LIVEPRO L1　LIVEPRO L2

Multi - format Video Mixer

USER MANUAL

Thank you for your purchasing our product!

In order to let you quickly grasp how to use this signal switcher, the following is the detailed product instruction.You can read it and how to use it before using the switcher. Please read all the information we provide carefully, and brake you to use our products correctly.

Safety Instruction

1. The product can only use the specified power cable and interface. And should be make sure the power cable is in good condition. To change the specified power cable and interface, you need to find a qualified technician.
2. Keep away from flammable and explosive materials, do not operate this product in an explosive environment.
3. There is no customer self-operation service for this product, and dangerous voltage may be exposed when the cover is removed. To prevent personal accidents, please do not untie the upper cover by yourself.
4. Please do not use chemical solutions to clean this product. Please wipe the switcher with a clean soft cloth to maintain the brightness of the surface.
5. No adjustable components are in the switcher. Please do not take apart or repair the unit by yourself, to avoid the damage of the product.

Features

- USB capture video complying with UVC for live streaming
- 4 CH HDMI inputs
- 2” TFT display on board to live preview 4 inputs
- Auto cut and manual switch (T-Bar)
- 14 transition effects on T-Bar
- Support PIP (Picture-in-Picture)
- Audio offers embedded or external source to select
- Support switch between 6-picture PVW and PGM to HDMI out
- Advance features on LIVEPRO L2
  - Logo
  - Chroma Key
  - PTZ control
- Control by PC or Smart phone (via APP)
- Compact design

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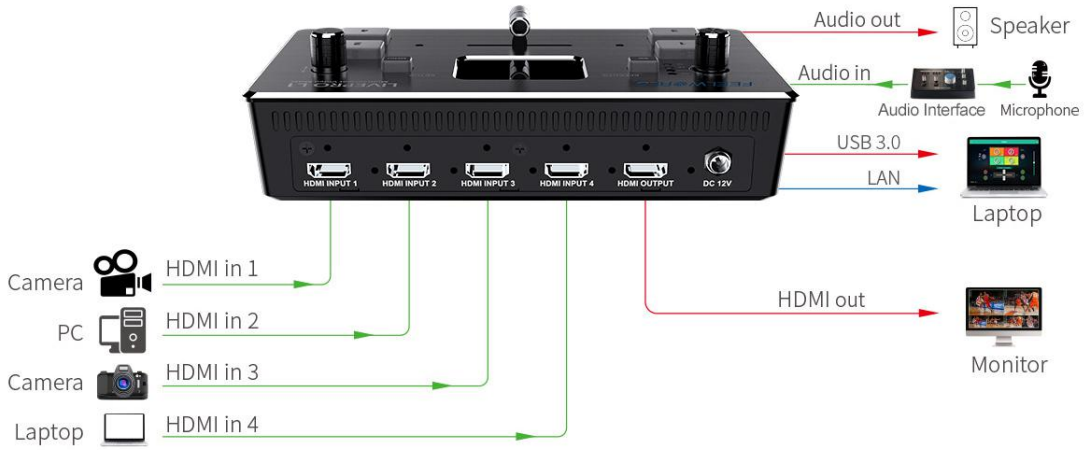
1.Product Instruction

1.1 Product Overview

LIVEPRO L1/ LIVEPRO L2 is a mini signal switcher and mixer which is able stream 6-picture PVW or PGM from any one out of the 4 HDMI inputs to any live broadcasting platform via the third party live streaming software such as OBS. It adopts compact design, equipped with a 2 inch TFT screen to preview the 4 inputs in real time. 14 transition effects on board to collaborate with T-Bar to do transition switching.

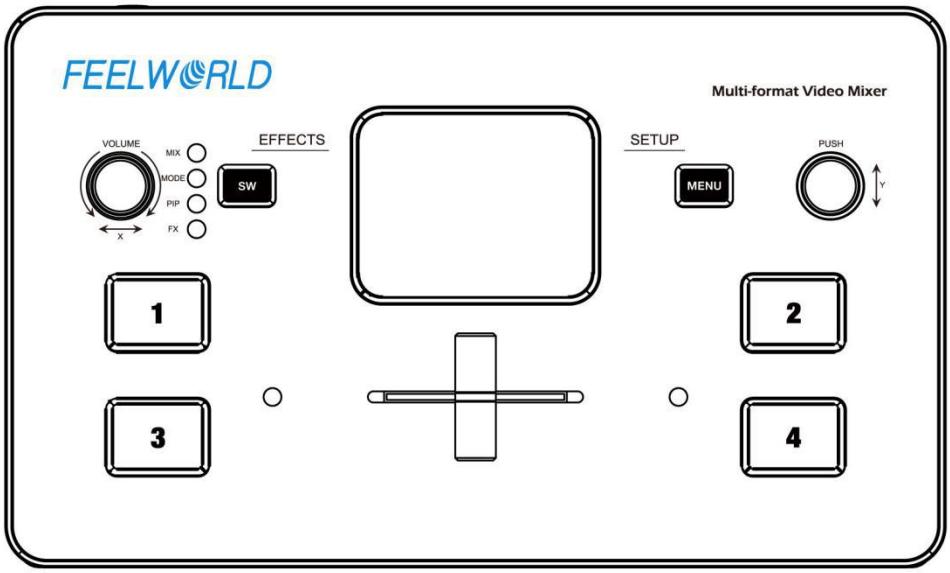
Along with feature of seamless switch, there are other outstanding features such as audio embedding, de-embedding, and automatically identify color depth of RGB 4:4:4, YUV 4:4:4，YUV4:22, YUV4:2:0. LIVEPRO L2 is based on LIVEPRO L1 but with advance features including DSK, LOGO, PTZ camera control. It is also easy to operate either on board or on dedicated app XPOSE on PC.

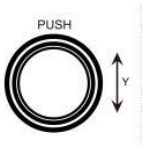
1.2 System Connection

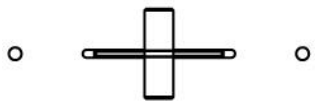


LIVEPRO L1, L2 System Connection Diagram

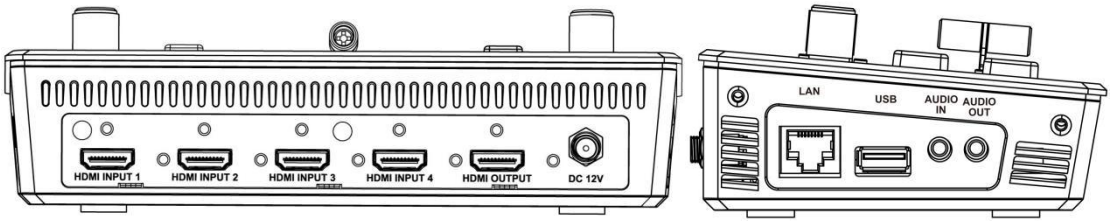
1.3 Front Panel



	TFT display To display 4 inputs and menu
	**PUSH/Y** 1. Knob, turn to select menu item, push to confirm 2. Work as a quick button to switch HDMI Out between 6-Picture PVW and PGM when TFT is under the state of previewing 4 inputs. 3. On LIVEPRO L2, control camera lens position, moving up and down under PTZ control menu-POS. 4. On LIVEPRO L2, control camera lens zoom in and out under PTZ control menu-Zoom.
	MENU Menu and Back Button
	SW Function select button, to select transition effects (MIX), Mode switching (Fast or T-Bar), PIP and FX (only for LIVEPRO L2)
	VOLUME/X 1. Turn to adjust volume of PGM (adjust after pressing the knob to display the volume bar). 2. On LIVEPRO L2, control camera lens move left and right under PTZ control menu.
	1,2,3,4 4 inputs, red is on air (PGM), static green is signal standing by to switch, flash green is the ready to be switched

	**T- Bar** Manual switch, push to left end or right end to switch signal to PGM. If T-Bar doesn't push to left end or right end, the signal or effects can't switch, the menu also can't operate.

