

LIVEPRO L1

Multi - format Video Mixer

Version: LIVEPRO L1 V1



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 make 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
- Chroma key
- Control by PC or Smart phone (via APP)
- Compact design

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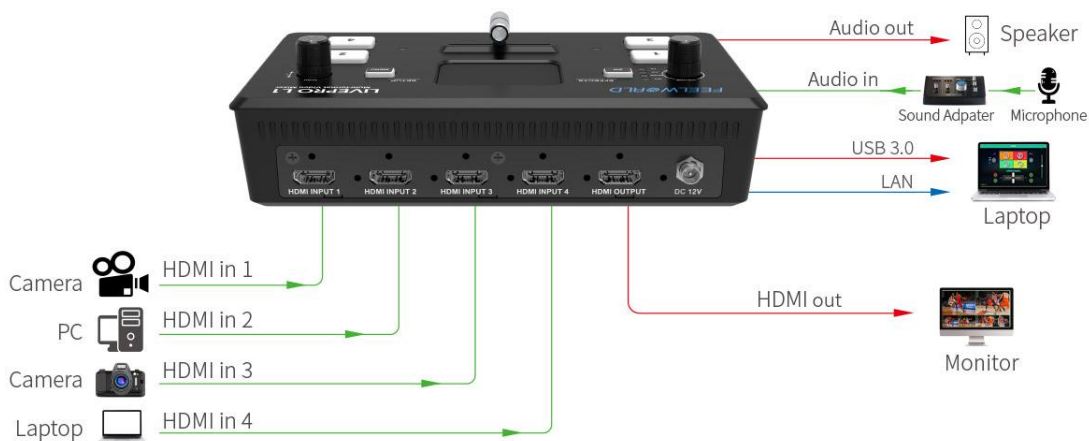
1.Product Instruction

1.1 Product Overview

LIVEPRO L1 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.

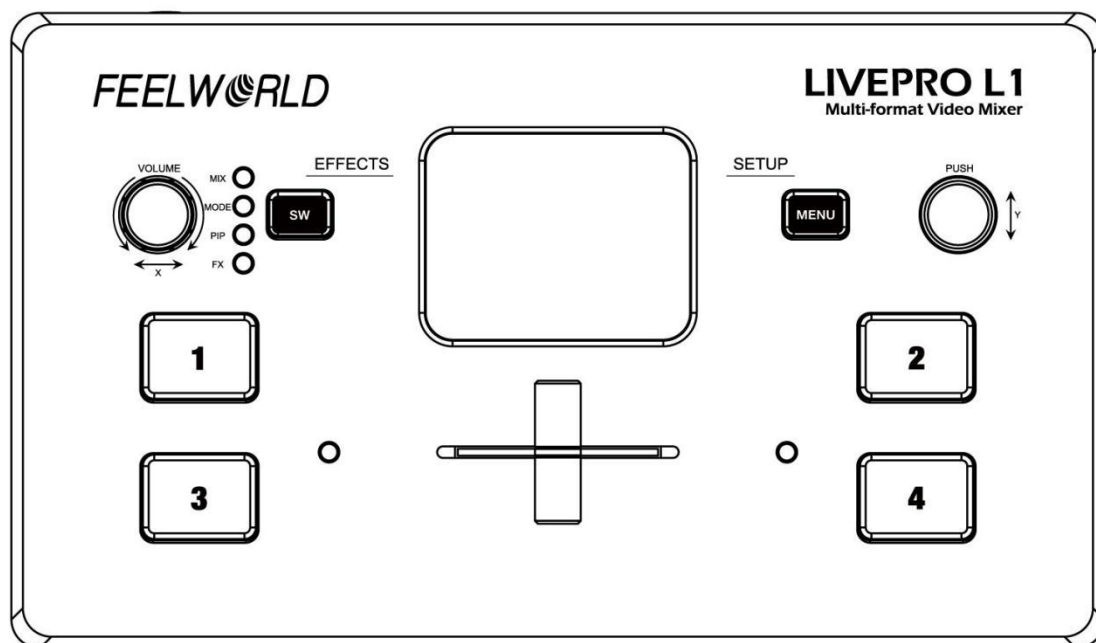
Along with feature of seamless switch, there are other outstanding features such as audio embedding, de-embedding, and automatically identify color depth of RGB 4:4:4, YUV 4:4:4, YUV4:22, YUV4:2:0. It is also easy to operate either on board or on dedicated app XPOSE on PC.


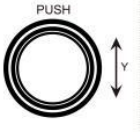


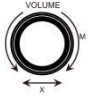

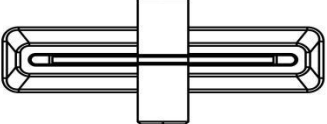
1.2 System Connection



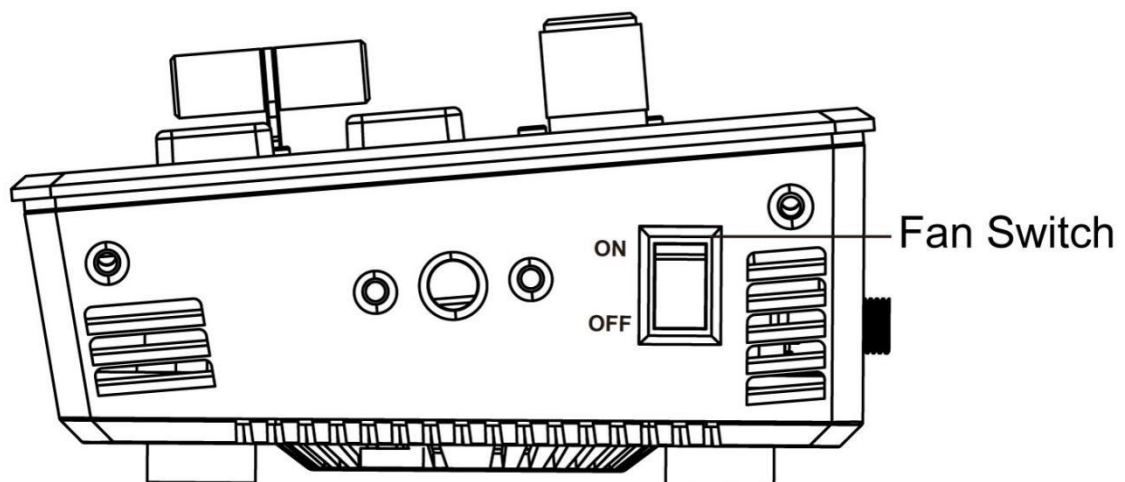
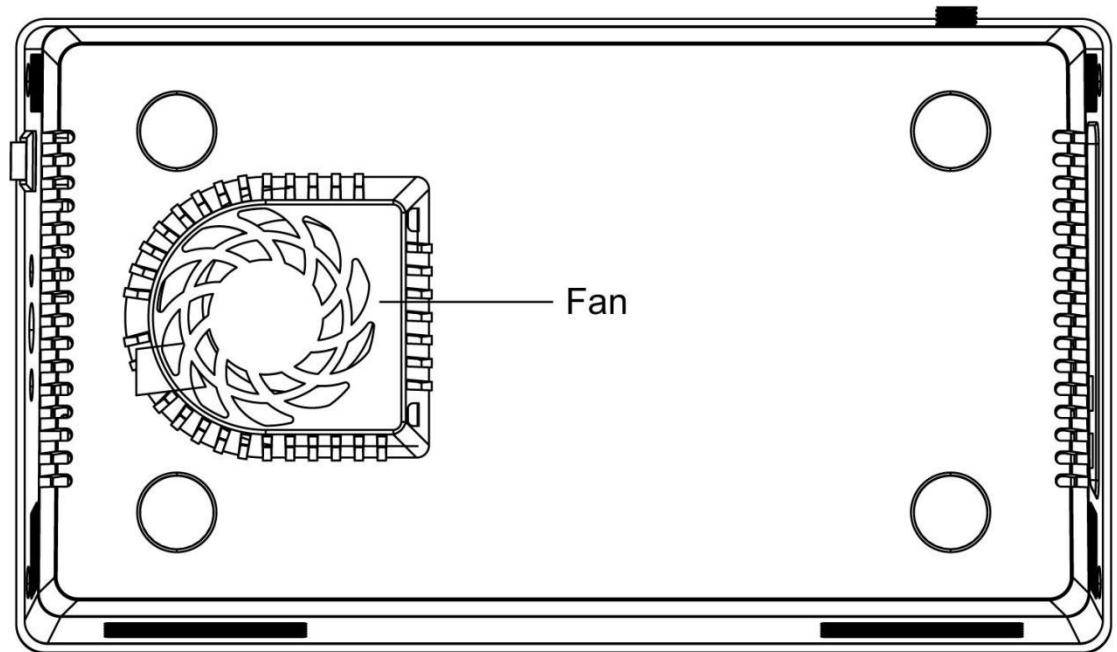
LIVEPRO L1 System Connection Diagram

