

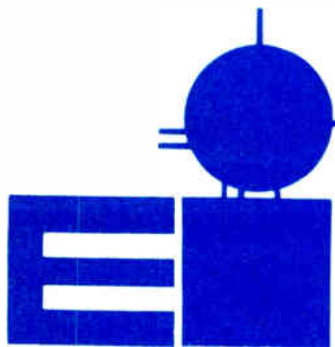
November 1981

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A MONTHLY NEWSLETTER FOR BROADCASTERS

Distributed by Electronic Industries, Inc., 19 E. Irving Ave., Oshkosh, WI. 54901

414-235-8930

COMMON POINT TELLING STORIES ACCORDING TO SBE PRESIDENT

In a letter to **Common Point**, Ron Arendall, president of the Society of Broadcast Engineers took exception to reports in **Common Point** critical to the SBE. Based on information from readers, **Common Point** had reported complaints of chapter meetings consistently television oriented to the exclusion of radio engineering members. Mr. Arendall, in his reply, stated, "We do take issue with your determination of factual as opposed to fictional information." To support his position, several monthly SBE logs were enclosed showing the majority of program subjects applicable to radio. He said, "It is simply a matter of the member who wishes more radio to become involved on a local level with the program planning committee of their chapter."



Ron Arendall

To answer criticism by engineers of having to travel too great a distance for meetings, Mr. Arendall pointed out it takes but three members and three meetings to start a new chapter, and then there is always the ham radio chapter of the air SBE network, originating from Durango, Colorado for those engineers in really hard to reach places.

In regards to certification, he said, "We do realize the potential embarrassment to those who do not pass an exam. Those names, however, are known by the certification committee members and are not revealed even to other board members."

In closing, Mr. Arendall stated there are usually answers to negative critics and better methods of resolving those issues than amplifying a distorted signal.

In closing his letter, he said **Common Point's** well intentioned promotion of the SBE has yet to prove of value . . . since it primarily deals with negatives rather than positives.

WOW . . . A Story of Radio

Nebraska! To some it means farming. To others . . . football . . . but to many, Nebraska means radio station WOW and the first major radio station west of the Mississippi.


The Woodman of the World Life Insurance Society, the original owners, built the station at a cost of

\$25,000 and first went on the air the evening of April 2, 1923. The original call letters were WOAW and their frequency 833.3 Khz with a power of 500 watts. The insurance company had requested the call letter of WOW (Woodman of the World) originally, however, at the time there was an old ship, the steamer Henry J. Bibble operating off the west coast with those call letters and they did not become available for almost another three years when the freighter was decommissioned.

(cont. on page 5)

COMMON POINT READINGS

- Page 1 - Arendall Answers Back
- WOW...A Story of Radio
- Page 2 - Editor's Notebook
- Page 3 - Orban Audio
- Page 6 - Letters to Editor
- Page 11 - Talkback
- Page 12 - Persons' Post Scripts



New Solid-State Tower Flashers Offer Economy and High Reliability

Since it was first introduced in the early 1970's the SSAC "B-KON-FLASH" has shown a steady increase in popularity with commercial broadcasters. More dependable than the old mechanical flashers which many times size up when the temperature falls during the winter months, the SSAC "B-KON-FLASH" has been a proven performer, operating without problems at temperatures from -40 degrees to +150 degrees.

Not only is the price of the "B-KON-FLASH" much less than the old mechanical flashers, it is very popular because it increases lamp life by up to 10 times, because of the units zero switching voltage. The highest inrush current occurs at the peak of the voltage sine wave in a lamp load circuit. If switching occurs at any other phase of the voltage sine wave, the peak current through the bulb is less than the worst case.

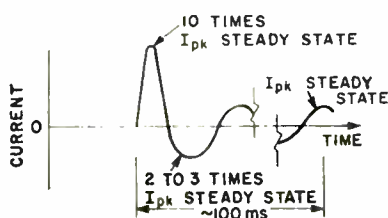


Figure 1. Inrush current at peak voltage point.

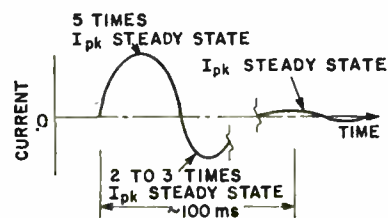
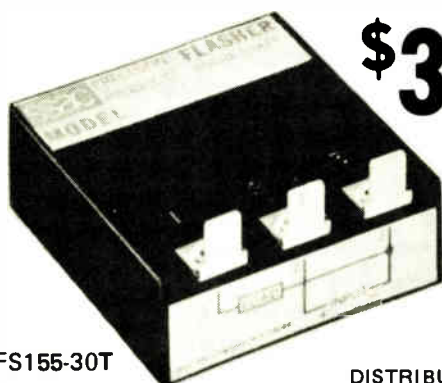


Figure 2. Inrush current at zero-voltage point.

Quoting from an article that first appeared in the June 1975 issue of "Antennas and Towers" . . . "typically, the maximum inrush current can be ten times as great as the steady-state peak current while the peak inrush current with zero voltage switching can be approximately five times as great as the steady state peak current as shown in Fig. 1 & 2. Zero voltage switching of a lamp allows for a soft "turn on" that reduces the initial peak of inrush current by half, and greatly increases lamp life."



