

# PS-820S

## 8x2 4K/60 Seamless Presentation Switcher

### USER MANUAL



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## SAFETY PRECAUTIONS

To ensure optimal performance, please read all instructions carefully before using the device. Save this manual for further reference.

- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device, as opening or removing housing may expose you to dangerous voltage or other hazards.
- Installation environment should have sufficient ventilation to avoid damage caused by overheating.
- If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull cables from the unit by force. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for an extended period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

### FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.





## INTRODUCTION

### Product Description

The HDTools™ **PS-820S** is an 8x2 seamless presentation switcher with 18 Gbps support and true 4K/60 @ 4:4:4 instant switching and individual video scaling for each output buss. The PS-820S features flexible input options including HDMI, HDBaseT, DisplayPort, and USB-C, as well as balanced audio embedding and audio mixing via S/PDIF. Together with convenient control options including relay control, the PS-820S provides a feature-rich solution for conference rooms, home theater, broadcast studios, hotel AV, auditoriums, and staging/rental environments that require seamless 4K/60 video and audio distribution.

### Package Contents

<b>Matrix Switcher</b>	<ul style="list-style-type: none"><li>• 1 ea. PS-820S-U 8x2 HDMI 2.0 Seamless Matrix Switcher</li><li>• 2 ea. Mounting Ears with 6 Screws</li><li>• 4 ea. Plastic Cushions</li><li>• 1 ea. IR Remote</li><li>• 1 ea. IR Receiver</li><li>• 3 ea. 3-pin Terminal Blocks</li><li>• 7 ea. 5-pin Terminal Blocks</li><li>• 1 ea. Power Adaptor (24V DC 6A)</li></ul>
<b>Extender Kit</b>	<ul style="list-style-type: none"><li>• 1 ea. PS-TX HDBaseT Transmitter</li><li>• 1 ea. PX-RX HDBaseT Receiver</li><li>• 4 ea. Mounting Ears w/ (8) screws</li><li>• 8 ea. Plastic Cushions</li><li>• 1 ea. 3-pin Terminal Block</li><li>• 1 ea. RS232 Cable (3-pin to DB9)</li></ul>

**Note:** Please contact your distributor immediately if any damage or defect in the components is found.



## SPECIFICATIONS

### PS-820S Seamless Switcher

<b>VIDEO</b>	
Input Signal	(1) HDBaseT, (4) HDMI, (1) Display Port, (1) VGA, (1) USB-C
Input Connectors	(1) RJ45, (4) Type-A female HDMI, (1) Type-A female DisplayPort, (1) 15-pin female VGA, (1) Type-C USB 3.0
Supported Input Resolutions	HDBaseT: Up to 4Kx2K@60Hz 4:4:4
	HDMI: Up to 4Kx2K@60Hz 4:4:4
	DP: Up to 4Kx2K@60Hz 4:4:4
	VGA: Up to 1920x1200 (50/60Hz)
	USB-C: Up to 4Kx2K@30Hz
Output Signal	(2) HDMI, (1) HDBaseT
Output Connectors	(2) Type-A Female HDMI, (1) RJ45
Supported Output Resolutions	HDMI: Up to 4Kx2K@60Hz 4:4:4
	HDBaseT: Up to 4Kx2K@60Hz 4:4:4
HDMI Version	2.0
DP Version	1.2
HDCP Version	2.2
<b>AUDIO</b>	
Input Signal	(1) External balanced audio (L+R) for the 1st input port – HDBaseT (1) External balanced audio (L+R) for the 2nd input port – HDMI (1) External balanced audio (L+R) for the 3rd input port – HDMI (1) Stereo auxiliary audio (L+R) for the 6 <sup>th</sup> input port – VGA (1) Balanced (L+R) MIX audio
Input Connectors	(4) 5-pin terminal blocks (1) 3.5mm jack
Frequency Response	20Hz – 20KHz, ±3dB
Max Input Level	2.0Vrms ± 0.5dB. 2V = 16dB headroom above - 10dBV (316mV) nominal consumer
Input Impedance	>10KΩ
Output Signal	(1) Balanced audio (L+R) for 1st output buss audio de-embedding (1) SPDIF audio (L+R) for 1st output buss audio de-embedding (1) Balanced audio (L+R) for 2nd output buss audio de-embedding (1) SPDIF audio (L+R) for 2nd output buss audio de-embedding
Output Connectors	(2) 5-pin terminal blocks (2) Toslink connectors
Frequency Response	20Hz – 20KHz, ±3dB



Max Output Level	2.0Vrms $\pm$ 0.5dB. 2V = 16dB headroom above -10dBV (316mV) nominal consumer line level signal
THD+N	< 0.05% (-80dB), 20Hz – 20KHz bandwidth, 1KHz sine at 0dBFS level (or max level)
SNR	> 80dB, 20Hz - 20KHz bandwidth
Crosstalk Isolation	> 70dB, 10KHz sine at 0dBFS level (or max level before clipping)
L-R Level Deviation	< 0.3dB, 1KHz sine at 0dBFS level (or max level before clipping)
Frequency Response Deviation	< $\pm$ 0.5dB 20Hz - 20KHz
Output Load Capability	1K $\Omega$ and higher (Supports 10x paralleled 10K $\Omega$ loads)
Stereo Channel Separation	>70dB@1KHz
Noise Level	-80dB
<b>CONTROL</b>	
Control Ports	(1) RS232, (2) Relays, (1) IR eye for PS-820S remote, (2) IR In, (1) IR Out, (1) TCP/IP, (1) Firmware
Connectors	(3) 3-pin terminal blocks, (4) 3.5mm jacks, (1) RJ45, (1) Type-A USB
<b>GENERAL</b>	
Operation Temperature	-10°C ~ +55°C
Storage Temperature	-25°C ~ +70°C
Relative Humidity	10%-90%
External Power Supply	Input: AC 100~240V, 50/60Hz; Output: 24V DC 6A
Power Consumption	85W (Max)
Dimension (W*H*D)	436.4mm x 44mm x 356.5mm
Net Weight	2.87KG

## PS-TX/RX Extender Kit

<b>TRANSMITTER (TX)</b>	
Input Signal	(1) HDMI
Input Connector	(1) Type-A female HDMI
Output Signal	(1) HDBT OUT
Output Connector	(1) RJ45
Control Ports	(1) IR IN, (1) IR OUT, (1) RS232
Control Connectors	(2) 3.5mm jacks, (1) 3-pin terminal block
Supported Resolutions	Up to 4K@60Hz 4:4:4 8bit
<b>RECEIVER (RX)</b>	
Input Signal	(1) HDBT IN
Input Connector	(1) RJ45



Output Signal	(1) HDMI
Output Connector	(1) Type-A female HDMI
Control Ports	(1) IR IN, (1) IR OUT, (1) RS232
Control Connectors	(2) 3.5mm jacks, (1) 3-pin terminal block
Supported Resolutions	Up to 4Kx2K@60Hz 4:4:4 8bit
<b>GENERAL</b>	
Transmission Distance	1080P@60Hz ≤ 230 feet (70 meters), 4K@60Hz ≤ 131 feet (40 meters)
HDMI Version	2.0
HDCP Version	2.2
Bandwidth	18 Gbps
Power Consumption	14W (max)
Operation Temperature	-10°C ~ +55°C
Storage Temperature	-25°C ~ +70°C
Relative Humidity	10%-90%
External Power Supply	Input Power: 12V DC 2A or Power over Cable (PoC), AC Adapter Input Power: 100~240VAC, 50/60Hz
Dimension (W*H*D)	115mm x 16mm x 84mm
Net Weight (g)	150g (ea.)



