

# LIVEPRO L1

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 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
- Audio offers embedded or external source to select
- Support switch between 6-picture PVW and PGM to HDMI out
- Licensed features including DSK, PTZ control etc.
- Control by PC or Smart phone (via APP)
- Compact design

## Package Content

Name	Unites	Quantity
Switcher	pcs	1
12V/1.5A Adapter	pcs	1
User Manual	pcs	1

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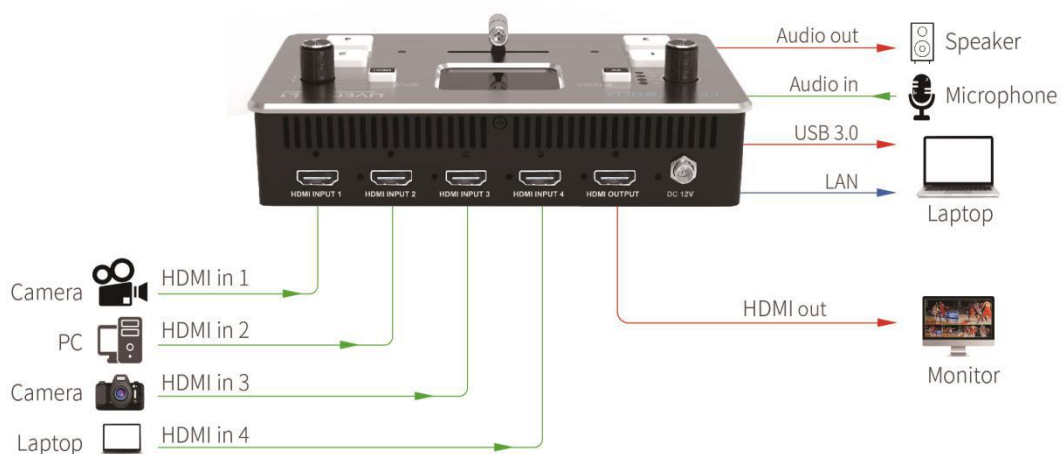
# 1.Product Instruction

## 1.1 Product Overview

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

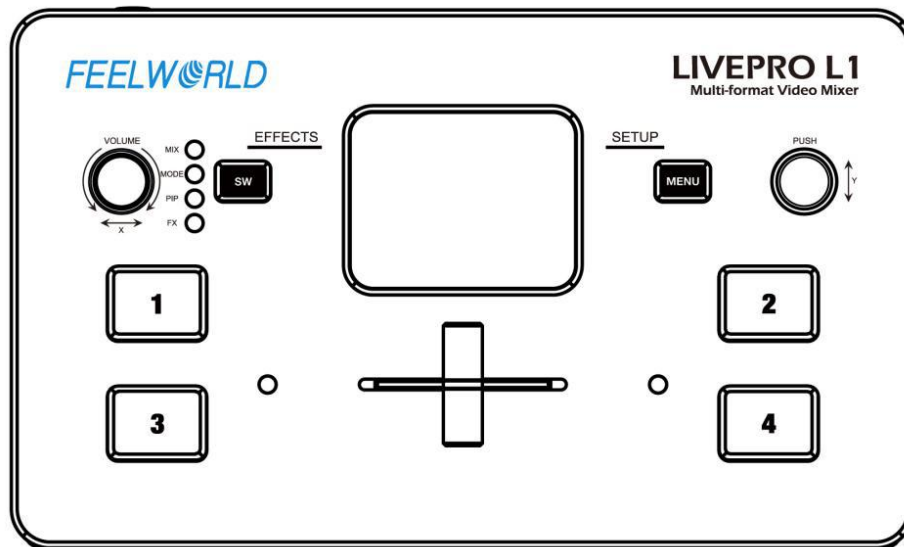
Along with feature of seamless switch, there are other outstanding features such as audio embedding, deblocking, and automatically identify color depth of RGB 4:4:4, YUV 4:4:4 , YUV4:22, YUV4:2:0. Licensed features including DSK, LOGO, PTZ camera control will be available at additional cost. It is also easy to operate either on board or on dedicated app on PC.