FS155-30T

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Editor's Notebook

NOVEMBER. The weather's colder but the discussion between engineers and the SBE continues as warm as ever. Mr. Arendall, in our lead article this month, we think, made some good points but is still coming across as critical of **Common Point** for complaints or differences of opinion by "Reader-Engineers".

October was busy . . . with the Broadcasters Clinic sponsored by the University of Wisconsin in Madison still growing and more popular than ever . . . and the new Tri-State SBE meeting in Indianapolis reported to be an unqualified success.

Common Point Winner . . . for the month of November is Radio Station WNHV located in White River Junction, Vermont. Each month our winner is given \$100 credit to use as they see fit. Be sure to return your acknowledgement card. That's your only requirement.

It's Great To Be A Subscriber . . . to **Common Point** even though it can, and possibly does come to you absolutely free. The 2% discount available as a subscriber saved one station \$40.00 on their new production room. Not a bad return on a \$6.00 subscription.

Used Equipment . . . used equipment inquiries are increasing every day, and hopefully by January a simple call to an 800 number will give you the info you need. (A) Want to buy? You get current prices and availability. (B) Want to sell? We keep a list of inquiries . . . help you find the right buyer . . . and at the right price. We hope to make it work not unlike the "used car blue book" that every car dealer and banker works from.

Money Crunch . . . is really showing its ugly head and making itself felt these past few months. Companies that have been known for fast service have in some cases had to cut those big inventories slowing deliveries from days to weeks . . . sometimes many weeks. Another problem we have been told is the difficulty in getting the best help. In the past year, three transmitter manufacturers have been sold . . . one long established cart machine manufacturer has bowed out completely, a second is looking for a way out, and another was reported sold to a Japanese firm on two occasions but for some reason the deal fell through. What's happening?? You tell me. Use your "Talkback" or drop us a line. Let's get a consensus of opinions.

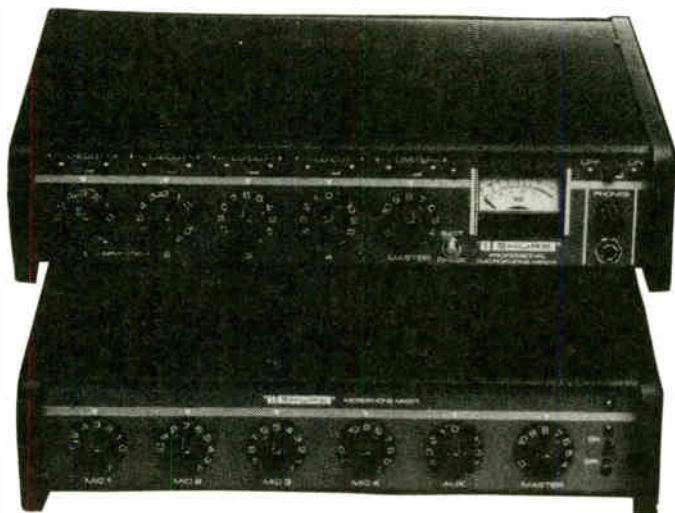
Finally . . . for this month . . . as far as our readers are concerned, the FCC is still in trouble. The vote of confidence check mark on your acknowledgement card is still running about 60/40 against our great leaders.



YE OLDE EDITOR

FOR FAST SERVICE, CALL ELECTRONIC INDUSTRIES ORDER/INFO LINE . . . 1-800-558-0222

Twice again: Shure sets the standard for the industry!



Introducing two new microphone mixers

Ten years ago—with the introduction of the M67 and M68—Shure set the standards of the industry for compact, portable micro-

phone mixers. Shure is now introducing two new mixers with features and improvements that will make them the *new* industry standards.

NEW M267

For Professional Broadcasting
Both TV and Radio—in the studio and for remote broadcast applications.

For Professional Recording

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With all these new features:

- Switchable, fast-attack limiter
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- Built-in battery supply
- Lower noise
- Reduced distortion

and all of the famous M67 original features

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For Public Address and Paging
In hotels, schools, churches, community centers, hospitals, etc.

For the Serious Tape Recording Enthusiast

As an Add-On Mixer for Expanding Current Equipment

With all these new features:

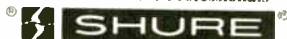
- Lower noise
 - Dramatic reduction in distortion
 - Mix bus
 - Automatic muting circuit
 - Simplex power
- and all of the famous M68 original features

Both new models include the same ruggedness and reliability that have made the M67 and M68 the top-selling mixers in the industry

\$195.00

For complete information on the M267 and M268 send in for a detailed product brochure (ask for AL669)

The Sound of the Professionals™



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Orban

provides the extra edge!



by
Sid Goldstein,
Marketing Manager
Orban Professional
Audio Products

The past few years have seen a rapid increase in the interest in audio processing tools for the radio production room. This is due to a number of factors. The broadcaster, in order to remain competitive in the marketplace, has been challenged to come up with more innovative, attention-getting commercials and station promos. This has been perpetuated by the fact that the listener is now used to high-quality production work and has come to expect, or perhaps more accurately, demand it in order to be motivated.