1.3 Front Panel

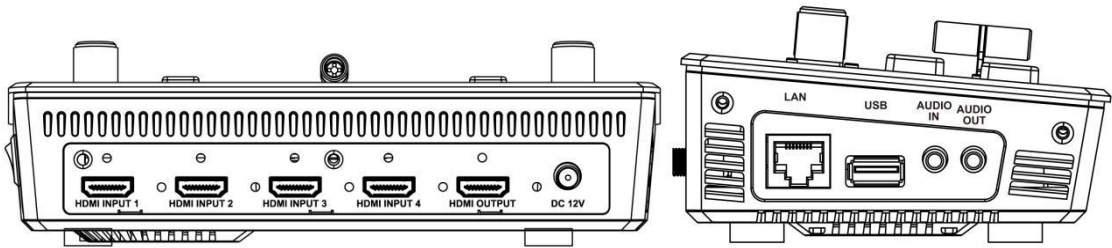


	<u>TFT display</u> To display 4 inputs and menu
	<u>PUSH/Y</u> 1. Knob, turn to select menu item, push to confirm 2. Work as a quick button to switch HDMI Out between 6-Picture PVW and PGM when TFT is under the state of previewing 4 inputs.
	<u>MENU</u> Menu and Back Button
	<u>SW</u> Function select button, to select transition effects (MIX), Mode switching (Fast or T-Bar), PIP and FX (Chroma Key)
	<u>VOLUME/X</u> 1. Turn to adjust volume of PGM (adjust after pressing the knob to display the volume bar).
	<u>1,2,3,4</u> 4 inputs, red is on air (PGM), static green is signal standing by to switch, flash green is the ready to be switched
	<u>T- Bar</u> 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 Fan Instruction



1.5 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 is power on, the native TFT display show starting up page.

2.2 Main Menu

MAIN		MAIN	
INPUT	>	IP SETTING	>
HDMI	>	LANGUAGE	>
USB3.0	>	RESET	>
AUDIO	>	INFO	>

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

2.2.1 INPUT

MAIN	INPUT	
HDMI1:1920x1080x60		
HDMI2:1920x1080x60		
HDMI3:1920x1080x60		
HDMI4:NO INPUT		

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

2.2.2 HDMI

MAIN	HDMI	
OUTPUT	PREVIEW	
FORMAT	1920x1080x60	

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: 1920x1080x24/25/30/50/60, 1360x768x60, 1280x1024x60,
1280x720x50/60, 1280x768x60, 1024x768x60

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: 1920x1080x24/25/30/50/60, 1360x768x60, 1280x1024x60, 1280x720x50/60, 1280x768x60, 1024x768x60

2.2.4 AUDIO



Choose <AUDIO>

SOURCE: AFV,LINE IN, 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 interface is a linear input interface (LINE IN), this interface can't receive the sound while connecting the microphone directly, you can use a audio interface or amplifying device to solve this problem.

Solutions for live broadcasting audio problems :

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

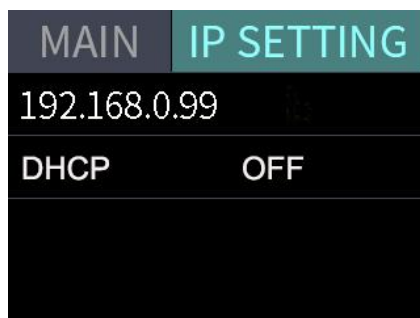
to the MIC interface of computer.

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 LIVEPRO 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.

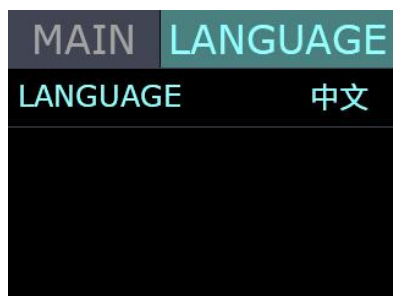
2.2.5 IP SETTING



Manually set IP address

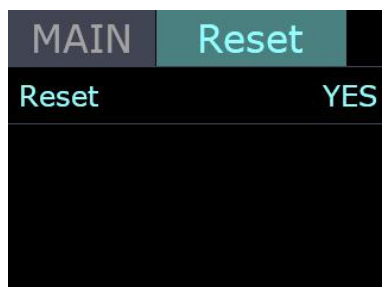
DHCP: ON/OFF

2.2.6 LANGUAGE



LANGUGE, select Chinese or English

2.2.7 RESET



Reset: Yes or No

2.2.8 INFO

MAIN	INFO	MAIN	INFO	MAIN	INFO
DEVICE SN:		MAC ADDRESS:		VIDEO VER:	
2020XXXXXXXXXX		18.20.40.96.0a.20		1.17	
IP ADDRESS:		MCU VER:			
192.168.0.99		0.40			

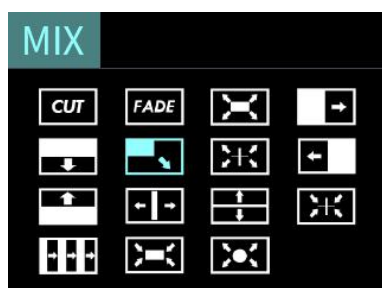
INFO: Show the SN, IP, MAC, MCU version and VIDEO version.

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 to <FX> chroma key.










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

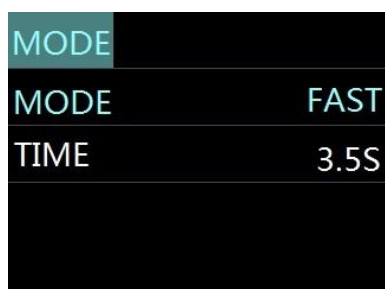


Push button SW to open up the transition effect menu. Use knob to select the desired transition effect icon and push the knob to confirm.

	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.

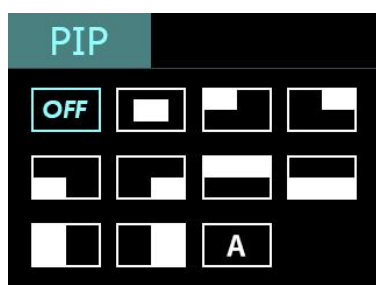
MODE: FAST or T-Bar

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” button 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

CHROMA KEY

CHROMA KEY		CHROMA KEY	
CHROMA KEY	ON	MARGIN	200
COLOR	PURPLE	LAYER SEL	B
MAX	2480		
MIN	2000		

L1 supports matting the Chroma Key in the menu, removing the pure color background and overlaying it on another signal to realize the application of virtual reality. Matting can be done on the software “Feelworld Live” or simple settings and adjustments can be made on the device.