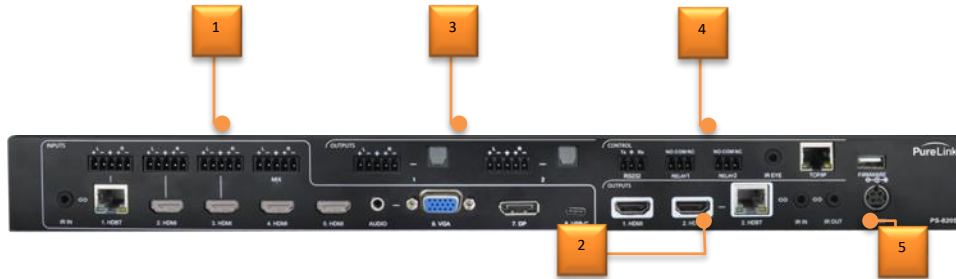
## PANEL DESCRIPTION

### PS-820S Front Panel



- ① **Power LED:** The LED illuminates red the device is powered on.
- ② **SOURCE:** Total nine buttons with amber backlight.
  - 1-HDBT input selector. Operates as Left navigation when OSD present.
  - 2-HDMI input selector. Operates as Right navigation when OSD present.
  - 3-HDMI input selector. Operates as Up navigation when OSD present.
  - 4-HDMI input selector. Operates as Down navigation when OSD present.
  - 5-HDMI input selector.
  - 6-VGA input selector.
  - 7-DP input selector.
  - 8-USB-C input selector. Operates as Enter when OSD present
  - Auto switching mode selector. Press this to enter or exit automatic switching mode. Operates as Menu On/Off when OSD present. Press and hold it at least 2 seconds to enable OSD menu.
- ③ **OUTPUTS:** Two buttons with amber backlight.
  - 1-HDMI output selector.
  - 2-HDBT output selector.
- ④ **VOLUME:**
  - Press the volume knob in toggle fashion to select **MIX**, **HDMI OUT** and **HDBT OUT** audio control, and the corresponding LED will illuminate blue.
  - Rotate the knob to increase or decrease the volume of the selected audio.
  - Press and hold the knob at least three seconds to mute the selected audio. Rotate the knob to unmute.

## PS-820S Rear Panel



### ① INPUT: Eight inputs, with five embedded audio inputs and one IR input.

- **1-HDBT:** RJ45 port to connect the PS-820S TX transmitter to receive video, audio, IR and RS232 control signal, and one external balanced audio input (5-pin) can be embedded in the HDBT video. The HDBaseT TX is powered from the PS-820S by 24V PoC.
- **2-HDMI:** Type-A female HDMI port to connect the HDMI source. One external balanced audio input (5-pin) can be embedded in the HDMI video.
- **3-HDMI:** Type-A female HDMI port to connect the HDMI source. One external balanced audio input (5-pin) can be embedded in the HDMI video.
- **4-HDMI:** Type-A female HDMI port to connect the HDMI source.
- **5-HDMI:** Type-A female HDMI port to connect the HDMI source.
- **6-VGA:** 15-pin female VGA port to connect the VGA source. One stereo auxiliary audio input (3.5mm jack) can be embedded in the VGA video.
- **7-DP:** Type-A female DP port to connect the DP source.
- **8-USB-C:** Type-C USB port to connect the device with SlimPort output, e.g. Macbook.
- **IR IN:** 3.5mm jack to connect the IR receiver for IR pass-through.
- **MIX:** 5-pin terminal block to connect the audio source for global audio mixing.

### ② OUTPUT:

- **1-HDMI:** Type-A female HDMI port to connect the video display.
- **2-HDMI:** Type-A female HDMI port to connect the video display.
- **2-HDBT:** RJ45 port to connect the PS-820S-U TX/RXR receiver to transmit AV signal, IR and RS232 control signal. The HDBT output supports 24V PoC.

**Note:** The 2-HDMI and 2-HDBT ports output the same signal.

- **IR IN:** 3.5mm jack to connect the IR receiver for IR pass-through.



- **IR OUT:** 3.5mm jack to connect the IR emitter for IR pass-through.

③ **AUDIO OUTPUT:**

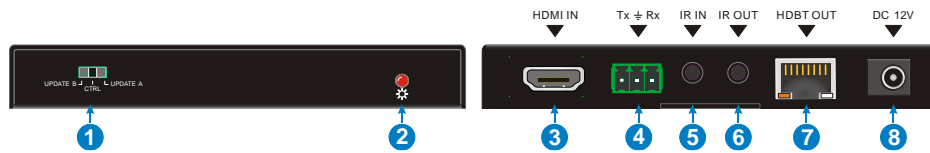
- **1:** One balanced audio output (5-pin) and one digital SPDIF audio output for 1-HDMI output audio de-embedding.
- **2:** One balanced audio output (5-pin) and one digital SPDIF audio output for 2-HDBT output audio de-embedding.

④ **CONTROL:**

- **RS232:** 3-pin terminal block to connect the control device (e.g. PC) to control the switcher by sending RS232 commands. It also supports RS232 pass-through control.
- **RELAY 1-2:** Two 3-pin terminal blocks to connect the relay devices (e.g. projector screen).
- **IR EYE:** 3.5mm jack to connect IR receiver to control the switcher by the IR remote.
- **TCP/IP:** RJ45 port to connect the control device (e.g. PC) to control the switcher by GUI.
- **FIRMWARE:** Type-A USB port for firmware upgrade.

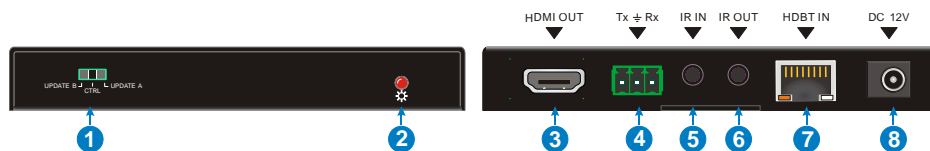
⑤ **DC 24V:** DC barrel connector for the power adapter connection.

## PS-TX Front & Rear Panel



- ① **MODE SWITCH:** Put the Mode switch in the **CTRL** position for normal operation and to allow RS232 control pass-through. Put the switch in the **UPDATE A** position to update the Valens IC program. Finally, put the switch in the **UPDATE B** position to update the compression IC program.
- ② **POWER LED:** The LED illuminates red when power is applied.
- ③ **HDMI IN:** Type-A female HDMI port to connect the HDMI source.
- ④ **RS232:** 3-pin terminal block to connect the RS232 control device (e.g. PC) or a device to be controlled by RS232 commands.
- ⑤ **IR IN:** 3.5mm jack to connect the IR receiver for IR pass-through.
- ⑥ **IR OUT:** 3.5mm jack to connect the IR emitter for IR pass-through.
- ⑦ **HDBT OUT:** RJ45 port to connect the **HDBT IN** port of switcher by CATx Ethernet cable.
- ⑧ **DC 12V:** DC barrel connector for the power adapter connection.