111B Reverberation

Years ago, the most extensive processing equipment which existed in many stations was a graphic equalizer. Now, due to the plethora of new techniques which have been derived from the recording industry, many top stations are using a vast array of parametric equalizers, analog and digital delay lines, pitch changing devices, limiter/compressors, aural exciters, de-essers, stereo synthesizers, and, of course, reverberation. It is finally possible to assemble a processing system for a production room which will not only allow for creative production but will also solve a wide variety of basic audio problems like noise, dynamic range control, sibilance, loudness enhancement, and special effects.

And the listener, who has cut his teeth on high-quality record production is now listening to radio production with open ears. Many stations, of course, have already made substantial investments in top-quality gear. However, not all stations can afford a big budget purchase, and therefore have to look closely at price/performance values in order to sensibly acquire the basic tools they need.

At Orban, we've focused our efforts for a number of years on development of many of these techniques. Our Model 111B Dual Spring Reverb is used to create special effects in the production of commercials and promos and over the air. Reverb does not always have to be noticed to be appreciated however. Many stations add just a hint of reverb to make straight voice program sound more realistic.

(cont. on page 11)

IT COSTS MORE -- BUT IT HAS MORE -- IT'S THE SONY TCM-5000

THE PORTABLE CASSETTE-CORDER WITH PROFESSIONAL FEATURES,
UNSURPASSED PERFORMANCE

TCM-5000

The professional quality, dependable TCM-5000 is one of the most exceptional cassette-corders available today. Compact and convenient to operate, this unique unit has a three-head recording/monitor system for high quality recordings. And with the combination headset/microphone unit, you can listen and record at the same time and get professional mic-mixing results. Sony's counter-inertial flywheel system minimizes "wow" and "flutter" when you're in motion—so you can conduct your interviews on the move. And if it takes all night, you're assured of 20 hours of recording time (with alkaline batteries). Plus, it has a four-way power supply capability, continuous tone control and locking pause control system. The portable, professional cassette-corder with unsurpassed performance. The TCM-5000.

\$449⁹⁵



Features

- Three-head recording/monitor system, for professional-quality recordings
- Counter-inertial flywheel system for tape transport stability when unit is in motion
- Automatic or manual recording adjustment, for optimum recording levels
- Fully automatic shut-off to protect cassette and minimize wear
- Pre-end alarm LED and audible signal through earphone
- Variable playback speed control (+40%, -20%)
- Microphone/headset for special mic-mixing included
- Three-digit tape counter
- Locking pause control
- Four-way power supply capability
- Continuous tone control
- Record level/battery meter with battery check
- Compact size for portable convenience
- Source/tape monitoring selector



A.

- A. Front panel showing speed control and source/tape selector
B. Manual recording level controls and level/battery meter



B.

Specifications

System: 2 track 1 channel monaural

Frequency response: 90-9,000 Hz

Inputs: External microphone, mixing microphone, line, external DC input, remote

Output: Earphone

Power output: 700 mW (max.)

Speaker: 3½" dynamic

Battery life: Approx. 20 hours recording time with "C" × 4 alkaline batteries

Power requirements: Battery "C" × 4 (6V) (batteries included) • AC 120V 60 Hz with AC power adaptor AC-61 (optional) • Rechargeable Battery Pack BP-16H (optional) • DC 12V with Car Battery Cord DCC-127A (optional)

Dimensions: 2¼" H × 10½" W × 5¾" D

Weight: 3 lbs. 3 oz. (with batteries inserted)

Supplied accessories: Batteries ("C" × 4), Microphone/headset (CBH-2), connecting cord (RK-69A), shoulder belt, carrying case, blank tape

All specifications are subject to change without notice.

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ELECTRONIC INDUSTRIES INCORPORATED

Common Point/Nov. 1981
Page 4

19 E. IRVING - OSHKOSH, WI 54901

WOW . . .
(cont. from page 1)

WOW is owned and operated by the Meredith Publishing Company which it acquired in 1961. There have been many interesting changes in its 58 year history. Broadcasts originated initially from the WOA-W Crystal Studios, a show place and tourist attraction in Omaha. The studios were later moved to another location in 1935, again in 1960, and finally to the present location in 1976.

Power wise, the station started out at 500 watts, increasing to 1000 watts in January 1925. The next change came in Dec. 1935 when power went to 5000 watts days, 1000 watts nights. The next change came in November 1939 when the FCC granted permission to use full time power of 5000 watts.



Master Control Room

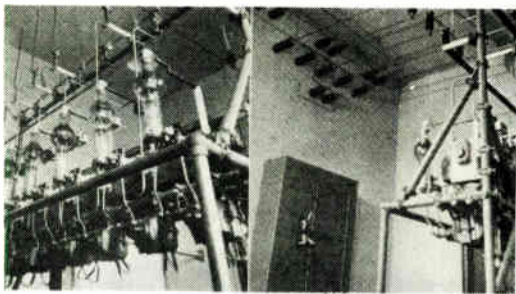
**Transmitter Building
& Tower**



The station has operated on four different frequencies . . . starting out in April 1923 on 833.3 KHz . . . then to 750 KHz in June, and still further down to 570 KHz in August, all in the first year. WOW made their final move to their present frequency of 590 KHz in June of 1926 . . . a frequency considered one of the most valuable in the AM band enabling them to reach out to a 200 mile radius, the largest service coverage area reported in the whole state of Nebraska.



