VIP-T300H-U
4K HDMI and USB over IP System
USER MANUAL

For order support, please contact your local dealer.
For technical support, please contact us at support@purelinkav.com.
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What’s in the box

The VIP-T300H-U Transmitter and Receiver are sold separately.

- **VIP-T300H-U TX**
  - 1 VIP-T300H-U TX Transmitter/Encoder
  - 1 12 VDC Power Adapter
  - 1 set of mounting brackets
  - 1 IR receiver
  - 1 USB cable

- **VIP-T300H-U RX**
  - 1 VIP-T300H-U TX Transmitter/Encoder
  - 1 12 VDC Power Adapter
  - 1 set of mounting brackets
  - 1 IR receiver
  - 1 IR remote control

Optional Accessories

VIP-T300H-U-RACK2-TX

VIP-T300H-U-RACK2-RX

RPS-1218 – 18 channel, 12 VDC rack mount power supply

VPX – Video Over IP Management Software with Automation

VPX Wallmaster pluging for VPX

VPX Commander – 1U Rack mount host appliance for VPX Management Software

VIP-NET Media Hub purpose built for video over ip network switches
Product Description

The VIP-T300H-U is four in one IP transport solution system for applications of extension, distribution, switching, and matrixing. The VIP-T300H-U accepts up to 4K30 4:4:4 HDMI signals, and USB 2.0, RS232, and Infrared. The VIP-T300H-U supports layered switching, up to 8x8 videowalls, image rotation, and provides either copper (CAT) or fiber (SFP) transport.

Specifications

- **Input video support**
  - 4K60 4:2:0
  - 4K30 4:4:4
  - 1080P60
  - 1080P30
  - 1080P24
  - 720P60
  - 720P30
- **Input audio support**
  - HDMI input
    - Typical HDMI 1.4 audio formats
    - Dolby TrueHD
    - DTS-HD Master
    - LPCM Audio
    - Up to 7.1 channels 192 KHz
  - Analog stereo input
- **HDCP support**
  - HDCP 1.4 and 2.2 input
  - HDCP 1.4 output with HDCP 2.2 inputs (supports legacy 4K HDMI 1.4 displays)
- **Data rate**
  - 280 – 320 Mbps median (800 Mbps peak)
  - Installer variable rate throttle option
- **Latency**
  - Up to 17 milliseconds
- **Distance**
  - Max. 150M using CAT6a
  - SFP Multi mode
  - SFP Single mode
Front Panel - TX (encoder) (transmitter)

1. Power LED
2. Network Link LED
3. IR receiver
4. IR activity LED
5. CAT/RJ45 Activity LED
6. Fiber/SFP Activity LED
7. Info/fault message LED
8. Broadcast channel display
9. Minus/multifunction button
10. Plus/multifunction button
11. Menu/multifunction button
Rear Panel - TX (encoder) (transmitter)

1. 1G LAN Port
2. 1G SFP Slot
3. HDMI Input
4. HDMI Loop Out
5. Stereo input (unbalanced)
6. Stereo output (unbalanced) (unicast mode only)
7. IR receiver input
8. IR transmitter output
9. USB 2.0
10. RS232
11. 12V DC input
Front Panel - RX, (decoder) (receiver)

1. LAN activity LED
2. Audio output
3. Power LED
4. Network Link LED
5. IR receiver LED
6. IR activity LED
7. USB 1.1
8. SFP Activity LED
9. Mic in (unicast only)
10. Info Message LED
11. Broadcast channel display
12. Minus/multifunction button
13. Plus/multifunction button
14. Menu/multifunction button
Rear Panel – RX (decoder) (receiver)

