

REPEATING

REPEATING COILS

172A - 153A

Western Electric

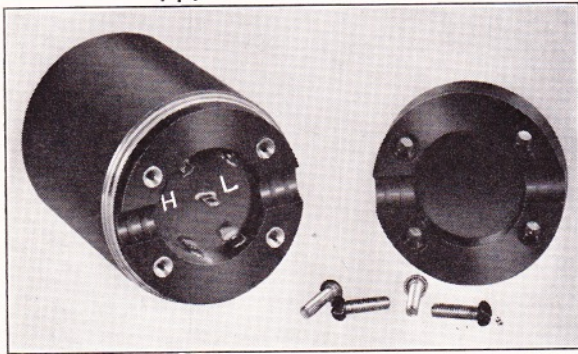
COILS

for

SOUND SYSTEMS

and

RADIO BROADCASTING



172A Repeating Coil with cover removed

THE WESTERN ELECTRIC 172A Repeating Coil is an exceptionally high quality impedance matching device for use in low level circuits particularly between a microphone and an amplifier. It is adaptable for connection in the microphone cordage or it may be mounted on the associated amplifier. A cover, illustrated, protects and relieves the strain on the terminals and terminal plate.

The 172A coil may be used either between low impedance microphones, such as the Western Electric 639 Type, and amplifiers having input impedances of 200 - 250 ohms, or between 250 ohm microphones quite frequently used and 30 ohm amplifier inputs. The insertion loss amounts to approximately 1.5 db.

Other electrical and mechanical characteristics follow:

Frequency Range and Loss

35 — 15,000 cycles per second with less than 0.5 db loss.

Power Capacity

+10 vu (0 level calibration 1 milliwatt).

Impedance Ratio

30:250 ohms.

DC Resistance

Winding

L
H

Approximate DC Resistance

5 ohms
45 ohms

Shielding

The coil potted in a permalloy case is electromagnetically shielded. A terminal is provided as a convenience for connecting to the shields on the microphone cordage.

Weight

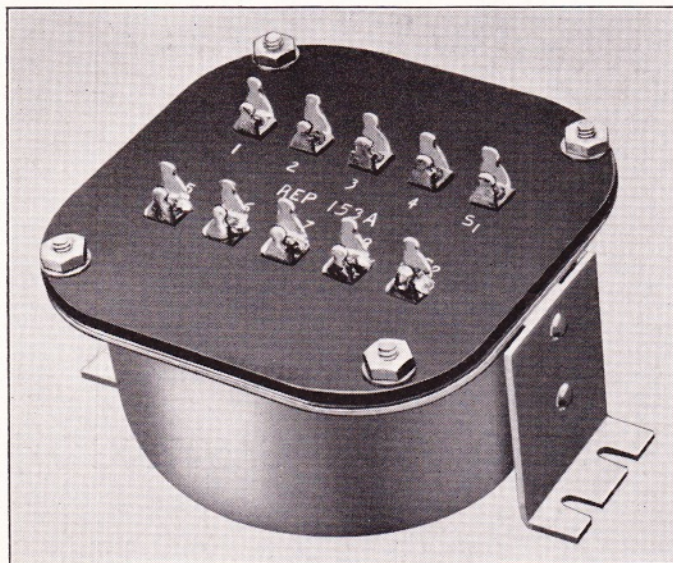
12 oz.

Size

Diameter approximately 1 $\frac{3}{4}$ " ; height 2- $\frac{25}{32}$ ".

Western Electric

153A REPEATING COIL



153A Repeating Coil

The Western Electric 153A Repeating Coil is for general use in low level circuits to match impedances. Electrical and mechanical characteristics follow:

Frequency Range and Loss

40 — 10,000 cycles per second with less than 1.0 db loss.

Power Capacity

+18 vu (0 level calibration 1 milliwatt).

Impedance Ratios

See Fig. 1.

DC Resistance

Winding	Approximate DC Resistance
(1 — 4)	4.0 Ohms
(2 — 3)	1.6 Ohms
(6 — 7)	3.2 Ohms
(5 — 8)	12.4 Ohms

Shielding

Two electrostatic shields between windings — used separately to segregate grounds, or strapped to form a single shield.

The pick up of stray magnetic fields is made very small by the use of a heavy iron can and a chromium permalloy ribbon toroidal core.

Weight

2 pounds, 10 oz.

Size and Mounting

See dimensional drawing, Fig. 2.

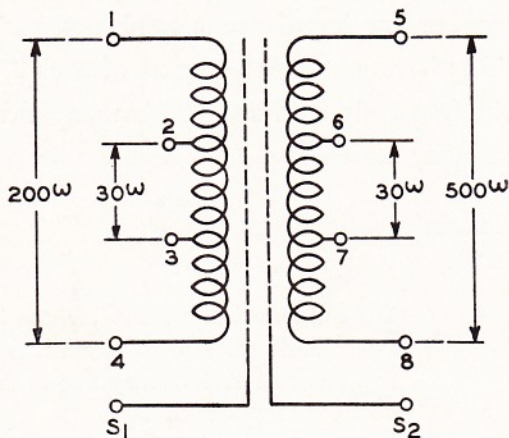


Fig. 1

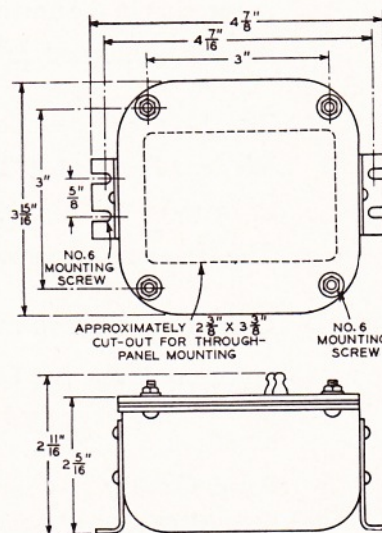


Fig. 2

DISTRIBUTOR IN THE UNITED STATES

Graybar
ELECTRIC COMPANY

General Offices: 420 Lexington Avenue, New York, N. Y.
A NATIONAL ELECTRIC SERVICE

GENERAL DISTRIBUTOR FOR CANADA AND NEWFOUNDLAND

Northern Electric Company
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General Offices and Plant: 1261 Shearer Street, Montreal, P. Q.
TWENTY-ONE BRANCHES FROM COAST TO COAST

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International Standard Electric Corporation

67 Broad Street New York, U. S. A.
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