

Application Note IPAMP-20130308 COMTR2570-324J Transformer Installation Instructions **REV** March 2013

Audio Transformer Installation

The optional 25/70V audio transformer enables an IP7 Amplifier to:

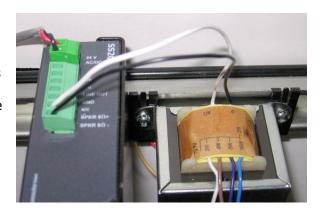
- Drive one or more speakers, each with its own transformer
- Install the speakers up to 3000' away from the IP7 Amplifier
- Set an individual speaker's relative volume using its transformer taps

Use the TalkMaster® software or the blue Vol+ and Vol- buttons to set the volume level of the IP Amplifier to **level 6**. Use each speaker's transformer taps to adjust the speaker's volume level.



To install the optional 25/70V transformer:

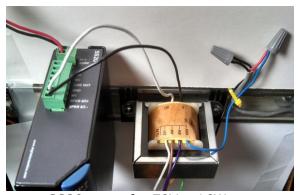
- Mount the transformer next to the IP Amplifier. Optional DIN clips are provided
- Connect the Black 0 and the White 8Ω leads from the transformer to the J2-6 and J2-7 terminals (SPKR 8Ω+ and SPKR 8Ω-) on the IP7 (polarity independent)



Determine whether to use a 25V or a 70V distribution line. The speakers must be tapped for the same voltage as the distribution line you select

Determine the correct wattage tap for the 25/70V transformer. The IP7-SS8 and IP7-SE8 will use the 8 watt tap and the IP7-SS20 will use the 16 watt tap

- IP7-SS8/25V speaker distribution line:
 - On the Transformer, select the Yellow
 25V-8W and the Black C leads and connect to the speaker distribution line
- IP7-SS20/25V speaker distribution line:
 - On the Transformer, select the Orange 25V-16W and the Black C leads and connect to the speaker distribution line
- IP7-SS8/70V speaker distribution line:
 - On the Transformer, select the Purple 70V-8W and the Black C leads and connect to the speaker distribution line
- IP7-SS20/70V speaker distribution line:
 - On the Transformer, select the Blue 70V-16W and the Black C leads and connect to the speaker distribution line

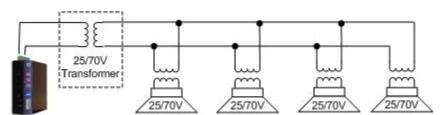


SS20 setup for 70V - 16Watts

Speaker Installation Guidelines

- Each speaker must have its own 25/70V transformer
- Connect the speaker's transformer to the distribution line using the matching voltage and the appropriate wattage to set the speaker's relative volume
- Make sure to maintain the same wiring polarity between each speaker
- Do not mix Speakers tapped for 25V with a 70V distribution line or speakers tapped for 70V with a 25V distribution line
- All Speakers must be wired in parallel (see diagram below)
- When using transformers, the total wattage available from the IP Amplifier must be reduced to account for transformer loss. The IP7-SS8 and IP7-SE8 have 5 watts available and the IP7-SS20 has 14 watts available
- When the wattage from each speaker on a 25/70v distribution line is added together, the total cannot exceed the available wattage for the IP Amplifier
- Snip off any exposed wire ends on the transformer to prevent shorting
- The following guidelines should be used for selecting Speaker Wire

Distance	Wire Gauge
1' - 500'	18 AWG
501' - 1000'	16 AWG
1001' - 2000'	14 AWG
2000' - 3000'	12 AWG



25/70v distribution line using parallel wiring