1. 1G LAN Port
2. 1G SFP Slot
3. HDMI Out
4. IR receiver input
5. IR transmitter output
6. USB 2.0
7. RS232
8. 12V DC input
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Button</th>
<th>Receiver Function</th>
<th>Transmitter Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="POWER" /></td>
<td>POWER</td>
<td>Turn Off/On Video Output</td>
<td>Connect/Disconnect Receiver</td>
</tr>
<tr>
<td><img src="image" alt="MENU" /></td>
<td>MENU</td>
<td>Menu selection, input numbers after press</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="UP" /></td>
<td>UP</td>
<td>Increase Value</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="DOWN" /></td>
<td>DOWN</td>
<td>Reduce Value</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="LEFT" /></td>
<td>LEFT</td>
<td>Carry</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="RIGHT" /></td>
<td>RIGHT</td>
<td>Decomposition</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="ENTER" /></td>
<td>ENTER</td>
<td>Enter / Show Channel Information</td>
<td>Enter</td>
</tr>
<tr>
<td><img src="image" alt="ASTERISK" /></td>
<td>ASTERISK</td>
<td>Cancel</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="NUMBER" /></td>
<td>NUMBER</td>
<td>Recall Previous Value</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="A" /></td>
<td>A</td>
<td>Favorite Channel Switching</td>
<td>Not Available</td>
</tr>
<tr>
<td><img src="image" alt="B" /></td>
<td>B</td>
<td>Back to Previous Channel</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="1" /></td>
<td>1</td>
<td>Number 1</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="2" /></td>
<td>2</td>
<td>Number 2</td>
<td></td>
</tr>
</tbody>
</table>
Remote requires 2x AAA batteries.

Remote Control Operation

Select Channel:
   Mode 1: use ↓ or ↑ or ← or → to select channel and press ENTER to confirm.
   Mode 2: enter the channel number and press ENTER to confirm the input channel.

Select Menu Function:
   Mode 1: press MENU, then use ↓ or ↑ or ← or → to select function, press ENTER to confirm.
   Mode 2: press MENU, then input function number as below, press ENTER to confirm.

Wake Up Receiver:
   Receiver will enter screen saver mode after 30 seconds if no video input, you could press any button of IR remote or pane to wake up

Turn On/Off Monitor:
   Press POWER of IR remote or panel button CH- and CH+ together to turn on video output

IR Quick Block:
   # # #: IR block mode, ignore IR control signal until press any panel button or IR remote * three times
   * * *: Quit IR block mode
TV Wall Quick Switch:

_**MENU+POWER**_: IR quick block mode, ignore IR control signal until press any panel button or IR remote *** *

Add Favorite List:

_**MENU+A**_: Add channel to favorite list in menu, maximum 32 channels.

Remove Favorite List:

_**MENU+B**_: Remove current channel from favorite list in menu

Transmitter RS232 Mode:

_**MENU+A**_: Switch to message mode to receive response instead of OSD.
_**MENU+B**_: Switch to extender mode.

---

**Connecting to the VIP-T300H-U over the Network**

Besides video, audio, USB, IR and RS232 transport over networks, the VIP-T300H-U provides network access to the following functions:

- Built in web server
- API

**Built in web server**

The built-in web server provides the following functionality

- Informational
  - Firmware version
- Settings

**API**

**Point to Point**

To use the VIP-T300H-U as a point to point system, there is no need for a network, you can directly connect the TX and RX by CAT or Fiber.
Distribution (One TX to more than one RX)
Connecting a VIP-T300H-U TX to multiple RX, you need a compatible network switch, however it is not necessary to access the devices through the network, although you may.

Switching (More than one TX to one RX)
The VIP-T300H-U offers IR remote control, and front panel switching on the RX, however you may want to use a control system, such as our VPX Video Over IP Management Software.

Windows 8.1 and Windows 10 Computer LAN Port Setup

Opening Network Page
Option 1: Right Click on the taskbar icon that looks like a signal strength indicator. Then click on “Open Network and Sharing Center”.

Option 2: Use the search window and type “Network and Sharing Center”. When the search function provides choices below, select Network and Sharing Center.

The next page will be as shown below. Select the “Change Adapter Settings”.