## PS-RX Front & Rear Panel



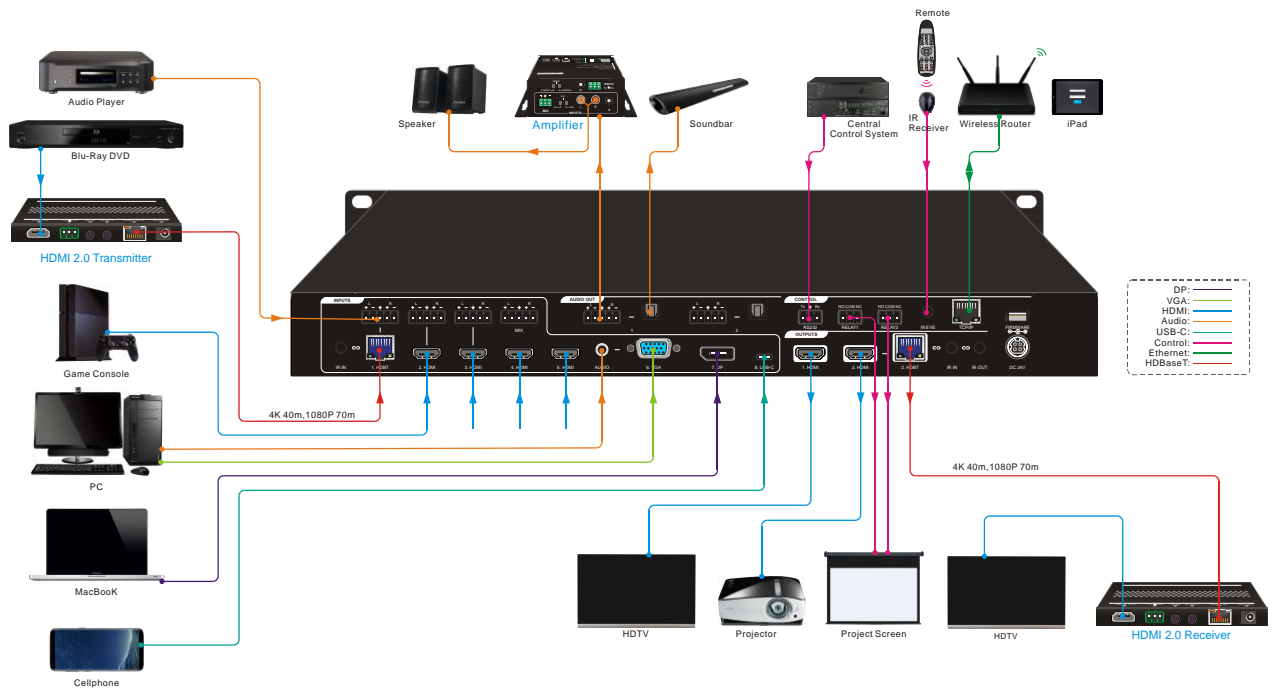
- ① **MODE SWITCH:** Put the Mode switch in the **CTRL** position for normal operation and to allow RS232 control pass-through. Put the switch in the **UPDATE A** position to update the Valens IC program. Finally, put the switch in the **UPDATE B** position to update the compression IC program.
- ② **POWER LED:** The LED illuminates red when power is applied.
- ③ **HDMI OUT:** Type-A female HDMI port to connect the display device.
- ④ **RS232:** 3-pin terminal block to connect the RS232 control device (e.g. PC) or a device to be controlled by RS232 commands.
- ⑤ **IR IN:** 3.5mm jack to connect the IR receiver for IR pass-through.
- ⑥ **IR OUT:** 3.5mm jack to connect the IR emitter for IR pass-through.
- ⑦ **HDBT IN:** RJ45 port to connect the **HDBT OUT** port of switcher by CATx Ethernet cable.
- ⑧ **DC 12V:** DC barrel connector for the power adapter connection.

## SYSTEM CONNECTION

### Before Use:

- Make sure all components and accessories are properly installed.
- All power switches, plugs, sockets, and power cords should be insulated and safe.
- All input/output devices should be connected before powering on the unit.

### System Diagram





## FRONT PANEL CONTROL

### Manual Switching

When the switcher is in manual switching mode, the AUTO button LED goes out. Please follow the below steps to switch input source to output channel.

- 1) Press any one of eight input buttons to select input source, and the corresponding button LED turns blue.
- 2) Press either **1-HDMI** or **2-HDBT** output button to select output channel, and the corresponding button LED turns blue.
- 3) Press the input button again to confirm switching setting, otherwise, it will automatically confirm after three seconds.

### Automatic Switching

Please follow the below steps to enable auto switching mode for 1-HDMI or 2-HDBT output.

- 1) Press **AUTO**, and the button LED turns blue.
- 2) Press either **1-HDMI** or **2-HDBT** output button, and the corresponding button LED turns blue.
- 3) Press **AUTO** button again to confirm the setting, otherwise, it will automatically confirm after three seconds.
- 4) Repeat the above three steps can exit auto mode, but the input source will remain the current setting.

**Note:** The AUTO button LED illuminates blue when the **1-HDMI** output is in auto mode or the **2-HDBT** output in auto mode.

When in auto mode, the switcher will switch according to the following rules:

- *The switcher will switch to the first available active input starting at input 1 to 8.*
- *New input: The switcher will automatically select the new input once detecting a new input.*
- *Reboot: If power is restored to the switcher, it will automatically reconnect the input before powered off.*
- *Source removed: When an active source is removed, the switcher will switch to the first available active input starting at 1-HDBT input.*
- *In auto mode, the input source also can be switched by the manual switching steps.*



## Sound Volume Control

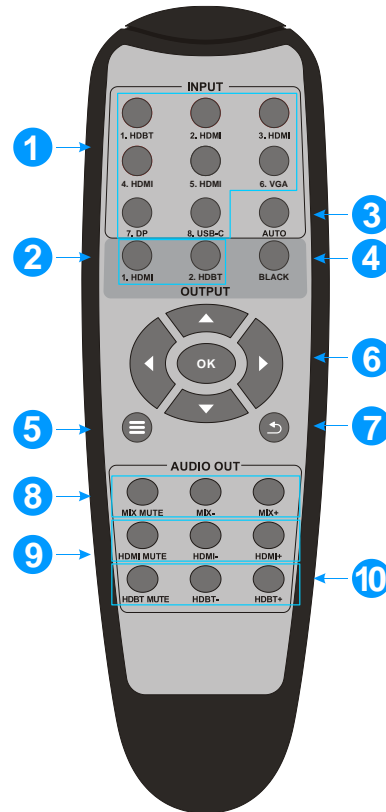
Press volume knob to choose **MIX**, **HDMI OUT** or **HDBT OUT** audio needs to be adjusted, the corresponding LED will turn blue and keep on.

- *Adjusting the knob in clockwise direction to increase sound volume.*
- *Adjusting the knob in anti-clockwise direction to decrease sound volume.*
- *Press and hold the knob at least three seconds to mute the selected audio. Rotate the knob to unmute.*

## IR REMOTE CONTROL

Connect IR receiver to the **IR EYE** port. The switcher can be controlled by the included IR remote.

- ① Select input source
- ② Select output channel
- ③ Press **AUTO** to enable automatic switching mode, and then select output channel.
- ④ Press **BLACK**, and then select output channel to make it output black screen.
- ⑤ Enable/Disable OSD menu.
- ⑥ Confirm and Navigation buttons: OK, UP, DOWN, LEFT and RIGHT for OSD menu.
- ⑦ Return to the previous OSD menu.
- ⑧ MIX input audio control: Mute, Volume Down and Volume Up.
- ⑨ HDMI output audio control: Mute, Volume Down and Volume Up.
- ⑩ HDBT output audio control: Mute, Volume Down and Volume Up.







