

**DESCRIPTION**

ALTEC 70.7V and 25V Line Transformers are designed for use in distributed sound systems. In installations where loudspeakers are positioned some distance from the amplifier, more efficiency and less loss may be obtained when a high-impedance transmission line or 70.7/25V constant voltage line is used. With the high-impedance distribution system, line matching transformers are necessary to match the imped-

ance of the loudspeaker to the impedance of the line. The constant voltage line provides simple means of matching a number of loudspeakers to an amplifier. For these reasons, Altec Lansing has designed five new line matching transformers to assure the most efficient transfer of power from the line to the loudspeaker.

Primary and secondary windings are electrically **isolated**, and provide a **balanced** line to the load. **Low insertion loss, low distortion and high efficiency** are maintained throughout the frequency range, at full rated power output.

The Model 15700 may be utilized as a 25V or 70.7V line matching transformer with selectable secondary power taps of 0.5W, 1W, 2W or 4W.

Models 15704, 15708, 15716 and 15732 are 70.7V line matching transformers with four selectable power taps. Selectable line loss correction taps are provided to compensate line resistance, allowing significant savings in wire gauge<sup>1</sup>.

Primary taps of the line matching transformers are identified in watts for amplifier connections, with color coded lead wires. The 8-ohm secondary taps are 0.25-inch blade type quick-connect wire terminals, allowing either wrap-and-solder connections, or crimp type quick-connect wire terminals for convenience of installation.

<sup>1</sup>Technical Letter No. 265A, Altec Lansing, **Transmission Loss in 70.7V and 25V Lines.**

**SPECIFICATIONS**

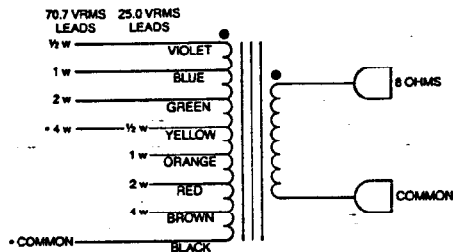
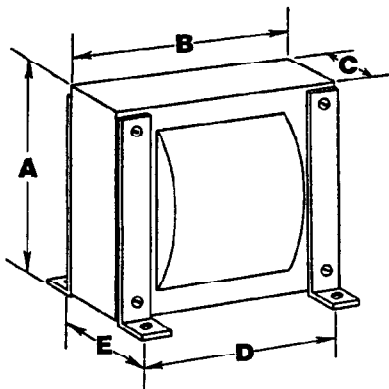
**70.7/25V LINE TRANSFORMERS**

MODEL NUMBER	FREQUENCY RESPONSE (+1 dB)	INSERTION LOSS (max. dB)	PRIMARY VOLTAGE (Vrms)	PRIMARY IMPEDANCE (ohms)	PRIMARY POWER (watts)	SECONDARY IMPEDANCE (ohms)	SECONDARY POWER (watts)	LINE LOSS CORRECTION TAP (dB)
15700	100 Hz to 10 kHz	1.0	25 70.7	9997*	0.5	8	4	N/A
				4999*	1.0		4	
				2499*	2.0		4	
				1250*	4.0		4	
15704	50 Hz to 15 kHz	0.5	70.7	9997	0.5	8	4	0.5
				4999	1.0		4	1.0
				2499	2.0		4	
				1250	4.0		4	
15708	50 Hz to 15 kHz	0.5	70.7	4999	1.0	8	8	0.5
				2499	2.0		8	1.0
				1250	4.0		8	
				625	8.0		8	
15716	50 Hz to 15 kHz	0.5	70.7	2499	2.0	8	16	0.5
				1250	4.0		16	1.0
				650	8.0		16	
				312	16.0		16	
15732	50 Hz to 15 kHz	0.5	70.7	1250	4.0	8	32	0.5
				650	8.0		32	1.0
				312	16.0		32	
				156	32.0		32	

\*For primary impedance at 25V rms, divide by 8

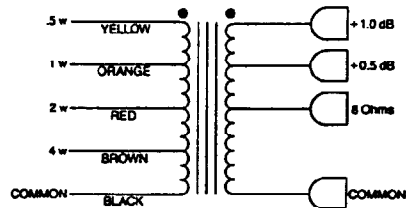
**DIMENSIONS AND WEIGHT**

MODEL NUMBER	A	B	C	D
15700	1.75"	1.38"	0.56"	1.81"
15704	2.00"	1.63"	0.69"	2.00"
15708	2.38"	2.00"	0.75"	2.38"
15716	2.75"	2.31"	0.81"	2.75"
15732	3.13"	2.56"	1.06"	3.13"

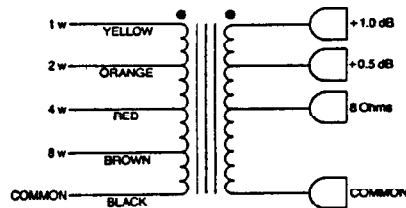


\* The yellow and black leads are used for either 70 or 25 volt application.

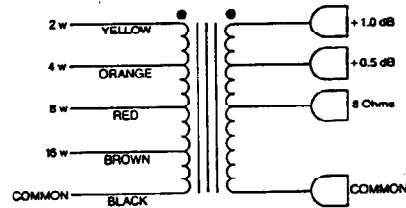
15700



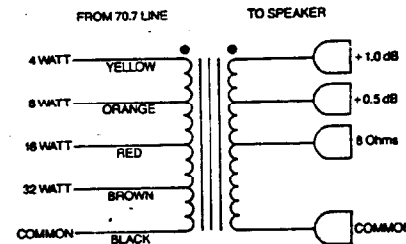
15704



15708



15716



15732

**ARCHITECT'S AND ENGINEER'S SPECIFICATIONS**

**NOTE:** After selecting the transformer, ascertain proper values given in the Table of Specifications, and insert values in blank spaces below.

The transformer shall deliver within \_\_\_\_\_ dB of its full rated power over the frequency range of \_\_\_\_\_ Hz with a maximum insertion loss not greater than \_\_\_\_\_ dB for the most unfavorable impedance

combination. The primary taps shall be identified with \_\_\_\_\_ W of audio power delivered to the load when the transformer is connected to a \_\_\_\_\_ volt line. The secondary taps shall be identified with a line loss correction of \_\_\_\_\_ dB, and an impedance of 8 ohms.

The transformer shall be the ALTEC Model \_\_\_\_\_



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