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When you are in the Change Adapter Settings page as shown below, select the LAN adapter that you will use to communicate with the VIP-T300H-U system.

For this example, we will select the middle listing, Qualcomm Atheros LAN Adapter. Double click on the listing. The properties page will open as shown below.

Note: Do not deselect the checkbox or change the selections of any other properties in the menu.

When the window changes to the Properties page for the Internet Protocol Version 4, enter the same IP subnet as the VIP-T300H-U system. (VIP-T300H-U default address is 192.168.1.180)
Setting up your Mac computer to communicate on the same subnet

*Opening Network Page*

From the top menu bar, you can either click on the network symbol

![Network Menu](image1.png)

Or click on the Apple icon in the upper left, and select system preferences:

![System Preferences](image2.png)

Then select Network:
Select the appropriate network adapter from the list in the left pane, and then set the correct IP subnet parameters.

**Network switch requirements**

The VIP-T300H-U is compatible with all Media Hub network switches from PureLink. We recommend the Media Hub line as they are video over ip purpose built and ready for use out of the box in closed systems. The Media Hub line of network switches are all either L2+ or L3 switches depending on the model, and support CAT and Fiber transport.

You may use the VIP-T300H-U video over ip system with other network switches.

The minimum requirements of a network switch for the VIP-T300H-U are:

- 1G BaseT Port speeds
- Backplane data rate performance that exceeds the total data rate of your system
- IGMP Snooping, and IGMP Querier
- Jumbo Frame
Network switch recommendations

It is also recommended from a system design standpoint that you consider VLAN management to isolate the multicast traffic generated by the transmitters from devices other than the receivers.

Bandwidth Chart

Bandwidth will vary based on a variety of factors, chart is for approximate reference.

<table>
<thead>
<tr>
<th>Resolution (@60Hz)</th>
<th>Average Bandwidth (Mbps)</th>
<th>Resolution (@60Hz)</th>
<th>Average Bandwidth (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3840x2160 (2160p)</td>
<td>218 (146~268)</td>
<td>1280x1024 (SXGA)</td>
<td>113 (79~150)</td>
</tr>
<tr>
<td>1920x1080 (1080p)</td>
<td>133 (80~210)</td>
<td>1024x768 (XGA)</td>
<td>81 (72~120)</td>
</tr>
<tr>
<td>1280x720 (720p)</td>
<td>147 (112~177)</td>
<td>800x600 (SVGA)</td>
<td>66 (49~82)</td>
</tr>
<tr>
<td>1600x1200 (UXGA)</td>
<td>81 (57~105)</td>
<td>640x480 (VGA)</td>
<td>43 (29~56)</td>
</tr>
</tbody>
</table>

Transmission of USB simultaneously can add approximately 50 Mbps to above values.

Installation

The VIP-T300H-U can be rack mounted, or tab mounted. Tab mounts come in the product packaging. Rack plates are optional accessories, and can be found listed on the product web page.

Connections

Power

Each VIP-T300H-U can be powered by PoE 802.3af via the RJ45 port, or from the included AC to 12Vdc power adapter.

When multiple VIP-T300H-Us are present in a rack system, and are connected by fiber, or PoE is not an option, we recommend our RPS-1218, eighteen channel 12VDC UL listed power supply.
Network
The VIP-T300H-U supports standard category RJ45 connectivity. It is recommended to use CAT6a cabling to ensure best performance. CAT5e will satisfy bandwidth requirements.

The VIP-T300H-U is set to an static default IP method, within the 169.254.nnn.nnn, 255.255.0.0 subnet.

Audio
The VIP-T300H-U provides HDMI audio transport, and support insert analog audio on the TX, and extraction analog audio on the RX. If you choose unicast mode, parallel analog audio transport is possible in both directions.

Using the layered switching feature of the VIP-T300H-U (Free Routing enabled), you can break away the HDMI or analog audio and route it separately from the video, USB, IR, and RS232 layers, to other receivers.

