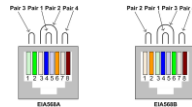


# Specifications

<b>Environment</b>	2CH analog audio distribution over multiple zones via an IP network
<b>Devices</b>	2CH audio source equipment, microphone systems, speakers, PA systems.
<b>Input Level</b>	-10 dBu for line level RCA and 3.5mm connectors, -50 to -10 dBu for microphone, Microphone: Ceramic, Dynamic, Electret with combined or separate bias. Bias: 6V (for consumer Electret).
<b>Frequency response</b>	20 – 20,000 Hz (+/- 1 dB)
<b>LCD Display</b>	2 line x 20 character backlit LCD display
<b>Control</b>	Local control from front push/turn knob and LCD display, and remote control via web interface and 500811 controller. Supports a recessed front soft reset button.
<b>Front Display</b>	LCD DISPLAY 2 x 20 character 2 LEDs: IP status and Power
<b>Connectors</b>	Two (2) RCA receptacles for L+R source input. One (1) 3.5mm stereo audio jack for source input. One (1) 3.5mm IR for IR Sensor or IR Emitter (port is directional). One (1) RJ45 connector for Ethernet connection to a 1Gig Ethernet Switch. One (1) locking power coaxial jack, 2.0x5mm. One (1) three pin terminal block connector for Mic In. One (1) male DB9 for RS232.
<b>IR Frequency</b>	Directional IR: 38KHz to 56KHz
<b>Cable</b>	One (1) Cat 5e/6 or better twisted pair cables required.
<b>Maximum Distance</b>	Cat5e/6: 330ft (100m) <i>Note: When installed in an electrically noisy environment, an STP cable must be used. Also, cross-connections in the signal path reduce the effective distance depending on the grade of cable used.</i>
<b>RJ45 Pin Configuration</b>	<b>RJ45 Link</b> Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) <i>Reverse Polarity Sensitive. Use EIA/TIA 568A or 586B straight-through wiring.</i>
<b>Power requirement</b>	3W via PoE or external 5V, 1A adapter (PS not included).
<b>Temperature</b>	Operating : 32° to 90°F (0° to 40°C) Storage: -4° to 185°F (-20° to 85°C)
<b>Humidity</b>	Maximum 90% (non-condensing)
<b>Enclosure</b>	Steel, painted black.
<b>Dimensions</b>	4.33" x 4.76" x 1.97" (11 x 12.1 x 5 cm)
<b>Weight</b>	1.20 lb. (0.55 kg)
<b>Warranty</b>	3 Years
<b>Ordering Information</b>	500755-AMP-US Audio/AMP over IP Extender Kit, with Mic & AMP 50W/CH, US 500755-AMP-UK Audio/AMP over IP Extender Kit, with Mic & AMP 50W/CH, UK 500755-AMP-EU Audio/AMP over IP Extender Kit, with Mic & AMP 50W/CH, EU 500755-AMP-TX Audio/AMP over IP Transmitter, with Mic, US 500755-AMP-RX-US Audio/AMP over IP Receiver, with AMP 50W/CH, US 500755-AMP-RX-UK Audio/AMP over IP Receiver, with AMP 50W/CH, UK 500755-AMP-RX-EU Audio/AMP over IP Receiver, with AMP 50W/CH, EU
<b>Compatible Products</b>	500755, 500755-AMP-RX, 500755-70V, and other MuxLab AV over IP devices.
<b>Accessories</b>	500755-70V 70V Audio Converter 500917 Wall Mount Transceiver Bracket Kit 500920 16-Port Rackmount Transceiver Chassis 500993 Univ. Locking Power Supply 5VDC/2.6A US/UK/EU Blade 500994 IR Sensor 500998 IR Emitter



## Audio/AMP over IP Transmitter, with Mic 500755-AMP-TX Quick Installation Guide

### Overview

The AUDIO/AMP over IP Transmitter, with Mic allows 2CH audio signals to be extended up to 330ft (100m) via one (1) Cat5e/6 UTP cable in a point-to-point configuration. Point-to-multipoint and multipoint-to-multipoint is possible by connecting several Transmitters and/or Receivers to the same local Ethernet network. The Transmitter supports PoE (PD) if used with a PoE (PSE) Ethernet Switch. These units support RS232 and IR transmission for remote control of end devices. IR emitters and sensors are not included, but may be purchased separately if required.

For the point-to-multipoint and multipoint-to-multipoint configuration the Ethernet Switch must have Gigabit ports and DHCP Server capability and additionally support the IGMP communication protocol for the multipoint-to-multipoint case. MuxLab recommends using the Cisco SG300 Series Managed Switches. The MuxLab ProDigital Network Controller (500811) is available to simplify the configuration and utilization of the 500755-AMP and other MuxLab IP based products via an Ethernet web interface.

### Main Application

Audio Distribution Systems



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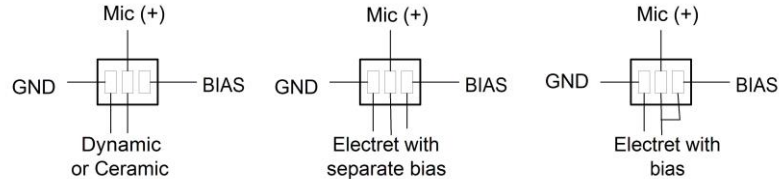
E-mail: [videoease@muxlab.com](mailto:videoease@muxlab.com) URL: [www.muxlab.com](http://www.muxlab.com)

## Installation

For the source (TX), connect one or two line level audio sources and/or a microphone. For more information on how to configure the unit and the Ethernet switch, check MuxLab's website, the 500811 Operation Manual and the 500755-AMP-RX Quick Installation Guide.