1.4 **Interface Panel**



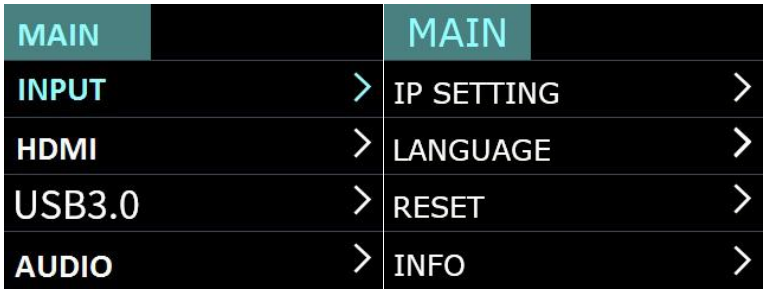
HDMI OUTPUT	1 HDMI Output port, connect to display to show Preview (6 pictures) or PGM.
HDMI INPUT	4 HDMI inputs, connect to input source from HD camera or PC
DC 12V	1 DC Jack for power input, connect to 12V/1.5A power adapter
LAN	Communication port to link dedicated software for control
USB	USB3.0 output, capture signal via third party streaming software and push to live broadcasting websites.
AUDIO IN / OUT	AUDIO In, linear input interface, please use audio interface, device of MIC to Line or connect to MIC interface of computer directly when connecting microphone; AUDIO Out, audio output port, connect to loudspeaker, headset, etc.

2. Product Using

2.1 MENU

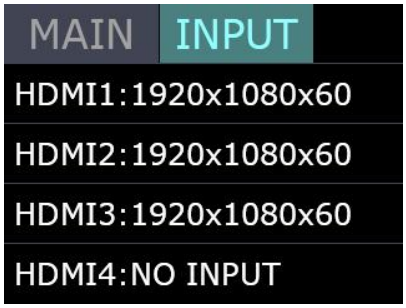
When LIVEPRO L1/ L2 is power on, the native TFT display show starting up page.

2.2 Main Menu



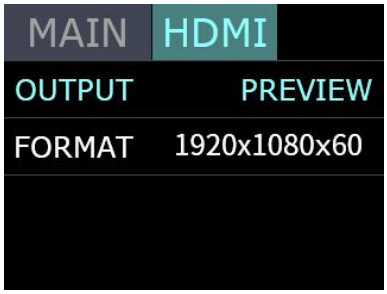
The menu will automatically exit after about 5 seconds when there is no operation.

2.2.1 INPUT



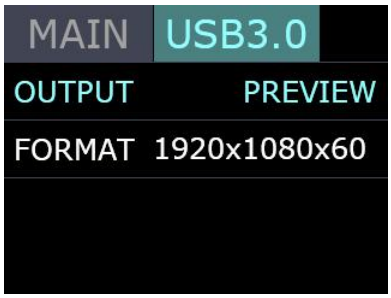
Push MENU and select the first menu item <Input>
Push knob to enter <Input> menu

2.2.2 HDMI



Push MENU and select the second menu item <HDMI>
Push knob to enter <HDMI> menu
HDMI means HDMI output, select Preview output and PGM output for HDMI.
Output: Preview or PGM
Format: 1920x1080x60, 1024x768x60, 1280x720x50

2.2.3 USB3.0



Push MENU and select the third menu item<USB3.0>
USB3.0 means USB3.0 output, push knob to enter <USB3.0>menu, select Preview output and PGM output for USB3.0
Output: Choose PGM or Preview
Format: 1920x1080x60, 1024x768x60, 1280x720x50

2.2.4 AUDIO

Choose <AUDIO>
SOURCE: EMBEDED, EXTERNAL, INPUT 1~4
AUDIO BAR: ON/OFF

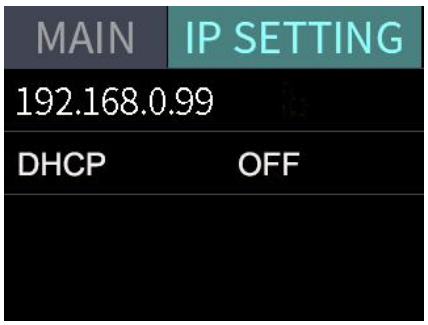
Selecting the external or embedded audio source in the <AUDIO> menu firstly when connecting or embedding audio.

The AUDIO IN is a linear input interface, which is connected to digital signal. The microphone collects analog signals, so when the microphone is connected to the LIVEPRO L1 audio input interface directly, there is no way to receive audio.
Solutions for live broadcasting audio problems for :

1. If there is microphone and audio interface, please connect microphone to the audio interface and connect the output interface of the audio interface to the AUDIO IN interface of LIVEPRO L1.
2. If there is microphone without sound adapter, please connect the microphone to the MIC interface of computer.

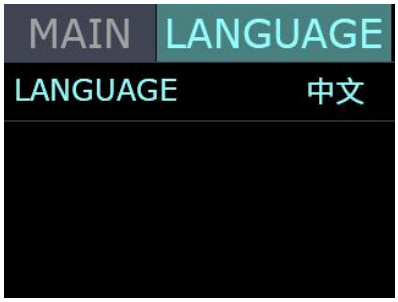
3. If there is wireless microphone and it with earphone interface, please connect this interface to AUDIO IN of LIVEPRO L1.
Note: Because there are variety of wireless microphone, if you can't use normally when connect to the LIVERPRO L1 directly, please use it with audio interface or amplifier.
4. If there is device of MIC to Line output, please connect to AUDIO IN of LIVEPRO L1.

2.2.5 IP SETTING



Manually set IP address
DHCP: ON/OFF

2.2.6 LANGUAGE



LANGUGE, select Chinese or English

2.2.7 RESET

Reset: Yes or No

2.2.8 INFO

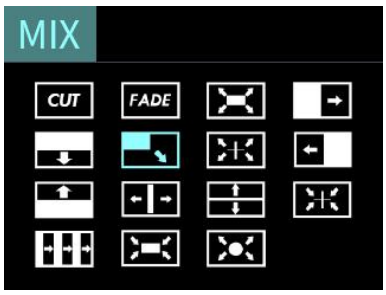
INFO: Show the SN, IP, MAC,MCU version and VIDEO version.

2.3 BUTTON SW

On LIVEPRO L1 push button SW, the TFT will show the transition effect menu <MIX>. The <MIX> LED indication beside will light up. Push again, it will skip to the next menu <MODE>, again to <PIP > and again back to MIX.

On LIVEPRO L2 pushing SW button is also to open up <MIX>, <MODE>, <PIP> one by one before FX but keep pushing SW button, there is PTZ control menu available on LIVEPRO L2. The LED indicators beside light up meaning the corresponding feature menu is open. Use knob to select and confirm the desired items after it enters the menu.

2.3.1 MIX

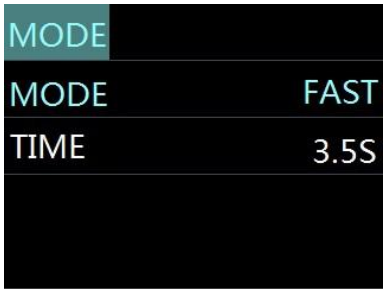


Push button SW to open up the transition effect menu. Use knob to select the desired transition effect icon and push the knob to confirm.

	Cut Directly
	Fade In/Out
	Iris Box
	Wipe to Right
	Wipe to Bottom

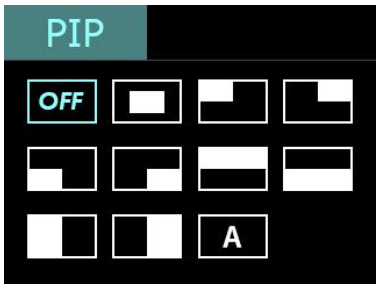
	Wipe to Bottom Right
	Iris Cross
	Wipe to Left
	Wipe to Top
	Center Split Horizontal
	Center Split Vertical
	Cross Inwards
	Blinds Vertical
	Box Inwards
	Iris Round

2.3.2 MODE



Keep pushing the button SW to open up MODE menu.
MODE: FAST or T-Bar
TIME: 0.5-5.0S
Choose FAST, the switching will be without transition effect but in set time.
Choose T-Bar, the switching will be with selected transition effect by pushing T-Bar.

2.3.3 PIP (Picture in Picture)



Push SW button 3 times to open PIP menu. PIP menu offers 9 layouts for main picture and sub picture.

