; frequency response 300-5000 Hz; output level 44 dB max.; output imp. 800 ohms; red LED indicator for transmit mode; PTT button; lock button; will operate with both relay and electronic switching transmitters $39.95

416-404 Maxi Mike
Preamplified hand-held microphone; PTT button; omnidirectional dynamic element; output level —42 dB; preamp gain 0-26 dB; output imp. 900 ohms; frequency response 400-5000 Hz; requires 7-V battery (not supplied); supplied with coiled cord and factory-wired connector; works on relay and electronic switching .. $29.95

416-401 Base-Station Microphone
Dynamic, omnidirectional type; output level 68 dB; output imp. 600 ohms; frequency response 30-5000 Hz; PTT button; lock button; standard 4-pin plug; will

operate with both relay and electronic switching transmitters $29.95

417-500 Extension Speaker
Mobile extension speaker; molded ABS plastic case 3½" speaker with ceramic magnet & moisture-resistant case; gimbal mounting bracket; molded cable with 3.5-mm phone plug; power handling 3 W; 4¾" × 4" × 3" $12.95

LAFAYETTE

Range Boost Preamplified Desk Mike
For base stations; has built-in audio compressor/preamp with overmodulation safeguards; for relay and electronic switching; has touch-to-talk bar with slide lock, volume control, and self-contained battery; output −23 dB; four-conductor cable with shield; 42-01950 ..... $44.95

Noise-Cancelling Amplified Mike
Built-in two-stage preamp; noise-cancelling design; for relay and electronic switching; output impedance 1000 ohms; powered by 7-volt mercury battery (supplied); coiled cable has four conductors plus shield; 42-01836 ..... $34.95

Power Gain Mike
Built-in preamp boosts output levels; has output level control; powered by 9-volt battery; for relay and electronic switching; coiled cable has four conductors plus shield; 42-02040 V $19.95

Dynamic Mike
For solid-state transceivers with low-impedance input; 3-conductor (one shielded) coiled cable and four-prong miniature plug included; PTT button; wired for relay switching for Lafayette transceivers; 99-46807 ..... $12.95

MAGITRAN

CB123 Power Supply/Speaker
Converts mobile CB to base-station use; regulated 13.8 V d.c. output; line & load regulation; 3 A continuous output, 6 A peak; dual output voltage: 13.8 V d.c. or 15 V d.c.; built-in 5¼-in speaker; power-boost circuit; short-circuit & overload protection; voltage mode indicator ... $64.95

CB10-69 Clip-On Voice-Com Speaker
Clips to vehicle sun visor or window; frequency range 200-3000 Hz; improves voice clarity in high-noise mobile environment; weatherproof design; PA capability; 10 W rms; 12-ft audio cable with miniplug; 9" W × 5" H × 1⅛" D $17.95

CB10-4 Speaker
Shallow surface-mount wedge for custom sound direction; 5¼-in speaker; 10 W rms power handling; frequency range 80-20,000 Hz, voice-band peak 200-3000 Hz; imp. 8 ohms; comes with hardware and 12-ft speaker cable; 7" dia. wedge × 2"-3¼" depth $13.95

MURA

PRM Series CB Microphones
All models feature peak-redistribution modulation (PRM); 9-V battery power source; relay or electronic switching; 5-wire, color-coded, shielded cord.
PRX-100. Hand-held; maximum sensitivity −50 dB; 0-2500 ohms impedance; maximum gain 16 dB with variable gain setting controlled by slide switch $39.95
PRX-200. Hand-held; impact-resistant case; −50 dB, −52 dB, −54 dB sensitivity levels; 12 dB, 14 dB, 16-dB gain levels; 2000 ohms nominal impedance .. $29.95
PRX-300. Base-station mike; −50 dB maximum sensitivity; 16 dB maximum gain; push-to-talk button; lock switch; slide-type gain control; sensitive dynamic cartridge; transistor amplifier $59.95

DX-116 Variable Gain Mike
Hand-held mike features PTT button; slide-type switch for variable gain control; sensitive dynamic cartridge; transistor amplifier; 9-V battery power source; relay or electronic switching; −42 dB maximum sensitivity; 20 dB maximum gain; 0-2500 ohms impedance range; 5-wire, color-coded, shielded cord $29.95

DX-119 Noise-Cancelling Mike
Hand-held CB mike features noise-cancelling circuitry for clear transmissions in high-level background noise situations; PTT button; high-impact resistant case; −65 dB sensitivity; 500 ohms nominal impedance; electronic or relay switching; 5-wire, color-coded, shielded cord $12.95

DX 120 Three-Level Gain Mike
Hand-held CB mike features three separate gain levels, 23 dB, 21 dB and 12 dB; −54 dB, −45 dB, −34 dB sensitivity levels; PTT button; 9-V battery power source; relay or electronic switching; 2000 ohms nominal impedance; 5-wire, color-coded, shielded cord $18.95

DX-2000 Variable Gain Base-Station Mike
Base-station mike features variable-gain slide control; PTT button and lock switch; all-metal, sturdy construction; −36 dB maximum sensitivity; 28 dB maximum gain; 9-V battery power source; electronic or relay switching; 5-wire, color-coded, shielded cord $49.95

CBX-111 Boom Mike Headset
Combines noise-cancelling mike on adjustable mike boom with single earcup headset; control unit houses PTT switch and headset volume control; imp. 8 ohms; mike imp. 500 ohms; 5-ft cord with "Mike Mate"; electronic or relay switching $29.95

RCA

Model 14T817 Desk Microphone
Built-in preamplifier; flexible neck; PTT plus talk-lock switches; adjustable level control; 10-ft four-wire cord with connector; requires 9-V battery (not supplied) ... $36.95

Model 14T172 External Speaker
3½-in speaker; frequency response 200-9000 Hz; 8-ohm imp.; max. input 6 W; swivel base for mounting flexibility $7.20

Model 14T173 PA Speaker
5-in weatherproof hailing speaker; frequency response 300-3000 Hz; 8-ohm imp.; max. input 8 W; 90-degree tilt base for mounting flexibility; anodized aluminum with silver color finish; supplied with 8-ft cord and plug $7.20

RMS

CBH-550 CB/PA Reflex Horn
Aluminum construction, enameled gold finish; heavy gauge steel mounting bracket; 5½-in reflex horn; 8 W at 8 ohms $12.90
CBH-650. Similar to 550 except weatherproof plastic housing; white enamel finish $11.85

CBS-325 CB Extension Speaker
3" × 5½" speaker; 5 W output 8 ohms imp.; plastic housing (3½" H × 7¾" W × 2½" D; 5" H with mounting bracket extended); adj. mounting bracket; 6-ft hookup cable with 3.5 mm plug $13.25

ROYCE

2-075 Microphone
Dynamic microphone; 600-ohm imp.; for electronic or relay switching; 5-ft coiled cord $10.95

2-077 Microphone
Special design for voice communications; for electronic or relay switching; 5-ft coiled cord $11.95

2-078 Power Microphone
Built-in transistorized power amplifier; slide-type gain control; 600-ohm imp.; for electronic or relay switching; 5-ft coiled cord; requires 7-V battery $24.95

2-079 Telephone-Style Handset
Telephone-style handset has 8-ohm imp. speaker element and 600-ohm imp. microphone element; two-wire audio input ... $29.95

2-080 Base Station Microphone
Built-in transistorized power amplifier; rotary gain control; PTT with locking lever; for electronic or relay switching; 60-in four-conductor coiled cord; requires 9-V battery $49.95

2-060 Paging Speaker
Weatherproof paging speaker; bell diameter 5 in; horn length 5½ in; power rating 8 W; frequency response 400-7000 Hz;

permanent magnet driver; 3¼-in air column; 180 degrees swing-swivel bracket; 96-in two-conductor lead $10.95

2-062 Remote Speaker
Indoor remote speaker; 3 in × 5 in speaker; 8-oz magnet; supplied with mobile mounting bracket, 8-ft cable, and connector $10.95

SHURE

Super Punch Model 526T
CB base-station microphone features dynamic 9-V d.c. battery-powered transistor preamplifier; 200 to 6000 Hz frequency response; 5000 ohms output impedance; 1000 ohms minimum load impedance; 0.63 to 14 mV adjustable output level; electronic or relay switching; single-bar, locking or non-locking, push-to-talk switch; Normal/VOX, single-pole, double-throw slide switch; constructed of high-impact plastic; comes with non-detachable, 7-ft three-conductor, plastic-jacketed cable 10⅜" H × 4¼" D; weight $47.00

450 Microphone
Features telescoping height adjustment, high/low impedance switch, push-to-talk switch bar that activates both microphone & relay circuits, a mike-on locking switch, and desk stand; frequency range 100-10,000 Hz; Lo imp. 1 mW/10 μ bar; high imp. 2 mV/μ bar; 7-ft four-conductor (two shielded) cable $40.20

Dispatcher 520 Series Mikes
Features grip-to-talk, slide-to-lock switch & desk stand; switch bar activates both relay and microphone muting circuits; mike portion of switch is normally shorted and relay portion normally open; frequency range 100-9000 Hz.
Model 520SLB. Low imp. (150-250 ohms), 0.281 mV/μ bar; with 7-ft four-conductor shielded cable $40.20
Model 520B. Same except head only; 7-ft nondetachable, single-conductor shielded cable $18.75
Model 520SL. High-imp. 2.38 mV/μ bar with 7-ft two-conductor shielded cable $36.60
Model 520. Same except head only; 7-ft nondetachable, single-conductor shielded cable $18.75

524C Hand-Held Microphone
Transistorized dynamic microphone for use with mobile or fixed-station transceivers; 300-5000 Hz frequency response; low sensitivity to hum pickup; low susceptibility to RF interference; load imp. 250-2200 ohms; 2.5-35 V d.c. supply; double-pole single-throw leaf-type push-to-talk switch; non-detachable 5-ft jacket coil-cord $39.60

CB41 Long Ranger
CB base-station microphone; controlled-magnetic cartridge; dual impedance; adjustable height; momentary or locking press-to-talk transmit/receive switch; selector switch for grounded or isolated transceiver switching; 200-6000 Hz frequency response; load imp. range; lo-Z 200-1000 ohms, hi-Z 15-100 kilohms; 6-ft extended four-conductor cable ... $39.00

