

Troubleshooting Guide



UX Series

HDMI 2.0 Integrated Matrix Switcher

PureLink[™]

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Chapter 1. Important Facts

1. UX series matrix important facts

- * UX matrix supports HDMI 2.0, HDR, and HDCP 2.2.
- * UX matrix supports resolution up to 4K@50/60Hz (4:4:4 pixel format).
- * Default EDID on the UX matrix is 4K@60Hz (4:2:0 bitstream)

* UX 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.

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Chapter 2. Basic Troubleshooting

1. Pre-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 Cables to see if the issue persists.
- Make sure the cables are within maximum distance

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

4. Basic Troubleshooting Steps

- * Pressing each input will show the status of the following:
- 1) Video timing
- 2) AV Link Mode (Color space)
- 3) HDCP Status
- 4) EDID Timing (EDID currently used)
- 5) EDID M. Name (EDID currently saved)
- 6) E. Audio. Fmt (Audio Format)
- * Pressing each output will show the status of the following
- 1) Out timing (video out timing)
- 2) Output mode (HDCP mode)
- 3) EDID timing
- 4) EDID M. name (EDID of the display)
- 5) E. Audio. fmt (audio format)

Chapter 3. Firmware Upload

1. Symptoms

- Stuck in System Checking
- Stuck in Blue Screen
- Stuck in Firmware Upload

For example:



< PIC. Stuck in System Checking >

2. Probable Causes

- Glitch within the firmware
- Power Outages effecting the power supply

3. Web UI Instructions

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 properly setup for the PC.

a) 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.



< PIC. Windows Network Connections>

4. Go to Properties

📱 Ethernet Statu	s		>
General			
Connection			
IPv4 Connecti	vity:	No Inter	net access
IPv6 Connecti	vity:	No netw	ork access
Media State:			Enabled
Duration:			00:22:31
Speed:			1.0 Gbps
Details			
Activity			
	Sent —	-	Received
Bytes:	48,855	ľ	53,567
Properties	Disable	Diagnose	
			Close

< PIC. Ethernet Status - Properties>

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

Ethernet Properties	×						
Networking Sharing							
Connect using:							
ASIX AX88179 USB 3.0 to Gigabit Ethemet Adapter #2							
Configure This connection uses the following items:							
✓ Internet 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 UX's IP address.)**

Internet Protocol Version 4 (TCP/IPv4)	Properties ×									
General										
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.										
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	natically									
• Use the following DNS server add	resses:									
Preferred DNS server:										
Alternate DNS server:	· · ·									
Validate settings upon exit Advanced										
	OK Cancel									

< PIC. IPV4 Configuration Settings>

7. To check if the IP address is on the same network, go to the front of the UX and scroll down in the Menu list and enter LAN Info.



< PIC. Menu – LAN Info>

8. Check and make sure the following IP address is on the same network as the PC.

Pure Link ^{**}		
	ST:Dynamic (IP:192.168.0	IP(DHCP) 301.111
UX-4400	<u>VULTRAHD</u> [™] PREMIUM	HDR

< PIC. UX's IP Address>

9. Proceed to the next **Web UI Instructions** step to further validate the connection.

2) Go to the Web UI by entering the UX's IP address into a URL and login using the following credentials.

Name	1
Password	1
Login	

*We recommend using Google Chrome.

3) Go to the Settings Tab and go to the bottom-right hand

side.

CREATE	PRE	ESET	EDID	SE	ITING	INFO			
NETWORK SETTING							RS232	2C SETTING	
DHCP		On	Τ	Off		Baud F	Rate	19200	~
IP Address	5		Î			Data E	Bits	8bit	~
Subnet						Stop Bits 1bit		~	
Gateway						Parity disable		~	
	SAVE	CAN	ICEL				SAVE	CANCEL	
user1:name/pa	ss 1		1				FIF	RMWARE	
user3:name/pass 3			3			Web U	I:UX-4400-	-UI-V1.1.1	UPDATE
	SAVE	CAN	NCEL			Controller	:UX-4400-	CT-V1.4.2SA	UPDATE

< PIC. Settings Tab>

4) Under the section for Firmware, next to the line for the Controller, click Update.