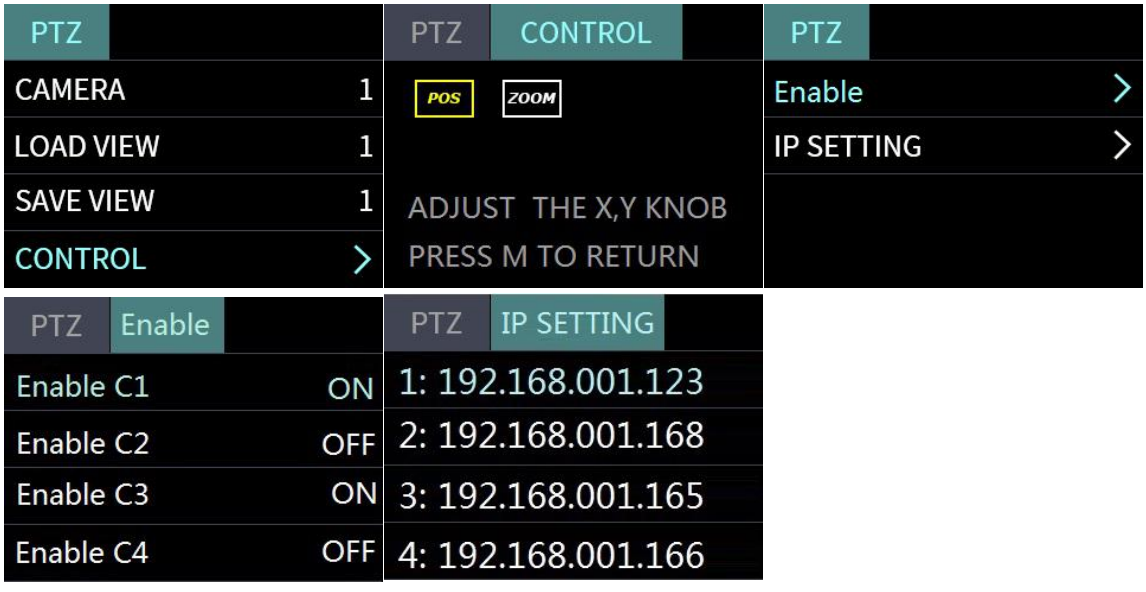
Press the “Volume/x” knob on the left of panel to switch the A/B layer.

PIP operation

1. Decide which source to be the main picture, select and switch it to PGM when PIP is OFF
2. Select the PIP layout mode in PIP menu
3. Select the input source and switch it to sub-picture on PGM
4. After switching, the selected green button turns to red

After PIP mode is selected, the main picture can not be changed unless go back to choose PIP OFF and restart the above steps.

2.3.4 FX



FX only woks on LIVEPRO L2 and leads to PTZ control menu on device.

Camera: choose the desired camera from index 1~8, or ALL. One device is able to connect up to 8 PTZ cameras.

Load View: from View index 1~11

Save View: to View index 1~11

In terms of “View” it means lens position and zoom setting on PTZ control.

Control: POS (position) and ZOOM (Zoom in/out)

Position control: Use X knob to control camera lens move left and right, Y knob to move camera lens up and down.

Zoom control: Use Y knob to zoom in and out.

Enable: Enable or disable the LAN communication of Camera 1~8

IP Setting: Match the IP address of those PTZ cameras connecting to LIVEPRO L2

3.Switch Input Source

After selecting transition effect and switch mode

①. Under Fast+Time mode, pushing green button will switch the input source in the selected time with set transition effect. After switching, green turns to red.

②. Under T-Bar mode, pushing green button, it will flash and push T-Bar to the end (left or right), the source will be switched with selected transition effect. After switching, green turns to red.

Note: When T-Bar is not in the end position, no source can be selected

4.Software Operation

Connection Way

1. Connect the LAN port of the computer to the LAN port of LIVEPRO L1, manually set the IP for the computer and LIVEPRO L1, you can connect LIVEPRO L1 and the computer to the same LAN.

2. Connect the computer and LIVEPRO L1/L2 to the same router, only need to set the IP on LIVEPRO L1/L2, you can connect the computer and LIVEPRO L1/L2 to the same LAN.

Install dedicated software named XPOSE to control LIVEPRO L1/L2.

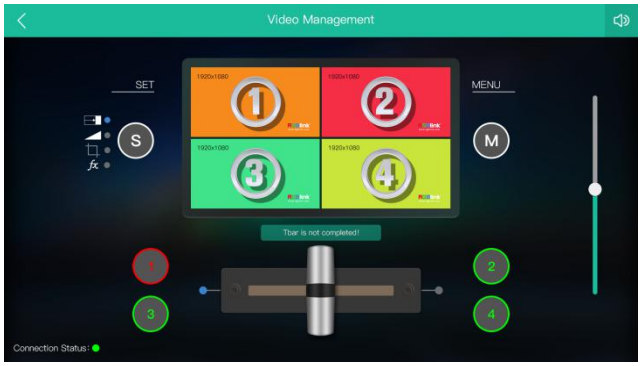
Right click the setup exe file .

Choose Run as administrator to open the exe and install the software.

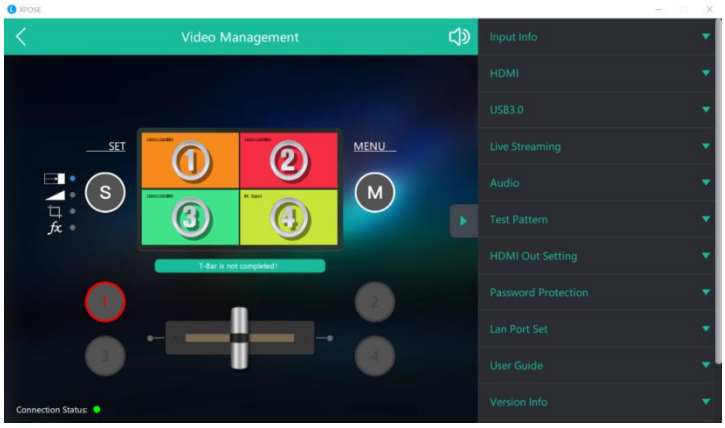
After software is installed, click the icon and login the software. Click SERACH to search LIVEPRO L1/ L2 device.

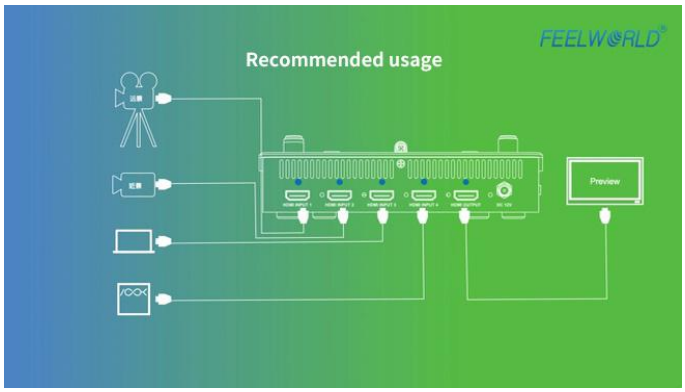
After searching, all available devices in the subnet can be found, up to 128 devices can found if there are.

Select the desired device by SN and IP and enter the management interface. The software interface is a simulation of operation panel on real LIVEPRO L1/L2 device.