Mike Accessories
A15A. Attenuator inserts 15 dB loss $18.00
A15LP. Low-pass filter provides high-freq. cutoff $18.00
A15LA. Line input adapter converts balanced low-imp. mike input to bridging line-level input $18.00
A15BT. Bridging transformer; balanced unit that matches balanced or unbalanced devices of different impedances (33 kohms primary and 600 or 7500 ohms secondary) $18.00

SUPEREX

CB10-2 SVX Mike/Headphone
Designed to be used with any mobile CB radio; mike automatically "keys" radio with sound of operator's voice; noise-cancelling mike; complete hands-free operation; instantaneous communication response; earphone equipped with AGC circuit to prevent blasting $100.00
CB10-2VX. Mobile unit with voice-activated mike mounted on headband; remote-control switch $85.00
M-606VX. Base-station version; flexible gooseneck construction; operates on 110 V a.c. or 12 V d.c.; comes complete with "Vox-Box" $110.00
610VX. Voice-activated control station (as supplied with M606VX) which can be used with most dynamic mikes .. $60.00

CB-MEP Power-Mike Headset
Single headphone with boom-mounted power mike & safety switch; condenser mike has FET preamp and transistor amp with gain control; powered by single "AA" cell; PTT switch mounts on turn signal or gear-shift lever; can be wired to most electronic or relay switching CB units; earphone has anti-blast circuitry; ... $60.00

Mobile Safety Mikes
CB-SMC. Electret mike with FET preamp $55.00
CB10-2 SMD. Safety mike with single phone $45.00
CB10-2 MD. Safety mike on headband with safety switch $30.00
CB-900. Motorcycle safety mike; helmet speaker; safety switch $45.00

CB Handsets
Can be used with most existing transceivers; 500-ohm dynamic mike; 8-ohm receiver; multiple switching and jack for remote speaker; can be wired for electronic or relay switching transceivers.
HS-10. Handset $40.00
HS-19. Handset with VS-19 visor speaker $50.00

Base-Station Mikes
Electret-condenser base-station amplified mike with variable gain control; self-contained power supply; operates with one "AA" battery; interlocking PTT switch; flexible gooseneck construction; 500 ohm imp $45.00
M-606. Similar to M607 but without variable gain control $35.00

PV-1 CB Power Mike
Hand-hugging shape; electret/condenser type element; built-in FET preamp; adj. amplifier gain; powered by single "AA" cell; no-solder 4-pin CB connector; output level −45 dB re 1 V; 6-ft retractable cord $34.95

CB Headphones
CB10-2. Base station phone; automatic level-limiting circuit; impedance-matched circuits; 300-4000 Hz frequency response; cushioned earphone with adjustable headband; 500 ohm imp $25.00
CB10-2S. Single-sided mobile version of CB10-2 permits monitoring without disturbing others $20.00

M-508 Replacement Mike
Dynamic hand-held power mike; compression amp prevents overload; AGC for signal equalization; self-contained power supply (uses one 7-V mercury battery); 500 ohms $25.00
M-506. Similar to M-508 but without compression amp & AGC $12.00

VS-19 Visor Speaker
Compact (5½" × 3¼" × 1¼") housing with two speakers; installs on sun visor with self-contained mounting clips; comes with cable and standard mini-plug $15.00

SYLVANIA

SDX-200 Base Station "Power + Mike"
Base-station model; provides up to 4-dB amplification without clipping; push-to-talk & lock switches; max. gain 16 dB; sensitivity −50 dB; imp. 0-2500 ohms; for relay or electronic switching; shielded five-wire color-coded cord; standard PP-50 plug; 9-V battery-operated (included) $69.95

"Match-All" Adapters. Eliminates problem of wiring of CB mike to transceiver connector; adapters available to fit most CB transceivers $5.95
SDX-100. Similar to 200; max. gain 20 dB; slide-type continuously variable gain control $39.95

SPM-70 Power Microphone
Provides up to 20 dB audio voltage gain; transistorized preamp; variable gain control; 0-2500 ohm imp.; relay or electronic switching; max. gain 16 dB; max. sensitivity −42 dB; comes with 9-V battery, coiled cord; PP-50 plug $29.95

SSM-50C Mobile Microphone
High-impedance mobile mike; ceramic cartridge; sensitivity −62 dB; relay or electronic switching; standard PP-50 plug; imp. 750 pF $17.95
SSM-60D. Same as 50C except low-imp. version; imp. 500 ohms $17.95

TELEX

CB-88 Lightweight Headset
Single-side magnetic earphone element; includes adaptor for use with eyeglasses without headband; noise-cancelling power mike with IC amplifier; variable gain control; pivoting boom; PTT switch; 8-ft cord (no plugs); weight less than 3 oz. $69.95

CB-1200 Headset/Mike
Designed for hands-free transmit/receive of CB communications for all types of mobile operation; headset combines dynamic receiver with ceramic boom mike; talk-switch, and FET battery-powered amplifier (separate long-life battery); adjustable mike boom rotates 310 degrees to move out of way when not transmitting; talk switch; unterminated headset cord so jacks can be installed to match rig. $59.95

CB-73 "Double-Header" Mike
Dynamic, noise-cancelling power mike; has noise-cancelling defeat control, battery operated IC amplifier with adj. output; fits front or back on mounting bracket; aviation-type acoustic housing; high-flex coiled cord.
CB-73R For relay switching transceivers $39.95
CB-73E. For electronic switching transceiver $39.95
CB-73S. For special switching transceiver. $42.95

HTC-2 "Twinset"
Lightweight twin receiver for monitoring CB at home; dual magnetic drivers 3.2-20 ohms; sensitivity 120 dB SPL ±3 dB; response 100-3000 Hz $19.95

C-610 Base Headphone
Circumaural ear cushions to seal out ambient noise; adjustable headband; self-aligning earcups; equipped with 5-ft cord terminated in 0.250" dia. phone plug; dual receiver magnetic drivers; 3.2-20 ohms; sensitivity 103 dB SPL ±5 dB; response 40-15,000 Hz $9.95

TURNER

EX-500 Base-Station Mike
Pre-amplified base-station mike; separate volume & tone controls; built-in meter for reading audio input & battery condition; 6-wire cable to make unit compatible with all transceivers; volume slide control can be used with level meter to optimize radio input; compression preamp prevents overmodulation; tone slide control adjusts bass-treble balance; uses 9-V battery for preamp and meter functions $70.00

Model M + 3 Mobile Mike
Transistorized mobile version of Model +3B; provides up to 15 dB gain; slide-action volume control; compression amplifer circuit to prevent overmodulation; ceramic design; 300-3500 Hz tailored for voice transmission; push-to-talk switch; 7-volt replaceable mercury battery; designed for relay switching: (Model JM + 3 for electronic switching) $42.00
M + 3 Special. Same as M + 3 except with six-conductor cable $42.00

Model + 3B Base-Station Mike
Base-station microphone with solid-state preamplifier; built-in compression circuit to guard against overmodulation; adjustable volume output control; ceramic microphone cartridge with high speed intelligibility limited to 300-3000 Hz; touch-to-talk front bar with slide-lock; self-contained battery $55.00

Model M + 2 Base-Station Mike
Has temperature and humidity-resistant ceramic cartridge; two-stage silicon transistor preamp with volume control; up to 35 dB more gain than conventional ceramic units; adaptable to both relay & electronic switching with slide-mount switch in base; lock-down lever to hold down PTT bar; die-cast case; light blue finish; polished chrome grille ring $45.00
M + 2/U. Mobile version with up to 15 dB more gain; built-in two-stage amp powered by 9-V mercury battery; will modulate any transceiver; Cycolac case; coiled cord; wired for relay switching $38.00
JM + 2/U. Same except wired for electronic switching $38.00

Road King CB Mikes
Designed for truck applications.
RK56. Noise-cancelling dynamic types response 100-9000 Hz; impedance 2000 ohms (for use with all transistorized equipment with 600-5000 ohm input imp.); output level −60 dB (0 dB = 1 mW/10 μ bar); wired for relay switching; six-conductor coiled cord $24.00
RK66. Features high-output compression amplifier; response 300-3500 Hz; imp. 1000 ohms; adjustable output level −42 dB; wired for relay switching; six-conductor coiled cord $40.00

360DM-6 Mobile Mike
Dynamic replacement mike for transistorized equipment with 2000-ohm imp.; full-length switch lever; 2000 ohms output imp.; response 100-8000 Hz; output level −75 dB (0 dB = 1 V/μ bar); wired for relay switching; coiled cord $19.00

NOTICE TO READERS

We consider it a valuable service to our readers to continue, as we have in previous editions of Citizens Band Handbook, to print the price set by the manufacturer or distributor for each item described as available at presstime. However, almost all manufacturers and distributors provide that prices are subject to change without notice.

We would like to call our readers' attention to the fact that during recent years the Federal Trade Commission of the U.S. Government has conducted investigations of the practices of certain industries, in fixing and advertising list prices. It is the position of the Federal Trade Commission that it is deceptive to the public, and against the law, for list prices of any product to be specified or advertised in a trade area, if the majority of sales of that produce in that trade area are made at less than the list prices.

It is obvious that our publication cannot quote the sales price applicable to each trading area in the United States. Accordingly, prices are listed as furnished to us by the manufacturer or distributor. It may be possible to purchase some items in your trading area at a price that differs from the price that is reported in this edition.