Seeting on the device

- (1) Turn ON CHROMA KEY
- (2) Select the layer need matting, Layer A is background picture, Layer B is sub picture
- (3) Select the color to be removed, there are six kinds of color: Orange, Yellow, Green, Cyan, Blue and Purple
- (4) You can adjust Max, Min and Margin according to the actual need. The range is from 0 to 2880.

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

Install dedicated software named XPOSE to control LIVEPRO L1.

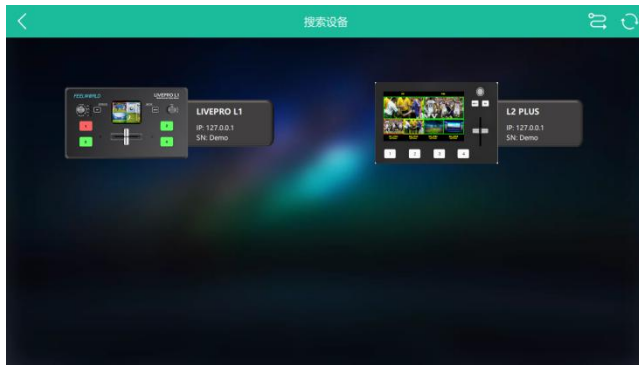
Right click the setup exe file .

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 device.



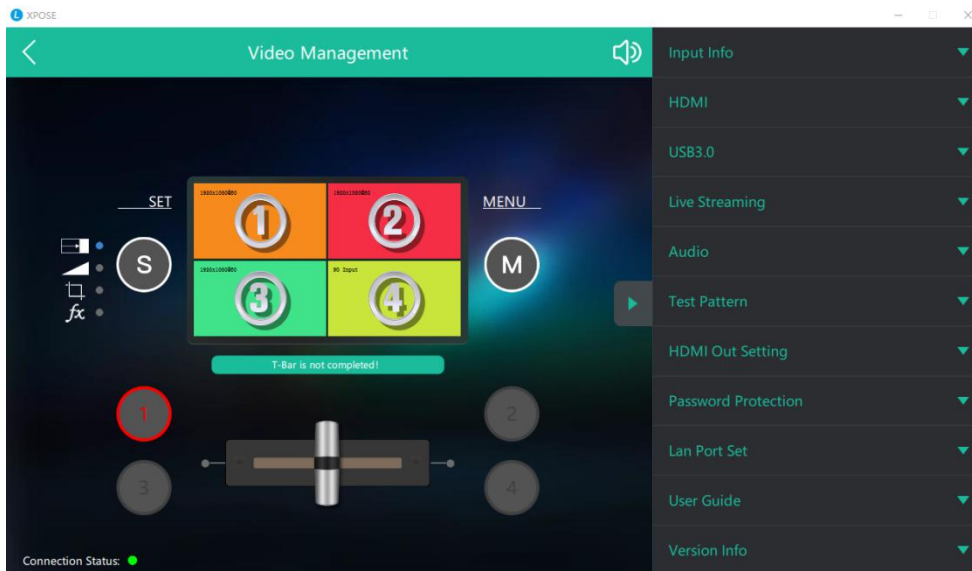
After searching, all available devices in the subnet can be found, up to 128 devices can found if there are.

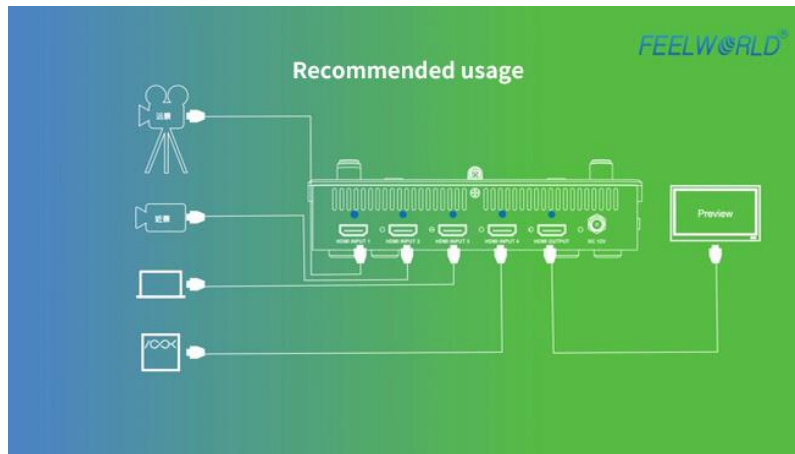


Select the desired device by SN and IP and enter the management interface. The software interface is a simulation of operation panel on real LIVEPRO L1 device.



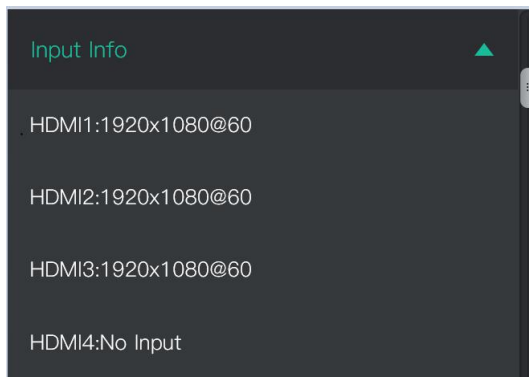
For example, clicking Button M can open up menu as on the device. MIX and PIP click via button S





INPUT INFO

In the 【Input Info】 you can check the input resolution

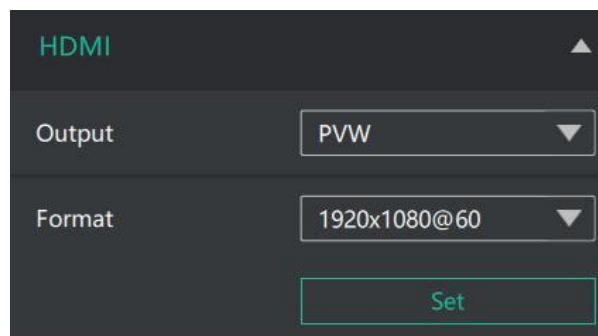


HDMI Output

Output: PVW/PGM

Format: 1920×1080@60(max)

Click<Set>after confirm

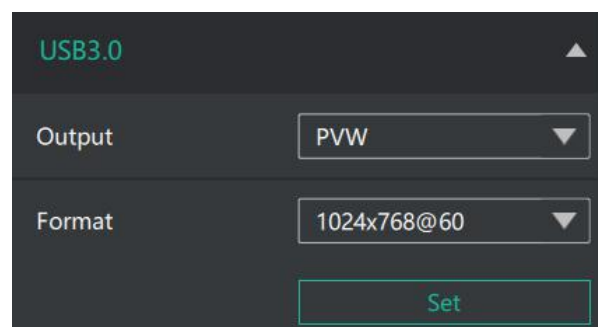


USB3.0 Output

Output: PVW/PGM

Format: 1920×1080@60(max)

Click<Set>after confirm



Live Streaming

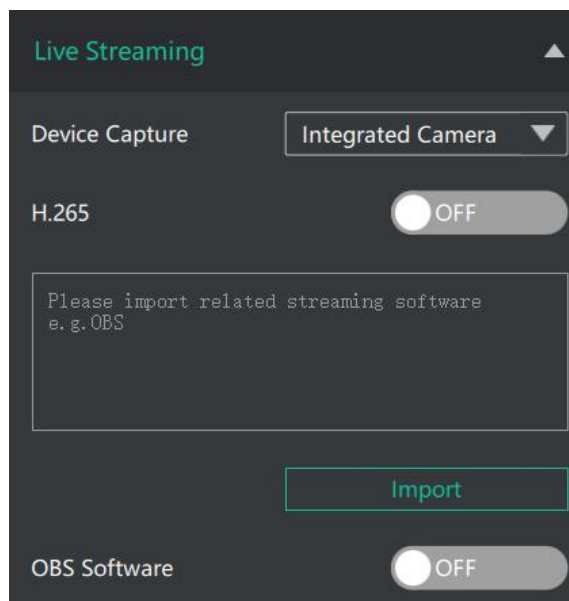
Capture Device: Choose FEELWORLD USB3.0 Capture

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.