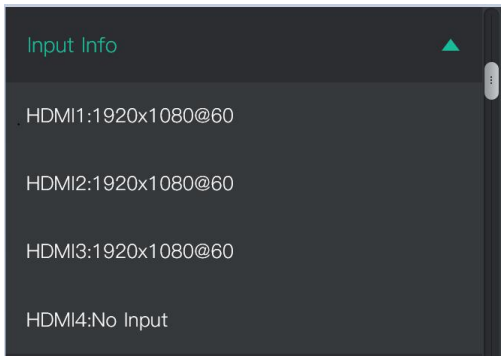


For example, clicking Button M can open up menu as on the device. MIX and PIP click via button S

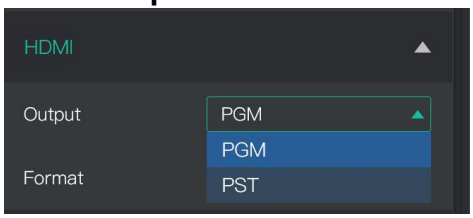




INPUT INFO



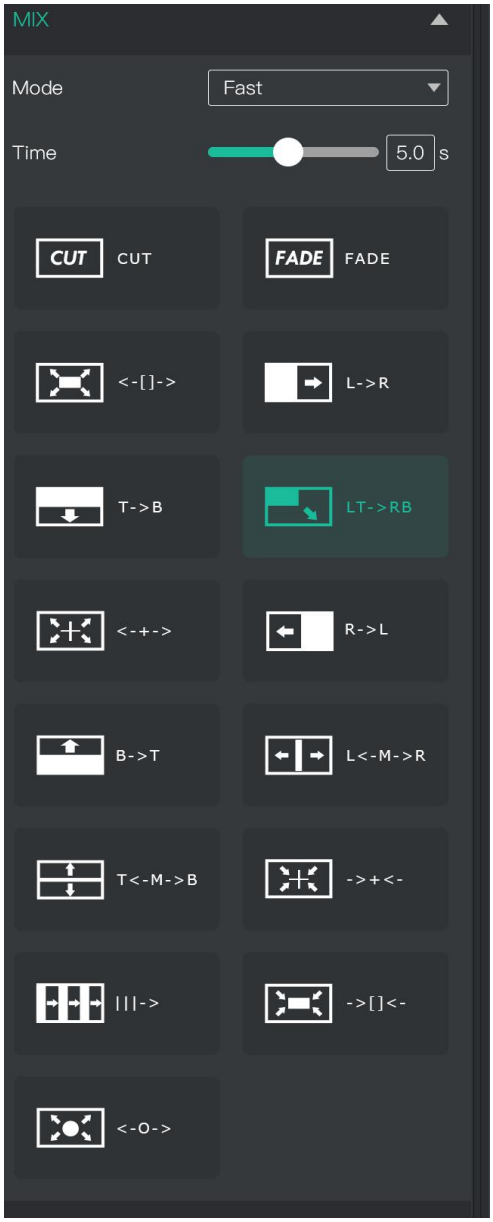
HDMI Output



USB3.0 Output

<MIX>

Choose switch time and transition effect.
When Mix Mode set as Fast, transition Time range 0.5~5s, switch input source by mouse on XPOSE software, PST is switched to PGM automatically and PST and PGM display the same input source.



<PIP>
Choose layout mode for PIP

Live Streaming

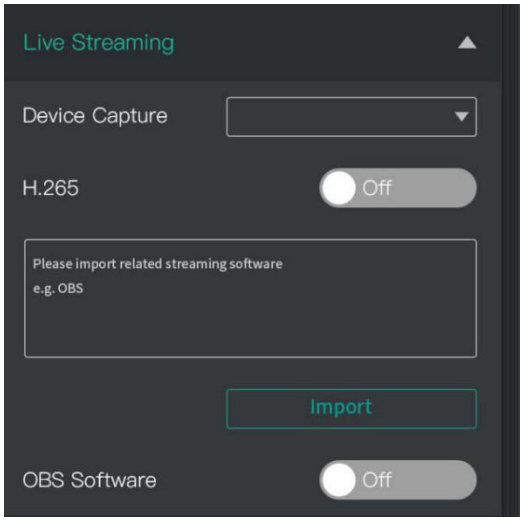
Capture Device: Choose FEELWORLD USB3.0 Capture

H.265: When it is ON, users can watch Preview or PGM streaming back on XPOSE software. The streaming back content is subject to USB 3.0 output setting.

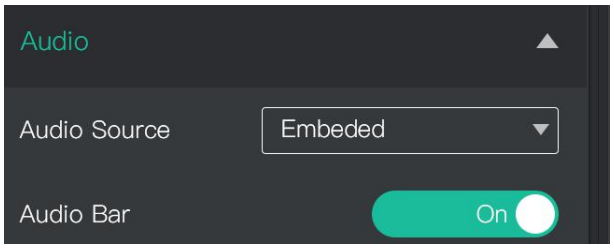
Import the file path of the related OBS application if users need to do live streaming, click Relate to confirm.

OBS: slide on to turn on the related OBS software .

Note: H.265 and OBS cannot work at the same time. User choose either H.265 or OBS, not both.



AUDIO

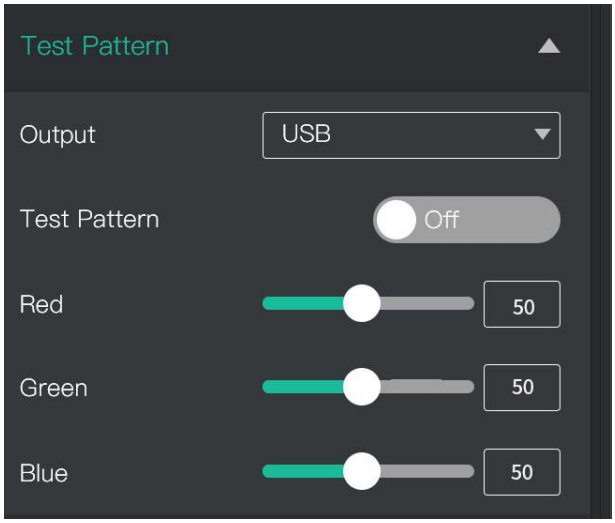


TEST PATTERN

Output: HDMI/USB

Test Pattern: Off/Color Bar/Solid Color

When Test Pattern is Solid Color the value of Red/Green/Blue is from 0~255.

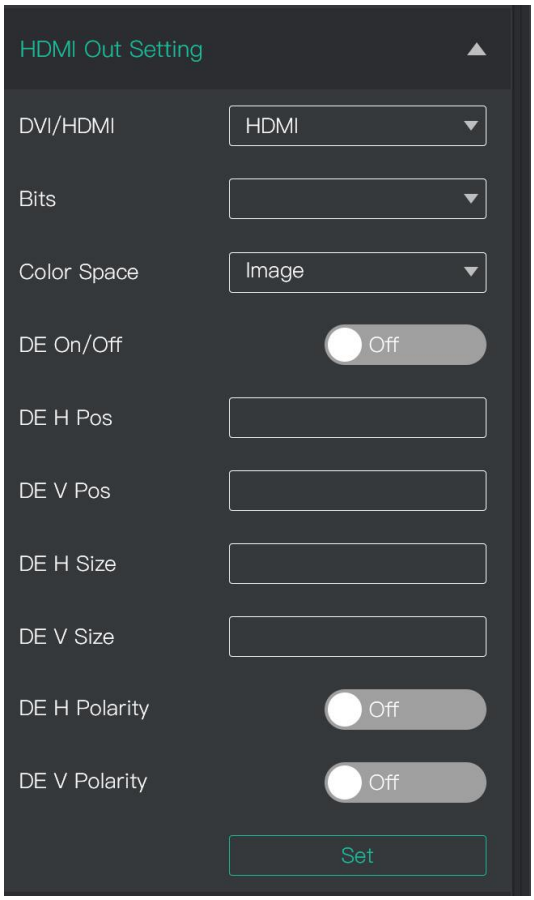


HDMI Output Setting

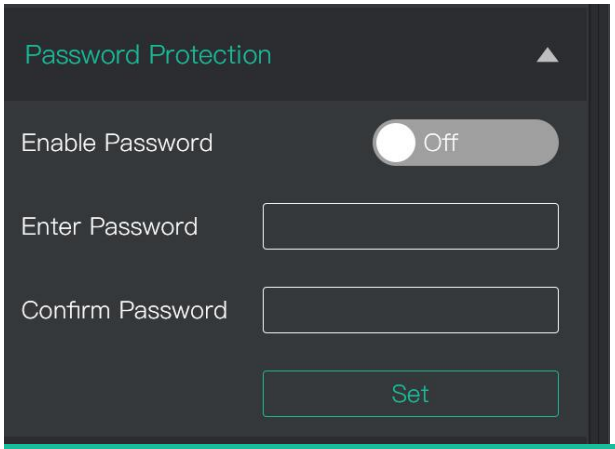
DVI/HDMI: Choose output type as DVI or HDMI, default is HDMI.

