

# **Troubleshooting Guide**



# **HTX Series**

# Ultra HD/4K HDMI to HDBaseT Matrix Switcher with POE and HDCP 2.2

# PureLink<sup>™</sup>

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# Chapter 1. Important Facts

# 1. HTX series matrix important facts

\* HTX matrix supports HDMI 2.0, HDR, and HDCP 2.2.

\* HTX matrix supports resolution up to 4K@50/60Hz (4:4:4 pixel format).

\* Default EDID on the HTX matrix is 4K@60Hz (4:2:0 bitstream)

\* HTX matrix is not a scaling unit (1080p source will output 1080p despite the display being a 4K capable display and 4K source many not display video/audio if the display is not capable of 4K.)

# 2. Other important facts

\* There are three kinds of HDMI 2.0 support sources and devices by maximum supported resolution.

- 1. Maximum resolution up to 4K@60Hz (4:4:4).
- 2. Maximum resolution up to 4K@60Hz (4:2:0).
- 3. Maximum resolution up to 4K@30Hz (4:4:4).

Please refer to their manual.

\* Some sources and displays may not support HDR. Please refer to their manual.

\* If the display does not support certain audio format, there may be audio issues such as lip sync. Please refer to their manual.

\* HDbaseT does not support 4K@60Hz (4:4:4) -18 Gbps and only supports up to 4K@60Hz (4:2:0) - 10.2 Gbps.

# Chapter 2. Basic Troubleshooting

# 1. Basic Troubleshooting Steps

- Power cycle the unit
- Power cycle the unit by disconnecting / reconnecting the power supply
- Check and take note of the Firmware Info
- Swap known-working HDMI/CAT Cables to see if the issue persists
- Make sure the cables are within maximum distance
- If you own an HTX RX extender, check if it has its LINK/DATA Led light ON

### 2. Symptoms

- No Pictures
- No Video Signal
- Flickering / Blinking Pictures
- Wrong Color Output (e.g Green, Pink, or Black Screen)
- Audio, but no Video
- Video, but no Audio
- Displaying incorrect Resolution

### 3. Probable Causes

- \* Source does not support the resolution/or the function is turned off.
- \* Display does not support the resolution/or the function is turned off
- \* The cables are not connected properly or damaged
- \* The routing is incorrect
- \* EDID does not match
- \* Display does not support HDCP 2.2

# Chapter 3. EDID Management

# 1. EDID settings

EDID stands for Extended Display Identification Data.

EDID is an industry standard for AV Source and Display devices which automatically communicates manufacturer specification and data between devices.

This allows your AV source to send the best compatible signal data to your screen, TV, or projector to ensure the best possible picture results.

EDID data includes manufacturer and specification data including:

- Brand
- Product Code
- Date of Manufacture
- Video Input Type
- Horizontal and Vertical Size
- Supported features
- Color characteristics
- Timing information

# 2. Saving External EDID

This function acquires the default EDID of the Display to the input of your selection.

## a. Front of the UX

1) Select the Menu button and scroll up and down for the desired Output (HDMI/HDBaseT). Then press enter.



< PIC. EDID Menu List - HDMI Output 1>



< PIC. EDID Menu List – HDBaset Output 1>

2) Scroll up and down and press enter once you find the desired Input.

PureLink		
		MENU
Copy To Input: Input 1	ENTER ONCE YOU FIND YOUR INPUT	
	IR	ENTER
HTX-8800-U		

< PIC. Input Menu List – Input 1>

3) The following message will appear on the screen if the EDID is successfully passing the signal.



< PIC. EDID Status - Update was Successful>

4) If the issue persists, then please continue onto Saving External EDID - Web UI.

#### b. Web UI

1) Make sure to connect the UX and the PC to the same network via LAN cable. If a direct connection is made, remember to have the correct IPV4 Settings setup for the PC.

# I. How to Setup IPV4

1. Right-click your internet icon on the bottom right and Open Network & Internet Settings.



< PIC. Open Network & Internet settings >

2. Click Change Adapter Options.

# Change your network settings



Change adapter options View network adapters and change connection settings.

< PIC. Change Adapter Options>

3. Double-click the ethernet cable connected to the PC.

Network Connections				_			$\times$
$\leftarrow \rightarrow \ \lor \  \   \uparrow \  \   $ Control Panel $\rightarrow \   $ Net	work and Internet > Network C	onnections		~ Ō	Searc	ch Ne	Q
Organize   Disable this network device	Diagnose this connection	Rename this connection	»	1 1 1 1	-		?
Bluetooth Network Connection Not connected Bluetooth Device (Personal Ar Wi-Fi Pure2G Qualcomm QCA9377 802.11a	Ethernet PureLink ASIX AX88179 US	58 3.0 to Giga	Ethernet 3 Network cable unplugged TAP-Windows Adapter V9				
4 items 1 item selected							=