Live Streaming

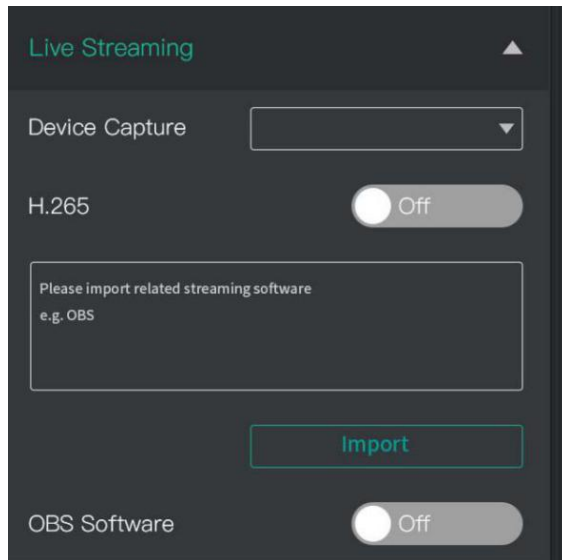
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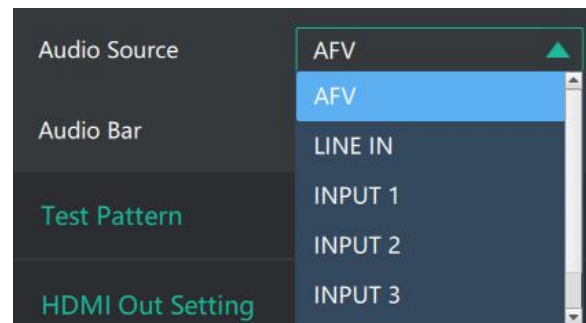
Note: H.265 and OBS cannot work at the same time. User choose either H.265 or OBS, not both.



AUDIO

AudioSource: AFV/Linein/input1,2,3,4

Audio Bar: ON/OFF



TEST PATTERN

To facilitate troubleshooting, Feelworld Live provides a test signal output, which can be used to troubleshoot the USB or HDMI output interface when there is no output signal from USB or HDMI.

Output: Select the USB/HDMI interface to be tested.

Test Pattern: Select the mode of the test pattern.

Color: Adjust color.

Test Pattern ▲

Output USB ▼

Test Pattern Off

Red 50

Green 50

Blue 50

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

HDMI Out Setting ▲

DVI/HDMI HDMI ▼

Bits ▼

Color Space Image ▼

DE On/Off Off

DE H Pos

DE V Pos

DE H Size

DE V Size

DE H Polarity Off

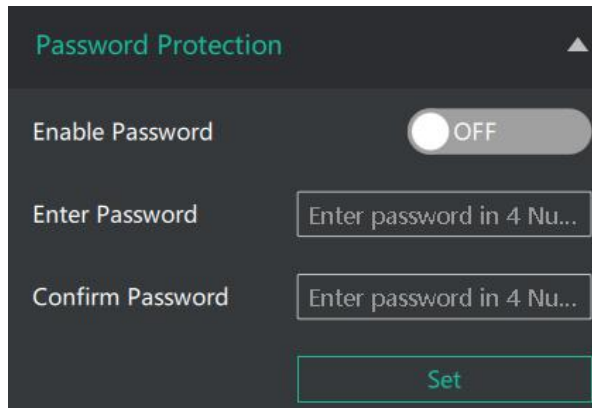
DE V Polarity Off

Set

Password Protection

In order to solve the problem of control conflicts caused by different devices controlling the same L1 in the same LAN, Feelworld Live provides a password protection function, as an administrator, you can set a password for the device controlling Feelworld Live, and when you control the interface again, you need to enter the password to control it.

Note: If you have forgotten your password, please restore the factory settings on the Livepro L1

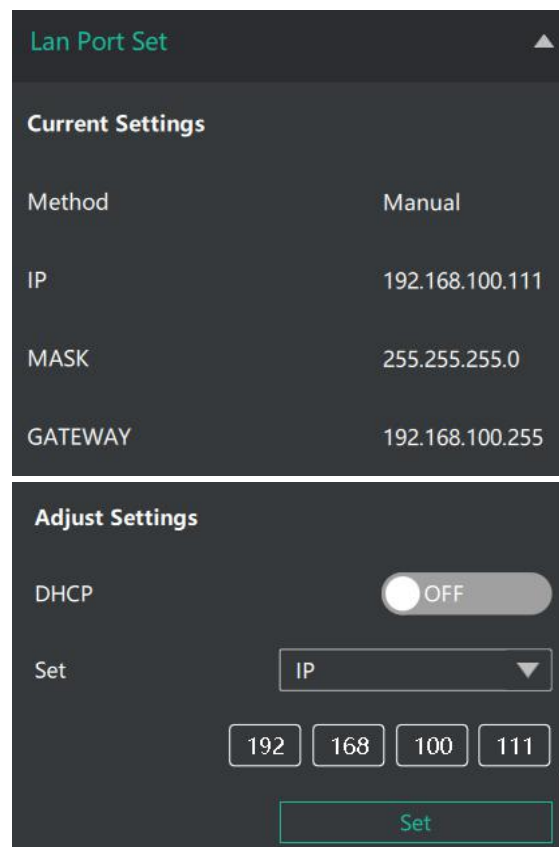


The screenshot shows the 'Password Protection' settings screen. At the top, the title 'Password Protection' is in green. Below it, there is a toggle switch for 'Enable Password' which is currently set to 'OFF'. Underneath, there are two input fields: 'Enter Password' and 'Confirm Password', both containing the placeholder text 'Enter password in 4 Nu...'. At the bottom, there is a green 'Set' button.

Lan Port Set

In **【Lan Port Set】**, you can check current IP, mask and gateway.

If you want to change the IP address, mask and gateway, turn **off DHCP** first and change the value.



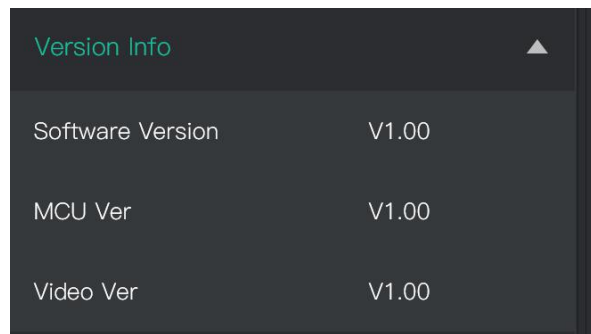
The screenshot shows the 'Lan Port Set' settings screen. At the top, the title 'Lan Port Set' is in green. Below it, there is a section titled 'Current Settings' which displays the following information:

Method	Manual
IP	192.168.100.111
MASK	255.255.255.0
GATEWAY	192.168.100.255

Below the 'Current Settings' section, there is a section titled 'Adjust Settings'. It contains a toggle switch for 'DHCP' which is currently set to 'OFF'. Underneath, there is a 'Set' label and a dropdown menu showing 'IP'. Below the dropdown, there are four input fields for the IP address: '192', '168', '100', and '111'. At the bottom, there is a green 'Set' button.