## GUI CONTROL

The switcher also be controlled via TCP/IP. The default IP settings are:

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

Type **192.168.0.178** in the internet browser, it will enter the below log-in webpage:

A screenshot of a login webpage with a dark grey background. It features two input fields: 'User Name' and 'Password', both containing the placeholder text 'Please Enter'. Below the fields is a blue 'Login' button. At the bottom, the text 'GUI : V1.0.0' and 'Firmware: V1.0.0' is displayed.

User Name  
Please Enter

Password  
Please Enter

Login

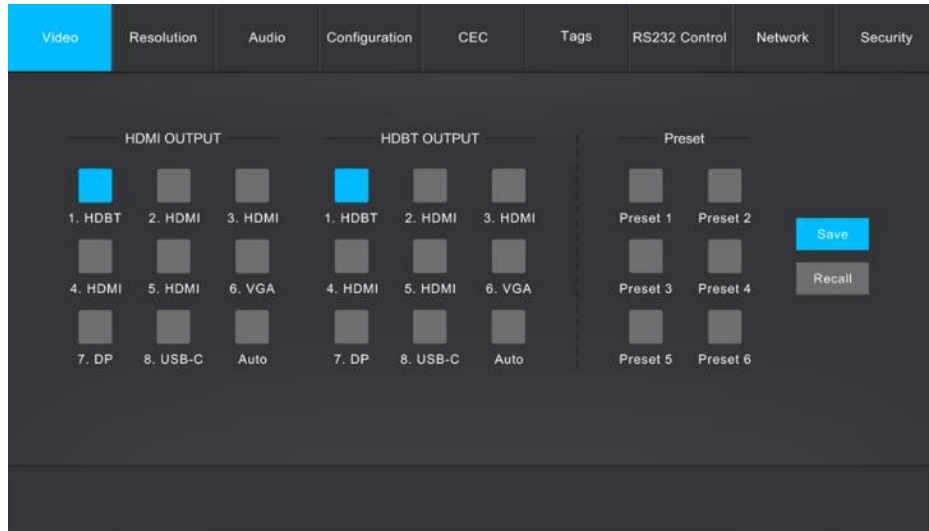
GUI : V1.0.0  
Firmware: V1.0.0

**Username:** admin

**Password:** admin

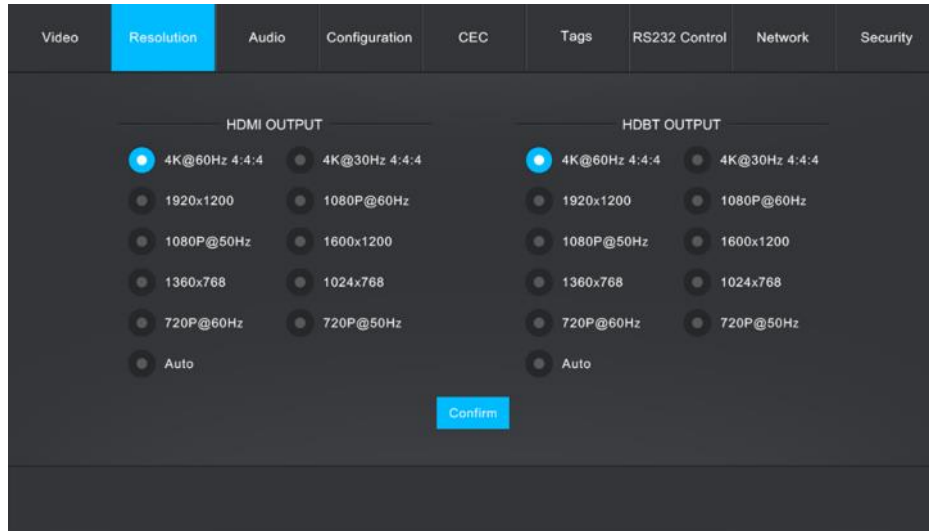
Type the username and password, and then click **Login** to enter the section for video switching.

## Video Switching



- **HDMI OUTPUT:** Switch the selected input source to HDMI output. Click **AUTO** to enable/disable automatic switching mode.
- **HDBT OUTPUT:** Switch the selected input source to HDBT output. Click **AUTO** to enable/disable automatic switching mode.
- **Preset:** Save the current routing status to preset 1~5.

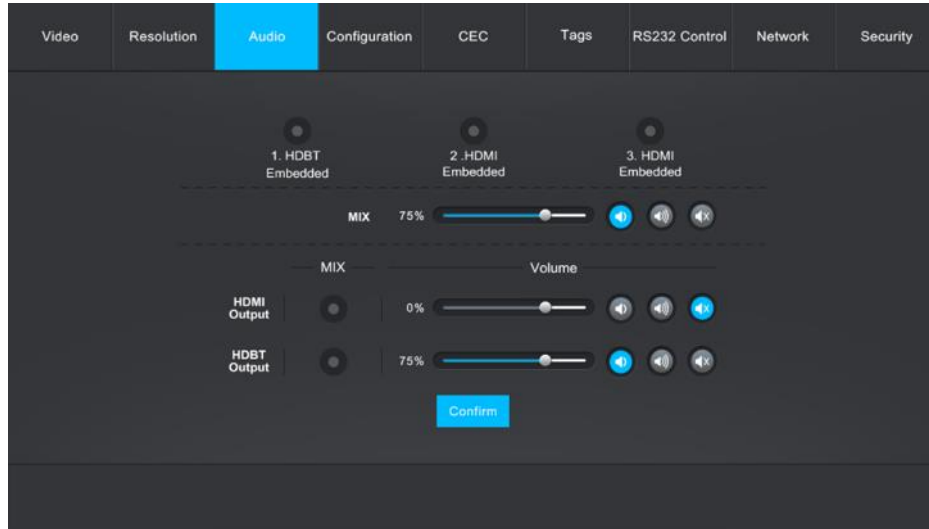
## Resolution Selection



- **HDMI OUTPUT:** Select the HDMI output video resolution. Press **AUTO** to automatically select the best output resolution for satisfying the connected display.
- **HDBT OUTPUT:** Select the HDBT output video resolution. Press **AUTO** to automatically select the best output resolution for satisfying the connected display.

**Note:** If EDID communication is failed, the 1080P@60Hz will be used as default output resolution.

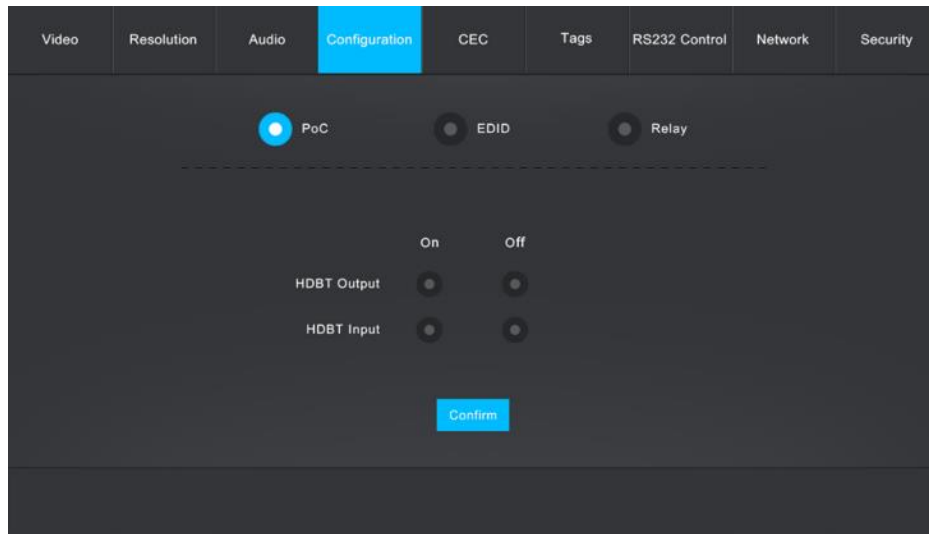
## Audio Control



- **1.HDBT Embedded:** Select the external balanced audio (5-pin) to embed in **1.HDBT** video input.
- **2.HDMI Embedded:** Select the external balanced audio (5-pin) to embed in **2.HDMI** video input.
- **3.HDMI Embedded:** Select the external balanced audio (5-pin) to embed in **3.HDMI** video input.
- **MIX:** MIX input audio volume control.
- **HDMI Output:** Select MIX input audio to mix with HDMI output audio, and then control the global output audio by volume bar and buttons.
- **HDBT Output:** Select MIX input audio to mix with HDBT output audio, and then control the global output audio by volume bar and buttons.

