The MuxLab ProDigital Network Controller (500811) is available to simplify the configuration and utilization of the 500764-TX. Reference the 500762-RX Install Guides for further details on this device.

The Transmitter (500764-TX) and Receiver (500762-RX) are sold separately. IR Emitter and IR Sensor, if required, may be purchased separately for IR based remote control applications.

For the point-to-multipoint and multipoint-to-multipoint configurations the Ethernet Switch must have Gigabit ports, DHCP Server capability and additionally support the IGMP communication protocol for the multipoint-to-multipoint case. MuxLab recommends using the Cisco SG350 Series Managed Switches.

The MuxLab ProDigital Network Controller (500811 or 500812) and MuxControl iOS and Android App is available to simplify the configuration and utilization of the 500764-TX and other MuxLab AV over IP products.

Applications
Applications include Audio/Video streaming over LAN/Internet, commercial and residential AV systems, classroom projector systems, digital signage, boardroom systems, and medical information systems.

Installation
Note: The following instructions are for the 500764-TX Transmitter and a compatible Receiver such as the MuxLab 500762-RX Receiver.

1. Identify the connectors on the Transmitter and Receiver as indicated on the product labels, see the above front and rear product views for further details on the 500764-TX. Reference the 500762-RX Install Guides for further details on this device.
2. Verify that the distance between the HDMI Transmitter and Receiver is within MuxLab specifications (see Specifications table for further details).

3. To install the Transmitter:
   3a. Connect the 500764-TX Transmitter to the HDMI video source with an HDMI compliant cable.
   3b. If the application is point-to-point, then connect one (1) length of Cat5e/6 (or higher) grade UTP cable to the RJ45 LINK connector on the 500764-TX Transmitter. If transmitting over the network, use an Ethernet Switch between the TX & RX unit

4. To install a compatible Receiver, such as the MuxLab 500762-RX:
   4a. Connect the 500762-RX Receiver to the HDMI display equipment with an HDMI compliant cable.
   4b. If the application is point-to-point, then connect one (1) Cat5e/6 cable coming from the 500764-TX Transmitter, to the RJ45 LINK connector on the 500762-RX Receiver. If transmitting over the network, use an Ethernet Switch between the TX & RX unit

5. If the configuration is a point-to-multipoint or multipoint-to-multipoint:
   5a. You will need to use an Ethernet Switch with Gigabit 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, that the DHCP Server is enabled, and that the IGMP Protocol is enabled for multipoint-to-multipoint applications. See the Ethernet Switch operating manual for more information about configuring the Ethernet Switch.
   5b. Connect all 500764-TX Transmitters and 500762-RX Receivers to the Ethernet Switch.
   5c. Use the DIP Switches to select a unique Device ID for each 500764-TX Transmitter present on the network and configure each 500762-RX Receiver Device ID to the corresponding selected Transmitter. Note: This step is not necessary if the MuxLab ProDigital Network Controller (500811 or 500812) is used.

6. Powering the 500764-TX Transmitter or 500762-RX Receiver via an external power supply is only necessary where PoE (PSE) is unavailable. If PoE is unavailable, connect a 5 VDC power supply (500993 – sold separately) to each 500762-RX Receiver and to an AC power outlet. Next connect each 500764-TX Transmitter in the same manner. If power is present, the power LED on each 500764-TX Transmitter and 500762-RX Receiver will illuminate.

   Note: Power ‘ON’ the HDMI 500764-TX Transmitter and 500762-RX Receiver only after all other connections have been made.

7. Power ‘ON’ the HDMI equipment and check the visual quality.

8. This product supports IR control. IR Emitter and Sensor are not included, and are sold separately. If infrared remote control is needed to control the Source equipment from the Display, connect the IR Sensor (PN: 500994) to the 3.5mm IR Jack of the 500762-RX Receiver and the IR Emitter (PN: 500998) to the 3.5mm IR Jack of the 500764-TX Transmitter. Set the IR direction via the unit web interface (see Web Interface Guide).

   Note: 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).

9. 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.

10. Position the IR Emitter as close as possible to the source’s IR Sensor (i.e. Blu-Ray player). 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.

11. This product supports RS232 bidirectional communication. On the 500764-TX Transmitter, the RS232 port is configured as a DCE; and on the 500762-RX Receiver as a DTE. Please connect your RS232 cable accordingly. The default settings are 115.2K, N, 8, 1.

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12. The HDMI & 2CH Audio loop-out ports may be used to connect to local compatible devices.

13. The following diagram illustrates a typical configuration.

14. This unit supports a Factory Reset function, if ever required. Note however that and saved unit configuration data will be lost. To perform a Factory Reset, press and hold the reset button located on the front between 6 to 10 seconds, until the LED starts to flash. If you just want to reset (reboot) the unit, then simply momentarily press the reset button for 1 second.

![Troubleshooting Diagram](Image 450x316 to 698x504)

### Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in regard to the installation of the 500764-TX Transmitter in combination with the 500762-RX Receiver:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Transmitter LEDs</th>
<th>Receiver LEDs</th>
<th>Probable Cause</th>
<th>Possible Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Image</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>No Image</td>
<td>BLINK</td>
<td>OFF</td>
<td>BLINK</td>
<td>ON</td>
</tr>
<tr>
<td>No Image</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>Info Screen</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>Info Screen</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>Info Screen</td>
<td>ON</td>
<td>BLINK</td>
<td>ON</td>
<td>BLINK</td>
</tr>
<tr>
<td>Info Screen</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
<td>BLINK</td>
</tr>
<tr>
<td>Chopp Video</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>Image flickers when powering up nearby equipment</td>
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<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>IR not functioning *</td>
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<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
</tbody>
</table>

* IR Emitter and IR Sensor sold separately.

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