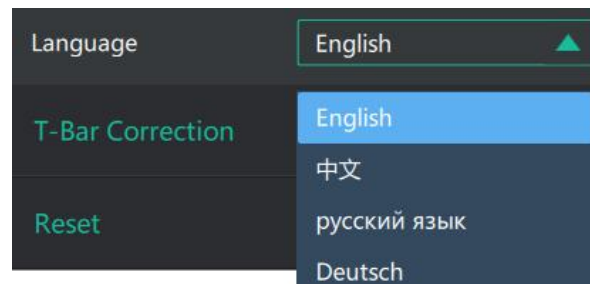
Version Info

Show the version information



Language

There are 4 kinds of language: Chinese, English, Russian and German.

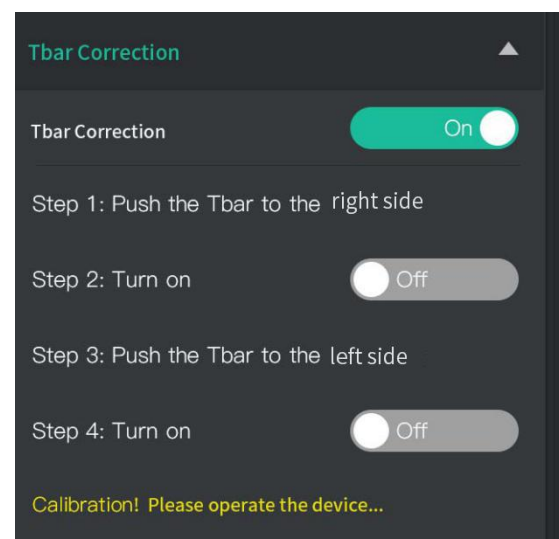


T-Bar Calibration

If the T-Bar is not in the correct position, no other operation is possible. T-Bar correction is available in Feelworld Live.

The steps are as follow:

1. Turn on the T-Bar Calibration switch.
2. Push the T-Bar to the **far right** side.
3. Turn on the "On" switch
4. Push the T-Bar to the **far left** side.
5. Turn on the "On" switch



Reset

Reset will remove all settings.

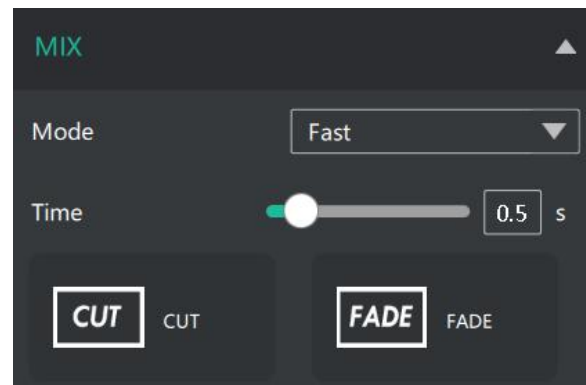


MIX

Mode: Fast/T-Bar

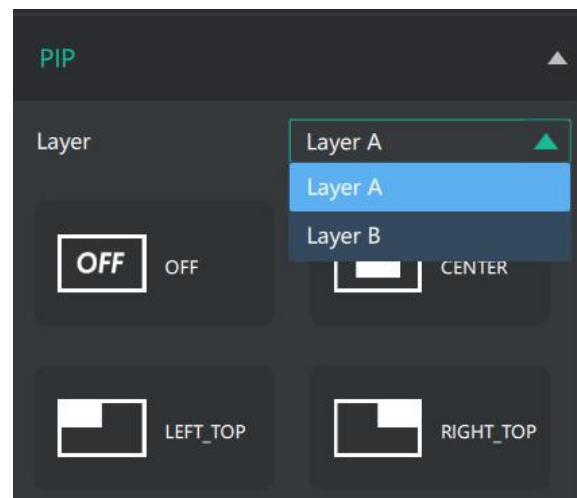
Time: 0.5s~5.0s

Layout: 15 kinds



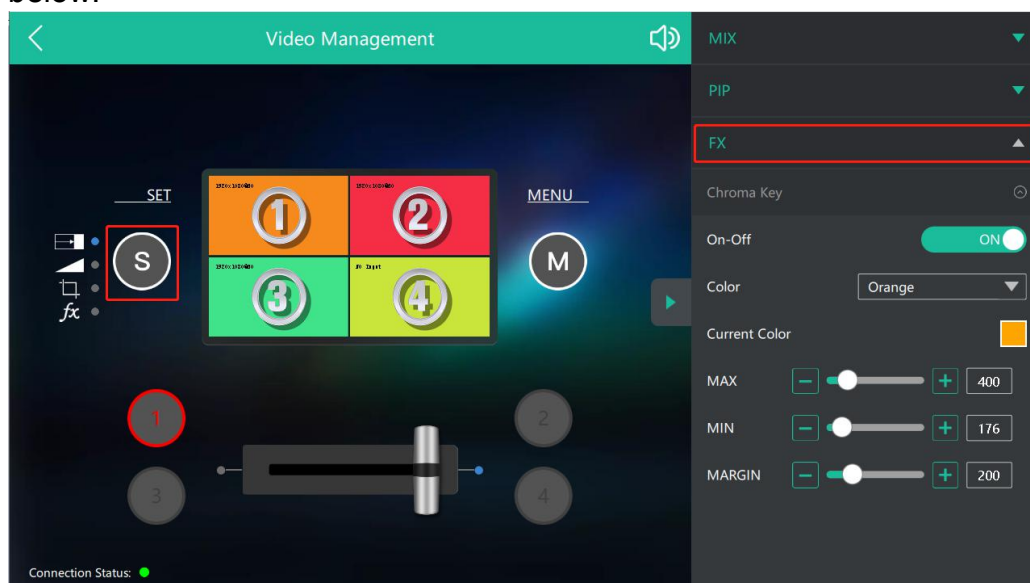
PIP

There are 9 kinds of PIP layout

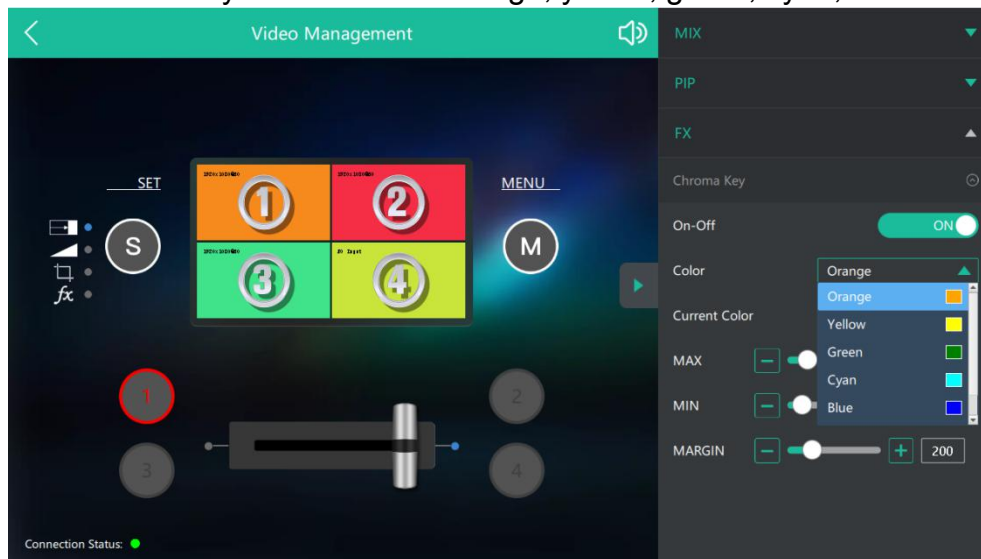


Chroma Key

(1) Click **S** button and **FX**, open **Chroma Key** menu, as shown in the picture below:



(2) Turn ON Chroma key and select the base color to be removed. There are 6 kinds of colors you can select: orange, yellow, green, cyan, blue and purple.