The Publisher

CB Test Meters & Miscellaneous

ALPHA

Vomax SBP-3 Speech Processor
Low-distortion, SSB compatible speech processor; AGC ahead of compression circuit starting at 14 dB of peak limiting; compression does not exceed 17 dB; dynamic range 60 dB; automatic level control; visual level indicators; designed to be installed between any mike and exciter/transceiver; frequency response: band limits −6 dB points, 400 & 2500 Hz; passband ripple at 10 mV input ±1 dB 480 to 2200 Hz; 2" H × 3¾" W × 6½" D $179.50
A.c. power pack $15.00

ANTENNA POWER

"No-Ears" Antenna Coupler
Coupling device permits use of regular and windshield antennas with CB transceivers and/or AM-FM radios; 40-channel capability; adjustable for 1:1 SWR; 1⅝" H × 3¼" W × 2⅛" D $37.50

ASTRO

"Astro-Loop" CB Antenna Booster
To be used with any type mobile antenna, balances signals warped by improper ground plane, reduces overmodulation at close range, capacitively relates CB antenna to relative environment ... $3.95

"Super Squelch"
Designed to limit reception of long-distance interference such as skip; reduce excess noise from long-distance transmissions; will not interfere with SWR readings; must be used only at standard transmitter power; connects between CB transceiver and antenna $12.95

AUTOMATIC RADIO

CAM-1100 Portable SWR Meter
1:1 to 1:3 SWR range; accuracy ±5%; 2½" H × 2½" W × 2" D $16.95

HPS-2000 Power Supply
Regulated power supply; pilot light; on/off switch; 12-V d.c. output; "quick connect" terminals; 2⅞" H × 4⅜" W × 6" D .. $26.95

AVANTI

TVI Filters
Low-pass filter designed to be installed at the CB transceiver to eliminate harmonics radiated into TV channels (especially Ch. 2 & 5). CB signal rejection filter designed to be installed on the TV set's lead-in if interference is present after installation of low-pass filter.
AV-800. Low-pass filter $24.95
AV-820. A.c. line filter $19.95
AV-811. 27 MHz rejection filter $14.95

BIRD

10043 "Thruline" Wattmeter/VSWR Bridge
Measures forward RF power up to 10 W, reflected RF power to 2.5 W, direct reading of SWR of antenna system; may be left in-line for continuous monitoring or used as portable test instrument; accuracy ±5% of full-scale; directivity ±1 division VSWR resolution or ±0.2 of actual reading; imp. 50 ohms nominal; accepts PL-259 connector; 3⅞" H × 5¾" W × 3¼" D $88.00

BOMAN

Micro-Mini Converters
All converters are used with ordinary car radios, have pushbutton band selectors and lighted dial scales.
CBC-500. Adds CB, TV-1 and TV-2 to car radio $49.95
CBC-400. Adds 40 channel CB and National Weather Bureau band to car radio; includes variable control tuning .. $41.95
CBC-600. Converts AM car radio to FM as well as 40 channel CB $41.95
CBC-310. Converts car radio to 40 channel CB $34.95

PB-40 High Power Booster
Boosts audio output power of any car stereo or radio to approx. 40 W peak power; includes by-pass $39.95

CBC-300-B CB Converter
Converts car radio to 40 channel CB receiver; crystal-controlled; pushbutton power switch; ANL $34.95

PS-400 CB Power Supply
110 V a.c. to 12 V d.c. power converter adapts mobile CB transceiver for base station use $29.95

ATC-2C CB Antenna Converter
Converts car radio antenna to CB antenna; built-in SWR tuning screw $16.95

COBRA

CA-20 Power Supply
Regulated power supply; input voltage 117-V a.c.; output voltage 13.8-V d.c.; built-in speaker; fused for overload protection; 6¼" × 8¾" $44.95

CONVOY

Base Maker I Power Supplies
Regulated power supply; input voltage 103-127-V a.c., 47-420 Hz; output voltage 13.75-V d.c.; line regulation 0.5% or 50 mV (whichever is greater) for input change of 103 to 127 V a.c.; ripple 10 mV RMS, 30 mV p-p; polarity is reversible; short circuit protection at 2 A.
PS-107B. 10 A $109.95
PS-107A. 5 A $59.95
PS-107. 2½ A $34.95

CPI

RP-1A Range Plus
Receiver preamplifier; noise figure 1.5 dB; 140-dB dynamic range; automatic protection against overload; −25 dB manual overload protection; less than 0.1 dB insertion loss on transmit; automatic T/R switching; delay switch; on-the-air indicator; 12-V d.c. or 115-V a.c. operation; 2⅝" H × 4⅜" W × 3¼" D $59.95
RP-1M. Similar to RP-1A but for 12-V d.c. operation only $49.95

TP-1 Talk Power
Full-wave logarithmic speech amplifier; switchable compression; compression meter; easily connects between microphone and transceiver; 12-V d.c. negative ground or 115-V a.c. operation; 2⅝" H × 4⅜" W × 3¼" D $69.95

FL-1 TVI Filter
Absorptive TVI filter; harmonic attenuation −100 dB; input/output tuning allows VSWR matching and reduction of insertion loss to 0.3 dB; takes standard SO-239 connectors; 2½" H × 2½" W × 12½" D $49.95

PH-12 Power Handler
Control center provides branch circuits for three pieces of equipment; single master on/off switch; one 30-A input, two 5-A outputs, one 20-A output; all circuits individually fused; d.c. voltmeter; d.c. power line filtering; supplied with leads and connector lugs; 12-V d.c. operation .. $39.95

FC-70 Frequency Counter
30 kHz to 40-50 MHz direct operation frequency counter; accuracy ±0.0003%; reads to 10 Hz; switchable kHz/MHz seven-digit LED display; through-line sen-

sitivity 1 W at 50 ohms; 12-V d.c. or 115-V a.c. operation (quick-disconnect cables supplied for both); 1.93" H × 5.558" W × 8.625" D $169.95

FA-70 Frequency Converter Adapter
Allows frequency readout in receive and SSB modes when used with the FC-70; requires certain internal crystal frequency for each RF generation scheme; available w/wo CPI internal crystals; two internal crystal positions to allow use with radios which shift local oscillator frequencies on different modes; base or mobile (negative ground) operation; 2⅝" H × 4⅜" W × 3¼" D $49.95

CUSHCRAFT

Coaxial Lightning Arrester
Blitz Bug with exclusive static ring discharge points; provides constant static drain for full-time lightning protection; effective to 500 MHz without insertion loss; LAC-1 for connection at equipment; LAC-2 for in-line use $4.50

CUSTOM ELECTRONICS

77 Digital SWR Meter
Digital readout (liquid crystal display) SWR meter; built-in antenna matcher; built-in safety circuits; current draw 15 mA max.; frequency coverage 26.0-28.0, MHz; power rating 5 W max; 1 A fuse in line fuse holder; supply voltage: between +12 and +18 V d.c., negative-ground only (external), 9-V batteries (internal); for base-station or mobile use $129.95

211 Antenna Co-Phaser
Can be used with any two CB antennas using standard coax cable, mounted in any configuration; easily tuned for max. range; no special cable harness needed $13.95

490 Antenna Matcher
Designed to correct impedance mismatch throughout all 40 channels; varies electrical characteristics of antenna to present 50-ohm transceiver load .. $10.95

507 TVI Filter
Three-stage TVI filter; designed to be attached to TV set; tuning control for best TV reception with lowest level of interference $9.95

102 CB Antenna Switch
Permits connection of either of two antennas to single transceiver or two transceivers to single antenna; low insertion loss; power rated at 150 W; frequency range to 50 MHz; SWR less than 1.2:1; for base or mobile applications $9.95

DRAKE

TV-3300-LP Low Pass Filter
Attaches to transceiver; reduces TV IF interference and front-end problems; attenuation better than 80 dB above 41 MHz $26.60

TV-42-LP Low Pass Filter
Attaches to transceiver; reduces TV interference; 43.2 MHz; extremely high attenuation in all TV channels $14.60

E & G RESEARCH

138A3 Power Supply
Regulated d.c. power supply; input voltage 115-V a.c.; output voltage 13.8-V d.c.; output current 3.5 A; regulation +0.05 V from no load to full load; fused short circuit protection above 1.5-2 A; power-on indicator lamp; front-panel output jacks; heavy vinyl-aluminum cover $49.88

EICO

700 CB Frequency Counter
In-line mobile frequency counter operates automatically on transmit; 40-channel capability; 10 Hz to 30 MHz frequency range; has kHz/MHz switch, five 0.5-in LED readouts with decimal point; comes with SO-239 connectors and mounting brackets; 1¾" H × 5" W × 6" D $89.95

715 Transceiver Tester
Portable, four-function transceiver tester with SWR meter/calibrator (1-30); two-range power meter; mod. meter (0-100%); field-strength meter (1-10); built-in 50-ohm dummy load; headphone jack. $69.95

ASA-310 Electronic Siren Auto Alarm
Voltage sensor detects intrusion; time-delay eliminates need for key-switch; timer shuts off after 5-min; hi/lo sound adjustment $59.95

1045 6-Amp Regulated Power Supply
IC-regulated, continuous duty low-ripple 13.6-V d.c. supply; has automatic foldback current-limiting protection circuit. $49.95
1043. Same except 2.5 amps $24.95

725 SWR/Power Meter
Dual-meters; front-panel switching measures SWR (1:3 max.) and true RF power output in three ranges; may be left in-line for constant monitoring; freq. 3-144 MHz. $39.95

CBC-2 "Roadmate" Converter
Monitors all 40 channels through car radio; no special antenna needed; for 12-V d.c. negative-ground vehicles $24.95

CM-2 "Channel Monitor"
Automatically silences car radio when CB call comes through; operates on both audio and RF; works with any transceiver having squelch circuit and external speaker jack and car radio with external speaker; for 12-V d.c. negative-ground . . $29.95

LR-3 "Long Ranger" Receive Preamp
Increases CB receiver sensitivity; installs between transceiver and antenna; RF sniffer circuit provides automatic transmit/receive switching; 12-V d.c. negative-ground $29.95

1040 Filtered Power Supply
12-V d.c. power supply to permit home operation of mobile CB transceiver; provides trickle charge capability for car battery; overload protection; handles up to 4 A continuous, 6 A surge $19.95

745 Field-Strength/SWR Meter
Measures comparative field strength, SWR, and relative forward and reflected power; measures SWR of 1:3 . . . . $19.95

CBR-5 "Big Ears"
Compact battery-operated receiver fits on car's sun visor; receives all 40 CB channels $14.95

SLM-14 CB Mounting Bracket
Permits transceiver to slide in or out easily without disconnecting wires or antenna; built-in key lock prevents CB theft . . $9.95

ELECTRONIC SPECIALISTS

Power Line Filter
For use with stereo and hi-fi gear; eliminates or reduces interference caused by CB radios and transmitted over a.c. power cables; 3-conductor $13.50
2-conductor $10.50

Phono-Input Interference Filter
Reduces or eliminates CB interference from stereo or hi-fi systems; plugs directly into amplifier input jacks; comes in pairs $7.95

ELENCO

CB-23 Converter
Designed to be used with any AM radio; built-in noise blanker; no special antenna required; no-tools installation; power consumption less than ½ W $14.95

EMI-LINE

Mobile Transceiver Filters
EMI-15A. Low-pass filter prevents coupling of ignition impulses into car's primary wiring system $6.95
EMI-AF. Controls alternator whine in tape decks; power converter or shore-power charger hum in RV's $11.95
EMI-ACE. For automotive accessory noise; three bypass capacitors feature low lead inductance; effective through v.h.f. $6.95
EMI-ISO. Isolates CB from residual interference present in 12-V power wiring system; suppresses electronic ignition system noise $11.95