Westinghouse Transmitter



High Voltage Rectifiers

Back in the days when all programming was "live" . . . WOW joined the NBC network in the fall of 1927 . . . carrying programs from both the "red" and the "blue" network. In 1945 when the Federal Government forced NBC to dispose of one network in an anti-monopoly action, and the "blue" network became the ABC network. WOW stayed with NBC until the early 1950's when it switched to CBS. WOW became affiliated with the ABC Information Network in July 1970, and finally to the ABC Contemporary Net in March 1974.

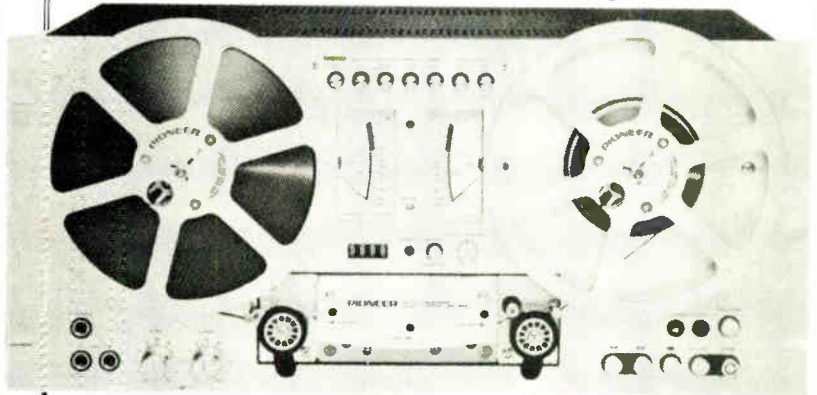
WOW - - just one more chapter in the proud history of radio.

Pictures published by permission of Meredith Corp. with our added thanks to Jim Eddens, G.M., and especially to Harry Stutzman, Chief Engineer.

YOU CAN SPEND MORE, BUT SHOULD YOU?

Join the many stations who have turned to Pioneer for a good job . . . at a fair price.

Pioneer RT 707



PRICED AT — JUST \$625.00

CONVERTED TO 1/2 TRACK SINGLE DIRECTION
RECORD/PLAYBACK WITH NORTRONIC HEADS
AND FULLY WARRANTED — JUST \$1195.50

Pioneer RT 909



PRICED AT — JUST \$725.00

CONVERTED TO 1/2 TRACK RECORD/PLAYBACK
SINGLE DIRECTION FOR PRODUCTION ROOM
— JUST \$1295.50

Sold & Serviced by

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Letters to the Editor



Disgruntled? You Bet'cha!

I must be the "one disgruntled member out of 4,000" that Ron Arendall alludes to in his letter in your September '81 edition.

I joined SBE, in September, 1980. Along about early '81, I received a note from Pat Satter, SBE secretary, to the effect that my dues would come due, in April. "Impossible," cries I. "Why, I just joined . . . my dues shouldn't be due until September!" "No," says Pat. SBE membership is based on a fiscal year, from April to March. "Your dues are due the following April, even though you paid for a year, and didn't get a year's membership out of your money."

Nowhere, Bud, is this fact mentioned in SBE's promotional literature. Nor do they mention it in the packet you receive when you join. The member is not made aware of this little item until April, next following his joining the organization. Even then, if the member isn't on top of things and doesn't realize that a year hasn't gone by since he joined, he isn't told about the fiscal year membership. I think, if someone got up on his hind legs and took this thing to court, SBE could be had for fraud. It certainly lines someone's pockets!

When I complained, Satter sent me a copy of a letter that Arendall had written to another "disgruntled" member with the same complaint. It seems the reason SBE does things this way is that it costs too much money to process applications over a year's period; it's cheaper to do them all at once, and, besides, a lot of other professional organizations do things that way, why not SBE? (It seems to me it would cost the same to process X amount of paper work, whether it be done over a period of time, and, if all IEEE members jumped over a cliff, I suppose Arendall would want all SBE members to do likewise).

For the six and a half months my year's dues got me, I received three issues of a news-letter (your's, though not as glossy, is better, and I get it, free), and the opportunity to attend one meeting, in Cincinnati (work kept me from making it).

As far as certification is concerned, come on, fellas, admit it . . . you're running scared! We don't need a slip of paper to say we can work on electronic goodies. Look at Canada . . . they don't have operator licenses, and in many respects, they do better than we do! If you think straight, I think you'll see the elimination of a license as a Godsend. You no longer need require a First on the part of your assistant, and your employer need no longer require one of you. It was just given lip service, anyway. How many "Podunk Hollow" radio stations do we know of, that had the friendly local ham radio operator make repairs, and have the

station's "quickie-school" First sign off the maintenance log? Now, you can hire someone who is really qualified for the job. I recently had an opening for an assistant. Most of the applicants had seconds, some were not licensed at all. Most were qualified, but I wouldn't even talk to them, because they didn't have a First. The day after I hired someone, FC dropped its bomb shell. I got a good man, but maybe I could have done better . . . if he didn't have to have a First.