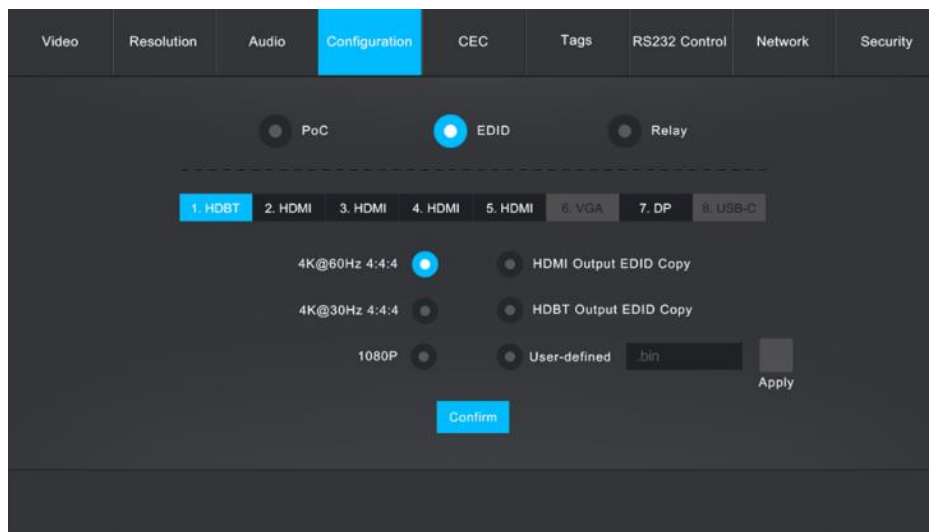
## Configuration

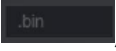
### POC Setting



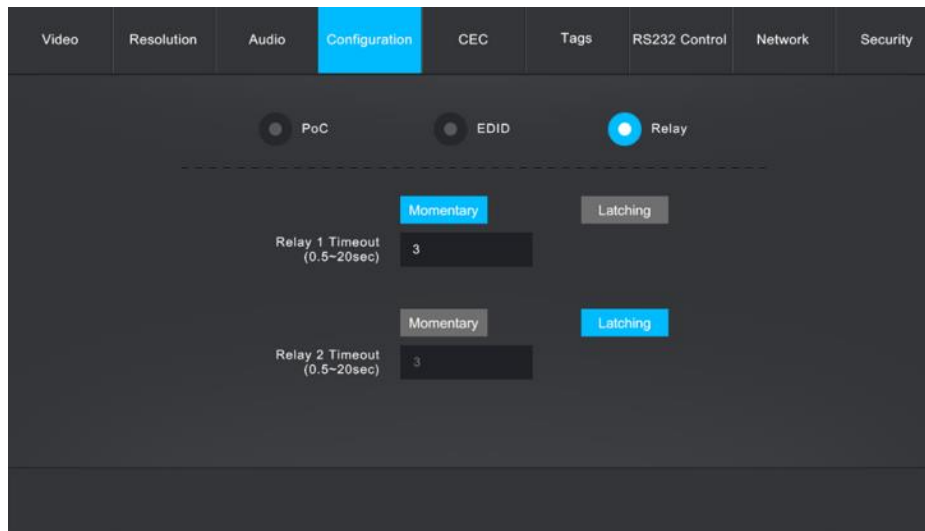
- Turn on or off PoC for HDBT output port.
- Turn on or off PoC for HDBT input port.

### EDID Management



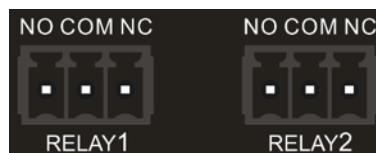
- Select the compatible built-in EDID for the selected input source.
- Upload user-define EDID by the below steps:
  - Step 1: Prepare the EDID file (.bin) on the control PC.
  - Step 2: Select the user-defined.
  - Step 3: Click the black box , and then select the EDID file (.bin) according the tooltip.
  - Step 4: Click **Apply** to upload the user-defined EDID.

## Relay Control



- Set **Momentary** or **Latching** relay control mode for Relay 1 and Relay 2.
- After setting the auto stop time, click **Momentary**, the projector screen starts to be rolled up or dropped down until the auto stop time is up.
- Click **Latching**, the projector screen starts to be rolled up or dropped down, and then click **Latching** again to stop process.

### RELAY 1 and RELAY 2 Ports Definition:

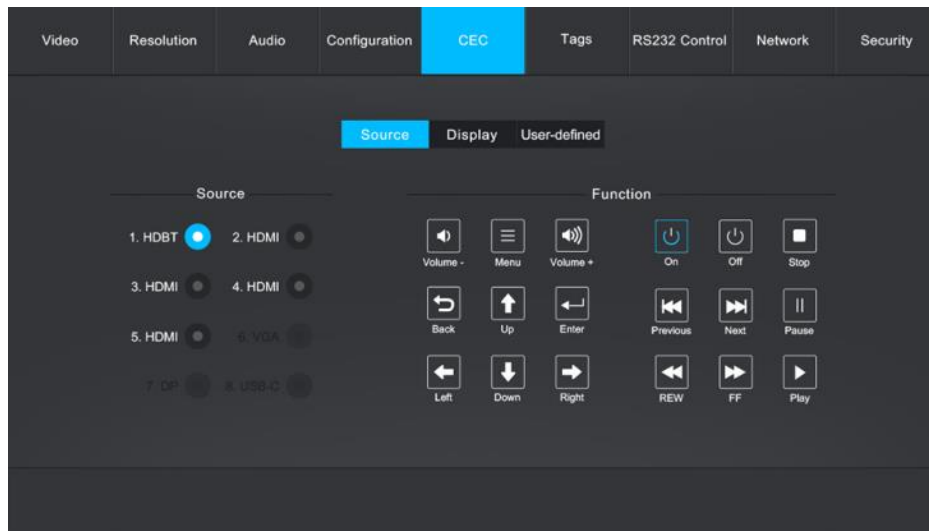


- When clicking **Momentary**, the **NO** connection closes, and the **NC** connection opens. When the delay time is up, the **NO** connection opens, and the **NC** connection closes.
- When clicking **Latching**, the **NO** connection closes, and the **NC** connection opens. When the delay time is up, the **NO** connection opens, and the **NC** connection closes.