Base-Station Filters
EMI-TVX2. Suppresses base-station harmonics; mounts in transmitter 50-ohm antenna output cable; effective over CB and 160-10 m ham bands; rated 4 kW PEP, 1 kW AM $16.95
EMI-TVR. High-pass filter mounts on TV or FM receiver antenna terminals to prevent saturation of input stages by nearby CB or ham transmitters $7.95
EMI-120V. For base-station CB transmitters; keeps transmitting signal off 115-V power lines; helps prevent TVI $12.95

EMPIRE

E4PS Security System
Includes 113-dB siren with optional cut-off feature; tampering with hood, trunk, or doors activates alarm; entry by cutting through roof or breaking glass activates alarm when brake pedal is depressed; external lock and key arms and shuts off system; siren can be mounted under hood or other convenient place; comes with all parts and installation instructions $39.95

FALCON

CB Caddy
Mounts on transmission hump, floor, or seat; high-impact molded ABS plastic case; will handle transceivers up to 3" × 8½" × 8½"; adjustable for various shapes of mounting surfaces; built-in 4", 8-ohm dynamic speaker $24.95

CB Saver
Storage and travel case for CB radios; molded case with foam cushion interior; will accommodate CB radios up to 3" × 9" × 12". $14.95

GC

18-151 Power/SWR Meter
Includes dual-range wattmeter with front-panel selection of 0-10 W or 0-100 W; reads true RF power output; SWR meter designed to be left in-line as constant monitor; range 1:1 (0-10) and 1:3 (0-100 W); response 3-55 MHz; imp. 52 ohms; 4" H × 5¼" W × 4" D $49.95

18-153 CB Multi-Meter
Measures RF power in two ranges (0-10 or 0-100 W), VSWR, and relative modulation; SWR ranges 1:1 (0-10), 1:3 (0-100); frequency response 1.5-150 MHz; imp. 50-52 ohms; may be left in-line; 3¼" H × 3¾" D × 6½" W $34.85

18-157 CB Omni-Meter
Multi-purpose meter which measures power/SWR and field strength; power ranges 0-10 W and 0-100 W; SWR ranges 1:1, 1:3; response 1.5-220 MHz; imp. 52 ohms; 2¼" H × 4¼" W × 2¼" D . . $27.29

18-155 SWR/FS Meter
Measures SWR for peak system performance; may be used for measuring field strength; may be permanently installed as constant monitor; power range up to 1 kW; frequency response 1.5-144 MHz; imp. 52 ohms; 6" H (inc. connectors) × 2 3/16" W × 2¼" D $20.40

18-260 Noise-Suppression Kit
Reduces or eliminates most common causes of engine noise in cars with alternators; includes 8 sparkplug suppressors, distributor suppressor, and alternator suppressor $7.30
18-262. Same except for cars equipped with generators $4.80

18-730 CB/AM Coupler
Permits standard auto antenna to be used for CB transceiver; two screwdriver adjustments tune to 1.1:1 SWR or better; no holes to drill; designed to be plugged in and adjusted once $14.95

GOLD LINE

GLC-1043 "Signal Hunter"
Direction-finding antenna; tracks any signal without triangulation; mounts on any car in seconds; simple, foolproof operation; designed for club-sponsored self-policing and education committees to

track down rule-breakers and trace interference from leaking power-pole insulators; hidden transmitter hunts $21.95

GLC-1077 Low-Pass TVI Filter
Designed to be inserted in CB power line; attenuation starts at 39 MHz, 40 MHz (20 dB down), 45 MHz (26 dB down); imp. 50 ohms; insertion loss ½ dB at 27 MHz; rated 100 W input $8.75

GLC-1093 TVI Filter
Designed to be installed on TV set; attaches to twin-lead; reduces interference to 1/25th its strength; filters interfering transmissions up to 50 MHz $8.95

GLC-1056 Inline Wattmeter
Reads true output power in watts; negligible insertion loss; 5 W continuous; frequency range 8-30 MHz..... $16.95

GLC-1106 Noise Filtering Hookup Harness
Reduces noise picked up by vehicle wiring; filtering action supplied by heavy-duty coax for power pickup which shields against unwanted noise and a ferromagnetic filter that reduces any remaining interference; in-line power fuse for set protection $12.95

GLC-1114 "Zing Ring"
Designed to improve mobile antenna performance by providing 360-degree launching pad for signal; for gutter, mirror, or bumper-mounted antennas which are not centered; offers 360-degree primary ground plane and centering effect to enhance omni radiation pattern; reduces antenna vibration and whiplashing ... $4.25

GLC-1089 Low-Pass TVI Filter
Eliminates TV interference; harmonic rejection: —50 dB (Ch. 2), —70 dB (Ch. 6); for use with any 50-ohm transmitter operating on any frequency to 30 MHz . $19.69

GLC-1057 Dummy Load
Lights up to indicate output power; 52-ohm load VSWR 1.1:1; provides quick modulation check; stops illegal output when servicing rig; for up to 5 W ... $3.59

GLC-1113 "Big 40" Antenna Matcher
Two-stage matcher designed especially for 40-channel rigs; 13-78 MHz coverage; 200 W; dual-system circuit provides for match throughout entire CB frequency range $19.95

HEATH

HD-1426 Field-Strength Meter
Measures relative field strength of signals from 1 to 1000 W transmitters, covering 1.8 MHz to 250 MHz; can be used to check transmitter operation and make transmitter and antenna adjustments; has built-in PC antenna & whip antenna; can be used as either mobile or fixed-station device; (kit, mail-order) $10.95

HICKOK

380 Series Counters
Available in four configurations, all units in series are autoranging with auto-decimal for "hands-off" operation; have bright 0.3" LED numerals in a 7-digit display; fast update with 1.1 second update in "Auto" mode below 10 MHz and 5 per second update in "Speed Read" mode or above 10 MHz.
Model 380. Basic unit with 80-MHz range; full frequency display with 1 Hz resolution to 10 MHz; above 10 MHz decimal point shifts automatically and display changes to Hz resolution; provision for external time-base input on rear panel ... $269.00
Model 380X. Same features as Model 380 plus high-stability temperature-compensated crystal oscillator time base with 1 ppm stability; time-base output at rear panel to drive up to four counters without crystal oscillator feature . $419.00
Model 385. Measures frequencies to 512 MHz; built-in UHF prescaler; time-base stability 10 ppm $549.00
Model 385X. Same as Model 385 but with 1 ppm time base $699.00

388 In-Line CB Tester
Provides digital readout of SWR; power, % modulation, and frequency; crystal-oscillator time base; frequency 10 MHz; stability (with line) 0.1 ppm for ±10% line variation (with temperature) 10 ppm from 0 to 50 degrees C; power 105-125 V a.c./ 210-250 V a.c. 50-400 Hz 14 watts; provision for 12-14 V d.c. operation; display: frequency 7 digits, power 3 digits, SWR 4 digits, % modulation 3 digits; resolution: frequency 10 Hz, power 0.1 W, SWR 0.01 ratio point, % mod. 1%; AM output for scope display of modulation; single function switch; front-panel BNC for 10 Hz-55 MHz frequency at 1 meg. impedance; 4" H × 8½" W × 6" D (plus stand/handle) $397.00
388X. Same except with temperature-compensated crystal oscillator (TCXO) timebase frequency reference ... $525.00

38 In-Line Digital CB Monitor
Monitors frequency, power, and SWR; designed to be installed in-line between antenna and transceiver; can be operated from 105-125 V a.c. or 12-V car battery; 6-digit frequency readout, 3-digit power output, 4-digit SWR readings; in normal operation with either AM or SSB transceivers will provide continuous digital readout of frequency output of transmitter, power output of final stages, and functional condition of antenna and transmission cable; 2¼" H × 6" W × 7" D $279.00
39. Same as Model 38 with 10-1000-W measurement; 25-30 MHz $279.00

256 40-CH CB/RF Generator
Five-band frequency tuning covers channels 1 through 40 on expanded tuning range for precise channel selection; frequencies of 100 kHz through 16 MHz are covered on other four bands for IF requirements: 455 kHz, 10.7 MHz, and any other, current or future; calibrated/attenuated output control provides RF signal output of 100,000 μV down to less than 1 μV for receiver sensitivity checks; attenuated output variable in 20-dB steps and by 20-dB continuously variable control calibrated in μV $225.00

244 "Mobil/Com" Power Supply
Fully adjustable voltage range of 10.5-14.5 V; 2½" meter with calibrated standard 13.8-V setting indicated; full adjustability and 0.5% regulation permits storage-battery operating conditions (including low- and over-voltage operation); continuous duty 3-A output; overload conditions indicated by front-panel "Overload" light $125.00

HUFCO

TWS-6000 Mark II Frequency Counter
Six digits through 500 MHz; readout to ±10 Hz at 500 MHz; gating at 1 ms and 1 sec. ..... (kit) $169.95
Assembled $199.95

TWS-600 Mark II Frequency Counter
Six-digit readout to 250 MHz; input sensitivity 300 mV (in MHz position), 50 mV (in kHz position); imp. 6000 ohms on low range; range: 250 MHz (in MHz position), 30 MHz (in kHz position); readout kHz or MHz, decimal shifts to show range; time-base: crystal frequency 1 MHz; frequency trimming ±2-3 digits; stability 2 ppm; sample rate ½ to 1 sec; gating time 10 ms; 6½" H × 5½" W × 3½" D .... (kit) $129.95
Assembled $149.95

TWS-6 Mark II Frequency Counter
Six-digit readout through 30 MHz; designed for experimenters, technicians, or service technicians; accurate to 100 Hz; operates through all CB and ham frequencies up to 30 MHz; gating time 10 ms or 1 s optional; other specs similar to TWS-600 ..... (kit) $79.95
Assembled $99.95
Extend option ..... (kit) $9.95
Assembled $14.95

Voice-Operated Transmit
VOX for hands-free transmission; works with any microphone; 9 V battery operation ..... (kit) $29.95
Assembled $39.95

CB Timer
LED indicator lights when 5-minute transmission time is up; 9 V battery operation .. .. (kit) $19.95
Assembled $29.95