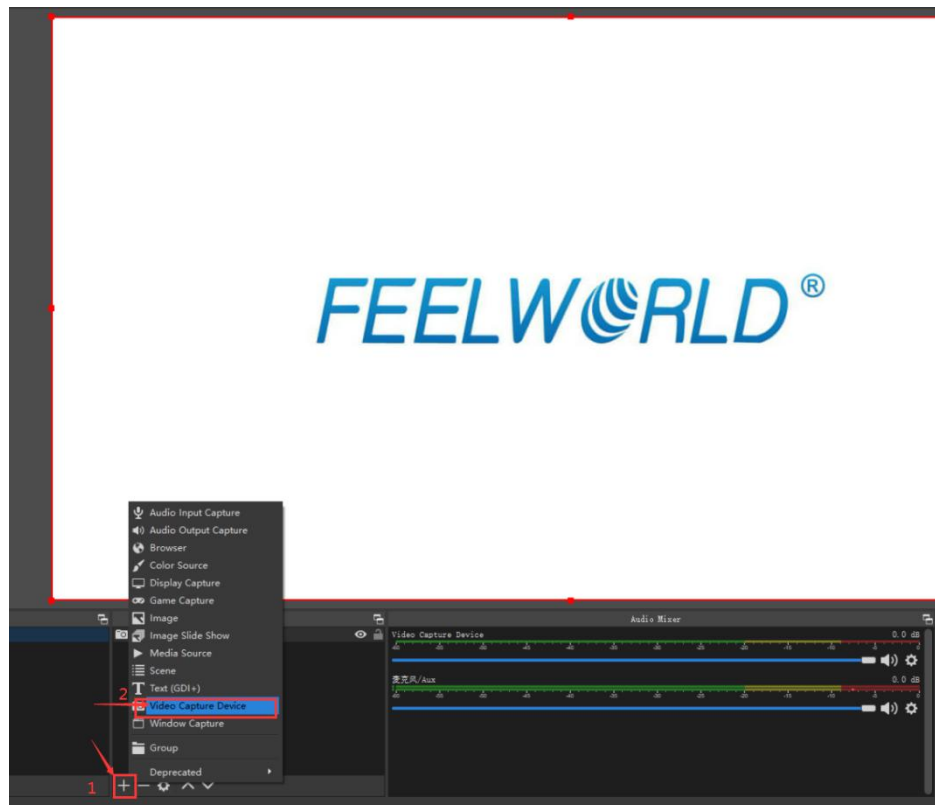
(3) You can slide the bar to adjust MAX MIN MARGIN or fill in the data input box to achieve a more precise keying effect.

Note: When using chroma key, make sure that the layer you want to edit is on the top layer, which is the B layer in the PIP setting, otherwise you may not see the chromakey effect.

5.OBS Streaming

LIVEPRO L1 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.

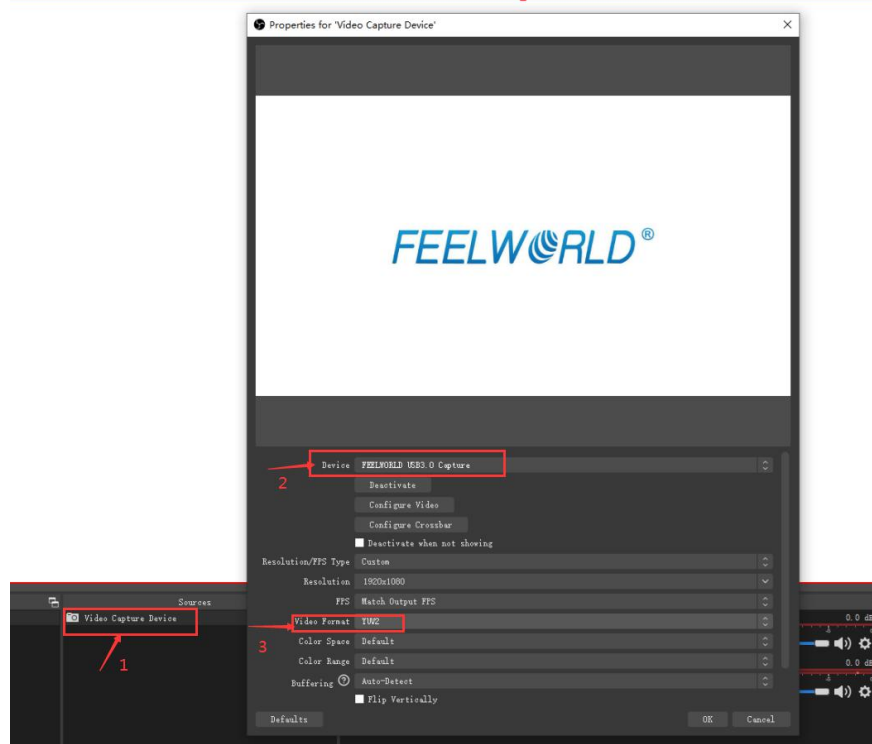
- 1.Click”+”icon
2. Choose video capture device
3. Click video capture device to open up setting page
4. Choose : FEELWORLD USB 3.0 Capture
5. Choose Video Format YUY2



If there is no video format YUY 2 after setting above, check the USB 3.0 port 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)



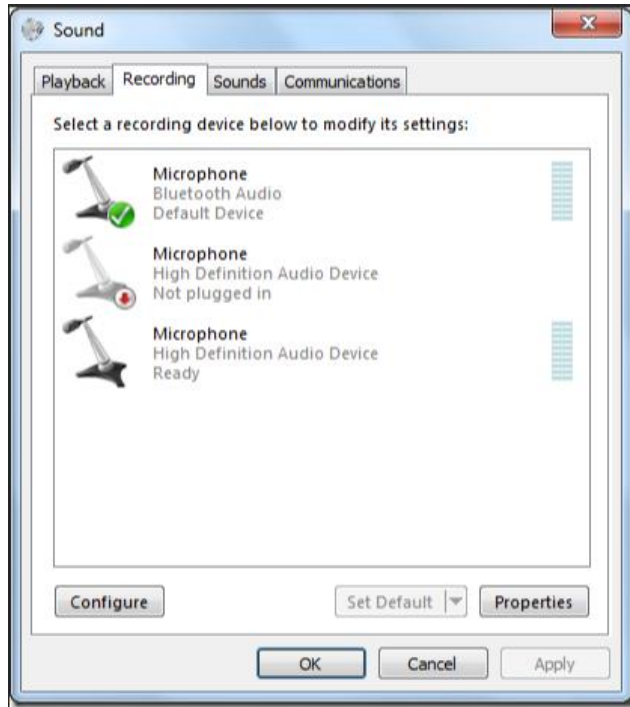
If the captured video is showing mosaic, change the video format to YUY2.