## CEC Control

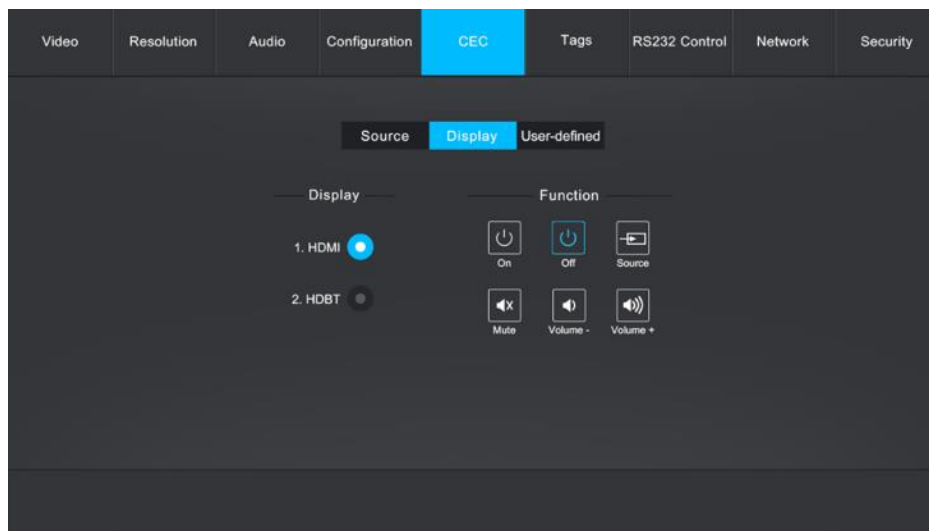
If the input sources and display support CEC, they can be controlled by the below control buttons to replace IR remote.

### 1. Source Control



- Select the input source which needs to be control, and then press function button as need.

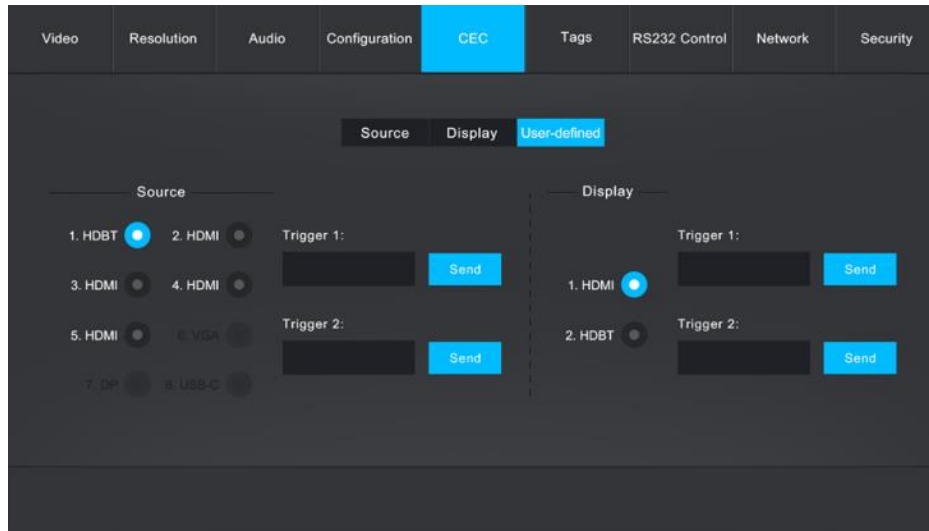
### 2. Display Control



- Select the output display which needs to be control, and then press function button as need.

### 3. User Define

The switcher also provides user-define CEC functions, the CEC command can be edited and saved in the Trigger textbox.



- Select the input source, and then type CEC command in the **Trigger 1** or **Trigger 2** box to control the selected source.
- Select the output display, and then type CEC command in the **Trigger 1** or **Trigger 2** box to control the selected display.



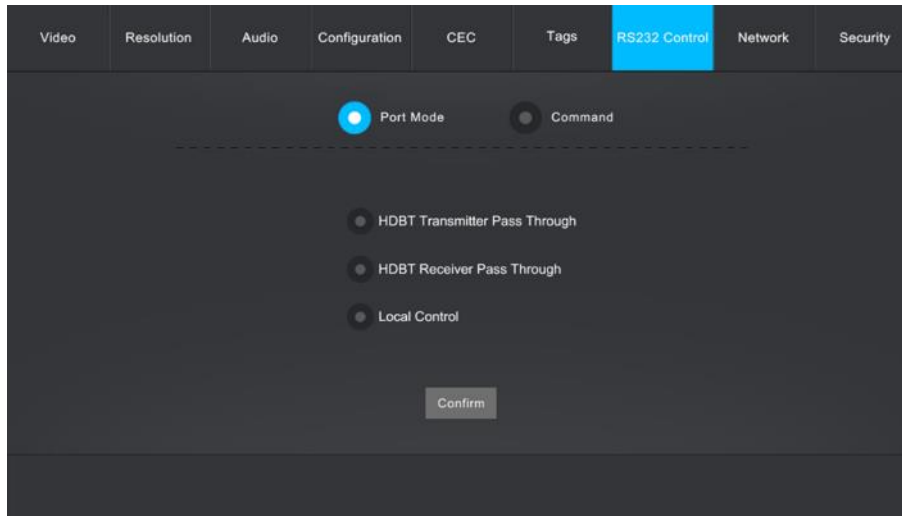
## Tag Setting

Video	Resolution	Audio	Configuration	CEC	Tags	RS232 Control	Network	Security	
INPUTS				Preset					
1. HDBT	<input type="text"/>	2. HDMI	<input type="text"/>	Preset 1	<input type="text"/>	Preset 2	<input type="text"/>		
3. HDMI	<input type="text"/>	4. HDMI	<input type="text"/>	Preset 3	<input type="text"/>	Preset 4	<input type="text"/>		
5. HDMI	<input type="text"/>	6. VGA	<input type="text"/>	Preset 5	<input type="text"/>	Preset 6	<input type="text"/>		
7. DP	<input type="text"/>	8. USB-C	<input type="text"/>						
				<input type="button" value="Confirm"/>					

- **INPUTS:** Modify the label of input sources.
- **Preset:** Modify the label of presets.