"But the management of W-cheap is going to hire the local CB operator to fix the goodies, now . . ." So, what? If you were any good before the elimination, you're still as good . . . go in and fix the stuff at W-cheap when the CB operator gets through fixing it, and charge through the nose! Handled right, the FCC's elimination of the First can be a gold mine. It won't be, if everyone gets the idea that you need a SBE "first!"

Stations which hire engineers because they are really needed, not because they are a bureaucratic requirement, will continue to do so. Possession of a First is just one requirement that won't be in the picture, anymore. Such stations will still hire engineers capable of the job . . . and pay them.

Disgruntled? You bet'cha!

And why everyone seems to think your idea of a "hot line" should be administered by SBE, I'll never know. Probably another manifestation of the old "The Sky Is Falling" syndrome, created by FCC's elimination of the First. Why can't Electronic Industries administer it?

Anyway, as to the employment situation: If I have an opening, SBE certification will NOT be a requirement. If a person has a track record, I will talk to his previous employers. If he doesn't, I will look at his education. Folks, I think that if an applicant has a degree (even an associates) in electronics, or a diploma from a reputable vocational or correspondence school (why do I think CIE?), in electronics, he is better qualified for a job than if he had a First or ANYBODY's certification!

Patrick J. Shirley
Centerville, Ohio

QUOTABLE QUOTES . . .

. . . what SBE re-Certification should mean is that you, as an Engineer, know what you're doing. Period. SBE's insistence on certain criteria which do not address themselves to an Engineer's competency to do his job cannot and will not contribute to the respect that Broadcasting needs and wants to have for the SBE Certification program.

A. B. Reis, Chief Engineer
WIVS/WXRD
Crystal Lake/Woodstock, IL.

FOR FAST SERVICE, CALL ELECTRONIC INDUSTRIES ORDER/INFO LINE . . . 1-800-558-0222

THE BROADCAST INDUSTRIES' ONLY LIMITED 3 YEAR WARRANTY CART MACHINE



- Simultaneous record and playback
- Deck assemblies interchangeable between DB-1000, DB-2000 and DB-3000 Series machines
- Individual electronics for each deck (interchangeable)
- Manual fast forward, standard.
- Plug-in board provides for field installation of Cue I, Cue II option
- Plug-in modules for field conversion from playback to record configuration
- Indirect drive DC servo Hall effect motor not affected by line-frequency variations
- Low voltage air damped solenoid
- Internal adjustable speed control
- Front panel pressure roller azimuth adjustment
- Factory wired for easy conversion to stereo
- Accepts NAB A & B size cartridges
- Provision for external cue audio input for text logging
- Meets or exceeds NAB specifications
- Jumper conversion to 220 V 50/60 Hz.

- The cart machine series designed by experienced professionals to allow for possible changing station/market needs
- Being wired for stereo - you can start mono and field convert to stereo
- Speed control and pressure roller azimuth adjustments for that "just right" sound
- DB-1000 single deck and DB-3000 triple deck models also available

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*prices shown are tentative



**THE MOST VERSATILE BROAD
— LIMITED 3 YEAR**

- ALL DB-1000, DB-2000 and DB-3000 mono playback units are pre-wired for stereo and to accept Recorder Modules
 - ALL DB-2000 and DB-3000 Record/Playback units can simultaneously record and playback
 - ALL DB-2000 and DB-3000 Record/Playback units dub deck to deck
 - ALL decks are 100% removable and interchangeable
 - ALL decks have individual electronics
 - ALL decks have front pressure roller azimuth adjustment
 - ALL decks use individual low voltage solenoid
 - ALL IC's and transistors are common types easily procured at local electronic suppliers
 - ALL models use the same DC servo Hall effect motors that are not affected by line frequency variations
 - ALL options are easily installed in the field after leaving the factory
 - ALL machines equipped with cue lights for visual cue monitoring for each deck while in playback mode
- STANDARD: Recorder Modules wired for plug-in Q1 and Q11 Tone Generator PC board
- STANDARD: Cue tones can be applied while recording or during playback -- also simultaneously Q1 and Q11 operation
- STANDARD: Cue tone and Bias check -- metering on front panel
- STANDARD: Provision for external cue audio input and output for text logging
- STANDARD: Reorder Modules have 1KHz disable jumper plug
- STANDARD: Line voltage change internal w/jumper -- 120/240V
- STANDARD: 7 1/2 ips to 3-3/4 ips switchable on power supply PC board with potentiometer to adjust individual speed
- STANDARD: Manual Fast Forward on front panel
- STANDARD: Headphone monitor output on Recorder Module front panel
- STANDARD: Microphone input on mono Record models, front panel