Power Mike Adapter
Increases power/transmitting distance; 9 V battery operation ..... (kit) $14.95
Assembled $24.95

HUNT

"Phantom Damper"
Vehicle noise suppressor; 1½-inch square black box is installed in vehicle between alternator and CB unit; self-adhesive backing to facilitate attachment direct to CB or any convenient location within 12-in of set; power cable runs through firewall and connects to battery; shielded coax between Damper and CB unit; red LED glows when all connections are tight and unit is correctly grounded. Mail order only ..... $39.95 + $2.00

JFD

CB35-DS Noise Suppression Kit
Kit of eight spark plug suppressors and one distributor suppressor reduces or eliminates noise in radios $7.85

CB35-AG Noise Suppression Kit
Reduces noise in CB, AM and FM radios caused by alternator or generator; pre-tuned to attenuate all frequencies .. $5.25

CB35-PS Noise Suppressor
Power supply noise suppressor reduces or eliminates CB radio interference on 12-V hot-wire $4.90

CB33 Lightning Arrester
Helps prevent CB radio damage by bleeding-off static charges; installs in-line to antenna or base unit; fits PL-259 .. $5.25

KMM

Antenna-Lok
Lock protects CB antennas from theft; designed for trunk-lip mount base-load antennas; transparent polycarbon resin construction; no-tools installation.. $7.95

KRIS

417-238 Mobile "Matchmaker"
Designed to eliminate mismatches and power losses in mobile installations; pre-tuned to 50 ohms; tunes out reactance in coax feedline for better match $16.95
418-238. Same except base model . $19.95

423-126 VSWR Meter
Provides field-strength and SWR readings; can be left in-line; 100-μA meter with two-color scale $22.95

423-136 VSWR Bridge
Dual 100-μA meters read relative transmitter output on calibrated scale and reflected power loss due to antenna and/or line mismatch; will work on any transmitter from 3-150 MHz from ½ W to 1000 W; can be left in-line for continuous monitoring $29.95

423-500 VSWR Bridge/Wattmeter
VSWR bridge can be used to adjust antenna system for peak efficiency, shorted or open coax, poor ground connection, or improper coax; read power output in watts; max. freq. 30 MHz; SWR 1:1 to 1:3; accuracy ±5%; imp. 50 ohms; meter sensitivity 200 μA; 4" × 2" × 2" $19.95

418-502 Coaxial Switch
For those using multiple antennas or multiple transceivers; three switch positions plus 10-W dummy load in fourth position; checks transceiver performance and SWR bridge calibration; freq. range to 50 MHz; 4" × 3¼" × 3½" $12.95

417-127 Mobile S/RF Meter
25-μA d'Arsonval meter; front-mounted illumination control; can be permanently connected to company's mobile transceivers with external S-meter jack; measures received signal strength and transmitter output power $29.95
418-127. Same except base model housed in extruded aluminum case $33.95

418-111 "Antenna Fire II"
Increases receive gain by as much as 20 dB; connects between antenna and CB transceiver; automatic SSB delay; automatic relay switching; reverse polarity protection; LED mode indicators; two JFET amplifiers; 12-14 V d.c. $36.95
417-111. Same except mobile unit . $34.95

LAFAYETTE

Antenna Impedance Meter
Measures antenna impedance from 10 to 500 ohms, allowing precise adjustment of antenna for optimum impedance match; comes with separate 27-MHz plug-in oscillator; 99-33094 ..... $69.95

SWR/Power/Modulation/FS Meter
Four-function instrument measures VSWR from 1:1 to 20:1; also serves as an RF wattmeter for monitoring RF output; indicates modulation levels from 0 to 100%; functions as a relative field strength meter for antenna tests; 99-26387 ..... $32.95

SWR/Power Meter
In-line instrument monitors VSWR with meter calibrated from 1:1 to 3:1; also functions as a dual-range wattmeter for monitoring RF output of CB transceiver; 99-26395 ..... $24.95

LEADER

LHM-950 CB Harmonic Meter
CB harmonic meter measures levels of 2nd and 3rd harmonics; 20-120 dB level range; ±3 dB accuracy; input attenuation 10 dB × 2 and 20 dB × 3; 75-ohm open terminal voltage indication $279.95

LAC-895 Antenna Coupler
Covers 80 to 10-meter bands plus CB; input impedance 50 ohms; load impedance 50 or 70 ohm coax, 10-250 ohm single-wire antenna; power handling 100 W continuous, 200 W 50% duty (CW keying), SSB, voice 500 W p-p transmitter input; in-line wattmeter range 20- and 250-W full scale; accuracy ±10% full scale; insertion loss 0.5 dB at tuned condition ... $159.95

LPM-880 RF Power Meter
Measures RF output from 0.5 to 120 W; frequency range 1.8 to 500 MHz; push-button range selection; measures power losses in low-pass filters and coaxial cables; load impedance 50 ohms; accuracy ±10% full scale $149.95

MAGITRAN

CB10-39 CB Antenna Matcher
Built-in matcher with tuning-eye VSWR indicator; knob-adj. of tuning-eye readout sets optimum antenna performance; RF bridge measures antenna imp. for min. VSWR adj.; provides continuous monitoring of antenna condition; operates on all 23 or 40 CB channels; coax connection between transceiver and antenna; for mobile or base-station use; 1⅞" H × 4⁹⁄₁₆" W × 2⅜" D $24.95
CB10-97. Broadband-tunes any CB antenna for max. power (min. VSWR); low-

loss adj. capacitive network trims antenna length electrically; fits any antenna; screws into antenna base; converts 23-channel ant. to 40 channels; one-knob tuning $9.95

CB10-10 Signal Booster/Attenuator
Provides front-end RF amplification to boost received signals by 35 dB or more; removes unwanted spurious signals for improved S/N; attenuator eliminates "convoy overloading", variable adj. up to 65 dB attenuation; operates over 40-channel CB band; automatic transmit pass-through; for all AM, SSB mobile, or base-station rigs; 10-15 V d.c. negative-ground operation; 1⅞" H × 4⁹⁄₁₆" W × 2⅜" D. $34.95

CB10-B Power Regulator/Booster
Boosts car battery voltage (11-16 V d.c. input) to regulated 15-V d.c. output; output current 2.5 A max. continuous, 4 A peak; ripple less than 7 mV rms; efficiency 60%; convection cooling; interconnects between battery and CB unit $39.95

CB10-43 Radio Check Monitor
Self-contained receiver picks up "off-the-air" transmission for monitoring on earphone provided; indicates whether signal is being transmitted and modulated properly; meter reading of relative transceiver power output and percent modulation; operates over all 40 channels; no tuning required; no installations or connections needed; operates on 9-V battery; 1⅝" H × 6⅛" W × 3⅜" D $39.95

CB10-33 Anti-Theft Alarm
Sensitive to gloved or fingertip touch; no connection to auto electrical system required; self-contained built-in alarm; 9-V battery operation; 100 dB alarm operates over 3 hours; built-in sensitivity control; alarm sensor can be extended to cover other equipment; supplied with sensor tape & interconnecting wire but without battery $29.95
CB10-14. Similar to CB10-33 except uses horn or existing burglar-alarm system; built-in battery design; 1⅞" H × 4⁹⁄₁₆" W × 2⅜" D $29.95
CB10-57. Similar to CB10-14 except operates from car battery; not recommended for use with center- or top-loaded ungrounded antenna systems; 2⅜" H × 2⁹⁄₁₆" W × 1⅞" D $25.95

J. W. MILLER

C-505-R Audio Interference Filters
Eliminates interference by radio stations or CB transmitters to hi-fi equipment or PA systems when interference enters at input; has RCA-type female and male connectors; install at input jack of hi-fi equipment or PA system $8.77
C-506-R. Similar but designed to eliminate interference that enters at output; install between amplifier output and speaker; works with mono and stereo equipment $11.11

C-508-L Power Line Filter 3A
Three-section LC filter eliminates or reduces interference to radios & CB receivers; designed to be installed at appliance causing interference; 3 A max. rating $13.89
C-509-L 5A. Same except 5-section filter, 5 A max. rating $24.00

C-511-T Transmitter Low-Pass Filter
Eliminates CB interference in TV sets; input/output imp. 50 ohms; cut-off frequency 30 MHz; 80 dB attenuation at 54 MHz; 25 W max. AM, 50 W max. PEP SSB; SO-239 connectors both ends; connect between antenna and transmitter . . . $29.95

C-512-T High-Pass Filter
Eliminates or reduces interference picked up by IF amp section of TV sets; rejects interference from CB transmitters, ham stations, x-ray and diathermy equipment, electrical appliances; designed to attenuate all signals below 50 MHz, 300-ohm line $9.00

C-510-T TV Set Antenna Filter
Prevents CB from interfering with TV; reduces interference from appliances, plane and car ignition; connects to TV set at antenna terminals $2.80

MOUNTIE

Locking Mounts
Heavy-gauge steel, universal-type mount; six-tumbler key-operated lock; interlock design of slides resists lift-out even if sides are sprung; accepts CB units from 6" to 9" wide; can be fastened to car floor or hump; available with plug-in connector with 8 gold-plated contacts; comes with complete mounting hardware.
629C. Hump mount $29.95
F629C. Flat mount $29.95
B6SC. Hump-mount base only . . . $21.85
FB65C. Flat-mount base only $21.85

MURA

CBM-40 Full-Function CB Meter
Measures SWR and field strength; RF power output from transceiver; modulation level; comes with 9½-in antenna; SWR scale 1:1-20:1; power scales 0-10, 0-100 W ±10%; mod. scale 0-100%; frequency range 3.5-150 MHz; imp. 52 ohms; 2¼" × 6¾" × 4½" $46.95

CBM-30 Twin-Scale CB Meter
Separate RF output power and SWR scales for simultaneous monitoring; precision-built d'Arsonval meter movement; 1:1-10:1 VSWR ±5% SWR scale; 0-100 watts ±20% power scale; 3.5-150 MHz frequency range; 52 ohms impedance; can be permanently installed in coax line; 3" H × 6" W × 2" D $35.95

CBM-20 Three-Function Meter
Measures RF output power, SWR, and relative field strength; comes with telescopic antenna, switchable imp. setting; SWR scale 1:1-3:1 VSWR; power scales 0-10, 1-100 W FS scale 1-10; frequency range 1:5-144 MHz; imp. 52, 75 ohms; 6" × 2½" × 2½" $29.95