< PIC. Firmware - Update Selected>

5) Select and open the appropriate firmware file to load the firmware.



< PIC. Firmware Upload - In-Progress>

6) Once the firmware upload is complete, check the LCD Display on the UX to see if the firmware upload is commencing.



< PIC. Firmware Upload - Complete>



< PIC. Front of the UX – Firmware Upload >

*You can attempt the firmware upload about 2 to 3 times

*The upload should take about 5 to 10 minutes.

6) If the issue persists, please continue to **USB Instructions**.

4. USB Instructions

1) Contact technical support for the latest firmware at (201)-488-3232 or email at support@purelinkav.com.

- 2) Use a USB flash drive that is 8GB or less and Windows PC (Recommended)
- 3) Once the USB is connected to the PC, right-click on the flash drive and format the drive.

	Open
	Open in new window
	Pin to Quick access
	Open AutoPlay
	Give access to >
	Open as Portable Device
	Include in library
U	Scan
۵	Shred
	Pin to Start
	Format
	Eject
	Cut
	Сору
	Create shortcut
	Rename
	Properties

< PIC. USB Flash Drive - Format >

4)	Make sure to	use FAT32 format	("Quick Format Unchecked")
----	--------------	------------------	---------------------------	---

Format USB Drive (D:)	\times
Capacity:	
7.50 GB	\sim
File system	
FAT32 (Default)	\sim
Allocation unit size	
4096 bytes	\sim
Restore device defaults	
Volume label	
Volume label	
Volume label Format options	
Volume label Format options	

< PIC. USB Flash Drive - FAT 32, Quick Format Unchecked >

5) Once the format is complete, download the firmware file to the USB flash drive.

*Only the firmware needs to be on the USB drive.



- 6) Once the firmware is on the USB, please follow the steps below.
 - 1. Turn off the UX.



< PIC. Front of the UX – Power Off >

2. Insert the USB to the USB port on the front.



< PIC. Front of the UX – USB Port >

3. Press and hold the cancel button.



< PIC. Front of the UX – Cancel Button >

4. While still holding the cancel button, power on the UX.



< PIC. Front of the UX – Holding Cancel while Power On >

5. Release the cancel button after 3 seconds



< PIC. Front of the UX – Releasing Cancel Button >

6. Confirm that the LCD display shows "Firmware Upload..."



< PIC. Front of the UX – Firmware Upload >

7) The UX will go into firmware upload mode.

*You can attempt the firmware upload about 2 to 3 times

- *The upload should take about 5 to 10 minutes.
- 8) If the issue persists, please feel free to contact technical support.

Chapter 4. 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 Menu
- 2) Go to the EDID Set and press enter



< PIC. EDID Set Function>

3) Select External EDID and Press Enter



- < PIC. External EDID Function>
- 4) Select the desired output



- < PIC. External EDID Select Output>
- 5) Select an input to test with. (If there is no output connected, the display will show the following.)



< PIC. External EDID – Select Input 1>

- 6) Press Enter and check to see if the signal is passing.
- (P means the signal is passing, F means the signal is not passing)



< PIC. External EDID – Signal Status>

7) If the signal does not pass, then move on to Saving Internal EDID.

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 5)

2) Go to the Web UI via the UX's IP address and login using the following credentials.



*We recommend using Google Chrome.

3) Go to the EDID tab

CREATE	PRESET	EDID	SETTING	INFO				
EDID								
IN1: Roku	3840x2160@	60[PUR],LPCM	2CH			REFRESH	LOAD	
IN2: DVD	1920x1080@	1920x1080@60[PUR],DVI						
IN3: PC	1920x1080@	1920x1080@60[PUR],DVI REFRESH LOAD						
IN4: Cable	1920x1080@60[PUR],DVI REFRESH							
EDID EDIT LIST	11.2160p@6	0, LPCM 2CH					•	

< PIC. EDID Tab in the Web UI>

4) Select an output port from the drop-down menu list.