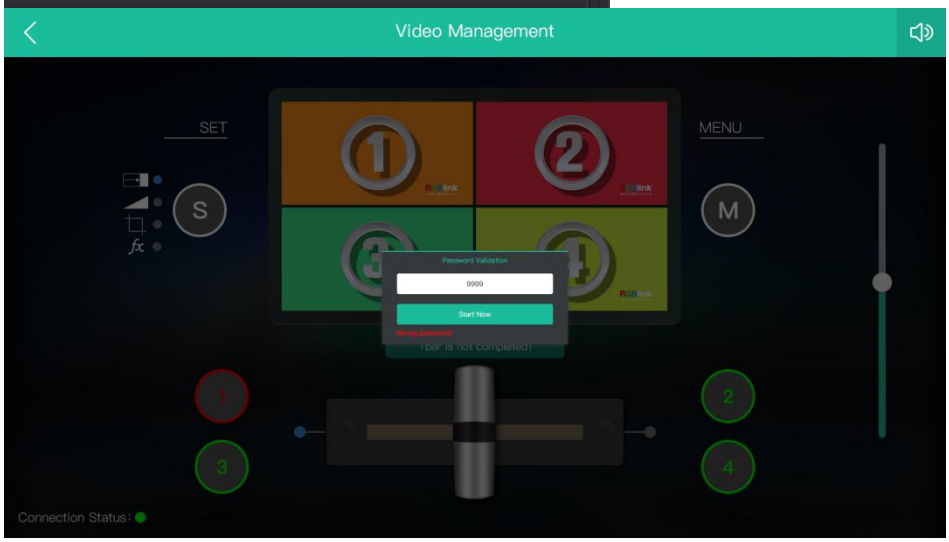
Bits: 8bit/10bit/12bit, default is 8bit.

Color Space: Video or Image, default is image.
DE On/Off: On/Off
DE H Pos: input value to adjust output horizontal position
DE V Pos: input value to adjust output vertical position
DE H Size: input value to adjust output horizontal size
DE V Size: input value to adjust output vertical size
DE H/V Polarity: ON/OFF



Password Protection
Set password for the device. After password is set, password will be required when enter the software operation interface. When multiple devices are connected to the same LAN, it can avoid mis-operation.
Enable Password: Slide to On
Enter Password: Enter 4-digit number
Confirm Password: Enter the 4-digit number again
Set: click Set to take effect





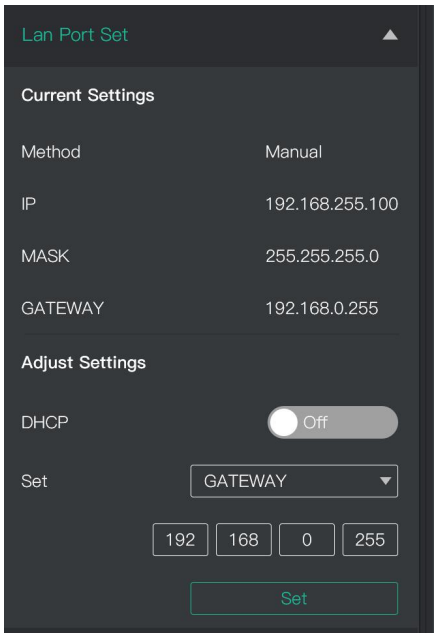
IP Setting

Manually set Gateway, MASK and IP for the device.

DHCP: When it is ON, IP, Mask, Gateway will be automatically allocated.

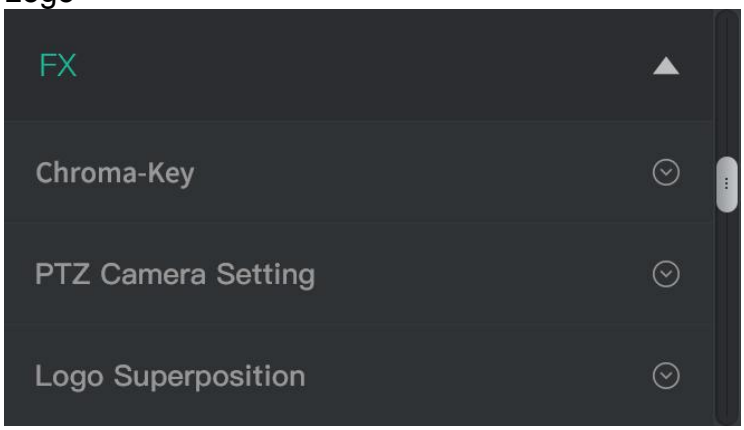
OFF DHCP

Set IP, Mask and Gateway manually.



FX

On LIVEPRO L2, FX contains 3 features: Chrome Key, PTZ Camera Control and Logo



Chroma Key

Preset: Customize, black background, red background, blue background, green background, and white background.

Switch: On/Off

Mode: Select Key In or Key Out.

Alpha: The adjustment range is between 0~255.

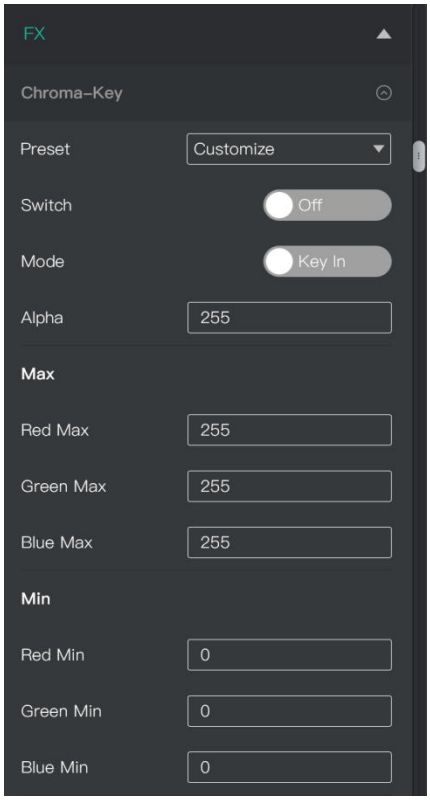
The color space is R,G,B by default.

The value range of R,G,B is from 0~255

0 means pure white, 255 means pure black.

Max (Red,Green,Blue): if users choose any preset mode except customize, the **Max** value of R,G,B is automatically set by system. If users choose customize as Preset, then R,G,B maximum value shall be adjusted manually.

Min (Red,Green,Blue): if users choose any preset mode except customize, the **Min** value of R,G,B is automatically set by system. If users choose customize as Preset, then R,G,B minimum value shall be adjusted manually.