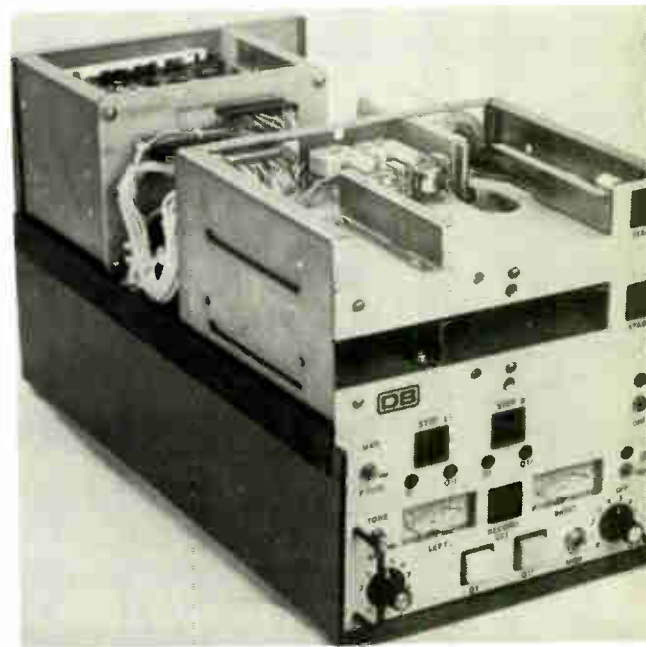
The modules, PC boards and deck pictured at right, will mate with any of our three basic chassis to obtain 8 different configuration of each one, two, or three deck DB cart machine.



Example: Buy a basic mono playback only machine and later if your needs change, that same machine can be field upgraded to stereo record/playback with all three tones!

SPLIT CASE

All new DB one, two and three deck cart machines come with split cases for easy access, top or bottom, for inspection and routine maintenance.



SOLD AND SERV

ELECTRONIC INDUSTRIES

DB-TEL TELEPHONE ANSWERING INTERFACE

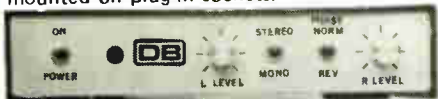
Automatic telephone answering for DB one, two, and three deck cart machines with a built-in call counter.



\$245.00

DB-10 MONO/STEREO TURNTABLE PREAMP

High quality turntable preamplifier featuring up to date integrated circuitry, with conservative design and employing readily available IC's mounted on plug-in sockets.



\$265.00

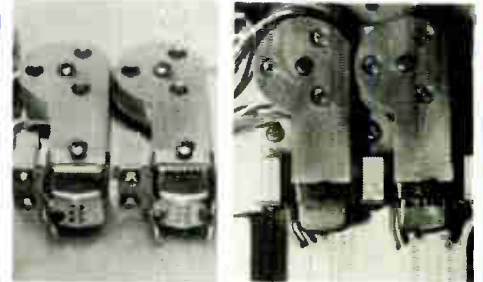
CAST CARTRIDGE MACHINE WARRANTY —



DAVE DURST, President



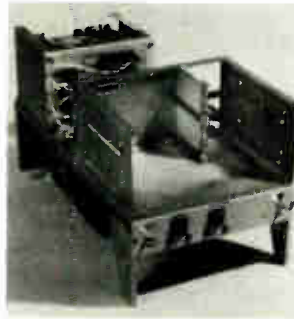
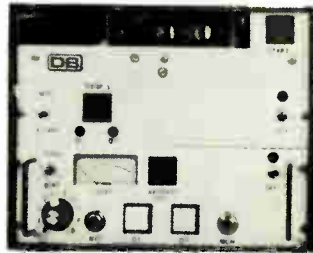
ACCU- PHASE



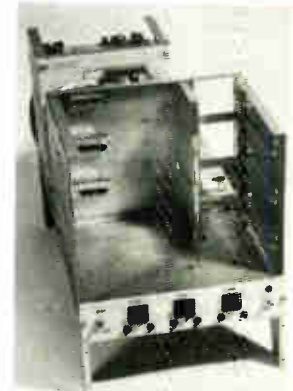
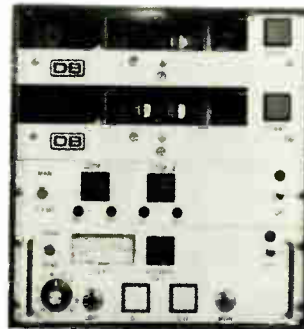
The Accu/Phase head bracket is ruggedly constructed of heavy, nonmagnetic components and will maintain adjustment during extremely heavy use. Adjustments are simple and easy with only one locking screw required to hold setting precisely. The head bracket assembly can be prealigned, removed for backup replacement, and reinstalled without readjustment.



