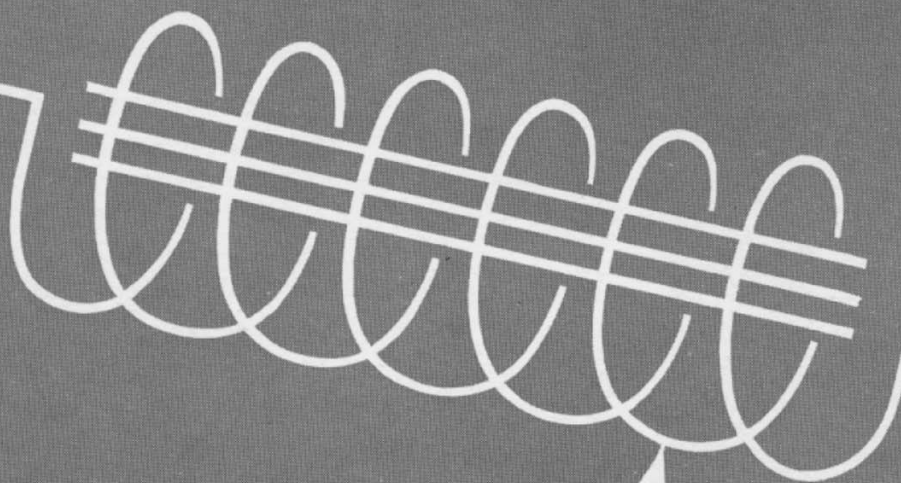


Western Electric

LOUDSPEAKER
AUTOTRANSFORMERS



Especially designed
**for Sound Distribution
and Wired Program Service**

Autotransformers

NEW STANDARDS FOR LOUDSPEAKER MATCHING TRANSFORMERS are evidenced in Western Electric's 25A, 26A and 27A. These transformers have been especially designed by Bell Telephone Laboratories for sound distribution and wired program fields.

Heretofore, complicated methods have been used when connecting multiple loudspeakers to the output of amplifying systems. With these new transformers the connection of loudspeakers has been made as simple as paralleling ordinary electric light bulbs across the power line. Effectively therefore all loudspeakers are operated in parallel thus permitting an arrangement for individual adjustment of volume for each loudspeaker. As an example, refer to the 26A transformer table; if a loudspeaker having a 4-ohm voice coil is to be fed full volume (16 watts), terminals 1-8 are connected to the 70-volt line and terminals 1-4 to the voice coil. To reduce the output of the speaker to 1 watt, terminals 1-12 connect to the line and 1-4 to the loudspeaker.

These 25A, 26A and 27A Autotransformers are designed as standardized units to work between a 70-volt output or distribution circuit and a loudspeaker. The frequency range of 50 to 15,000 cycles permits exceptional quality. When the transformers are connected between proper impedances the transmission loss is less than 0.6 db.

25A 4 WATTS

Specifications

25A AUTOTRANSFORMER

MAXIMUM POWER 4 WATTS

Transformer is tapped for lower power outputs, reducing 3 db per step to 0.25 watts.

SOURCE

Standard 70-volt amplifier output or distribution circuit.

LOAD

4 or 8-ohm loudspeaker.

DIMENSIONS

Approximately $1\frac{1}{16}$ " wide, $1\frac{1}{16}$ " long, $3\frac{9}{16}$ " high.
Including terminals, $4\frac{5}{16}$ " high.

WEIGHT

Approximately 12 ounces.

MOUNTING

Can be mounted on loudspeaker (728B) frame through the use of the 713A bracket.

If loudspeaker voice coil is 4 ohms, connect it to terminals 1-2.
If loudspeaker voice coil is 8 ohms, connect it to terminals 1-3.

Power from 70-volt Line	Line Terminals	Input Impedance
4 watts	1-8	1,250 ohms
2 watts	1-9	2,500 ohms
1 watt	1-10	5,000 ohms
.5 watt	1-11	10,000 ohms
.25 watt	1-12	20,000 ohms



26A 16 WATTS



Specifications

26A AUTOTRANSFORMER

MAXIMUM POWER 16 WATTS

Transformer is tapped for lower power outputs, reducing 3 db per step to 0.25 watts.

SOURCE

Standard 70-volt amplifier output or distribution circuit.

LOAD

4 or 8-ohm loudspeaker.

DIMENSIONS

Approximately 27/8" wide, 27/8" long, 4" high, including terminals.

WEIGHT

Approximately 2.5 pounds.