CBM-10 Dual-Function CB Meter
Measures standing-wave ratio and field-strength; features 5-section, telescopic antenna for relative field-strength measurement; SWR scale 1:1-1:3 VSWR; 0-5 relative FS scale; 3.5-150 MHz frequency range; 52 ohms impedance; can be left in coax line permanently; 6" H × 2½" W × 2½" D $19.95

CBT-35 Meter/Antenna Matcher
Separate scales for simultaneous measurement of SWR and RF power; twin meters; imp. matching range 25-140 ohms; SWR scale 1:1-3:1 VSWR; power scale 0-10, 0-100 W; 6¼" × 2⅛" × 2¾" . . $49.95

CBT-25 SWR/Pwr./Ant. Matcher
Measures output power, SWR, and imp.; imp. matching range 25-140 ohms; SWR scale 1:1-3:1 VSWR, power 0-10, 0-100 W; 5" × 2⅛" × 2½" $42.95
CBT-15. Similar to CBT-25 except without RF power scale; imp. range 25-140 ohms $34.95
CBT-8. Similar to CBT-15 but antenna imp. matcher only; can be used with SWR meter; 3¼" × 2¼" × 2⅜" $12.95

NPC

103R Regulated Power Supply
Solid-state; 115 V a.c. to 13.6 V d.c. ±200 mV; handles 2.5 A continuous, 4 A max.; line/load regulation 20 mV; ripple/noise 2 mV rms; transient response 20 μs; dual overload protection; can also be used to trickle-charge 12-V car batteries; 3" H × 4¾" W × 5¾" D $39.95
104R. Same as 103R except 4 A continuous, 6 A max; 3½" H × 5½" W × 6½" D $49.95
107. Similar to 104R except full load ripple 0.5 V rms; uses 10,000 μF filtering capacitor; thermal breaker; 3" H × 4¾" W × 5¾" D $28.95
102. Similar to 107 except handles 2.5 A continuous, 4 A max.; full load ripple 0.6 V rms; uses 5000 μF filtering capacitor; thermal breaker $24.95

12CB4 Regulated Power Supply
Solid-state; 115-V a.c. to 13.5-V d.c.; handles 1.5 A continuous, 2.5 A regulation; ripple/noise 5 mV rms $29.95
13CB4. Same except with built-in loudspeaker $41.95

12V4 Power Supply
Handles 1.75 A continuous, 4 A max.; full-load ripple 0.4 V rms; uses 5000 μF filtering capacitor; thermal breaker . . . $19.95

NYE VIKING

250-20 Low-Pass Filter
Consists of four full sections; cut-off frequency 45 MHz with "M" derived end sections adjustable to provide max. attenuation of 57 MHz (center of TV Ch. 2); attenuation of harmonic & spurious frequencies above 54 MHz 75 dB; insertion loss 0.5 dB; characteristic impedance 52 ohms; standard SO-239 coax connectors for input & output terminals; comes factory assembled and pre-tuned; all mounting hardware $19.95

PALOMAR

DC-30 Power Supply
Regulated power supply; 105-125-V a.c., 50-60 Hz input; 11-14-V d.c., 30-A output; automatic electronic overload protection $149.95

500 In-Line Wattmeter
Peak-reading wattmeter/SWR bridge; three scales: 0-10, 0-100, 0-1000 W; specially calibrated for 26-28 MHz; front-mounted earphone jack; anodized aluminum chassis; 4⅜" H × 8" W × 5¾" D $56.50

PARA DYNAMICS

PDC2812 Frequency Counter
Frequency range d.c. to 40 MHz (min.); accuracy 0.001%/°C and 1 ppm/°C; sensitivity 100 mV; 1 kW power output; resolution 1 Hz on kHz range, 1 kHz on MHz range; five-digit readout; operates from 10-15 V d.c. or 117-V a.c.; BNC and through-line inputs; 4-MHz crystal oscillator .. $150.00

PDC700 Power Scanner
Reads power, modulation, and SWR on single 4" × 6" meter; peak reading up to 1000 W output; frequency range to 220 MHz; factory calibration set at 27 MHz; mod. to 100% and overmodulation indication to +3 dB; requires two coax connectors; 9¾" × 4½" × 2¾" $89.95
PDC600. Similar to PDC700 except three separate meters for simultaneous reading of power, modulation, and SWR .. $87.96
PDC550. Similar to PDC600 except 7½" × 3" × 3⅜" $76.95
PDC137. Similar to PDC700 except meter is 2.9" × 4.5" and instrument reads power and SWR; 8¼" × 3½" × 2¾" $59.95

PDC248 RF Power Analyzer
Dummy load wattmeter; 0-5 and 0-15 watt scales audio headphone jack permits operator to monitor his own voice modulation $36.50

PDC162 Regulated Power Supply
Converts 117-V a.c. to 13.8-V d.c.; comes with car cigarette-lighter-type jack; fuse protection; heavy-duty case; PC board design; high-voltage protection circuitry; ripple less than 60 μV peak-to-peak; provides 3 A continuous power, 4 A for 15 min $34.00

PDC132 Low-Pass Filter
Reduces CB harmonics by 10 dB; eliminates TVI; will handle 150 W $22.50

RCA

Model 14T174 Power Supply
Regulated output 2.2 A at 13.8-V d.c.; 5-W speaker; illuminated on/off power switch; overload protected; requires 117-V a.c. $49.95

Model 14T170 Mounting Bracket
Quick-release mounting bracket; constructed of heavy-gauge steel with nickel-plated electrical connectors; includes brackets for mounting on vehicle floor over transmission hump; with hardware and instruction book $9.85
14T171. Similar to 14T170 but designed to permit same CB unit to be used in several vehicles $6.75

REPCO

CB-1 Anten-A-Verter
Converter permits use of automotive antennas as a combination CB/AM/FM antenna; designed for use with vertical automotive antennas with a mounting height of 30- to 60-in with a cable length of 48- to 54-in (can also be used with in-windshield antennas); effective range is proportional to antenna height; 40-channel operation; 1.5:1 SWR; 0.3 dB attenuation $19.95
CK-1. Conversion kit for rear deck-mounted antennas $6.95

RMS

CBWM-50 Window Antenna Mount
Window mount accommodates any mobile CB antenna; adjustable window extension fits windows up to 42-in wide; self-grounding; aluminum weather-proof elements; steel mounting bracket and hardware $12.95

"Hide-It" Trunk Mount
Accepts most CB antennas; no need to unscrew antenna from mount; easily attached in secure operating position; includes self-adhering cushioned strip to protect car finish; secures cable in place; self-grounding; for all cars except Nova, Monte Carlo, Chrysler, Dodge, Plymouth, and Toyota (specify CBTM-30); CBTM-20 ..... $11.95

CB Interference Filters
Designed for 75-ohm TV systems; combines CB interference filter and 75-300 ohm matching transformer; miniaturized printed circuitry; shielded network and housing; heavy-duty twisted and tinned twin-lead; blocks CB, ham, ignition interference/noise; 2600F $3.15
CB-300F. Same except for 300-ohm systems; connects to VHF antenna terminals on rear of TV set $7.75

ROGERS

The Killer
Solid-state switching system that automatically kills AM-FM radio when CB call is sent or received; can be actuated by either audio or RF; incoming messages switch speakers; CB mike button operation silences AM-FM radio; time delay on drop-out; will control two speaker channels (mono or stereo); 4¼" × 3" × ¾" .... (mail order) $29.95

ROYCE

2-050A Power Supply
Regulated power supply; input voltage 110-120-V a.c.; output voltage 12-V d.c.; output current 3 A $44.95

2-097 CB Test Meter
Complete CB test meter measures field strength, modulation percentage (0-100%), SWR, and RF output (0-10 and 0-100 W); rear-panel connectors $44.95

2-09B Power/SWR Monitor
Measures SWR and RF output (0-10 and 0-100 W); SWR meter is calibrated and set with separate % reflected power scale; 2¼-in meters $59.95

2-100 FS/SWR Meter
Measures relative RF signal strength and SWR; 6" H × 2" W × 2¾" D $19.95

SENCORE

CB42 Automatic CB Analyzer
For all troubleshooting and performance testing of CB units; receiver tests include: automatic EIA sensitivity test, direct digital readout of audio output power, all frequency stages, any internal frequency; checks front-end alignment, IF alignment of any single- or dual-conversion receiver, AGC, adjacent-channel rejection, any audio stage, speaker, receiver noise, SSB alignment, ANL circuits (with optional NL204 noise limiter accessory); transmitter tests include: direct digital readout of transmitter frequency, percent of transmitter frequency error, AM power, SSB PEP, AM modulation (%), SSB modulation using EIA standard two-tone test, all frequency synthesis stages; checks mike using dynamic mike tester, crystal operation out-of-unit, all audio driver or modulation stages; and, using any general service scope, checks instantaneous modulation peaks, residual transmitter carrier noise; comes equipped with 45-channel capability; will operate from any 12 V battery or up to 4 hours off the PS43 Porta-Pak $975.00

FC45 230-MHz Frequency Counter
Eight-digit readout for 1-Hz resolution with automatic ranging, decimal, Hz, MHz indicators; range 30 Hz audio through 230 MHz VHF; accuracy 0.0001%; 25 mV average sensitivity throughout range for circuit testing through 1-megohm input; 50-ohm imput with 12-W dummy load for direct connection to CB transmitter output; push-button operation; includes built-in crystal check; 117-V a.c. or 12-V battery operated with auto lighter plug included $395.00
PL207. Pick-up loop for testing in-circuit $9.95
NE206. Noise eliminator for digital circuits test $25.00
PR47. 600-MHz prescaler to extend range of FC45 to 600 MHz; divides input frequency by 10 without changing accuracy of signal; connects between counter and test lead; 300-mV sensitivity for circuit testing $125.00
PA202. A.c. power adapter $9.95

CB41 Automatic CB Tester
For checking CB performance; measures SWR, RF power, % modulation for any mobile or base rig; no calibrating, zeroing, or switching of leads; 4½-in color-coded meter; portable battery operation for all mobile work; checks all 23 or 40 channels by rotating channel selector; antenna tuning with built-in sensor unit that connects to CB through optional EX203 12-ft extension cable; switch on sensor selects 25-W dummy load for testing CB power and modulation output accurately; operates from standard 9 V transistor battery or from optional PA202 power adapter for a.c. $148.00
PA202. Power adapter for 3-way battery, rechargeable, a.c. line operation .. $9.95
EX303. 12-ft extension cable $9.95