Video
The VIP-T300H-U provides HDMI video transport. Using the layered switching feature of the VIP-T300H-U, you can break away the HDMI video and route it separately from the audio, USB, IR, and RS232 layers, to other receivers.

Infrared
The VIP-T300H-U provides IR transport. Using the layered switching feature of the VIP-T300H-U, you can break away the IR and route it separately from the audio, video, USB, and RS232 layers, to other receivers.

You may also control the VIP-T300H-U RX with the optional IR remote control, and IR receiver built in to the front panel.

RS232
The VIP-T300H-U provides RS-232 transport. There are a few types of RS-232 transport available.

Passthrough – follow video
RS-232 connections default to a follow video mode.

Passthrough – breakaway / layered switching
Using the layered switching feature (Free Routing) of the VIP-T300H-U, you can break away the RS-232 and route it separately from the audio, video, USB, and IR layers.

Network API to RS-232
In addition, the VIP-T300H-U provides API control of the RS232 ports, allowing send/receive commands to 3rd party devices. This very valuable feature uses network commands to implement control of sources and displays, or other devices.
**Diagnostic LEDs**

<table>
<thead>
<tr>
<th>Panel LED</th>
<th>Status</th>
<th>VIP-T300H-U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Green LED</td>
<td>On</td>
<td>Boot completed</td>
</tr>
<tr>
<td></td>
<td>Flash Twice</td>
<td>Booting</td>
</tr>
<tr>
<td></td>
<td>Flash Slowly</td>
<td>Transmitter: standby (by IR remote power button only)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Receiver: video output be turned off</td>
</tr>
<tr>
<td></td>
<td>Slow pulse</td>
<td>Screen saver mode (not available for transmitter)</td>
</tr>
<tr>
<td>Link Blue LED</td>
<td>On</td>
<td>Connected &amp; video is streaming</td>
</tr>
<tr>
<td></td>
<td>Flash</td>
<td>Connecting, or no source input from transmitter</td>
</tr>
<tr>
<td>IR Red LED</td>
<td>On</td>
<td>Transmitting /receiving IR signal</td>
</tr>
<tr>
<td></td>
<td>Flash</td>
<td>System warning, Alert</td>
</tr>
<tr>
<td>CAT Green LED</td>
<td>On</td>
<td>Connected by UTP RJ45 port</td>
</tr>
<tr>
<td></td>
<td>Flash</td>
<td>Transmitting /receiving data from UTP RJ45 port</td>
</tr>
<tr>
<td>SFP Blue LED</td>
<td>On</td>
<td>Connected by Fiber SFP port</td>
</tr>
<tr>
<td></td>
<td>Flash</td>
<td>Transmitting /receiving data from Fiber SFP port</td>
</tr>
<tr>
<td>MSG Red LED</td>
<td>On</td>
<td>Other message (IR, RS232, System setting...)</td>
</tr>
<tr>
<td></td>
<td>Flash</td>
<td>System warning, Alert</td>
</tr>
</tbody>
</table>

**MSG LED**

<table>
<thead>
<tr>
<th>Times</th>
<th>VIP-T300H-U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always ON</td>
<td>IR control, RS232 control, system setting</td>
</tr>
<tr>
<td>2</td>
<td>Transmitters channel conflict</td>
</tr>
<tr>
<td>3</td>
<td>DHCP server not found</td>
</tr>
<tr>
<td>4</td>
<td>Rest to factory default</td>
</tr>
<tr>
<td>5</td>
<td>Engineering mode</td>
</tr>
<tr>
<td>6</td>
<td>Manufacture setting mode</td>
</tr>
<tr>
<td>7</td>
<td>Aux system stopped</td>
</tr>
<tr>
<td>8</td>
<td>Aux system firmware boot sector error</td>
</tr>
<tr>
<td>9</td>
<td>Aux system firmware type error</td>
</tr>
</tbody>
</table>
RJ45 LED