Audio Setting

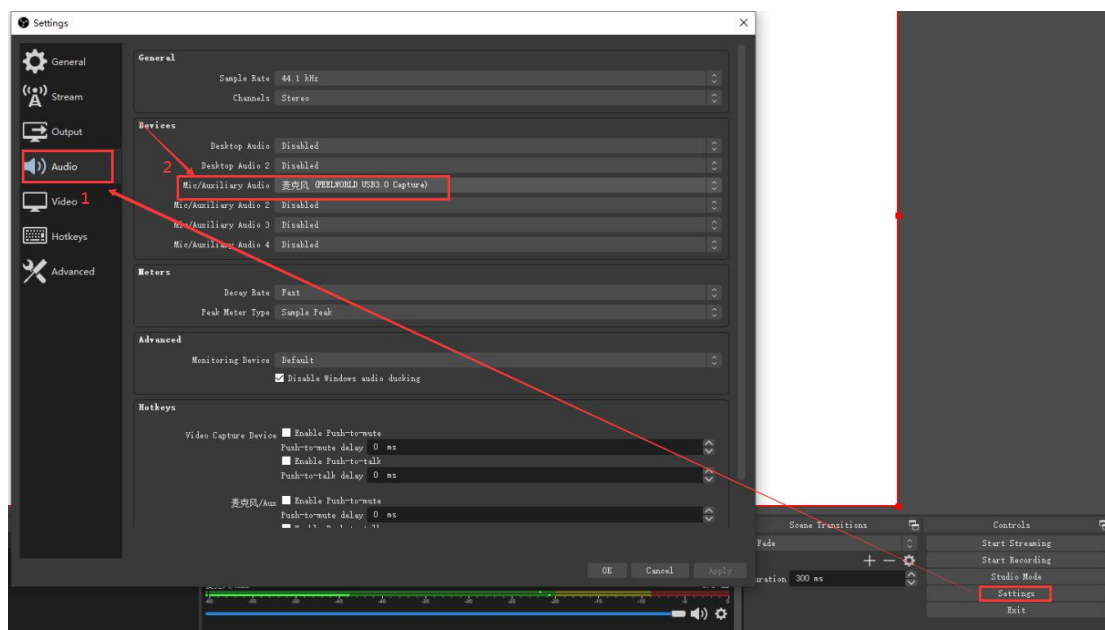
When there is no audio playing first check the video source see if the it is set in default value and then check the audio setting on OBS.

1. Set Default for the audio source.



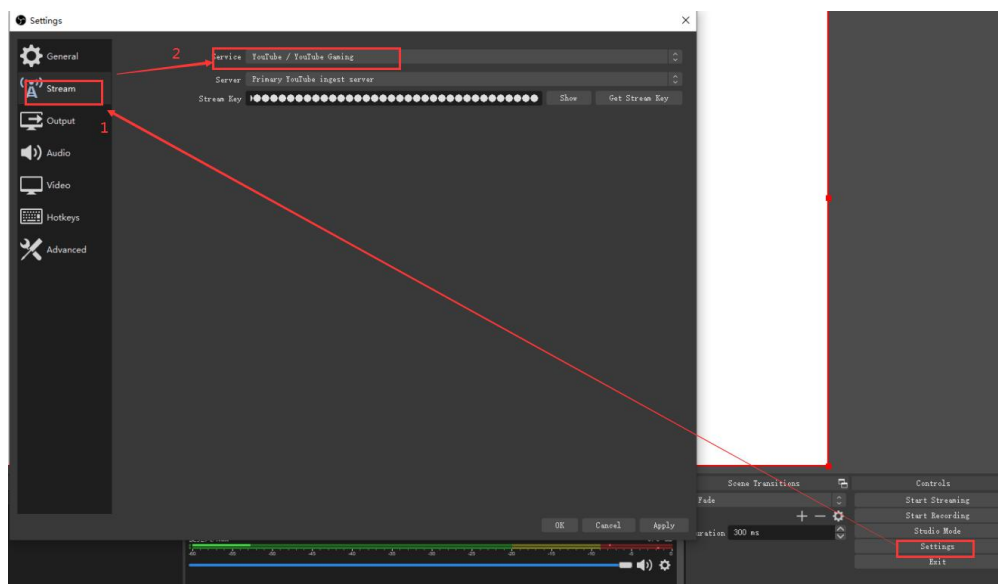
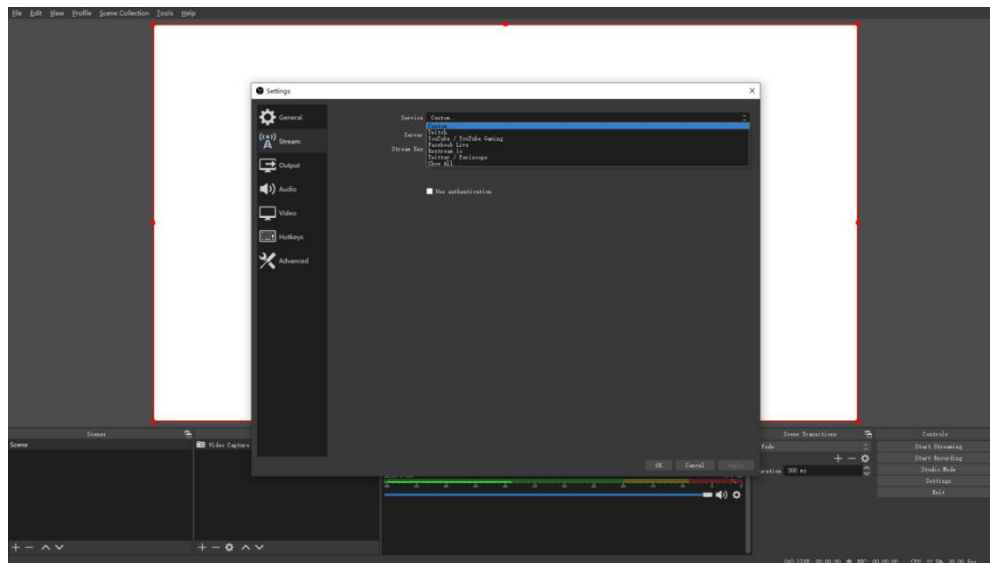
2. Audio setting on OBS.

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

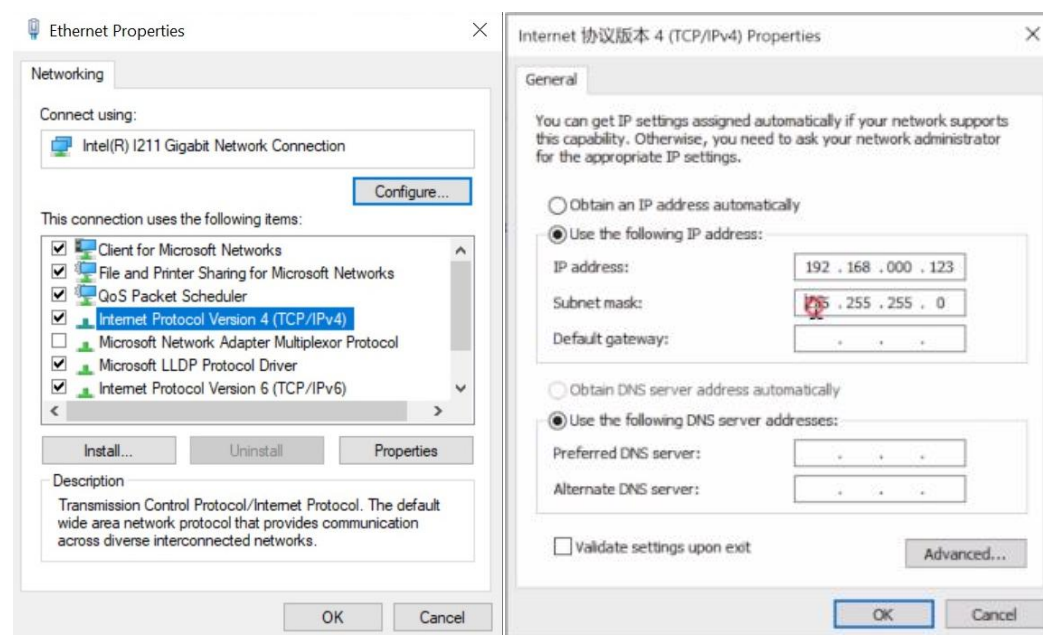
1. Tools: XTOOL software and upgrade cable