PS43 Porta-Pak
Portable power supply/battery eliminator; two adjustable supplies 0-14.4 V d.c. in 0.6 V steps for powering mobile equipment, 200 mA continuous output current when operated from a.c. line with extended 5 A peak for high current requirements; fixed 12-V output for servicing mobile equipment; fixed 6-V output; operates from standard 1.2 AH Ni-Cad batteries for standard use or heavy-duty 4 AH Ni-Cad batteries for extended portable use, 117-V a.c.; heavy-duty vinyl-clad steel case for portable use. (less batteries) $125.00

SHAKESPEARE

TS-1 The Defender
Test console connected to CB transceiver monitors RF power output, standing wave ratio and percentage of modulation; 3:1 SWR; 5 W power output; up to 120% modulation; antenna match and impedance from 4-1 matched to 1.5:1 or less $99.95

SILTRONIX

FS-9DX SWR/RF/Mod. Meter
Functions as in-line VSWR meter; RF wattmeter; modulation level meter; portable relative field-strength meter with telescoping antenna $39.95

SWR-2 SWR/RF Meter
Dual in-line meter measures VSWR and RF output power in watts $21.95

SWR-11 Mini-Meter
SWR bridge designed for mobile applications; reads relative forward or reflected power as well as SWR; 4¼" × 2½" × 2⅜"; weight 7 oz $11.95

CX-3 Antenna Switch
Coaxial switch allows selection of one of three antenna systems; insertion mismatch causes VSWR of only 1.2:1 max.; power rated at 150 W; 3½" × 2½" × 3¼" $9.95

CBM-4 Antenna Matcher
In-line matching network converts antenna impedances from 35 to 150 ohms to 50 ohms for optimum impedance match; 1:1 SWR for max. radiated power; also aids harmonic suppression $8.95
LP-7. Low-Pass Filter for suppressing harmonics; attenuation is −32 dB at 50 MHz, −40 dB at 60 MHz; 4¼" × 1⅝" × 2¼" $7.95

SOLITRON

SRPS-3 Power Supply
Regulated power supply; input voltage 105-125-V a.c., 50/60/400 Hz; output voltage 9-15 V d.c. adjustable; output current 3 A continuous; output power 45 W continuous; regulation 1% with variation in line, load, or temperature; ripple less than 5 mV RMS at full output; fail safe short circuit protection above 4 A; voltage and current meters; 4" H × 6⅛" W × 8½" D $69.95

SRPS 2.5 Power Supply
Regulated power supply; input voltage 105-125-V a.c., 50/60/400 Hz; output voltage 13.8-V d.c.; output current 2.5 A continuous; surge current 6 A; output power 32 W continuous; regulation 1% with variation in line or load; ripple less that 5 mV RMS at full output; circuit breaker short circuit protection; 3" H × 4½" W × 5¾" D $29.95

SRPS-3B Power Supply
Regulated power supply; input voltage 115-120-V a.c., 60 Hz; output voltage 13.8-V d.c.; output current 3 A; output power 40 W continuous; regulation 1%; ripple less than 25 mV RMS at full output; circuit breaker short circuit protection; 3" H × 4½" W × 5¾" D $24.95

SCBB CB Booster
Receiver preamplifier; provides up to 20 dB gain variable; automatically switches from receive to transmit; TX indicator; 12-V d.c. negative ground; 1" H × 2¼" W × 4⅛" D $22.95

Z Mate Antenna Matcher
Converts car radio antenna for CB use; 1.1:1 match attainable; SWR meter; automatic relay switching; TX indicator; supplied with all connectors, mounting bracket, and hardware; for AM operation only $26.95
Z Mate II. Same for SSB $26.95

SPRAGUE

QX1-6 Mobile Feed-Thru Filter
Can be used on any type of vehicle; suppresses RF noise; filters radio noise at power lines, ignition coils, voltage regulators, air conditioners, turn-signal flashers, and windshield wipers; 20 A max. current; 0.1 μF, 400 V d.c.; suppression 35 dB at 10-50 MHz; 11/16" dia. × 1 13/16" long . . $7.75

Mobile Alternator/Generator Feed-Thrus
Suppresses unwanted interference from alternators and generators; hermetically sealed in cylindrical metal cases.
QX1-18. 0.5 μF, 50 V d.c.; 40 A max.; 30 dB suppression at 4-30 MHz; 1" dia. × 1 13/16" long $10.10
QX1-100. Same, except 60 A max. current $14.65
QX1-500. 0.5 μF, 600 V d.c.; 100 A max., 30 dB at 4-30 MHz suppression; comes with 7-in accessory cable; 1 1/8" dia. × 3 1/8" long $19.95
QX1-600. Same, except 200 A max. current $19.95

STACO

CB Power Supplies
All models feature automatic dual overload & short-circuit protection; crowbar protection; solid-state circuitry; IC regulation controls; full 13.8-V d.c. output irrespective of load; come with power cord, switch, pilot light, operating instructions.
RPS-4. 120-V, 60-Hz input; 13.8-V d.c. output; 4.0 A continuous, 5.5 A surge; ripple 4 mV, load regulation 0.5%; 3 1/2" H × 5" W × 7 1/2" D $49.95
RPS-6. Same as RPS-4 except 6.0 A continuous, 7.5 A surge, 10 mV ripple; 3 1/2" H × 5" W × 8" D $39.95
PS-4. 4-A filtered output continuous, 5.5 A surge; 280 mV ripple (nom.); 10% load regulation; 3 1/2" H × 5" W × 7 1/2" D $23.95

SUPER SLIDE

Speaker/Mounts
Both models include company's "Super Slide"; black plastic construction; full coaxial antenna connectors; pin-and-socket connectors for power, ground, and extension speaker; contacts protected against damage, corrosion, short-circuiting; molded connector bodies to insure permanent alignment; phone plug to extension speaker jack; PL-259 connector to antenna input; power and ground connections at screw terminals; bevel slides.
"Ten Two." Matte finish housing; detachable mike mount inverts when unit is roof mounted; without antenna connector $24.95
"Ten Two." Same, except with antenna connector $29.95
"Good Buddy." Simulated wood-grain vinyl over 3/8" particle board; black cloth

speaker grille; provision for installing mike hanger on left side of speaker grille; 5¼" H × 7¾" W × 10" D; without antenna connector $24.95
"Good Buddy." Same, except with antenna connector $29.95

SYT

10-5 ATP Automatic Phone Patch
Designed for use with CB & ham radio systems; after land-line party is contacted through base station, operator pushes "Patch" button; unit automatically switches between phone & radio system; automatic audio compression; monitor speaker; manual override control; built-in voice coupler; comes with 6-ft cables for receive, transmit, keying, phone line, "hold" and a.c.; desert beige; 4¾" H × 8¾" W × 8¼" D $249.50

TEKNIK

Frequency Counters
Six-digit readout; frequency range 100 Hz-32 MHz; accuracy 0.001%; 2" H × 6" W × 4" D.
FC-106BB. Combination a.c./d.c. battery operated frequency counter with 12- or 24-hour digital clock; high/low sensitivity inputs for either proximity or in-line hookups; built-in battery charger/battery charge indicator light; uses eight 1.25 V "AA" NiCads $219.98
FC-106B. Portable unit with memory feature but without clock; otherwise same as FC-106BB $179.98
FC-106BA. Counter with 12- or 24-hour clock; 4- or 6-digit display; 110-V a.c., 12-V d.c. operation $189.98
FC-106C. Similar to FC-106B; 110 V a.c., 9-12 V d.c. $149.98

TELCO

CS-50 "Comm-Sol"
Communications console designed for CB'ers and hams; provides self-contained area; modular construction; easy to assemble without tools; front tilt panel slides down to conceal all equipment; pass-through holes for all cables; walnut veneer finished on sides, top, bottom sliding doors and tilt panel; 44" H × 45" W × 20" D $139.95

"Count-40" Frequency Counter
Seven-digit frequency counter; ½-in LED display with polarizing lens; 1 mV sensitivity; crystal controlled; for base or mobile use; 12-V d.c. or 117-V a.c. (117-V adapter included); 4½" H × 7½" W × 5" D $99.00

"Bench Volt" Series
Regulated power supplies; easy-to-read voltmeter; 5-way terminal posts; foldback circuits for protection from overloads and shorts; 7" H × 9" W × 10" D.
SRAP-15. Supplies 9-18 V d.c. at up to 15 A $89.00

tenna-loc

Anti-Theft CB Antenna Locks
The company offers four models to accommodate most mobile CB antennas. All feature notched, locking U-bolts; 5-tumbler, chrome-plated key locks; all metal components not of stainless-steel, chrome-plated to automotive specifications; fast installation.
Model H. For all Hustler or similar type base-loaded trunk-mount car antennas (large diameter base) $11.95
Model S. For all SignalKicker-type trunk-mount antennas; has lock-in stud; chrome-plated bracket with 1/way screws, protective nuts and washers $11.95
Model FX. For most fiberglass-type, hexagon barrel antennas; turn-proof locking plate $11.95
Model M. For most trunk-mount antennas; heavy-duty replacement mounting cup with no-mar rubber grommet; lock-in stud $11.95

THETA LABS

Car Burglar Alarm
Automatic electronic burglar alarm; no key, switches, or controls needed for normal operation; alarm sounds car's horn in series of short blasts; alarm module has several electronic timers which connect to car's horn, ignition switch, door light switch, power, and ground; radio guard to protect CB, tape deck, or ham radio; sensor wires connect to case of device to be protected.
BA-1A, BA-1AF (for late model Fords). $34.95

ULTRATEC

E70-037 SWR/FS Meter
Compact instrument for in-line SWR, antenna field-strength measurements; frequency range 3.5-150 MHz; field-strength antenna included $24.75

E70-038 Power/SWR/FS Meter
Measures both SWR and power output; supplied with charts for power measurements in all assigned ham and CB bands between 3.5-150 MHz; for continuous in-line use in base or mobile installations; 100 μA meter movement; connects with standard PL-259 coax plugs $41.10

E70-039 Power/SWR/FS Meter
Permits direct reading for checking antenna installation, field-strength, and modulation; 10 and 100 W scales .. $57.00