< PIC. Windows Network Connections>

4. Go to Properties

🖞 Ethernet Statu	IS	
General		
Connection		
IPv4 Connect	vity:	No Internet acces
IPv6 Connect	ivity:	No network acces
Media State:		Enable
Duration:		00:22:3
Speed:		1.0 Gbp
Details Activity		
	-	
	Sent —	Received
Bytes:	Sent — 48,855	Receiver - Receiver
Bytes:	Sent — 48,855	Received 53,56 Diagnose

< PIC. Ethernet Status - Properties>

5. Double-click the IPV4 to open its settings.

Ethernet Properties	Х
Networking Sharing	
Connect using:	
🚽 ASIX AX88179 USB 3.0 to Gigabit Ethernet Adapter #2	
Configure This connection uses the following items:	]
Image: Client for Microsoft Networks	
Install Uninstall Properties	
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. OK Cancel	

< PIC. IPV4 Settings>

6. Configure the IPV4 settings by selecting "Use the following IP address" and manually entering the IP address, Subnet mask, and Default gateway. (**Remember: the IPv4's IP** address must be different from the HTX's IP address.)

Internet Protocol Version 4 (TCP/IPv4) Properties		
General		
You can get IP settings assigned autom this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports ask your network administrator	
Obtain an IP address automatical	у	
• Use the following IP address:		
IP address:	192.168.1.7	
Subnet mask:	255.255.255.0	
Default gateway:	192.168.1.1	
Obtain DNS server address autom	atically	
• Use the following DNS server addr	resses:	
Preferred DNS server:		
Alternate DNS server:		
Validate settings upon exit	Advanced	
	OK Cancel	
< PIC. IPV4 Config	uration Settings>	

2) To manually find the IP address of the HTX, Press and Hold the Menu button until the IP address is displayed. (\*Do not let go of the button, otherwise the display will revert to its main screen.)



< PIC. HTX's IP Addres	S>
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3) Enter the HTX's IP address into the URL of a web browser (\*We recommend using Chrome.)4) Go to the EDID tab

General		Device Ver:2.40 Web Ver: 10.13
Control	Set EDID Mode 1080P PCM 2CH HDR	to IN 1 Set
EDID	Copy EDID From     HDMI OUT 1       Open EDID File     Open file	✓ to     IN 1     ✓     Set       ✓ to     IN 1     ✓     Set
Status	IN 1: 4k60 4:2:0 PCM 2CH HDR	
Upgrade	IN 2: 4k60 4:2:0 PCM 2CH HDR IN 3: 4k60 4:2:0 PCM 2CH HDR IN 4: 4k60 4:2:0 PCM 2CH HDR IN 5: 4k60 4:2:0 PCM 2CH HDR	EDID merge
	IN 6: 4k60 4:2:0 PCM 2CH HDR IN 7: 4k60 4:2:0 PCM 2CH HDR IN 8: 4k60 4:2:0 PCM 2CH HDR	Refresh

< PIC. EDID Tab>

5) Find the line "Copy EDID From".

Copy EDID From	HDMI OUT 1	🔽 to	IN 1 🔽	Set	
	< PIC. "Copy EDID From"	>			

General	Device Ver:2.40 Web Ver: 10.13
Control	Set EDID Mode 1080P PCM 2CH HDR I to IN 1 Set
FDID	Copy EDID From HDMI OUT 1 v to IN 1 v Set
EDID	Open EDID File
	HDMI OUT 2
Status	HDMI OUT 3
	IN 1: 4k60 4:2:0 HDMI OUT 4 IN 2: 4k60 4:2:0
Upgrade	IN 3: 4k60 4:2:0 HDMI OUT 5
	IN 4: 4k60 4:2:0 HDMI OUT 6 IN 5: 4k60 4:2:0
	IN 6: 4k60 4:2:0 HDMI OUT 7
	IN 7: 4K60 4:2:0 IN 8: 4k60 4:2:0 HDMI OUT 8
	HDBT OUT 1
	HDBT OUT 2
	HDBT OUT 3

6) For the first drop-down menu, select the desired HDMI/HDBaseT Output.

< PIC. "Copy EDID From" – Output Drop Down Menu>

7) For the second drop-down menu, select the desired Input.



< PIC. "Copy EDID From" – Input Drop Down Menu>

8) Click Set and make sure to check the Input status on the section below.

General		Device Ver:2.40 Web Ver: 10.13
Control	Set EDID Mode 1080P PCM 2CH HDR	to IN 1 Set
EDID	Copy EDID From HDMI OUT 4 Open EDID File <i>Open file</i>	✓ to IN 1 ✓ Set     ✓ to IN 1 ✓ Set
Status Upgrade	IN 1: HDMI OUT 4 IN 2: 4k60 4:2:0 PCM 2CH HDR IN 3: 4k60 4:2:0 PCM 2CH HDR IN 4: 4k60 4:2:0 PCM 2CH HDR IN 5: 4k60 4:2:0 PCM 2CH HDR IN 6: 4k60 4:2:0 PCM 2CH HDR IN 7: 4k60 4:2:0 PCM 2CH HDR IN 8: 4k60 4:2:0 PCM 2CH HDR	EDID merge

< PIC. EDID – Input 1: Resolution Results >

10) If the issue persists, please continue to **Saving Internal EDID.** 

# 3. Saving Internal EDID

HTX Matrix carries 16 pre-loaded EDID that can be saved to the inputs.