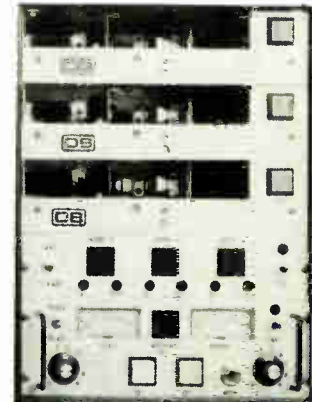
DB-1000



DB-2000



DB-3000



DESIGNED BY
COMMON POINT INCORPORATED

COMMON POINT CATALOG

AUDIO TAPE CARTRIDGE MACHINES

SINGLE DECK MONOPHONIC

(for A & B Size Cartridges)

Part Number	Model	Description	Domestic Price *
900-1000	DB-1000	Reproducer, 1Q	\$ 990
900-1030	DB-1030	Reproducer, 3Q	1080
900-1001	DB-1001	Recorder/Reproducer, 1Q	1690
900-1031	DB-1031	Recorder/Reproducer, 3Q	1855

SINGLE DECK STEREOGRAPHIC

(for A & B Size Cartridges)

900-1100	DB-1100	Reproducer, 1Q	\$1110
900-1130	DB-1130	Reproducer, 3Q	1200
900-1101	DB-1101	Recorder/Reproducer, 1Q	2010
900-1131	DB-1131	Recorder/Reproducer, 3Q	2175

TWO DECK MONOPHONIC

(for A & B size Cartridges)

900-2000	DB-2000	Reproducer, 1Q	\$1850
900-2030	DB-2030	Reproducer, 3Q	1950
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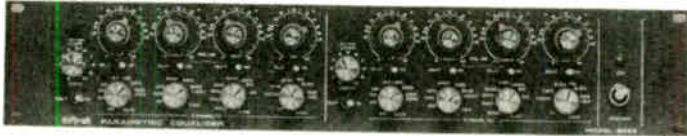
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622B Parametric Equalizer

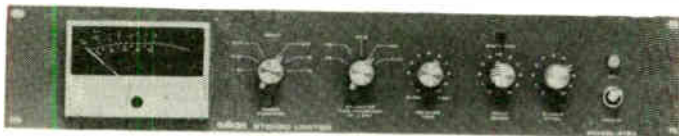


672A Equalizer

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245E Stereo Synthesizer



418A Stereo Compressor/Limiter

Our 245E Stereo Synthesizer can be used on mono cart machines to create a full stereo format, or it can pre-process mono material, like spots, into pseudo-stereo before getting on to a stereo cart. It can also "Stereo-ize" old mono records and the DJ microphone.

Lastly, our Model 418A Stereo Compressor/Limiter, a derivative of the famous "Optimod" circuitry, is conceived as a production studio processor to control dynamic range and high-frequency distortion when transferring mixed stereo material from one format to another.

All of these devices, along with others on the market, can provide the extra edge that many stations look for when trying to compete in the 1980's marketplace. As improved audio processing takes place in the transmission process, through devices like our "Optimod", it only makes sense that the broadcast production room must evolve as well in order to get closer to the high-quality audio demands of the listener and provide a continuity of sound from one to the other.

TALKBACK

North Dakota . . . First Ticket should have been written and apprenticeship. RTO has to be written only . . . am SBE member but having reservations.

Washington . . . Bud, go a little easy on the SBE. They may not be perfect but a damn site better than AES or NAB and NRBA combined . . . WHA item was great . . . NRBA Convention was disappointment . . . Hi to Mims.

Ohio . . . assuming you have not taken SBE statement out of context . . . agree with you about censorship. Keep up comments about loss of the "First".

New York . . . with demise of "First" and "Second" . . . area broadcast engineer & "Hotline" more important . . . but as Mr. Persons so aptly noted . . . there's no sub for a full time QUALIFIED engineer.

Missouri . . . for the FCC: Next question: "Who is the Chief Operator??"

Iowa . . . FCC needs panel of "broadcast engineers" to set up exams . . . learned more working under direction of C.E. than any book. Good idea for RTO along with exam.

Texas . . . Sept. editor reply was great . . . none has right to censorship.

Ohio . . . does SBE want censorship? . . . bad enough the FCC fouls things up . . . now SBE wants part of action.

Arkansas . . . new RTO exam should be given by C.B.'ers . . . they know more than the FCC . . . 10-4 Good Buddy.

Indiana . . . owners have cut off nose by support of change in 1st Ticket . . . engineers will abandon radio.

Oregon . . . RTO maybe . . . apprenticeship good idea . . . I've preached it for years. Maybe SBE should investigate offering the "grandfather option" again . . . wasn't much use to us out in the boonies before.

Virgin Islands . . . when you get cold enough . . . come on down . . . our all time low was 64 degrees . . . it was a freezing nite.

Ohio . . . starting to get difficult to find articles amidst the commercials.

Oregon . . . liked Persons' console article but how could someone with radio knowledge buy or use B.E. board??

Missouri . . . re Sept. letter to editor . . . certain freedoms mean so much to us in radio and TV industry and then there is the SBE president requesting a private mag to clear itself with him before press . . . we don't need that.

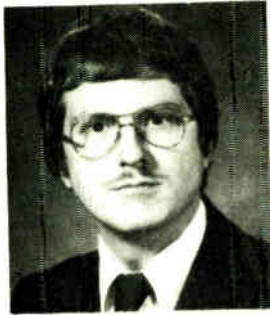
Kansas . . . have met many DJ's with First Ticket who didn't know anything about engineering . . . also met good technicians who didn't have "First". It's not a good indicator of ability . . .