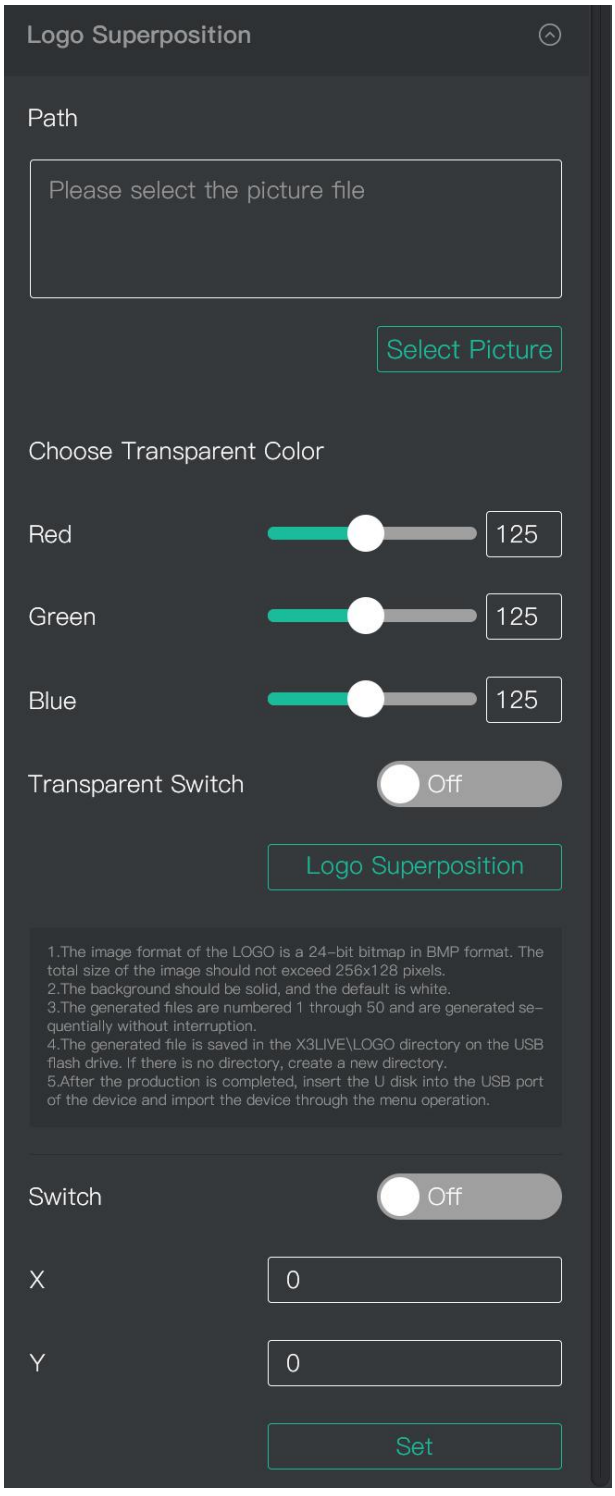


PTZ Camera Setting

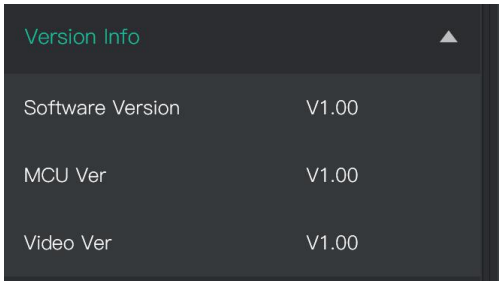
Camera: choose camera 1~8
Enable: Choose On to enable the LAN communication of the chosen camera.
Zoom：Click + - to Zoom in and out
Focus: Slide Auto to On usually
Brightness: Click + - to adjust
Preset: Load position and zoom setting of camera lens from View 1~20
Save: Save position and zoom setting of camera lens to View 1~20
Pan/Tilt Speed: Adjust the lens moving speed.
Positioner: to adjust the lens left right up down position
OLD IP: the current IP address of the camera
New IP: the new IP address just typed in.
Port: Set port number for PTZ camera. PTZ control support Visca protocol, port number is 1259 by default. LIVEPRO L2 supports control PTZ cameras in same IP address with different port number.
Note: Not all cameras can be set IP and port number on XPOSE, for those cameras, IP and port number set can be done on web.

Logo

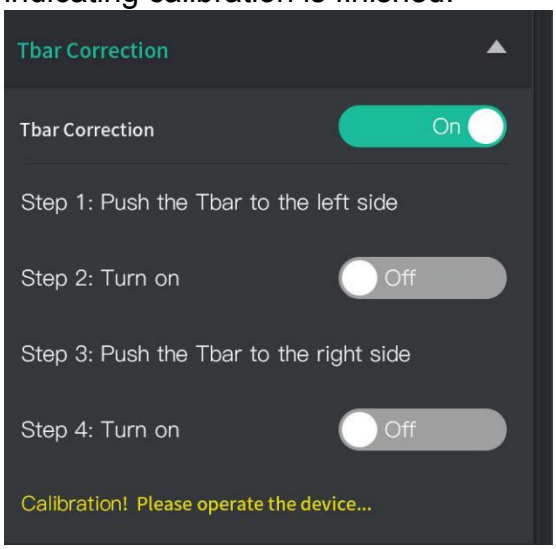
Path: Choose logo bin from local computer or U disk.
Color: Adjust Red Green Blue value
Transparent Switch: On/Off
X, Y: Adjust logo position



Version Info



Tbar Correction
Slide on T-bar Correction,
Push the T-bar to the right side.
Slide on step 2,
Push the T-bar to the left side.
Slide on step 4,
Calibration successful will show up,
indicating calibration is finished.



Factory Reset

5.OBS Streaming

LIVEPRO L1 / L2 is compatible with many third party steaming software, we recommend OBS, which is available to download on https://obsproject.com/download. Download the software and update to the latest version.

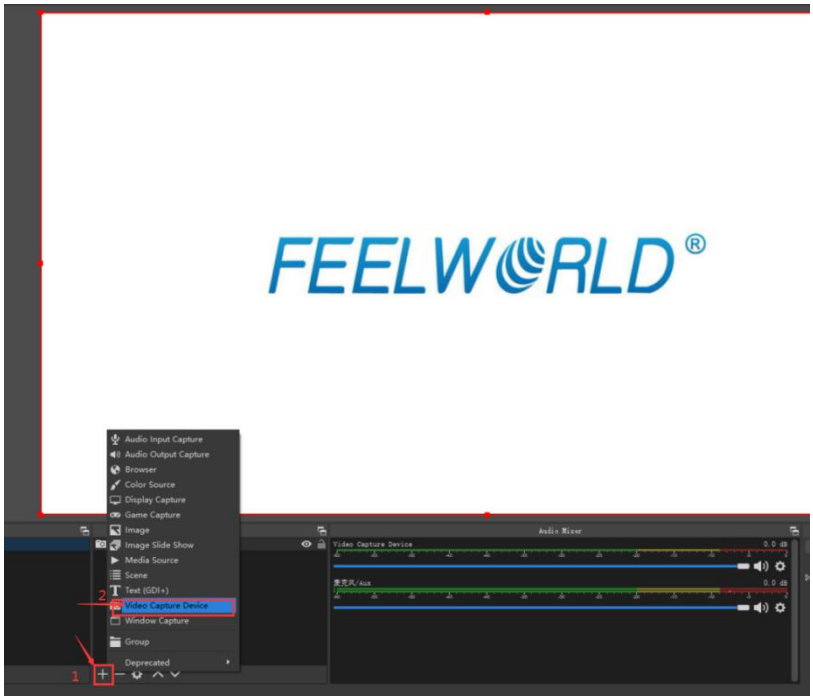
1.Click”+”icon

2. Choose video capture device

3. Click video capture device to open up setting page

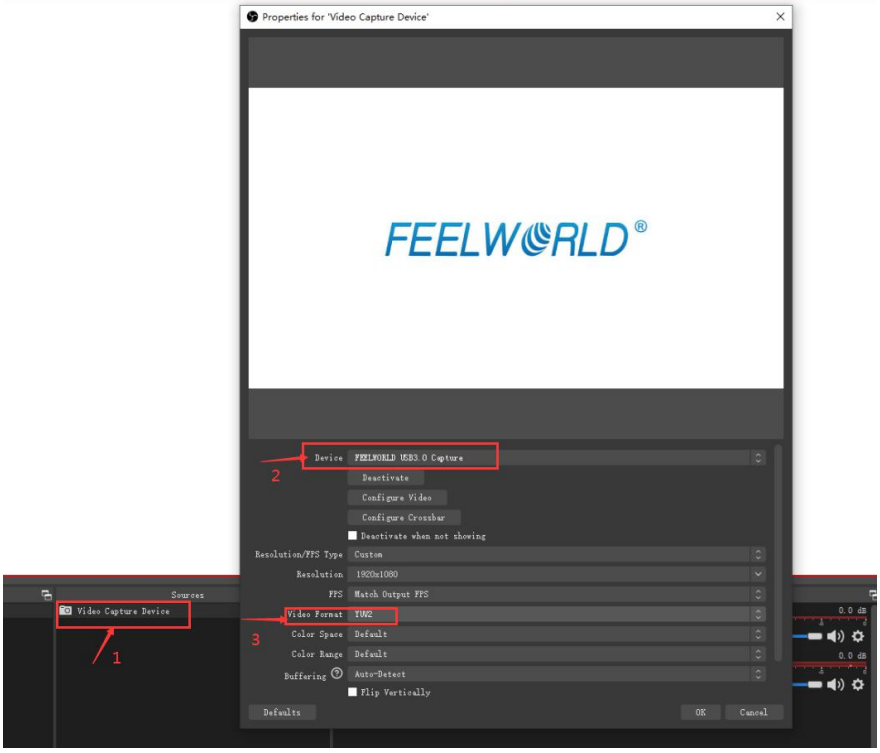
4. Choose : FEELWORLD USB 3.0 Capture

5. Choose Video Format YUY2



If there is no video format YUY 2 after setting above, check the USB 3.0port connection. Make sure it is linked to USB 3.0 port on PC by USB 3.0 cable. (USB 3.0 cable or port is standard in blue while USB 2.0 is in black)

