**Important Safety Instructions**

Please read the supplied safety instruction document before using the product and keep it safe at all times for future reference.

**Introduction**

Lightware’s UMX-TPS-TX130 devices transmit universal video at a resolution up to 4K, audio, analog video and audio signals (e.g., DVI, VGA, HDMI 1.4 and DP 1.1 with analog stereo audio from local inputs or embedded 7.1 HBR audio and to handle HDCP encryption).

The UMX-TPS-TX140-Plus model offers advanced control features: 100 available event slots; support RS-232 protocol for communication and control of third-party devices via VC codec - this allows the Cisco Room Kit login on RS-232–USB connection; support to send and receive GPIO signals.

**Compatible Devices**

The transmitters are compatible with other Lightware TPS devices, matrix TPS and TP2S boards, 25Gi boards, as well as third-party HDBaseT™ extenders, displays, but not compatible with the phasor UTP-90 extenders.

**Power Supply Options**

The transmitters can be powered:
- Locally with the supplied 12V DC adaptor or Lightware’s rack mountable PSU, or
- Remotely by a PoE-compatible power injector, like Lightware’s TPS-Pi-PFS.
- Powering by a matrix board over the TPS (CATx) cable. Output board needs to be powered by an external PSU.

**Mounting the Device**

The below examples demonstrate the application of UO Kit double and Rack Shell accessories (to order mounting accessories please contact sales@lightware.com).

**Further Information**

The document is valid with the following firmware version: 1.4.0.

The User’s manual of this appliance is available on www.lightware.com

**Contact Us**

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Connecting Steps

- Connect the transmitter and a compatible receiver or the main input board by a CATx via the TPS connectors.
- Optionally connect a serial device to the transmitter's RS-232 port.
- Optionally connect a controller/controlled device (e.g., relay box) to the GPIO port.

Front Panel Button Functions

Lock/Unlock Buttons: Press the AUDIO SELECT and the SHOW ME together.

Video Input Selection: The desired video input can be selected by the VIDEO SELECT button on the front panel. The selection order of the inputs depend on the model as follows:

- **TX120 models:**
  - VGA
  - DVI-D
  - HDMI
- **TX140 models:**
  - VGA
  - DVI-I
  - HDMI

Audio Input Selection: The desired audio input can be selected by the AUDIO SELECT button on the front panel. The selection order of the inputs depend on the model.

- If 4K video is selected to the output, analog audio cannot be embedded to the video stream due to the capabilities of the video IC, thus the original audio stream will be transmitted.
- Setting a Dynamic IP Address

Audio Cable Wiring Guide

For more information about audio cable wiring see the user's manual of the device or the Wiring Guide on our website www.liquidseven.com/support/guides-and-white-papers.

Typical Application

- Powering on the devices is recommended to do as the final step during the installation. Please see the Power Supply Options section for the details.

Maximun Extension Distances

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Pixel clock rate</th>
<th>CAT5e</th>
<th>AWG24</th>
<th>CAT7</th>
<th>AWG26</th>
<th>CAT7</th>
<th>AWG23</th>
</tr>
</thead>
<tbody>
<tr>
<td>1024x768@60Hz</td>
<td>68 MHz</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1280x1024@60Hz</td>
<td>75 MHz</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1280x1024@60Hz (HDCP)**</td>
<td>128 MHz</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1920x1080@60Hz</td>
<td>128 MHz</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
<td>600 m / 1.200 m</td>
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<tr>
<td>2560x1440@60Hz</td>
<td>166 MHz</td>
<td>200 m / 400 m</td>
<td>200 m / 400 m</td>
<td>200 m / 400 m</td>
<td>200 m / 400 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Long reach TPS mode supports pixel clock frequencies up to 148.5 MHz.
** If 4K video is selected to the output, analog audio cannot be embedded to the video stream due to the capabilities of the video IC, thus the original audio stream is transmitted.

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