Idaho . . . my First Phone is now defunct . . . doesn't bother me at all . . . I'm self taught . . . exam was no problem . . . I know what I can do . . . don't need fancy card.

Mississippi . . . "First" situation is debacle . . . SBE no help for me . . . need some realistic dialog with commission . . . stop appointing lawyers and include a few people with technical expertise.

Texas . . . FCC did it this time with new RTO . . . think SBE should design new test . . . including written AND apprenticeship.

Wisconsin . . . Sept. Editor's Notebook . . . excellent objective comments . . . 100% RTO . . . SBE trying to be another FCC.



PERSONS' POST SCRIPTS

by Mark Persons

Response to the July edition of this column was tremendous. As you'll recall, I gave "Hints and Kinks" on transmitter problems. A number of readers wrote to tell of their experiences.

Jim Alexander of KARV Radio in Russellville, Arkansas had these suggestions for Gates/Harris BC1T/G transmitter owners:

The screen resistors on the audio drivers tend to overheat and shift in value requiring frequent replacement. This problem seems to be aggravated when hitting the audio hard. The following is a permanent cure.

1. Replace the R16/24 and R15/25 combinations, feeding from B+ to the screens of the audio drivers with three 220K., 2 watt resistors in parallel. This gives 73.3K., 6 watts from the combination instead of the original 75K., 4 watts.

2. Replace R13 and R14, feeding from the screens of the audio drivers to ground, with two 91K., 2 watt resistors in parallel. This gives 45.5K., 4 watts instead of the original 47K., 2 watts.

Place a small piece of cardboard on top of the R.F. driver variable tank capacitor. This precludes flies being attracted by the filament glow of the 833A finals and then falling between the capacitor plates. This results in an arc over resulting in a trip to the transmitter site.

The 807 R.F. drivers of the stock BC1T are virtually always starved for grid drive, commonly less than 1 MA. I used to swap the two 2 watt resistors on J1 of the oscillator deck for a cure. However, Harris has come up with a better fix on the BC1G which should be incorporated in all BC1T's.

Remove the following components from J1 of the M-5422 oscillator deck:

1. R13, 47K., 2 watt from pins 6 and 7.
2. R12, 1K., 2 watt from pins 5 and 6.

Then install a 39PF., 500 v. silver mica from pin 5 to 6 of J1 in place of R12 just removed.

This increased drive to the R.F. drivers to the area of 4-5 MA, resulting in longer life for the tubes and usually more drive to the finals.

Engineering consultant Doug McDonnell said to replace 6BG6 tubes with 807's. Make sure the modulator overload is set at less than one ampere. Failure of a 47 ohm resistor in the audio driver will burn a hole in the plate of an 833A modulator if the overload is

set too high. Check the porcelain feedthru in the top of the transmitter for signs of dirt that might arc over causing a momentary overload.

Dan Kelly of KVSF Radio in Sante Fe, New Mexico gave the following story:

KVSF uses a Harris MW-5A 5kw AM. Recently, in the middle of our broadcast day it shut down with a DC overload fault indication. After putting our standby kilowatt on the air, I followed the recommended troubleshooting procedure in the manual with no luck. Called in our local transmitter expert (al la ABES?) who spent the next six hours going through the transmitter. The problem was finally located! There are three UFS10 rectifiers, 1CR15, 16 and 17 in the cubical assembly that can go bad after a while. (We've only had our transmitter for 14 months!) Our theory was that one, perhaps two of these rectifiers have been bad for a long time and finally the third one went. (At least it waited until 2 in the afternoon . . . just after I arrived at work!) Harris, during a late-night phone call, informed us that we could operate without them, as their primary purpose is the help negative overshoot. Apparently some early MW-5/5A models do not have these rectifiers and some only have two, while three are used in the current production models. I believe it may be a good idea for stations using this transmitter to check these rectifiers individually with an ohm meter and replace if shorted to prevent future problems. Thought I'd pass it along.

By the way . . . my MW-5A has a small audio problem which I understand is not corrected with the introduction of the Harris MW-5B. And that is a phase shift at the lower frequencies which boosts the low end and makes it all muddy. Didn't notice problem til I bought Orban AM-Optimod. Before that I didn't have a low end with the AGC/Limiter used and hence, no problem. You or any readers experience this? Any solution?

Many thanks to these people for sharing their experience.

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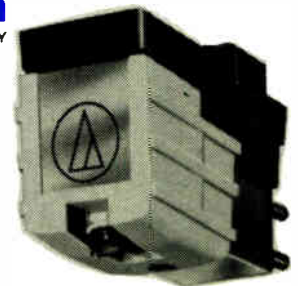
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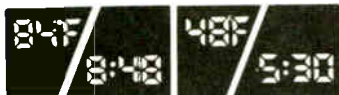
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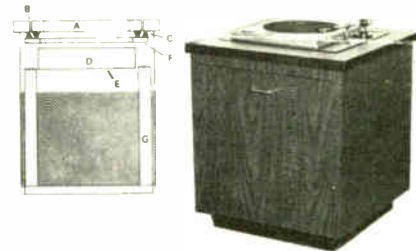
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