### a. Front of the UX

1) Select the Menu button and scroll up and down for the desired Resolution. Then press enter.



2) Scroll up and down and press enter once you find the desired Input.



< PIC. Input Menu List – Input 1>

3) The following message will appear on the screen if the EDID is successfully passing the signal.



< PIC. EDID Status – Update was Successful>

4) If the issue persists, then contact technical support via phone number (201)-488-3232 or email at <a href="mailto:support@purelinkav.com">support@purelinkav.com</a>.

# b. Web UI

1) Make sure to connect the UX and the PC to the same network via LAN cable. If a direct connection is made, remember to have the correct IPV4 Settings setup for the PC. (Refer to page 7)

2) To manually find the IP address of the HTX, Press and Hold the Menu button until the IP address is displayed. (\*Do not let go of the button, otherwise the display will revert to its main screen.)



< PIC. HTX's IP Address >

3) Enter the IP address into the URL of a web browser (\*We recommend using Chrome.)

General				Device V	/er:2.40 Web Ver: 10.13
Control	Set EDID Mode	1080P PCM 2CH HDR	🔽 to	IN 1 🔽	Set
FDID	Copy EDID From	HDMI OUT 1	🔽 to	IN 1 🔽	Set
	Open EDID File	Open file	🔽 to	IN 1 🔽	Set
Status	IN 1: 4k60 4:2:0 IN 2: 4k60 4:2:0	PCM 2CH HDR PCM 2CH HDR			
Upgrade	IN 3: 4k60 4:2:0 IN 4: 4k60 4:2:0 IN 5: 4k60 4:2:0	PCM 2CH HDR PCM 2CH HDR PCM 2CH HDR	EDID merge	$\bigcirc$	
	IN 5: 4k60 4:2:0 IN 6: 4k60 4:2:0 IN 7: 4k60 4:2:0 IN 8: 4k60 4:2:0	PCM 2CH HDR PCM 2CH HDR PCM 2CH HDR PCM 2CH HDR	Refresh		
5) Find the line	e "Set EDID Mode	e".			
Set EDID Mode	1080P PCM 2	CH HDR	to I	N 1 🔽	Set

Go to the EDID tab

< PIC. "Set EDID Mode" >

General					
Control	Set EDID Mode	1080P PCM 2CH HDR	to	IN 1 🔽	Set
EDID	Copy EDID From	1080P Dolby/DTS 5.1 HDR 1080P HD Audio 7.1 HDR	to	IN 1	Set
Status		1080i Stereo Audio 2.0 1080i Dolby/DTS 5.1 1080i HD Audio 7.1 3D Stereo Audio 2.0	10		Set
Upgrade	IN 2: 1080P PCM IN 3: 1080P PCM IN 4: 1080P PCM	3D Dolby/DTS 5.1 3D HD Audio 7.1 4K 30 PCM 2CH HDR 4K 30 Dolby/DTS 5.1 HDR	ge h		
		4K 30 HD Audio 7.1 HDR 4K 60(4:2:0) PCM 2CH HDR 4K 60(4:2:0) Dolby/DTS 5.1 HDR 4K 60(4:2:0) HD Audio 7.1 HDR			

6) For the first drop-down menu, select the desired Resolution.

< PIC. "Set EDID Mode" – Resolution Drop Down List>

7) For the second drop-down menu, select the desired Input.



< PIC. "Set EDID Mode" – Input Drop Down List>

8) Click Set and make sure to check the Input status on the section below.

General	Device Ver:2.40 Web Ver: 10	.13
Control	Set EDID Mode	
EDID	Copy EDID From       HDMI OUT 4       Image: Total of the set         Open EDID File       Open file       Image: Total of total of the set	
Status	IN 1: 1080P PCM 2CH HDR	
Upgrade	IN 2: 4k60 4:2:0 PCM 2CH HDR IN 3: 4k60 4:2:0 PCM 2CH HDR IN 4: 4k60 4:2:0 PCM 2CH HDR IN 5: 4k60 4:2:0 PCM 2CH HDR IN 5: 4k60 4:2:0 PCM 2CH HDR	
	IN 6: 4k60 4:2:0 PCM 2CH HDR IN 7: 4k60 4:2:0 PCM 2CH HDR IN 8: 4k60 4:2:0 PCM 2CH HDR	

< PIC. EDID – Input 1: Resolution Change Results >

9) If the issue persists, then contact technical support via phone number (201)-488-3232 or email

# at support@purelinkav.com.