2.Upgrade Method: LAN port upgrade

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

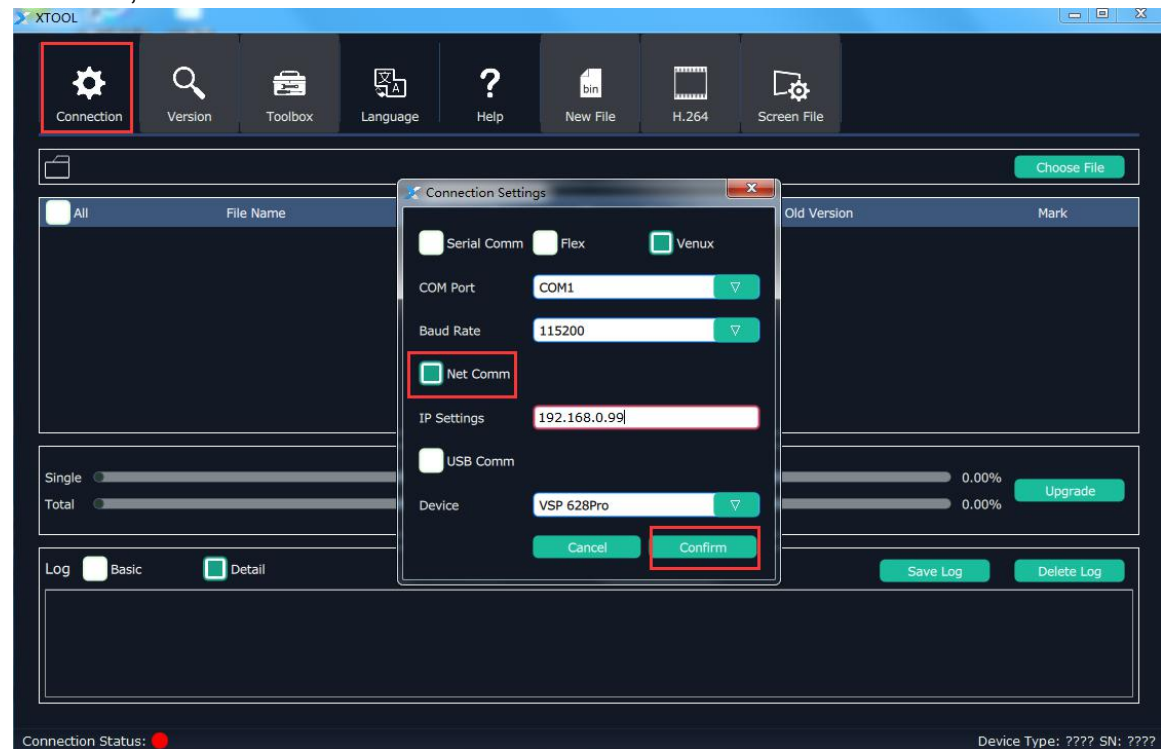
2.2 The default IP is 192.168.0.99, so make sure the PC and device are in the same IP segment, which means the IP of PC must be 192.168.0.XXX (but must not be completely same as the device).



2.3 Open the upgrade tool XTOOL, click Connection

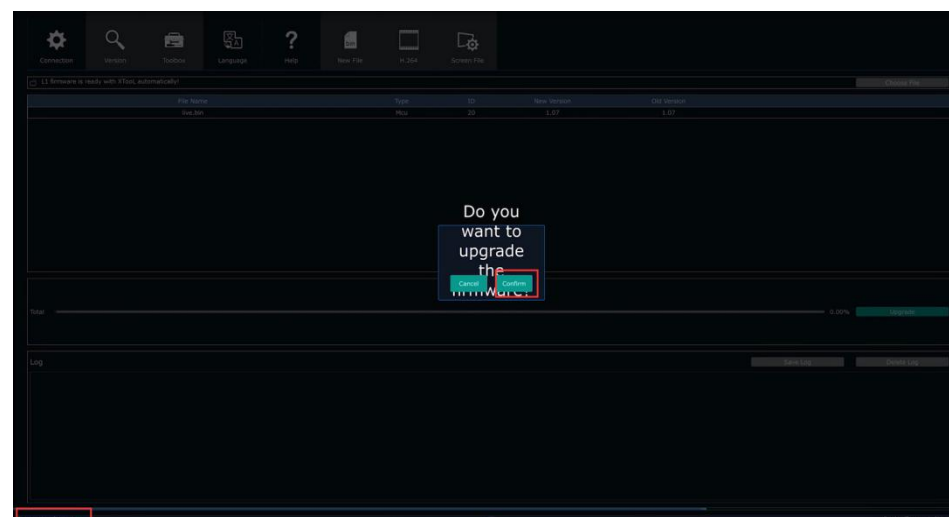
2.4 Choose Net Comm in pop up window and set IP address the same to the

switcher, then click confirm.

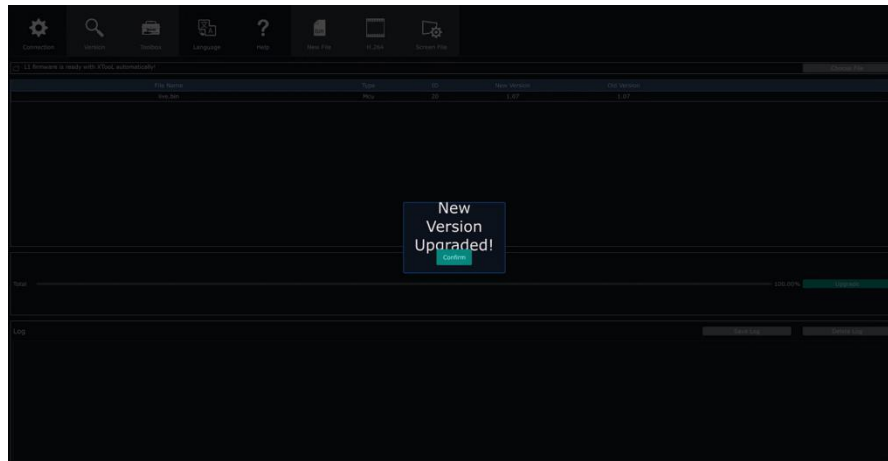


2.5 Upgrade Program

After communication setting is done, the status light in bottom left turns green. Click Upgrade, the software will automatically upgrade the firmware.



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
Performance	Power		1×DC Jack
	Input Resolutions	HDMI SMPTE:720p@50/60 1080i@50/60 1080p@23/24/30/50/60 VESA:1024X768@60 1280X720@60 1280X768@60 1280X800@60 1280X1024@60 1360X768@60 1366X768@60 1440X900@60 1600X1200@60 1680X1050@60 1920X1080@60 1920X1200@60	
	Output Resolutions	HDMI SMPTE:720p@50/60 1080p@24/25/30/50/60 VESA:1024X768@60 1280X720@60 1280x768@60 1280X1024@60 1360X768@60	
	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	500g	
	Dimension	190(L) x 110(W) x 43(H)mm	