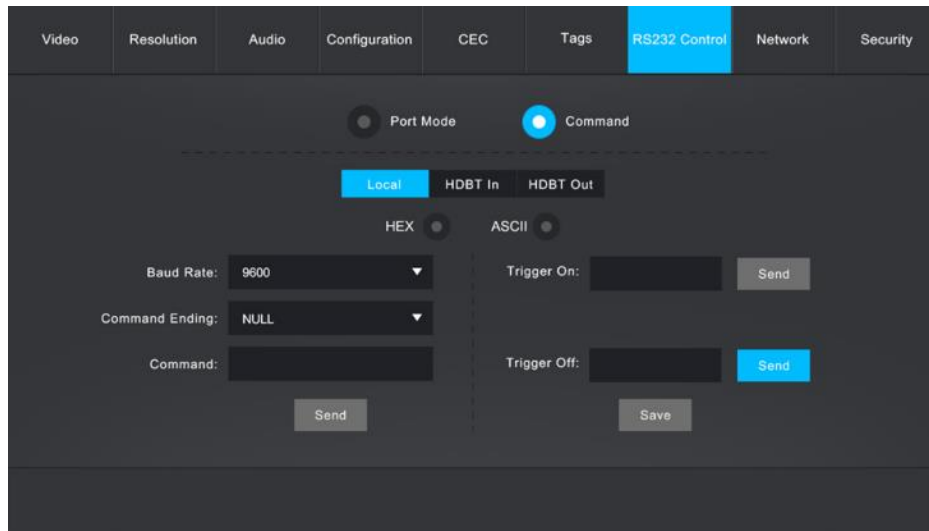
## RS-232 Control

### 1. Port Mode



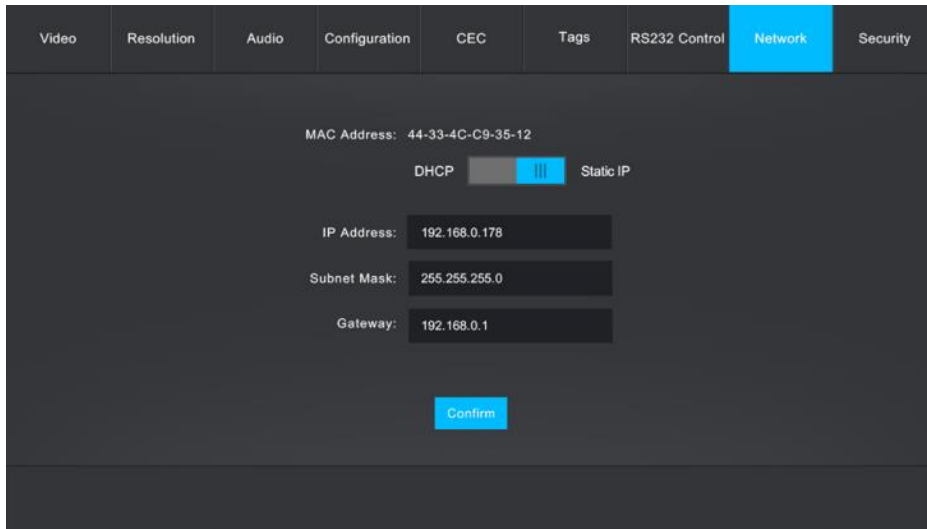
- **HDBT Transmitter Pass Through:** Establish RS232 pass-through communication between the switcher and HDBaseT receiver (e.g. PS-820S-U TX/RXR). The RS232 port of the switcher can be used to transfer commands to control the third-party device which is connected to the HDBaseT receiver.
- **HDBT Receiver Pass Through:** Establish RS232 pass-through communication between the switcher and the HDBaseT transmitter (e.g. PS-820S-U TX/RXT). The RS232 port of the switcher can be used to transfer commands to control the third-party device which is connected to the HDBaseT transmitter.
- **Local Control:** The RS232 port of the switcher is used to connect control device (e.g. PC) to control the switcher

### 2. Command



- Select **Local**, **HDBT In** or **HDBT Out** control mode.
  - ✓ **Local:** Send RS232 commands to control the local third-party which is connected to the RS232 port of the switcher.
  - ✓ **HDBT In:** Send RS232 commands to control the far-end third-party which is connected to the RS232 port of HDBaseT transmitter.
  - ✓ **HDBT Out:** Send RS232 commands to control the far-end third-party (e.g. projector) which is connected to the RS232 port of HDBaseT receiver.
- Select **HEX** or **ASCII** format.
- **Baud Rate:** Supports 2400, 4800, 9600, 19200, 38400, 57600 or 115200.
- **Command Ending:** **NULL**, **CR**, **LF** or **CR+LF** can be chosen.
- **Command:** Type command in this textbox to control the third-party device.
- **Trigger On:** Type Power On command in this box to turn on the third-party device.
- **Trigger Off:** Type Power Off command in this box to turn off the third-party device.

## Network Setting



Video Resolution Audio Configuration CEC Tags RS232 Control **Network** Security

MAC Address: 44-33-4C-C9-35-12

DHCP  Static IP

IP Address: 192.168.0.178

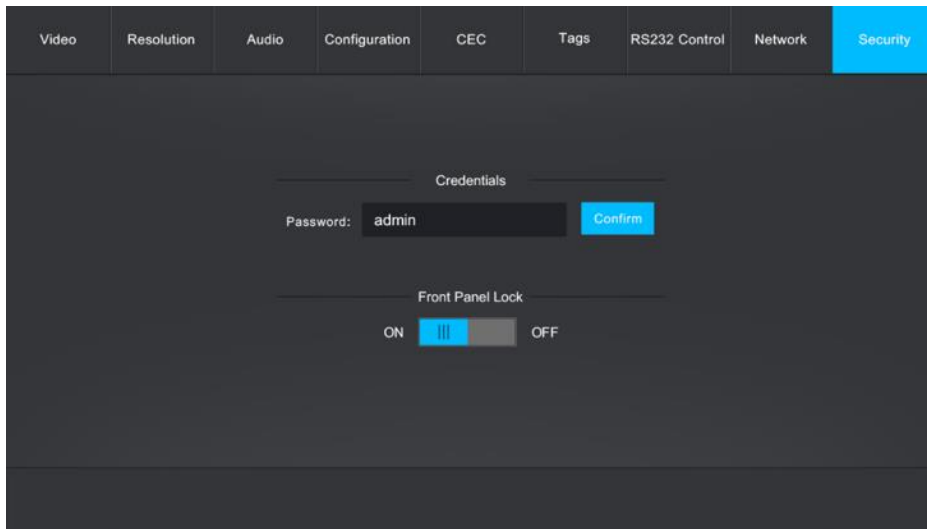
Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

Confirm

- Static IP or Dynamic Host Configuration Protocol (DHCP).
- Modify the static IP Address, Subnet Mask, and Gateway.

## Password Setting



Video Resolution Audio Configuration CEC Tags RS232 Control Network **Security**

Credentials

Password: admin Confirm

Front Panel Lock



ON  OFF

- Modify the login password.
- Lock or unlock the front panel buttons.

## OSD CONTROL

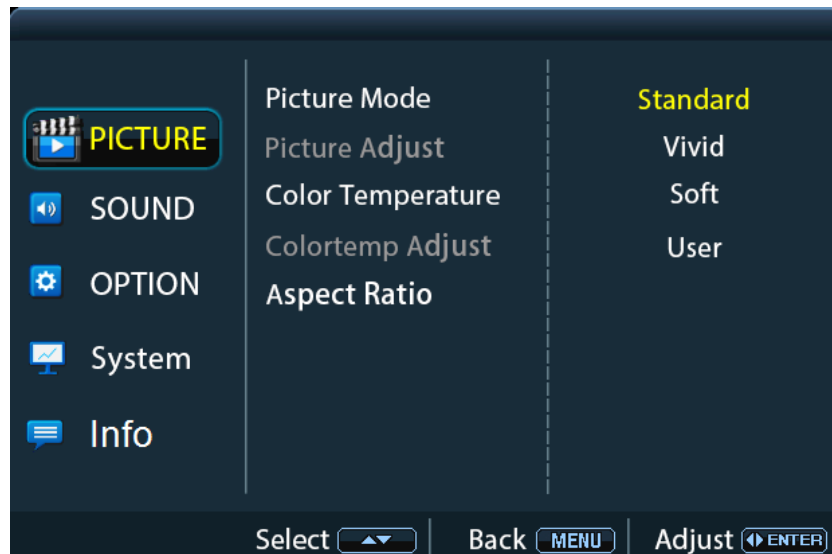
The **PS-820S** provides a powerful OSD operation menu which contains 3 parts: optional settings, image settings, system settings etc.

There are two ways to enter OSD menu:

- 1) Press and hold the **MENU/2s** button  at least two seconds on the front panel.
- 2) Press the **MENU** button  on the IR remote.

