

International Commercial Systems

70 Volt systems are common in the US, but in other countries other various other high-impedance system voltages are used. 25 and 100 Volt systems are common throughout the world. Most 70V products are capable of running with 100 Volt products, however, 25 Volt systems often need matching transformers of that type to properly function at the correct voltage.

Specifications

Primary Voltage: 70V

Power Rating: 20W

Primary Taps: 20, 15, 10, 5W

Secondary Impedance: 8, 4 ohms

Insertion Loss: 1dB

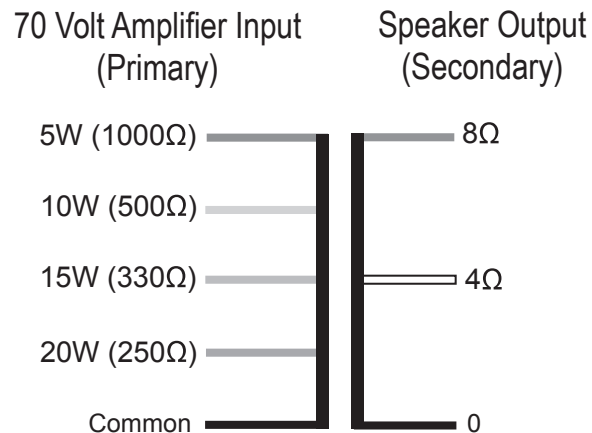
Frequency Response: 20Hz - 20kHz \pm 1dB

Lead Length: 6"

Weight (lbs.): 1.1 lb.

Mounting Dimensions: 3.37" W x 2" D x 2" H

Mounting Method: Self-Adhesive pad



Lifetime Limited Warranty
Episode® Multi-room accessories have a Lifetime Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to SnapAV or a designated service center with prior notification and an assigned return authorization number (RA).

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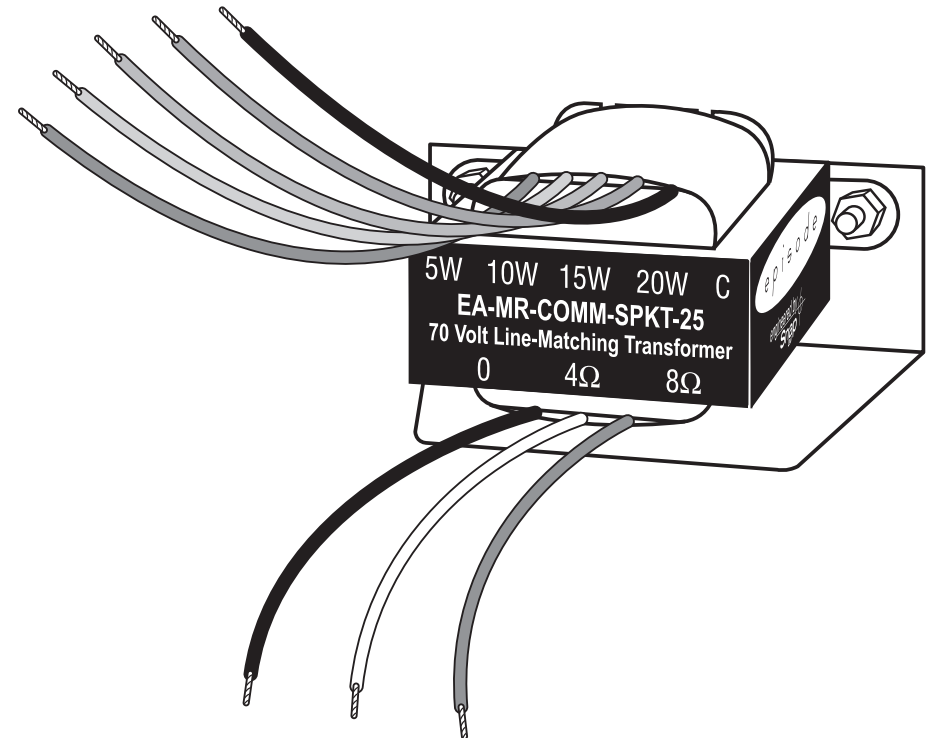