UTAC

Mobile Prevox
Voice-activated control and microphone preamp; VOX sensitivity 75 dB at 1 kHz; microphone preamp gain 15 dB; audio frequency response —6 dB at 50-15,000 Hz; relay contact response 250 ms at 75 dB; 0.5-1 second delay; electronic or relay switching; controls: preamp sensitivity, VOX anti-trip, VOX manual, AMP-off, CB-off; 11- to 16-V d.c. positive or negative ground, max. current drain 65 mA; 1½" H × 4¼" W × 5¼" D.
K-100. 4-wire operation $59.95
K-200. 6-wire operation $59.95

WAWASEE

1001-SFC/M Multipurpose Meter
Combines scope, counter, wattmeter and SWR bridge; oscilloscope displays modulation patterns and measures RF output to antenna; 6-digit LED 50-MHz counter; wattmeter displays power to 2 kW; and SWR bridge shows ratios of 1.5, 2 and 3 ..... $279.95

WILSON

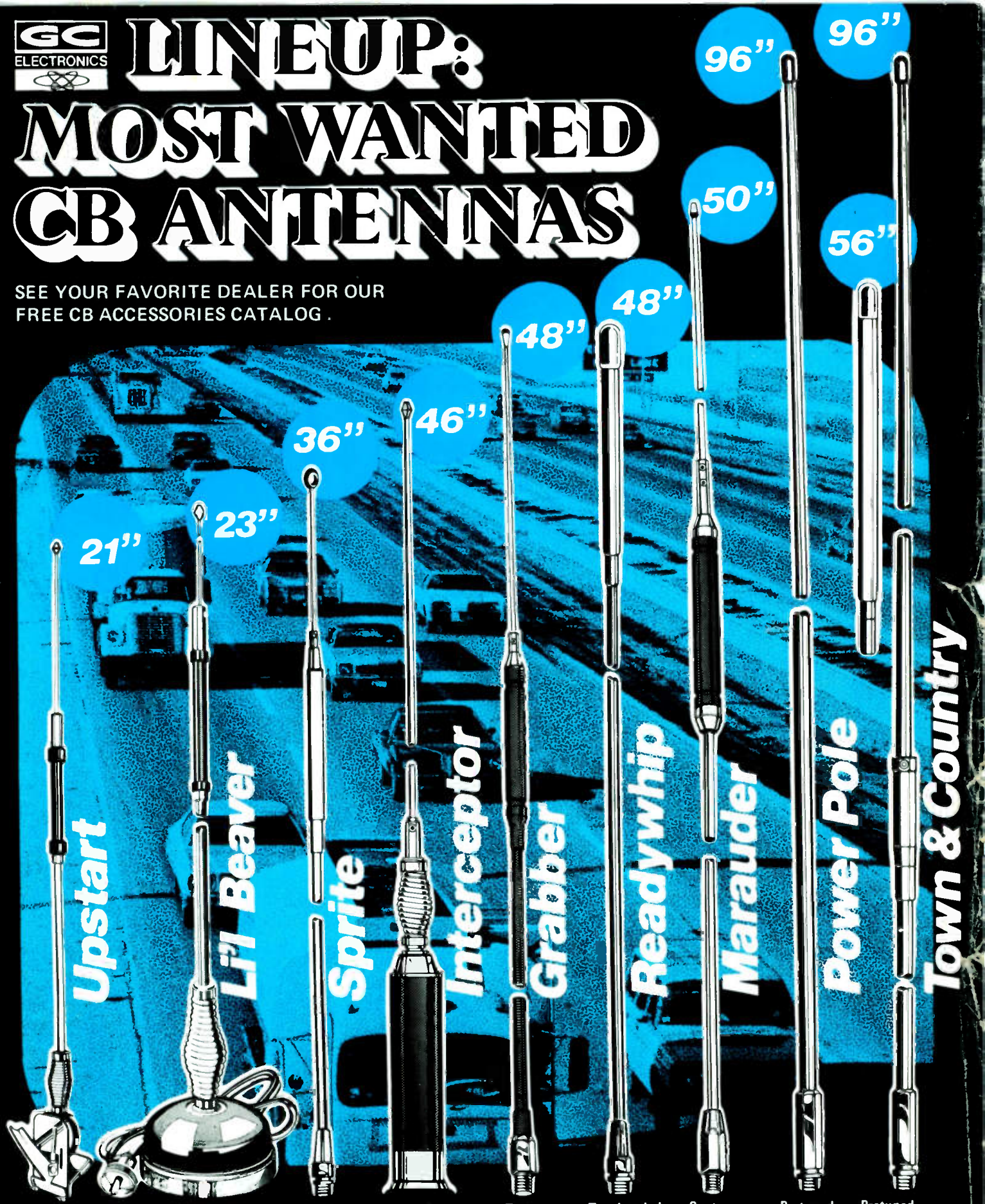
WR 1000 Rotor
Handles antenna arrays up to 25 sq ft; stainless-steel construction ring gear design, provides 4000 inch lbs of turning torque; solonized wedge-type braking system; weight 60 lbs $429.00

CITIZENS BAND HANDBOOK
1977
ADVERTISERS INDEX

GC ELECTRONICS

LINEUP: MOST WANTED CB ANTENNAS

SEE YOUR FAVORITE DEALER FOR OUR FREE CB ACCESSORIES CATALOG.

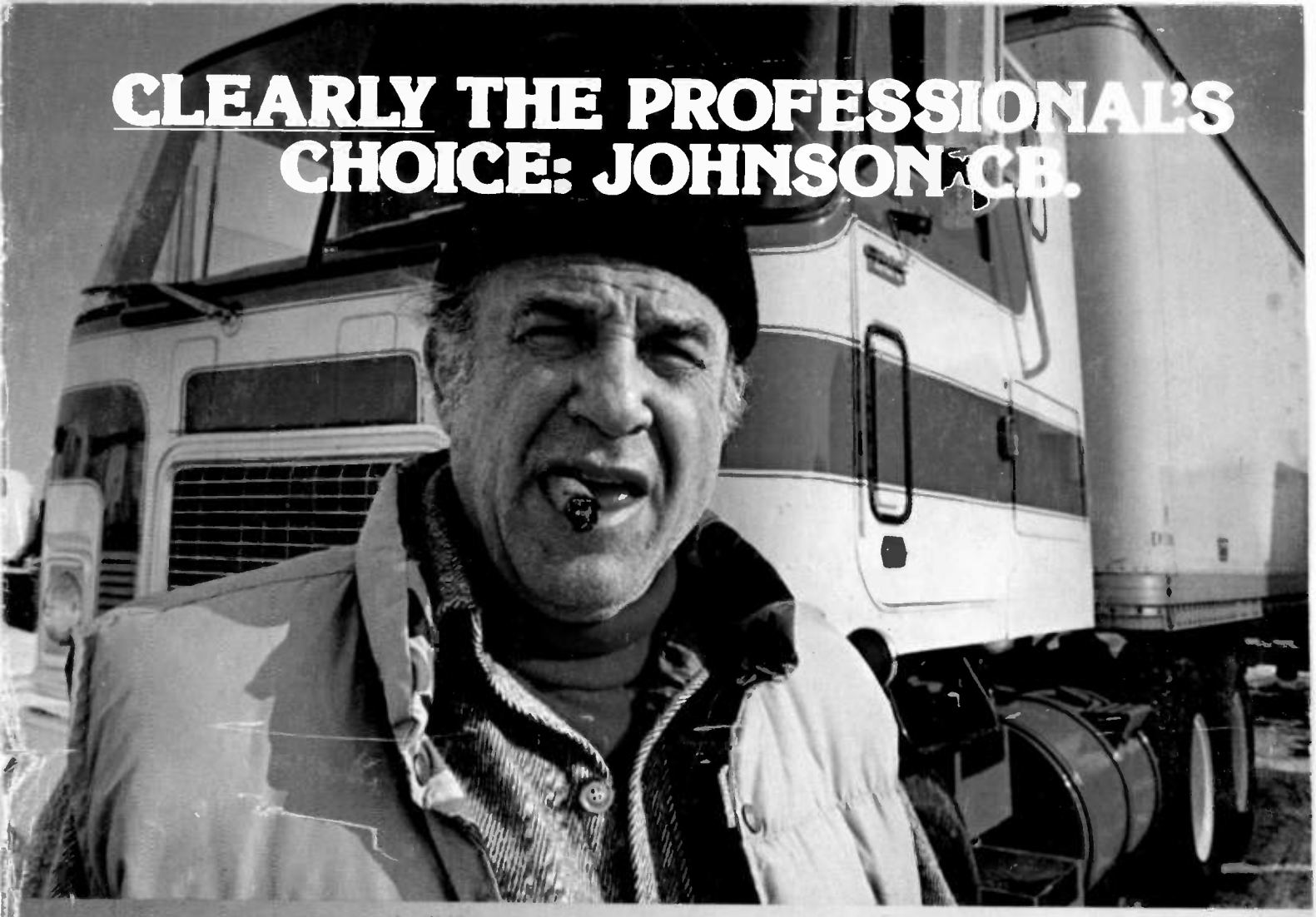


Center Loaded Tunable. CAT.NO. 18-2050	A Complete Magnetic Mount Antenna Kit With a High Q Center Loading Coil, Coax Cable. CAT.NO. 18-2077	Top Loaded Tunable White Fiberglass CAT.NO. 18-2066	Base Loaded Tunable Mach II CAT.NO. 18-2025 Mach I (Less Spring) CAT.NO. 18-2023	Top Loaded Tunable CAT.NO. 18-2000	Top Loaded Pretuned White Fiberglass CAT.NO. 18-2064	Center Loaded Tunable CAT.NO. 18-2040	Pretuned White Fiberglass CAT.NO. 18-2070	Pretuned Two Tips - Whip For Country, Power Stub For City - White CAT.NO. 18-2060

GC ELECTRONICS DIVISION OF HYDROMETALS, INC. ROCKFORD, ILLINOIS U.S.A. 61101

CIRCLE NO. 23 ON FREE INFORMATION CARD

CLEARLY THE PROFESSIONAL'S CHOICE: JOHNSON CB.



A 66% lead over the next brand. That's how independent truckers rate Johnson CB.

Independent truckers. The guys who own their own rigs and equip them the way they like because that's "home" as they roll more than 100,000 miles every year.

Performance and reliability mean a lot to these professionals.

What kind of CBs do they buy? Johnson . . 66% more of them ride with a Johnson CB than the next leading brand, according to a recent survey.*

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*Independent Trucker Survey results available upon request.

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