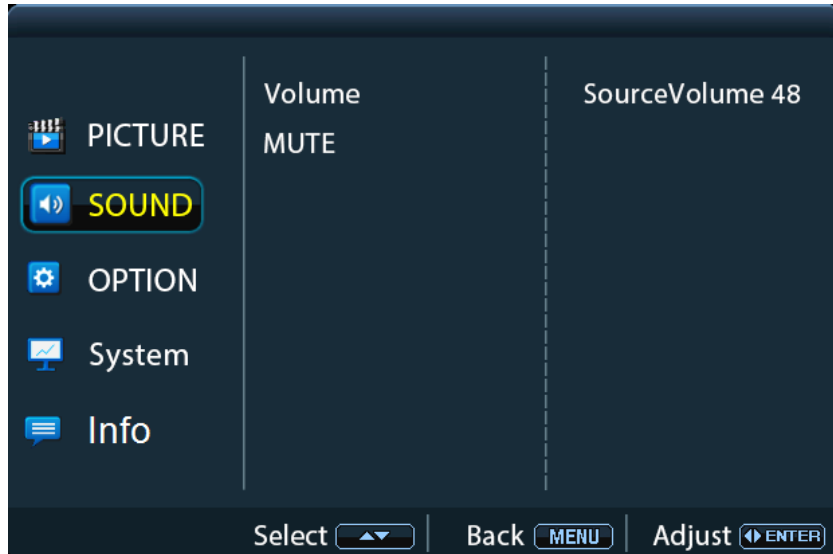
### Operation:

- Press direction buttons on IR Remote to switch between menu options and menu pages.
- Press **OK** on the IR Remote to confirm the selection.

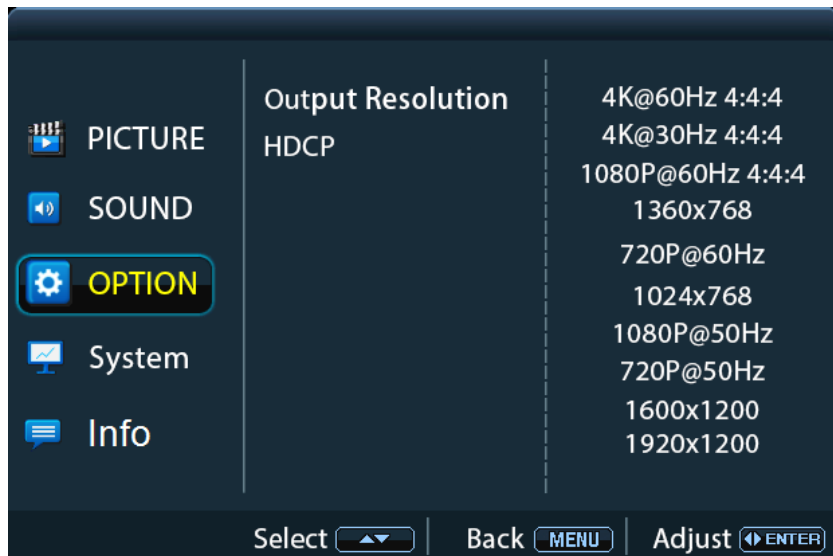


**Note:** When setting the Picture Mode to **User**, Picture Adjust and Color Temperature Adjust are available.

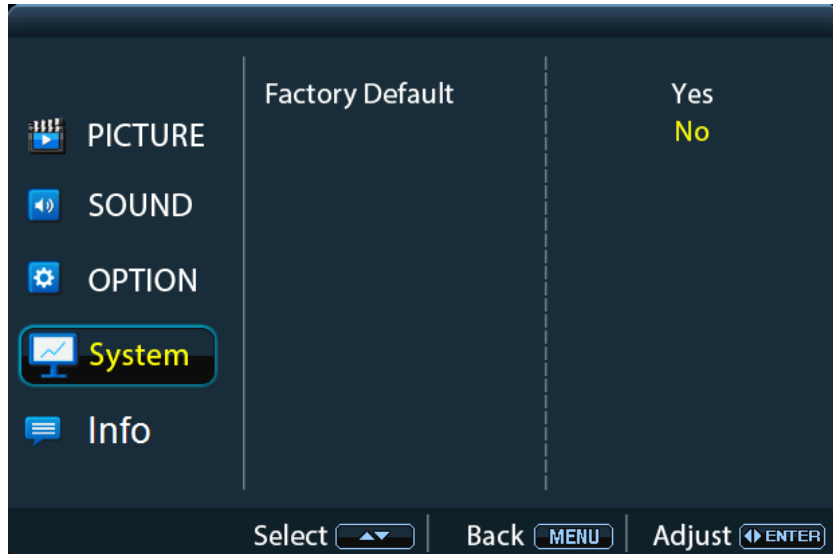
### Sound Menu



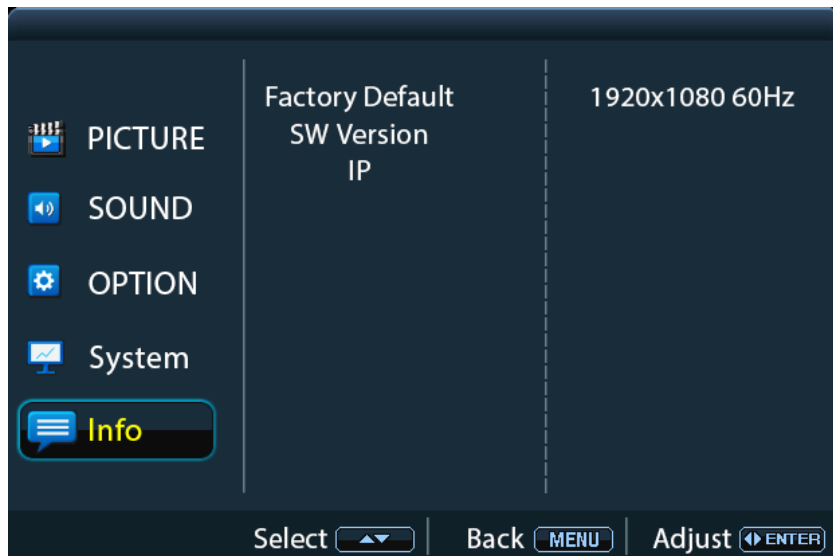
### Option Menu



### System Menu



### Info Menu



## TROUBLESHOOTING & MAINTENANCE

Common Issues	Potential Causes	Solution
Output image with white noise.	Connecting cable issue.	Try another working cable.
	Loose connection.	Make sure cables are connected securely.
No output image when switching.	No signal at the input / output end	Check with oscilloscope or multimeter if there is any signal at the input/ output end.
	Loose connection.	Make sure cables are connected securely.
	The switcher is defective.	Contact authorized dealer or PureLink's Technical Support Team.
<b>POWER</b> indicator is malfunctioning or does not respond to any operation.	Loose connection of power cord.	Make sure the power cord is connected securely.
Cannot control the device by control device (e.g. a PC) through RS232 port.	Wrong RS232 communication parameters.	Type in correct RS232 communication parameters.
	Broken RS232 port.	Contact authorized dealer or PureLink's Technical Support Team.





## WARRANTY & CUSTOMER SERVICE

### PureLink™ Three (3) Year Limited Warranty

#### For HDTools™ Branded Products Only

Dtrovision, LLC. (hereinafter “PureLink”) warrants its HDTools™ 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 [purelinkav.com/tickets](http://purelinkav.com/tickets). For immediate assistance please contact PureLink's Customer Care Team (M-F, 9:00 AM – 5:00 PM EST) at +1 (201) 488-3232.