<table>
<thead>
<tr>
<th>RJ45 LED</th>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINK Green LED</td>
<td>On</td>
<td>Ethernet connected</td>
</tr>
<tr>
<td>ACT Orange LED</td>
<td>Flash</td>
<td>Data transmission</td>
</tr>
</tbody>
</table>

RJ45 cable pin information (TIA/EIA-568-B)

1. Orange-white | Data 1 +  
2. Orange       | Data 1 -  
3. Green-white  | Data 2 +  
4. Blue         | Data 3 +  
5. Blue-white   | Data 3 -  
6. Green        | Data 2 -  
7. Brown-white  | Data 4 +  
8. Brown        | Data 4 –  

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Front Panel Button Functionality

To change ‘Channels’
Press either the up or down button until the 3-digit LED display shows the channel you wish to be on. Then press both the up and down button together to invoke the ‘Enter’ function.

Lock/unlock buttons
Press the up and down buttons together and hold for 6 seconds to lock, or unlock the buttons

Reset to Factory defaults
Prior to applying power to the device, press and hold the minus button. Then apply power.

Engineering mode
There is a mode called ‘Engineering mode’ that temporarily defaults the device to a specific static IP address of 192.168.0.88, in the event you are not able to access the device. Prior to applying power, press and hold the plus button, then apply power.
On Screen Display OSD

Pressing the Menu button will allow you to use the plus/minus buttons to select a Menu number. Menu numbers are explained below. When you are at the menu number you want, press the plus/minus button simultaneously to invoke the ‘Enter’ function. Many Menu choices have parameters that will be displayed where you can change and save your changes. Some menus, such as factory default, execute as soon as you confirm the menu number by invoking the ‘Enter’ function.

<table>
<thead>
<tr>
<th>No.</th>
<th>Menu</th>
<th>Description</th>
<th>Option / Remark</th>
<th>RX</th>
<th>TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>System Information</td>
<td>System Information</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>1</td>
<td>Network Information</td>
<td>Network Information</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>Function Information</td>
<td>Function Information</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>Control Information</td>
<td>Control Information</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>Video &amp; Audio Information</td>
<td>Video &amp; Audio Information</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>RS-232 Control Information</td>
<td>RS-232 Control Information</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>Channel Information</td>
<td>Channel Information</td>
<td></td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>Routing Information</td>
<td>Routing Information</td>
<td></td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>Video Wall Information</td>
<td>Video Wall Information</td>
<td></td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>10</td>
<td>Advanced Menu</td>
<td>Display advance menu</td>
<td>0 = Hide</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Reconnection</td>
<td>Reconnect with TX/RX</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>12</td>
<td>Disconnection</td>
<td>Disconnection (keep routing channel)</td>
<td></td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>13</td>
<td>Stop Connection</td>
<td>Stop all connection (Include routing channel)</td>
<td></td>
<td>A</td>
<td>A</td>
</tr>
<tr>
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<td>RS232 Control setting</td>
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<td>1</td>
<td>1</td>
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<td></td>
<td>1 = Enable (Case Sensitive)</td>
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<td>Screen Off Option</td>
<td>Behavior After Screen Off</td>
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<td></td>
</tr>
</tbody>
</table>

**Notes:**
- 0 = Disable
- 1 = Enable
- X = Customized

**35:** HDMI 5V Control
- Cut HDMI 5V when switching
- 0 = Disable
- 1 = Enable

**40:** Video Select
- Video output resolution setting
- 0 = Pass-Through
- 1 = Full HD 1080p 60Hz
- 2 = Full HD 1080p 50Hz
- 3 = Ultra HD 2160p 30Hz
- 4 = Ultra HD 2160p 25Hz
- 5 = WXGA 1366x768 60Hz
- 6 = WXGA 1440x900 60Hz
- 7 = WXGA 1920x1200 60Hz
- 8 = SXGA+ 1400x1050 60Hz
- 9 = Customize

