



**Overview:**

The MuxLab 70V Audio Converter may be paired with the 500755-AMP-RX and 500217 amplifiers to support 70V speaker systems at the amplifier output.

The 70V Audio Converter is a passive device and can be easily mounted anywhere near the amplifier that it is to be connected with. It adapts a standard 4 ohm amplifier output that has been configured in bridge mode (mono) to a 70V speaker system. 70V speaker systems allow multiple speakers to be chained together over much longer distances than traditional 4 ohm speakers can accommodate.



**Key Features:**

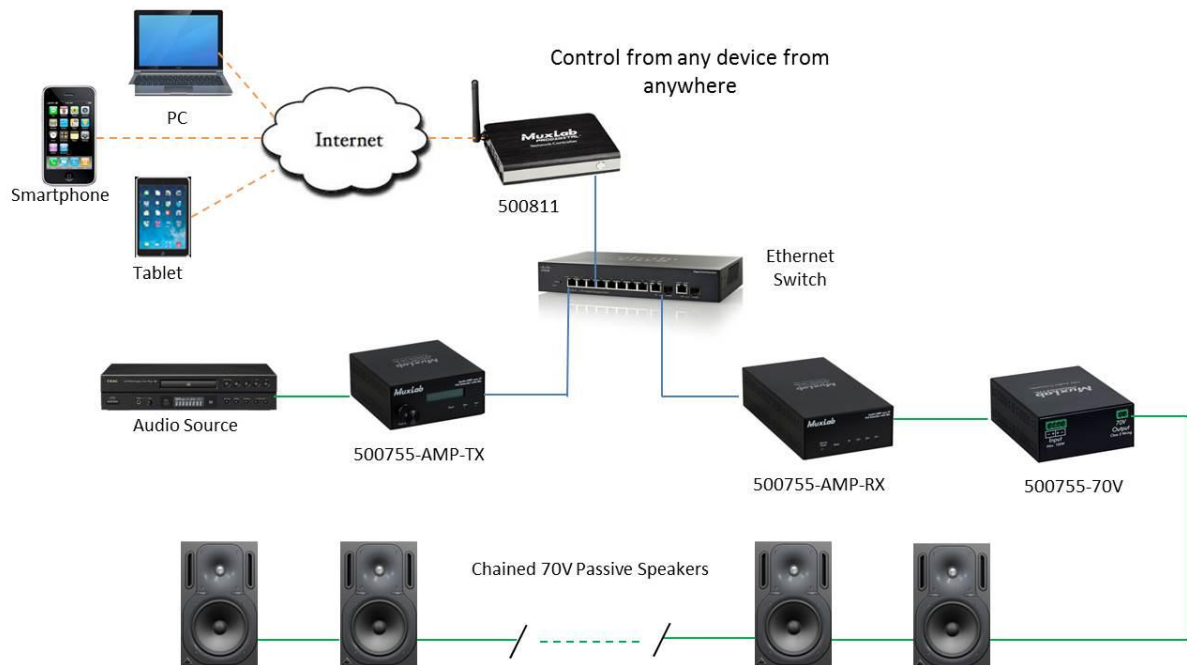
- Adapt an amplifier's bridged 4 ohm speaker output to a 70V speaker system
- Daisy-chain multiple 70V speakers from one source over a distributed layout
- Extend speakers over long distances
- Connects with 500755-AMP in Bridge Mode configuration at 100W (mono)
- Connects with 500217 amplifier in Bridge Mode configuration at 100W (mono)
- Power not required

**Applications:**

Excellent for distributing speakers in:

- School intercom systems
- Auditoriums
- Large halls

**Typical Application**



Specifications																																																																																																																																																				
<b>Environment</b>	Analog audio over 70V speaker systems																																																																																																																																																			
<b>Devices</b>	Amplifiers (in bridge mode) and 70V speaker systems																																																																																																																																																			
<b>Transmission</b>	Transparent to the user.																																																																																																																																																			
<b>Signal Bandwidth</b>	20Hz to 20KHz (mono)																																																																																																																																																			
<b>Signals</b>	Analog audio																																																																																																																																																			
<b>Impedance</b>	4 ohms																																																																																																																																																			
<b>Signal Power</b>	Up to 100W (with amplifier in bridge mode)																																																																																																																																																			
<b>Connectors</b>	One (1) 4-pin phoenix connector for connecting to amplifiers in bridge mode (mono) <i>Note: Cables not included.</i>																																																																																																																																																			
<b>Cable</b>	Standard 2-wire speaker cable																																																																																																																																																			
<b>Maximum Distance</b>	<table border="1"> <thead> <tr> <th rowspan="4">AWG</th> <th colspan="9">Speaker Cable Transmission Distance as a Function of Conductor Size vs. Loss</th> </tr> <tr> <th colspan="9">Power Loss in Cable (% Loss &amp; dB Loss)</th> </tr> <tr> <th colspan="3">4 Ohm Speaker</th> <th colspan="3">8 Ohm Speaker</th> <th colspan="3">70V Speaker*</th> </tr> <tr> <th>11%</th> <th>21%</th> <th>50%</th> <th>11%</th> <th>21%</th> <th>50%</th> <th>11%</th> <th>21%</th> <th>50%</th> </tr> </thead> <tbody> <tr> <td></td> <td>0.5</td> <td>1.0</td> <td>3.0</td> <td>0.5</td> <td>1.0</td> <td>3.0</td> <td>0.5</td> <td>1.0</td> <td>3.0</td> </tr> <tr> <td>6</td> <td>277 ft</td> <td>571 ft</td> <td>1930 ft</td> <td>554 ft</td> <td>1141 ft</td> <td>3859 ft</td> <td>13580 ft</td> <td>27965 ft</td> <td>94546 ft</td> </tr> <tr> <td>8</td> <td>174 ft</td> <td>359 ft</td> <td>1214 ft</td> <td>349 ft</td> <td>718 ft</td> <td>2428 ft</td> <td>8546 ft</td> <td>17598 ft</td> <td>59498 ft</td> </tr> <tr> <td>10</td> <td>110 ft</td> <td>226 ft</td> <td>764 ft</td> <td>219 ft</td> <td>452 ft</td> <td>1528 ft</td> <td>5377 ft</td> <td>11072 ft</td> <td>37434 ft</td> </tr> <tr> <td>12</td> <td>69 ft</td> <td>142 ft</td> <td>480 ft</td> <td>138 ft</td> <td>284 ft</td> <td>959 ft</td> <td>3376 ft</td> <td>6952 ft</td> <td>23505 ft</td> </tr> <tr> <td>14</td> <td>43 ft</td> <td>89 ft</td> <td>302 ft</td> <td>87 ft</td> <td>179 ft</td> <td>604 ft</td> <td>2127 ft</td> <td>4380 ft</td> <td>14809 ft</td> </tr> <tr> <td>16</td> <td>27 ft</td> <td>55 ft</td> <td>185 ft</td> <td>53 ft</td> <td>110 ft</td> <td>371 ft</td> <td>1305 ft</td> <td>2687 ft</td> <td>9085 ft</td> </tr> <tr> <td>18</td> <td>17 ft</td> <td>35 ft</td> <td>117 ft</td> <td>34 ft</td> <td>69 ft</td> <td>234 ft</td> <td>823 ft</td> <td>1694 ft</td> <td>5726 ft</td> </tr> <tr> <td>20</td> <td>11 ft</td> <td>22 ft</td> <td>74 ft</td> <td>21 ft</td> <td>44 ft</td> <td>147 ft</td> <td>518 ft</td> <td>1068 ft</td> <td>3610 ft</td> </tr> <tr> <td>22</td> <td>7 ft</td> <td>13 ft</td> <td>46 ft</td> <td>13 ft</td> <td>27 ft</td> <td>91 ft</td> <td>321 ft</td> <td>661 ft</td> <td>2234 ft</td> </tr> <tr> <td>24</td> <td>4 ft</td> <td>9 ft</td> <td>29 ft</td> <td>8 ft</td> <td>17 ft</td> <td>57 ft</td> <td>202 ft</td> <td>417 ft</td> <td>1409 ft</td> </tr> </tbody> </table> <p><small>*The number of feet of cable you can run for a given loss and performance budget.</small></p>	AWG	Speaker Cable Transmission Distance as a Function of Conductor Size vs. Loss									Power Loss in Cable (% Loss & dB Loss)									4 Ohm Speaker			8 Ohm Speaker			70V Speaker*			11%	21%	50%	11%	21%	50%	11%	21%	50%		0.5	1.0	3.0	0.5	1.0	3.0	0.5	1.0	3.0	6	277 ft	571 ft	1930 ft	554 ft	1141 ft	3859 ft	13580 ft	27965 ft	94546 ft	8	174 ft	359 ft	1214 ft	349 ft	718 ft	2428 ft	8546 ft	17598 ft	59498 ft	10	110 ft	226 ft	764 ft	219 ft	452 ft	1528 ft	5377 ft	11072 ft	37434 ft	12	69 ft	142 ft	480 ft	138 ft	284 ft	959 ft	3376 ft	6952 ft	23505 ft	14	43 ft	89 ft	302 ft	87 ft	179 ft	604 ft	2127 ft	4380 ft	14809 ft	16	27 ft	55 ft	185 ft	53 ft	110 ft	371 ft	1305 ft	2687 ft	9085 ft	18	17 ft	35 ft	117 ft	34 ft	69 ft	234 ft	823 ft	1694 ft	5726 ft	20	11 ft	22 ft	74 ft	21 ft	44 ft	147 ft	518 ft	1068 ft	3610 ft	22	7 ft	13 ft	46 ft	13 ft	27 ft	91 ft	321 ft	661 ft	2234 ft	24	4 ft	9 ft	29 ft	8 ft	17 ft	57 ft	202 ft	417 ft	1409 ft
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<b>Power Source</b>	None required (passive device)																																																																																																																																																			
<b>Temperature</b>	Operating: 0° to 40°C Humidity: Up to 95% non-condensing Storage: -20° to 85°C																																																																																																																																																			
<b>Dimensions</b>	4.33" x 5.51" x 1.97" (11 x 14 x 5 cm)																																																																																																																																																			
<b>Weight</b>	3.08lbs (1.4kg)																																																																																																																																																			
<b>Warranty</b>	3 years																																																																																																																																																			
<b>Order Information</b>	500755-70V 70V Audio Converter (UPC: 627699717554)																																																																																																																																																			
<b>Accessories</b> (These items are sold separately)	500755-AMP AUDIO / AMP over IP PoE Extender 500920 16-Port Rackmount Transceiver Chassis 500917 Wall Mount Transceiver Bracket Kit																																																																																																																																																			



**MuxLab Inc.**

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