CREATE	PRESET	EDID	SETTING	INFO		
EDID						
IN1: Roku	3840x2160@	60[PUR],LPCM	2СН		REFRESH	LOAD
IN2: DVD	1920x1080@	,60[PUR],DVI			REFRESH	LOAD
IN3: PC	1920x1080@	60[PUR],DVI			REFRESH	LOAD
IN4: Cable	1920x1080@	60[PUR],DVI			REFRESH	LOAD
EDID EDIT LIST	11.2160p@6	0, LPCM 2CH				•
	1. 1080p, DV 2. 1080p, LP 3. 1080p, Do 4. 1080p, LP 5. 1080p, LP 6. 1080p, Do 7. 1080p, LP 8. 2160p@3 9. 2160p@3 10.2160p@6 12.2160p@6 13.2160p@6 13.2160p@6 14.Output po 15.Output po	/I CM 2CH bby/D CM Multi channe CM 2CH 3D bby/D 3D CM Multi 3D 0, LPCM 2CH 0, Dolby/D 30, LPCM Multi 50, DOlby/D 50, LPCM Multi ort 1 ort 2	9			
	16.Output po 17.Output po	ort 3 ort 4				

< PIC. EDID Tab, drop-down list in the Web UI - Output port Selected>

5) Press Load to a selected input to find the best possible handshake between the input and output source and make sure to watch the displays to see any issues persist. If so, move on to **Saving Internal EDID**.

3. Saving Internal EDID

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

a. Front of the UX

- 1) Select Menu
- 2) Go to the EDID Set and press enter
- 3) Select Internal EDID and Press Enter



< PIC. Internal EDID Function>

4) Scroll up down for the desired resolution and select one or more desired

input



< PIC. Internal EDID – Input and Resolution Selection>

- 5) Press Enter and check to see if the signal is passing.
- (P means the signal is passing, F means the signal is not passing)



< PIC. Internal EDID - Signal Status>

6) If the signal does not pass, then contact technical support via phone number (201)-488-3232 or email at support@purelinkav.com.

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 5)

2) Go to the Web UI via the UX's IP address and login using the following credentials.

Name	1
Password	1
Login	

*We recommend using Google Chrome.

3) Go to the EDID tab

CREATE	PRESET	EDID	SETTING	INFO			
EDID							
IN1: Roku	3840x2160@	REFRESH	LOAD				
IN2: DVD	1920x1080@	1920x1080@60[PUR],DVI					
IN3: PC	1920x1080@	1920x1080@60[PUR],DVI					
IN4: Cable	1920x1080@	REFRESH	LOAD				
EDID EDIT LIST	11.2160p@6	0, LPCM 2CH				•	

< PIC. EDID Tab in the Web UI>

4) Select a desired resolution from the drop-down menu list.

CREATE	PRESET	EDID	SETTING	INFO			
EDID							
IN1: Roku	1920x1080@	60[PUR],DVI		REFRESH	LOAD		
IN2: DVD	1920x1080@	1920x1080@60[PUR],DVI					LOAD
IN3: PC	1920x1080@	1920x1080@60[PUR],DVI					
IN4: Cable	1920x1080@	1920x1080@60[PUR],DVI					LOAD
EDID EDIT LIST	14.Output po	rt 1					•
	1. 1080p, DV 2. 1080p, LP 3. 1080p, LP 5. 1080p, LP 6. 1080p, LP 6. 1080p, DC 7. 1080p, LP 8. 2160p@3 10.2160p@3 10.2160p@	4 CM 2CH CM 2CH CM Multi channi CM 2CH 3D Ibly/D 3D CM Multi 3D D, LPCM 2CH D, Dolby/D 80, LPCM Multi	el				
	11.2160p@6 12.2160p@6 13.2160p@6 14.Output po 15.Output po 16.Output po 17.Output po	10, LPCM 2CH 50, Dolby/D 50, LPCM Multi ort 1 ort 2 ort 3 ort 4					

< PIC. EDID Tab, drop-down list in the Web UI - Resolution Selected>

5) Press Load to a selected input to save the Internal EDID and make sure to watch the displays to see any issues persist. If so, then contact technical support via phone number (201)-488-3232 or email at support@purelinkav.com.