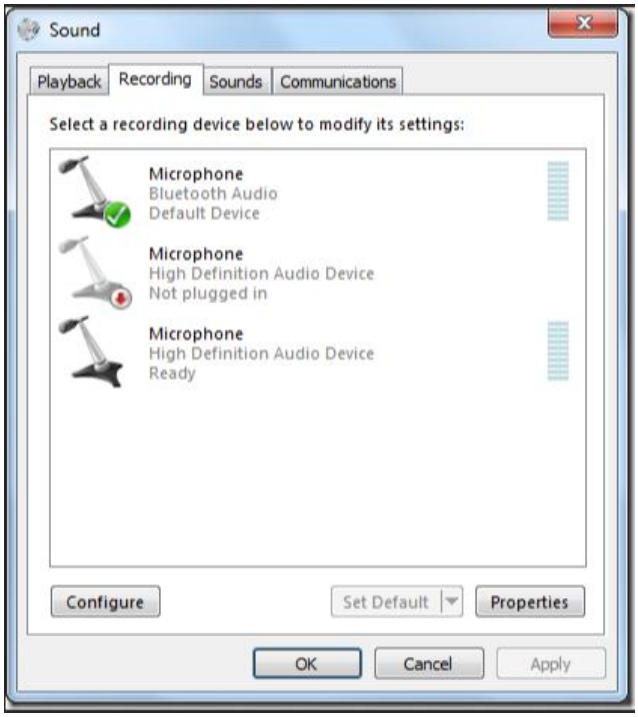
If the captured video is showing mosaic, change the video format to YUY2.



Audio Setting

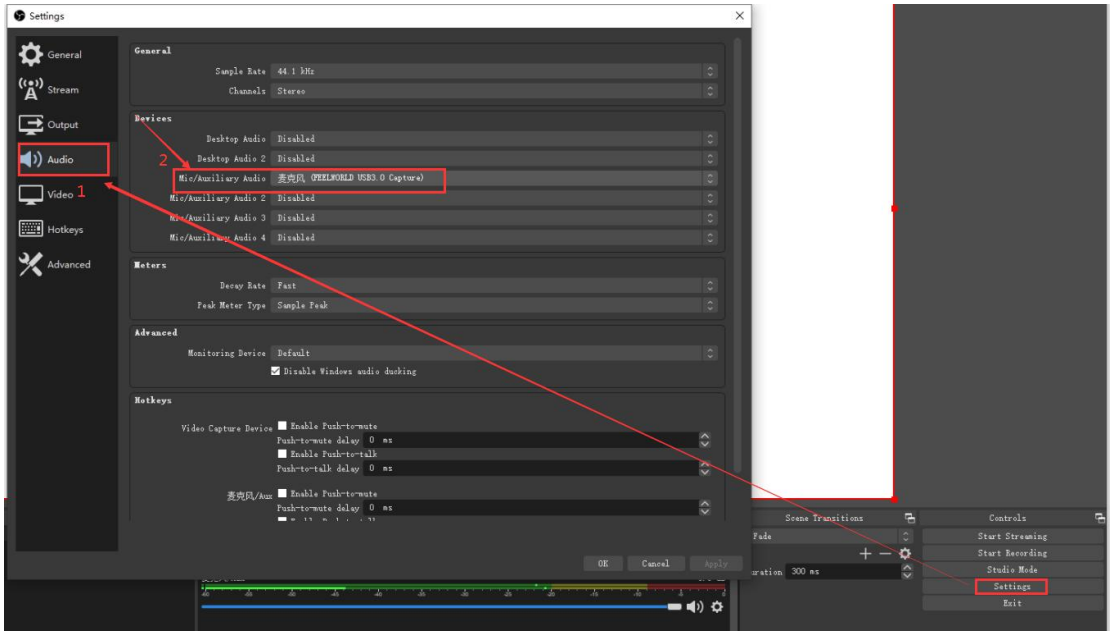
When there is no audio playing first check the video source see if the it is set in default value and then check the audio setting on OBS.

1. Set Default for the audio source.



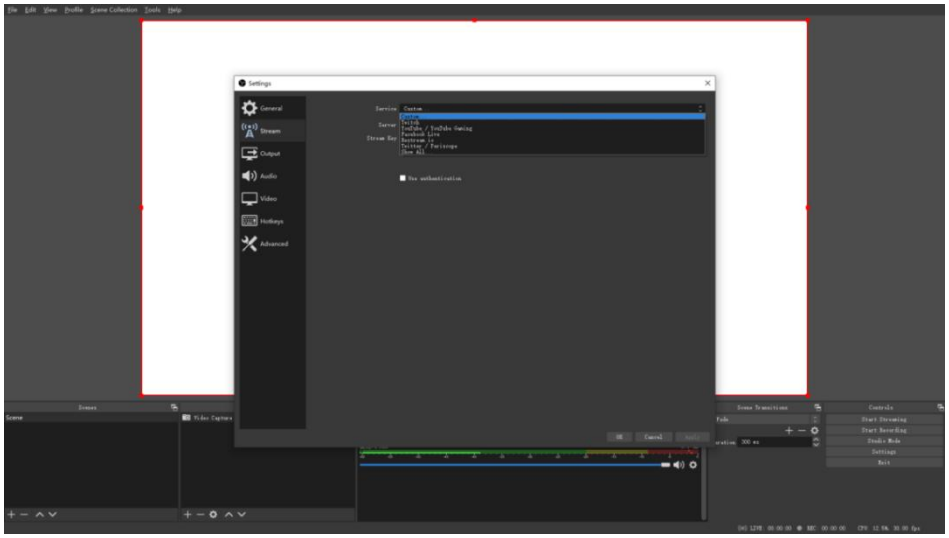
2. Audio setting on OBS.

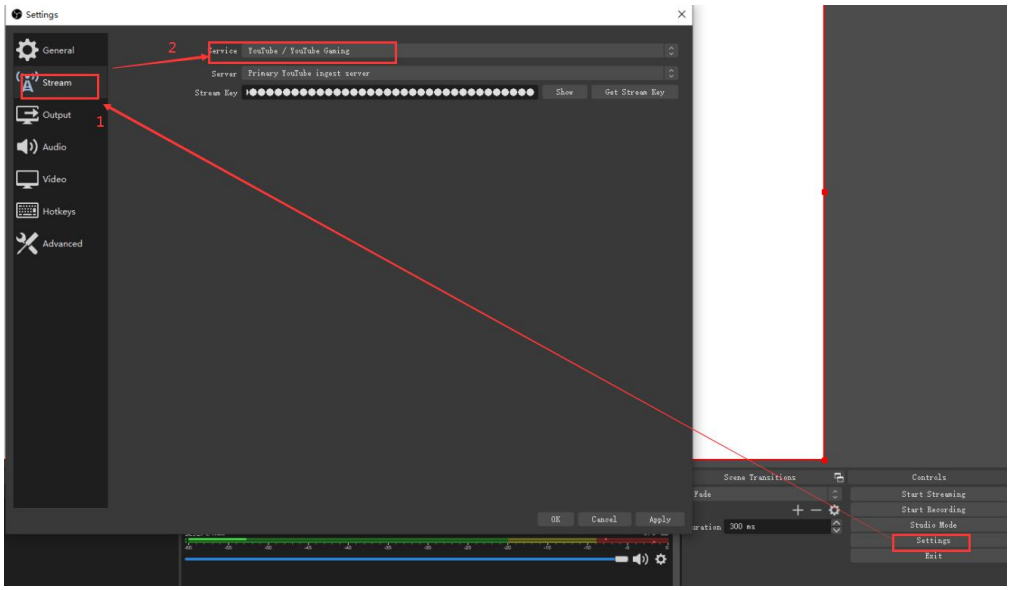
Choose Audio, click Setting and choose audio device (Mic/Auxiliary Audio Device)



6.Streaming Setting

1. Find the UL and Live Streaming Code provided by streaming broadcast website.
2. Copy rtmp address and broadcast code.
3. Back to OBS, click setting in the lower right corner and click “Stream”. Choose Stream Type as “Custom Streaming Server” Paste the rtmp address to server and broadcast code to stream key.
4. Click “Start Streaming.
5. Go back to live broadcast website and check the broadcasting.