**41:** Audio Select
- TX Audio Input Select/RX Audio Output Select
- 0 = HDMI
- 1 = Analog
- 2 = Auto

**42:** Analog Input Volume
- Analog Input Volume
- 0 = Mute
- 1 ~ 100 = Volume %

**43:** Analog Output Volume
- Analog Output Volume
- 0 = Mute
- 1 ~ 100 = Volume %

**44:** EDID Update
- Update EDID from TX or monitor of RX

**45:** Video Quality
- Video Quality setting
- 0 = Graphic Mode
- 1 = Mode 1
- 2 = Mode 2

**46:** Anti-Dither
- Anti-Dither setting
- 0 = Disable
- 1 = Mode 1
- 2 = Mode 2

**47:** HDCP Dither
- HDCP setting
- 0 = Disable
- 1 = Enable

**50:** RS-232 Select
- RS-232 Port Mode Select
- 0 = Disable
- 1 = Extender
- 2 = Keypad
- 3 = Auxiliary
- 4 = Console

**51:** RS-232 Baudrate
- RS-232 Extender Baudrate
- 0 = 115200 bps
- 1 = 57600 bps
- 2 = 38400 bps
- 3 = 19200 bps
- 4 = 9600 bps
- 5 = 4800 bps
- 6 = 2400 bps
- 7 = 1200 bps
- 8 = 600 bps
- 9 = 300 bps

**53:** RS232 Trigger
- RS232 Control Trigger setting
- 0 = Linux (0x0A)
- 1 = Windows (0x0D, 0x0A)
- 2 = Mac (0x0D)
- 3 = Other (0x0A, 0x0D)

**54:** Auxiliary Baudrate
- Auxiliary Baudrate
- 0 = 115200 bps
- 1 = 57600 bps
- 2 = 38400 bps
- 3 = 19200 bps
- 4 = 9600 bps
- 5 = 4800 bps
- 6 = 2400 bps
- 7 = 1200 bps
- 8 = 600 bps
- 9 = 300 bps

