

# 70.7-Volt Line Transformers



COMMERCIAL

## General Product Description

The Electro-Voice 70.7 V 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 V constant voltage line is used. With the high-impedance distribution system, line matching transformers are necessary to match the impedance of the loudspeaker to the impedance of the line. The constant voltage line provides a simple means of matching a number of loudspeakers to an amplifier. The 70.7 V Line Transformers are designed to be 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. At full rated power output, low insertion loss, low distortion and high efficiency are maintained throughout the frequency range.

The Model 15704, 15708, 15716 and 15732 are 70.7 V 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.

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.



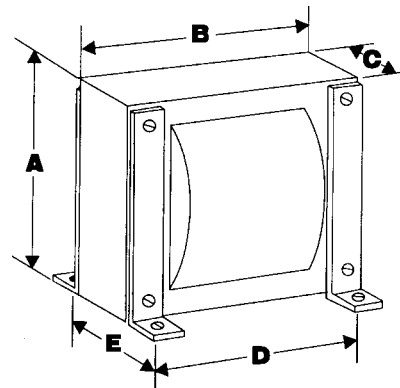
## Architects' and Engineers' Specifications

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 1 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 70 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 70.7 V Line Transformers.

## Dimensions

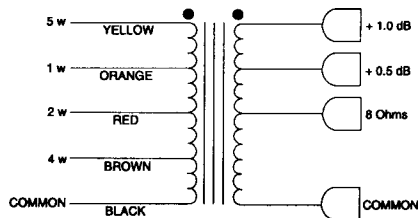
| NUMBER | A     | B     | C     | D     |
|--------|-------|-------|-------|-------|
| 15704  | 2.00" | 1.63" | 0.69" | 2.00" |
| 15708  | 2.38" | 2.00" | 0.75" | 2.38" |
| 15716  | 2.75" | 2.31" | 0.81" | 2.75" |
| 15732  | 3.13" | 2.56" | 1.06" | 3.13" |



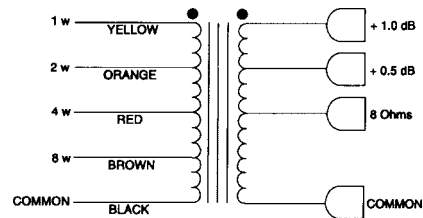
**Electro-Voice®**

## Specifications:

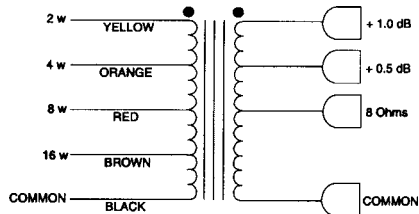
| MODEL NUMBER | FREQUENCY RESPONSE (+1 dB) | INSERTION LOSS (max. dB) | PRIMARY VOLTAGE (Vrms) | PRIMARY IMPEDANCE (ohms)     | PRIMARY POWER (watts)      | SECONDARY IMPEDANCE (ohms) | SECONDARY POWER (watts) | LINE LOSS CORRECTION TAP (dB) |
|--------------|----------------------------|--------------------------|------------------------|------------------------------|----------------------------|----------------------------|-------------------------|-------------------------------|
| 15704        | 50 Hz to 10 KHz            | 0.5                      | 70.7                   | 9997<br>4999<br>2499<br>1250 | 0.5<br>1.0<br>2.0<br>4.0   | 8                          | 4                       | 0.5<br>1.0                    |
| 15708        | 50 Hz to 10 kHz            | 0.5                      | 70.7                   | 4999<br>2499<br>1250<br>625  | 1.0<br>2.0<br>4.0<br>8.0   | 8                          | 8                       | 0.5<br>1.0                    |
| 15716        | 50 Hz to 15 kHz            | 0.5                      | 70.7                   | 2499<br>1250<br>625<br>312   | 2.0<br>4.0<br>8.0<br>16.0  | 8                          | 16                      | 0.5<br>1.0                    |
| 15732        | 50 Hz to 15 kHz            | 0.5                      | 70.7                   | 1250<br>625<br>312<br>156    | 4.0<br>8.0<br>16.0<br>32.0 | 8                          | 32                      | 0.5<br>1.0                    |



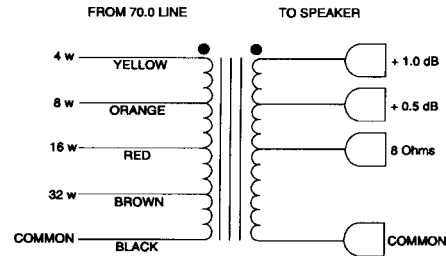
**15704**



**15708**



**15716**



**15732**

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 For warranty repair or service information, contact the Service  
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 For technical assistance, contact Technical Support at 866/78AUDIO  
 Please refer to the Engineering Data Sheet for warranty information.  
 Specifications subject to change without notice.