

LOUD SPEAKING

LOUD SPEAKING TELEPHONES

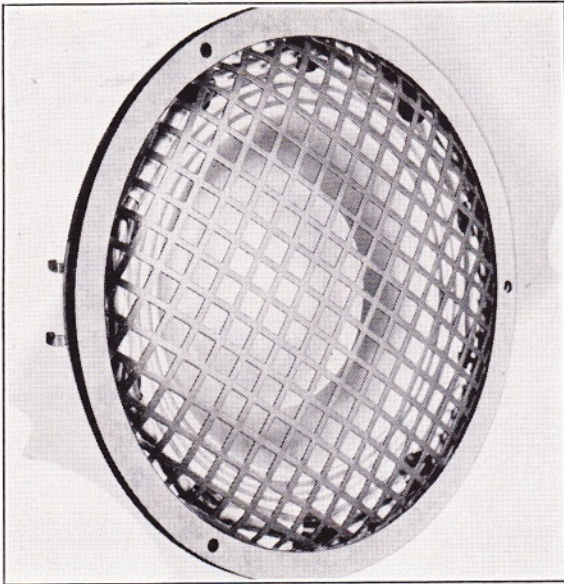
750A - 751B

Western Electric

TELEPHONES

for

SOUND SYSTEMS



750A Loud Speaking Telephone

THE WESTERN ELECTRIC

750A and 751B Loud Speaking Telephones are intended for use in public address and music reproduction systems, and for radio monitoring of speech or music over limited areas where high quality reproduction and low cost are essentials. They introduce a single direct radiator type of loud speaker with moderate power handling capacity, capable of covering a frequency range that heretofore required a multiple device.

The 751B consists of a 750A permanent magnet Loud Speaking Telephone mounted in a specially constructed box.

PERFORMANCE

Frequency Range

The 751B has a frequency range of 60 to 10,000 cycles. The 750A has the same range when mounted in a box such as that described below.

Impedance—8 ohms

Efficiency

With the full speech power of a 20-watt amplifier, it will produce an intensity level of 88 db above 10^{-16} watt per square centimeter at a distance of 10 feet on the axis.

Coverage Angle

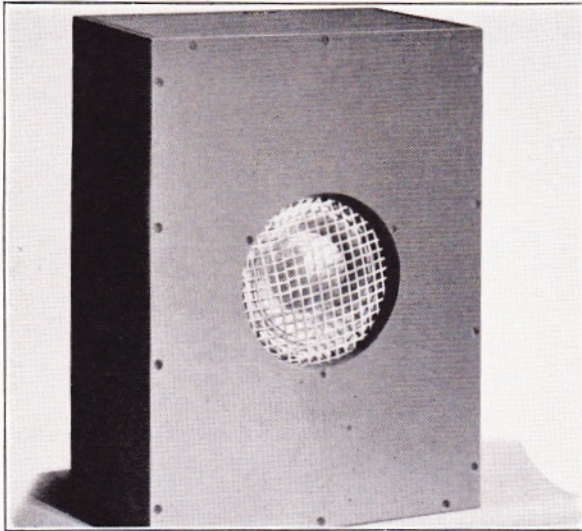
30° for highest quality.
45° for good quality.

Power Capacity

The 751B will safely handle speech or music with a maximum peak power of 20 watts.

Western Electric

PHYSICAL CHARACTERISTICS AND SUGGESTED METHODS FOR MOUNTING



751B Loud Speaking Telephone

750A Loud Speaking Telephone

The 750A measures approximately 9½" in diameter, 3¾" in depth, and weighs about 9 lbs.

It should be mounted in a rigidly constructed box, preferably made of 11/16" plywood with an enclosed volume of 2½ to 3 cu. ft. The box should be proportioned so that its depth is at least 9" with an inside dimension of not more than 24" for the width or height.

The inside surfaces of the box should be lined with sound absorbing material 1" thick. Hair felt or cellulose absorbent material is satisfactory.

If a grille cloth is used for covering this speaker, it should be light silk or open mesh material, which has no audible effect on the high frequency response.

751B Loud Speaking Telephone

The 751B measures approximately 24" high by 17" wide, by 13½" deep, and weighs about 42 lbs. The

box has a plain gray lacquer finish, which permits of a more decorative treatment when required to harmonize with surroundings.

The 751B will also mount in many existing loud speaker cabinets. It is also particularly suited for recess mounting in ceilings or walls where it can best be permanently installed from an acoustic standpoint for a given service and room treatment.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The speakers shall be the Western Electric $\frac{750A}{751B}$ permanent magnet Loud Speaking Telephone or equivalent.

When properly assembled, the loud speaking telephone shall have an axial frequency response substantially uniform over the range 60 to 10,000 cycles. It shall be capable of good quality reproduction, over an angle of 45°, and of the highest quality reproduction over an angle of 30°.

The efficiency of the loud speaking telephone shall be such that when the full speech power of a 20-watt amplifier is imposed, it will produce an intensity level of 88 db above 10⁻¹⁶ watt per square centimeter at a distance of 10 feet on the axis.

The speaker shall be capable of handling speech or music reproduction with maximum peak powers of 20 watts.

DISTRIBUTOR IN THE UNITED STATES

Graybar
ELECTRIC COMPANY

Executive Offices: 420 Lexington Avenue, New York 17, N. Y.
Offices in more than 80 principal cities
A NATIONAL ELECTRIC SERVICE

DISTRIBUTOR FOR CANADA AND NEWFOUNDLAND

Northern Electric Company
LIMITED

General Offices: 1620 Notre Dame Street, W. Plant: 1261 Shearer Street,
Montreal, P. Q., Canada
TWENTY-THREE BRANCHES FROM COAST TO COAST