**56:** Auxiliary Trigger
- Auxiliary Trigger setting
- 0 = Disable
- 1 = Enable

**60:** Fast Switch
- Switch without stop link
- 0 = Disable
- 1 = Enable

**61:** Conflict Check
- Check existing TX channel
- 0 = Hide
- 1 = Display

**70:** Direct Access Menu
- Run menu function even hide
- 0 = Disable
- 1 = Enable

**71:** Menu Item “Advanced Menu”
- Display/Hide “Advanced Menu”
- 0 = Disable
- 1 = Enable

**72:** Screensaver
- Screen Saver setting
- 0 = No Option
- 1 = Mute Analog Audio
- 2 = Stop Connection

**73:** Screen Off Option
- Behavior After Screen Off
- 0 = No Option
- 1 = Mute Analog Audio
- 2 = Stop Connection
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
</table>
| 74 | Diagnostic Information | Diagnostic Information | 0 = Disable  
1 = Enable |
| 80 | Video Routing | Video Routing setting | 0 ~ 999 = Specific Channel  
1000=Follow Channel |
| 81 | Audio Routing | Audio Routing setting |  |
| 82 | USB Routing | USB Routing setting |  |
| 83 | RS-232 Routing | RS-232 Routing setting |  |
| 84 | IR Routing | IR Routing setting |  |
| 85 | GPIO Routing | GPIO Routing setting |  |
| 86 | Load Routing Mapping | Load Free Routing Mapping | 0~4 |
| 87 | Save Routing Mapping | Save Free Routing Mapping | A X |
| 90 | Video Wall Max Row | Rows of Video Wall | 0~7 |
| 91 | Video Wall Max Column | Columns of Video Wall | 0~15 |
| 92 | Monitor Row Position | Monitor Position in Row | 0~7 |
| 93 | Monitor Column Position | Monitor Position in Column | 0~15 |
| 94 | Monitor Outside Width | Outer Width of Monitor | 0 X |
| 95 | Monitor Outside Height | Outer Height of Monitor | 0 X |
| 96 | Monitor Viewable Width | Width of Viewable Area | 0 X |
| 97 | Monitor Viewable Height | Height of Viewable Area | 0 X |
| 100 | Stretch Type | Stretch Type | 0 = Stretch Out  
1 = Fit In |
| 101 | Rotate | Rotation and Mirror | 0 ~ 7 |
| 102 | Vertical Shift | Vertical Shift | 400 = Default  
399 ~ 0 = shift up  
401 ~ 801 = shift down |
| 103 | Horizontal Shift | Horizontal Shift | 400 = Default  
399 ~ 0 = shift left  
401 ~ 801 =shift right |
| 104 | Vertical Scale | Vertical Scale | 0 ~ 255 |
| 105 | Horizontal Scale | Horizontal Scale | 0 X |
| 200 | Backup Setting | Backup Setting to bank 0~4 | 0 ~ 4 |
| 201 | Restore Setting | Restore Setting from bank 0~4 | A A |
| 202 | System Setting | System Setting | 0~255 (Debug use, no recommend for general users) |
| 203 | Application Setting | Application Setting | A A |
| 333 | Reset To Default | Reset to factory default | A A |
| 999 | System Reboot | System Reboot | A A |

Notes on Menus

- **Menu 17** Free Routing function only works in Multicast mode.
- **Menu 25** Display or hide video wall functions in the web UI.
- **Menu 26** CEC function only available in unicast mode.
- **Menu 20~25** To set select function connect to fix channel, not follow channel switching.
- **Menu 32** To set customize IR remote, need to be import to RX by RS-232 or Telnet command.
- **Menu 35** For monitors which detect HDMI 5V to enter sleep mode.
- **Menu 36** Turn off monitor by CEC command via RX.
- **Menu 40** Customize resolution need to be setup by RS-232 command or web page.
- **Menu 44** Use default EDID at TX side, copy monitor EDID at RX side.
- **Menu 47~48** Monitor HDCP version setting, with incorrect HDCP version setting it will show black screen.

<table>
<thead>
<tr>
<th>HDCP Always On</th>
<th>HDCP 2.2 Always On</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable</td>
<td>Disable</td>
<td>HDCP version follow source and Stream Type of</td>
</tr>
<tr>
<td>Enable</td>
<td>Disable</td>
<td>Monitor support HDCP 1.4</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Don’t Care</td>
<td>Enable</td>
<td>Monitor support HDCP 2.2</td>
</tr>
</tbody>
</table>

- **Menu 50** Extender = RS-232 extender, Keypad = for RS-232 keypad or number key in terminal software, Auxiliary = auxiliary mode debug, Console = system console debug

- **Menu 60** Fast Switch mode works best when: resolution, frame rate, scan mode (interlaced/non-interlaced), color depth, color space, interface (HDMI/DVI), HDCP mode (ON/OFF) all above are the same.

  **Disable**: Stop link before channel switch, will show black screen between switching, if switching to a channel which does not exist it will show diagnostic Information.

  **Enable**: Keep link when channel switch, if switch to the channel which not exist may cause screen freeze 1~2 seconds then show diagnostic Information.

- **Menu 61** Conflict Check will check existing TX channel number at booting, reconnection or before switching.

- **Menu 62** Channel Name will show full name instead of number only, the position of channel name is center of screen. Channel name can set by RS232 command or import from telnet port.

- **Menu 75** Message Redirect forward MENU message to TX RS232 port (Auxiliary mode) instead OSD.

- **Menu 76** Command Redirect run RS232 command from Web or telnet port (Auxiliary mode).

- **Menu 80~85** Fix selected function not follow the channel, only available when free routing enabled.