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PRODUCT INFO

25 Watt Commercial Speaker Transformer

EA-MR-COMM-SPKT-25

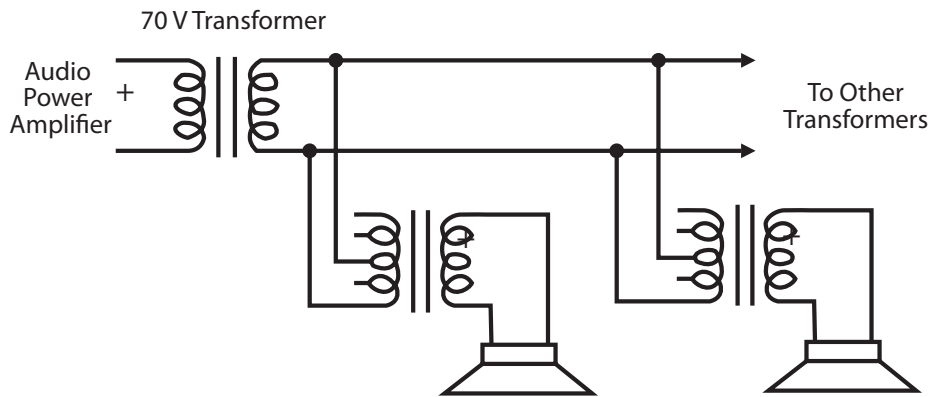


70 Volt System Applications

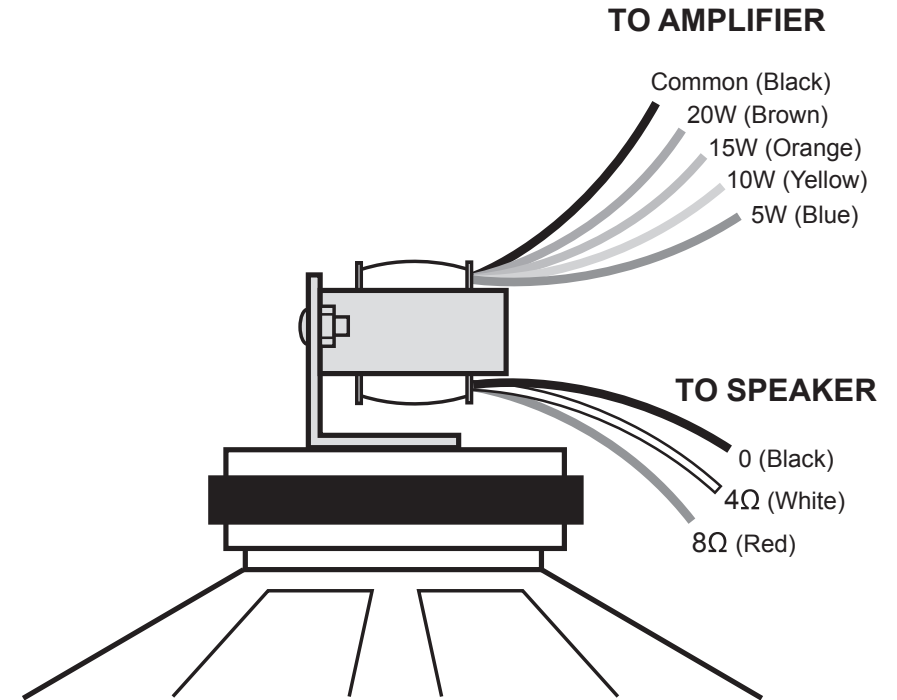
70 Volt systems are generally used in commercial applications when many speakers need to be connected to one amplifier and cover large areas. Also called a high-impedance speaker system, commercial 70 Volt systems offer advantages when long cable runs are required. High-impedances do not significantly affect the output as they would in a common low impedance speaker system and can use smaller gauge wire connected from speaker to speaker.

The speakers are commonly 4 or 8 ohms and need a line matching transformer that matches the impedance of the speaker, to a high-impedance amplifier. Typically, line transformers have multiple output taps so the sensitivity of the speaker system (output volume) can be adjusted as needed, and even divide the wattage from the commercial high-impedance amplifier.

Amplifiers designed for 70 volt operation often have an output transformer for matching purposes. A 70V line can be driven with normal audio amplifiers if a matching transformer is added. If you have powerful enough amplifier (high output voltage), you might be able to run the line directly (for example, some powerful PA amplifiers can be used to drive a 70V line directly in bridged mode).



70 volt systems are typically used in commercial applications such as restaurants, departments, and amusement parks; however, they are frequently used in residential systems to cover outdoor living spaces, pools, decks, and gardens. They are ideal for covering large areas and maintaining a consistent volume level. When connecting 10 or more speakers with one amp, a 70 Volt system minimizes wiring and connection time. If the amp connected produces 100 watts, each speaker would use the tap closest to 10 Watts.



Advantages

Speakers can be added or removed from a 70 volt system without regard for impedance matching devices; this cannot be done with a low-impedance 4 or 8 Ohm audio system.

Considerations

- 70V audio transformers are usually limited to an amplifier power of 250 Watts. Line matching transformers saturate easily and clipped signals do not pass through transformers. The result is poor sound quality and distortion.
- Frequency response is limited on transformers. Low frequencies act as a clipped signal does to a transformer, and are usually filtered out of the signal path at the amplifier.