Power from 70-volt Line	Line Terminals	Voice Coil Terminals 4-ohm	8-ohm	Input Impedance
16 watts	1-8	1-4	1-5	312 ohms
8 watts	1-9	1-4	1-5	625 ohms
4 watts	1-10	1-4	1-5	1,250 ohms
2 watts	1-11	1-4	1-5	2,500 ohms
1 watt	1-12	1-4	1-5	5,000 ohms
.5 watt	1-12	1-3	1-4	10,000 ohms
.25 watt	1-12	1-2	1-3	20,000 ohms

Specifications

27A AUTOTRANSFORMER

MAXIMUM POWER 64 WATTS

Transformer is tapped for lower power outputs, reducing 3 db per step to 1 watt.

SOURCE

Standard 70-volt amplifier output.

LOAD

4-ohm loudspeaker.

DIMENSIONS

Approximately 4" wide, 3" long, 6" high, including terminals.

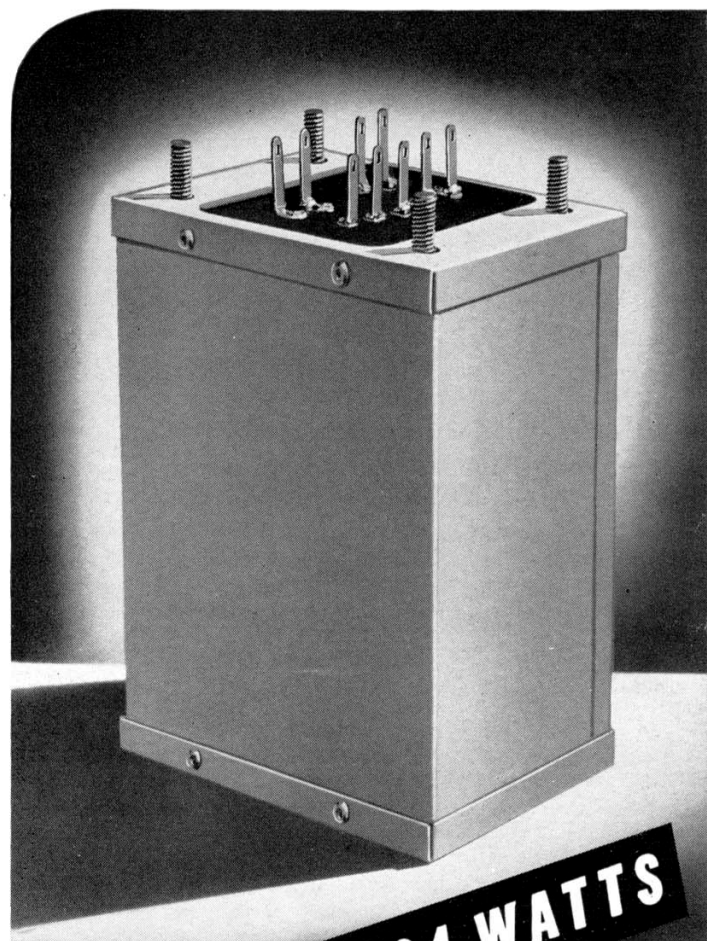
WEIGHT

Approximately 8 pounds.

Power from 70-volt Line	Line Terminals	4-ohm Voice Coil Terminals	Input Impedance
64 watts	1-8	1-4	78 ohms
32 watts	1-9	1-4	156 ohms
16 watts	1-10	1-4	312 ohms
8 watts	1-11	1-4	625 ohms
4 watts	1-12	1-4	1,250 ohms
2 watts	1-12	1-3	2,500 ohms
1 watt	1-12	1-2	5,000 ohms

This transformer can be used in place of the 18A Autotransformer to match a 500-ohm amplifier output to lower impedance loads as follows:

Primary or Line Impedance	Secondary or Load Impedance	Connect Line to Terminals	Connect Load to Terminals
	Nominal		Range
500	250 ohms	180 to 400 ohms	1-9
500	125 ohms	90 to 180 ohms	1-10
500	62 ohms	45 to 90 ohms	1-11
500	31 ohms	20 to 45 ohms	1-12
500	12 ohms	8 to 20 ohms	1-9
500	6 ohms	5 to 8 ohms	1-10
500	3 ohms	2 to 5 ohms	1-10
500	1.6 ohms	1 to 2 ohms	1-10
500	.8 ohm	.6 to 1 ohm	1-11
500	.4 ohm	.25 to .6 ohm	1-12



27A 64 WATTS

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