Note: Do not block the ventilation holes. Do not attempt to open the housing. There are no user-serviceable parts inside the amplifier. Opening the unit will void your warranty.

- Use a Cat5/5e/6 cable between the unit and the 1Gig Ethernet Switch.
- Connect microphone as show below. Use the removable connector supplied with the unit.



- If the configuration is point-to-point: use the DIP Switches to select a unique Device ID (DIP switch positions #1, #2 and #3) for each Transmitter present on the network and configure each Receiver Device ID to the corresponding selected Transmitter. A 1Gig Ethernet Switch is not required but may be used. Note that this step is not necessary if the MuxLab Network Controller (500811) is used. Also if point-to-point is created without a network (TX to RX direct connect), then the TX and RX should have the same address, but any setting is OK.
- If the configuration is a point-to-multipoint or multipoint-to-multipoint: You will need to use an Ethernet Switch with 1Gig ports and DHCP Server support. In addition IGMP Protocol support is required for the multipoint-to-multipoint case. **Verify that the Ethernet Switch is configured correctly and that the DHCP Server is enabled and that the IGMP Protocol is enabled for multipoint-to-multipoint applications.** See the support documentation on MuxLab's website regarding how to configure an Ethernet Switch. **Connect all Transmitters and Receivers to the Ethernet Switch.**
- An IR Emitter and Sensor is not included, but may be purchased separately. If purchased, IR control signals may initiate from control software on a PC, tablet, or smartphone connected to the network, so that only IR Emitters are required next to the audio equipment. You can differentiate the IR Sensor and the IR Emitter by looking at the 3.5 mm plug. The IR Sensor is using a Stereo Plug (3 Contacts) and the IR Emitter a mono plug (2 Contacts). Set the IR direction (Dip switch position #5, set to ON=Emitter, or OFF=Sensor).
- Position the IR Sensor so that it is directed at the hand-held remote control. For a clear IR signal reception, aim the hand-held remote control at the top of the IR Sensor enclosure.
- Position the IR Emitter as close as possible to the source's IR Sensor. For a clear IR signal reception, the IR Emitter can be glued on the source's IR Sensor. The IR Emitter's signal is transmitted from the side of the enclosure.
- This product supports RS232 bidirectional communication. On the Transmitter, the RS232 port is configured as a DCE; and on the Receiver as a DTE. Please connect your RS232 cable accordingly. The default settings are 9600, N, 8, 1.
- To send an RS232 packet to a specific device, you need to put the IP address in front of the packet. This communication is meant to be machine to machine; and hexadecimal codes must be used. For example, to send the message "Hello" to a device having an IP address of 192.168.168.55 IP, send the following hexadecimal string: 0xC0 0xA8 0xA8 0x37 0x48 0x65 0x6C 0x6C 0x6F. (or "192 168 168 55 H e l l o" in hexadecimal).
- Powering the Transmitter via an external power supply is only necessary where a PoE Ethernet Switch is unavailable. In this case, connect a 5 VDC power supply to the unit.

## Basic Operation

- Navigating the menu to configure unit settings (via the push/turn dial):
  - To navigate the menu: When in menu mode, turn the dial to cycle through the menu.
  - To select a menu item: Push the dial when the desired menu is displayed.
  - To select a setting within a menu: Turn the dial and push to select desired setting. If the setting is not selected before the timeout occurs, the unit returns to menu mode without the setting change. This timeout affects all menus except the VOL (0-87) menu.
- Menus & Settings:
  - VOL (0-87): Set main volume level [0 to 87]
  - INPUT: Select audio source [IN #1, IN #2, MIC, IN #1 + MIC, IN #2 + MIC]
  - LOW VOL: Set IN #1/IN #2 attenuation when MIC DETECT is active [-20 to 0dB]
  - BASS: Set IN #1/IN#2 bass level [-14 to +14dB]
  - TREBLE: Set IN #1/IN#2 treble level [-14 to +14dB]
  - MIC TYPE: Set type of Mic used [ELECTRET, DYNAMIC, CERAMIC]
  - MIC GAIN: Set Mic gain when MIC DETECT is active [0 to +26dB]
  - MIC BASS: Set Mic bass level [-14 to +14dB]
  - MIC TREBLE: Set Mic treble level [-14 to +14dB]
  - MIC DETECT: Set Mic detection sensitivity [0 to 63, where 0 = OFF]
  - LIGHT: Set backlight mode [AUTOMATIC, ALWAYS ON, ALWAYS OFF]
  - FACTORY RESET: Reset the unit to factory defaults, which are [VOL=0, INPUT=IN #1, LOW VOL=0, BASS=0, TREBLE=0, MIC TYPE=ELECTRET, MIC GAIN=0, MIC BASE=0, MIC TREBLE=0, MIC DETECT=0, LIGHT=AUTOMATIC]
  - SAVE: Saves the current settings, which are load on power-up

## Troubleshooting

The following table describes possible symptoms, probable causes and solutions regarding the unit:

Symptom	Probable Cause	Possible Solutions
All LEDs off or no power	Bad UTP cable or Switch not PoE	Try a new UTP cable and/or use an external power supply.
Network LED On or Off	Unit defective	Try another unit.
Network LED blinking	Unit is OK	
No audio or freezing audio	Volume low	Check input level on display, and turn the volume up. Check speaker type and connections.
	Equipment off	Check the audio source equipment.
	IP Address Conflict	Check DIP switch address.
	IGMP not enabled, or not working properly.	Check the Ethernet Switch configuration and enable the IGMP protocol.
Hum or Buzz	Defective audio cable, or equipment incorrectly connected or grounded.	Change cable, or verify wiring interface. Try grounding equipment on each side to a safety ground.
Software cannot detect the 500755-AMP	Computer not on the same subnet or wrong IP Address	Verify the network IP Address & mask.

If you still can't diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).