- **Menu 90~103** Only available when video wall function enabled.
Warranty

PureLink Three (3) Year Limited Warranty for PureStream™ Branded Products Only

Dtrovision, LLC. (hereinafter “PureLink”) warrants its HDTools and PureStream™ branded products (hereinafter “Product”) purchased directly from PureLink or Dealer shall be free from defects in workmanship and materials, under normal use and service, for a period of three (3) years on parts and three (3) years on labor. Any repaired or replaced equipment related to Product shall be covered only under the remaining portion of the warranty. This warranty has no relationship to and exists independently of any warranty offered by Dealer. This warranty is a limited warranty and gives you specific legal rights. You may also have other rights which vary from state to state.

TERMS & CONDITIONS

PureLink shall repair or replace the Product if it develops a material fault during the period of warranty, on condition that i) the Product has only been subject to normal use in a domestic or commercial environment in a manner consistent with its specification and functionality, ii) the Product has been cared for reasonably and only subjected to reasonable wear and tear, iii) the defect has not been caused by willful or negligent abuse or neglect, or any accident or improper installation procedure, iv) the serial number of the Product has not been altered or removed.

This warranty only applies to the original purchaser, and shall be the exclusive remedy to the original purchaser. PureLink shall not be liable for any damages whatsoever caused by Product or the failure of Product to perform, including incidental or consequential damages. PureLink shall not be liable for any claim made by a third party or made by the purchaser for a third party.

Except as expressly set forth in this warranty, PureLink makes no other warranties, expressed or implied, including any implied warranties of merchantability and fitness for a particular purpose. PureLink expressly disclaims all warranties not satisfied in this limited warranty. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

WARRANTY RETURNS/REPAIRS/EXCHANGES

No merchandise may be returned without prior authorization from PureLink, and a Return Materials Authorization (RMA) number. Failure to comply with these conditions will result in rejection of the returned merchandise.

Any warranty service on Products must be arranged through Dealer. Authorized returns must be shipped freight prepaid and fully insured to PureLink, Ramsey, NJ USA, with the RMA number clearly marked on the outside of all shipping boxes and containers. PureLink reserves the right at its sole discretion to refuse any shipments arriving freight collect or without an RMA number. Any authorized returned merchandise must be accompanied by a note describing the reason for return, along with contact information including name, phone number, return mailing and shipping addresses, e-mail address, and RMA number.

On any products returned and accepted with an RMA number, return freight charges following repair of items under warranty shall be paid by PureLink, shipping by the standard ground carrier of its choice.

ADVANCE WARRANTY REPLACEMENTS

PureLink’s advance replacement service offers a Replacement Unit upon request - free of charge for eligible products purchased less than one (1) year of the warranty claim. Products purchased more than one (1) year prior to the warranty claim do not qualify for advance replacement services.

Advance replacement requests must be validated by a member of PureLink’s Technical Support Team. Replacement units may be new or refurbished and is subject to availability. PureLink is responsible for shipping the Replacement Unit to your designated location by standard ground service. All other shipping methods will be responsibility of the Dealer.
Original Unit Return – the Original Unit must be returned within thirty (30) calendar days of the return authorization date. Failure to return the Original Unit within this period will be subject to a minimum 15% re-stocking fee. Dealer is solely responsible for the shipping of the Original Unit to PureLink.

TO MAKE A WARRANTY CLAIM

To make a warranty claim, promptly notify PureLink within the warranty periods described above by calling PureLink’s Technical Support Department at 1-201-488-3232. PureLink, in its sole discretion, will determine what action, if any, is required under this warranty.

Most problems can be corrected over the phone through close cooperation between Customer and a PureLink technician. To better enable PureLink to address a warranty claim, please have the Product’s serial and model numbers. If PureLink, in its sole discretion, determines that an on-site visit or other remedial action is necessary, PureLink may send a representative to Customer’s site.

CUSTOMER SERVICE

Technical support inquiries can be submitted electronically through the PureLink website at www.purelinkav.com. For immediate assistance please contact PureLink’s Customer Care Team at

+1 (201) 488-3232