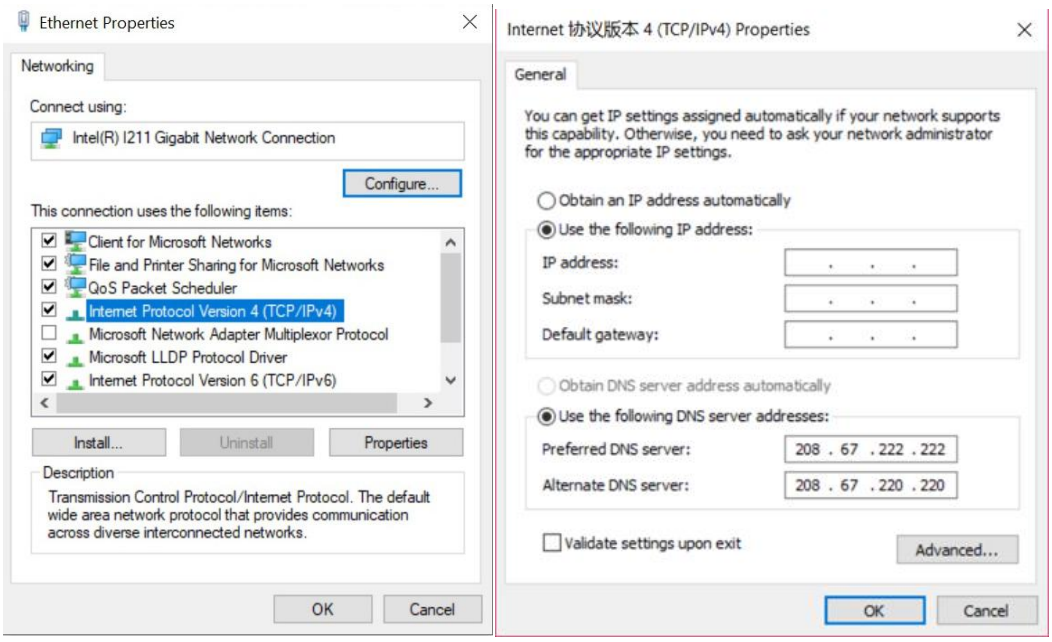
7.Upgrade

1. Tools：Upgrade package, XTOOL software and upgrade cable

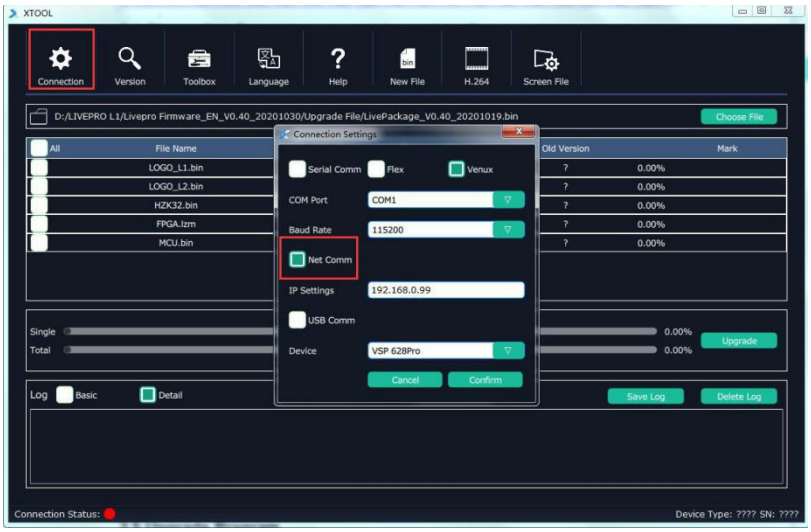
2.Upgrade Method: LAN port upgrade

2.1 Turn on the power on LIVEPRO L1 and use LAN cable to connect device.

2.2 The default IP is 192.168.0.99, so make sure the PC and device are in the same IP segment. As the picture show to check if your PC in the same IP segment.

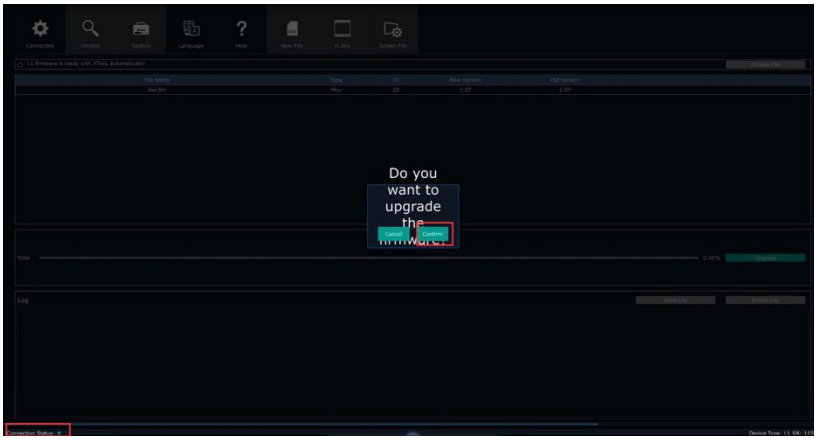


2.3 Open the upgrade tool XTOOL, click Connection
2.4 Choose Net Comm in pop up window and confirm

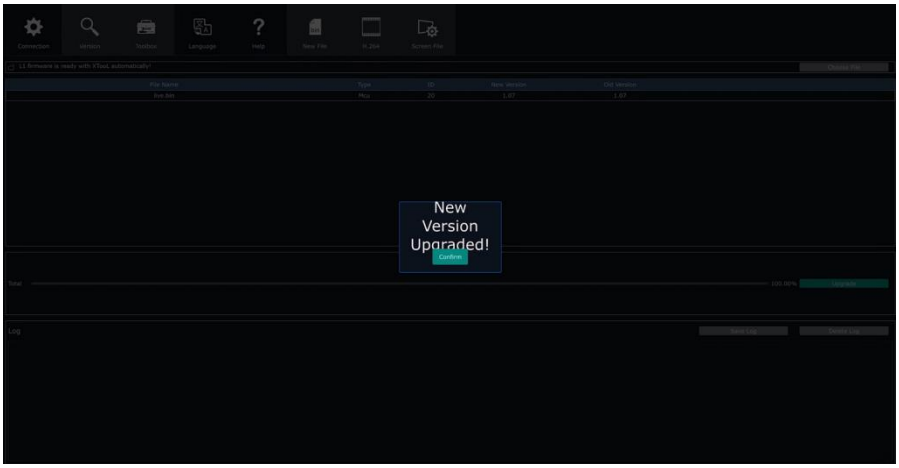


2.5 Upgrade Program

After communication setting is done, the status light in bottom left turns green. Click Confirm to start upgrade.



2.5.1 After upgrade is done, there will pop up a window showing “New Version Upgraded” then users need to reboot the device to let the new version take effect.



8.Specification

Connections	Input	HDMI In	4×HMDI-A
	Out	HDMI Out	1×HMDI-A
		USB3.0	1×USB TypeA
	Audio	IN	1×3.5mm Stereo Jack
		OUT	1×3.5mm Stereo Jack
	Communication	LAN	1×RJ45
	Power		1×DC Jack
Performance	Input Resolutions	HDMI SMPTE:720p@50/60|1080i@50|1080p@23/24/30/50/60 VESA:1024X768@60|1280 X 720@50/60|1280 X 768@60|1280X1024@60|1360X768@60|1920X1080@60i |1920 X 1080@50i	
	Output Resolutions	HDMI SMPTE:720p@50/60|1080i@50|1080p@23/24/30/50/60 VESA:1024X768@60|1280 X 720@50/60|1280 X 768@60|1280X1024@60|1360X768@60|1920X1080@60i |1920 X 1080@50i	
	Supported Standards	HDMI	1.3
		USB	3.0
Power	Input Voltage	DC 12V/1.5A	
	Max Power	18W	
Environment	Temperature	-30℃～50℃	
	Humidity	10%~85%	
Physical	Weight	640g	
	Dimension	190(L) x 110(W) x 43(H)mm	