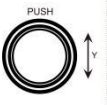




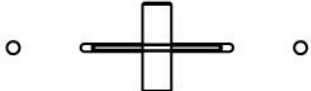
## 1.2 System Connection



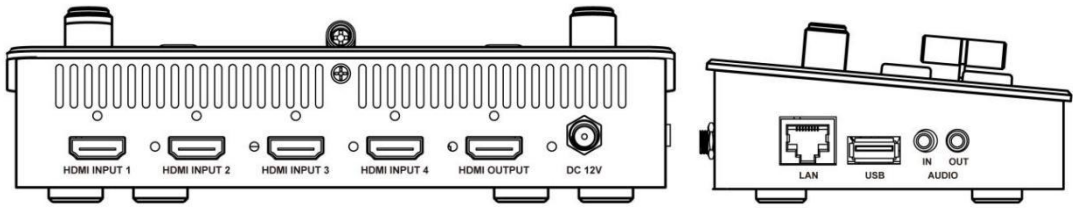
LIVEPRO L1 System Connection Diagram

## 1.3 Front Panel



	<b><u>TFT display</u></b> To display 4 inputs and menu
	<b><u>PUSH</u></b> Knob, turn to select menu item, push to confirm Work as a quick button to switch HDMI output between 6-picture PVW and PGM when TFT is under the state of previewing 4 inputs
	<b><u>MENU</u></b> Menu and Back Button
	<b><u>SW</u></b> Function select button, to select transition effects (MIX), Mode switching (Fast or T-Bar), PIP and FX (reserved licensed feature for future)
	<b><u>VOLUME</u></b> Turn to adjust volume of PGM
	<b><u>1,2,3,4</u></b> 4 inputs, red is on air (PGM), static green is signal standing by to switch, flash green is the ready to be switched
	<b><u>T- Bar</u></b> Manual switch, push to left end or right end to switch signal to PGM.

## 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, analog audio input port, connect to microphone AUDIO Out, analog audio output port, connect to loudspeaker.

## 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	>



## 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:** 1920x1080x60

## 2.2.3 USB3.0

MAIN	USB3.0	
OUTPUT	PREVIEW	
FORMAT	1920x1080x60	

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 HDMI.

**Output:** Choose PGM or Preview

**Format:** 1920x1080x60

## 2.2.4 AUDIO



Choose <AUDIO>

**SOURCE:** EMBEDDED or EXTERNAL

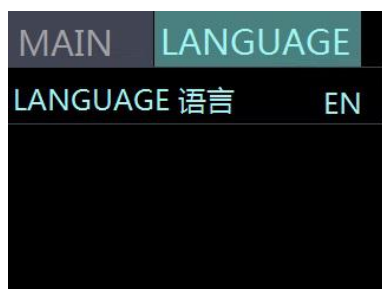
**AUDIO BAR:** ON/OFF

## 2.2.5 IP SETTING



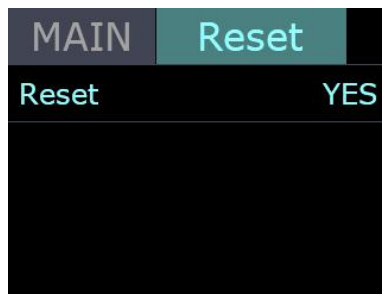
Manually set IP address

## 2.2.6 LANGUAGE



LANGUAGE, select Chinese or English

## 2.2.7 RESET



Reset: Yes or No

## 2.2.8 INFO

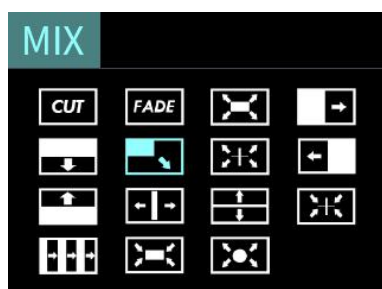
MAIN	INFO	MAIN	INFO	MAIN	INFO
DEVICE SN:		MAC ADDRESS:		VIDEO VER:	
2020XXXXXXXXXX		18.20.40.96.0a.20		1.10	
IP ADDRESS:		MCU VER:			
192.168.0.100		0.30			

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














## 2.3 BUTTON SW

Push button SW, the TFT will show the transition effect menu <MIX>. The <MIX> LED indication beside will light up. Keep pushing, it will skip to the next menu <MODE>, again to <PIP > and again back to <MIX>. Unless the device got license, it will skip to <FX> (Additional features). 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

MODE	
MODE	FAST
TIME	3.5S

Keep pushing the button SW to open up MODE menu.

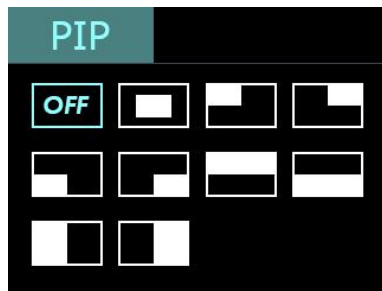
MODE:FAST or T-Bar

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.

#### 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 is advanced features asking for license, reserved for future development.

## 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

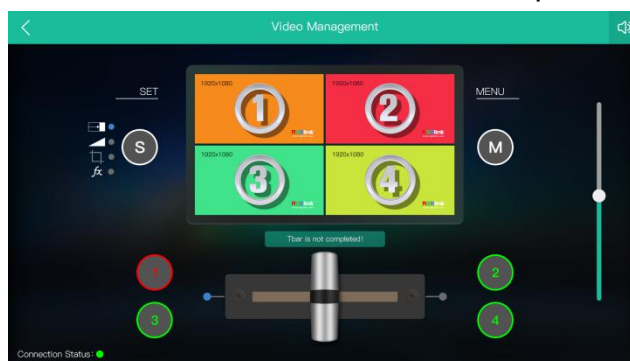
After software is installed, click the icon  and login the software. Click Search to search LIVEPRO L1 device.



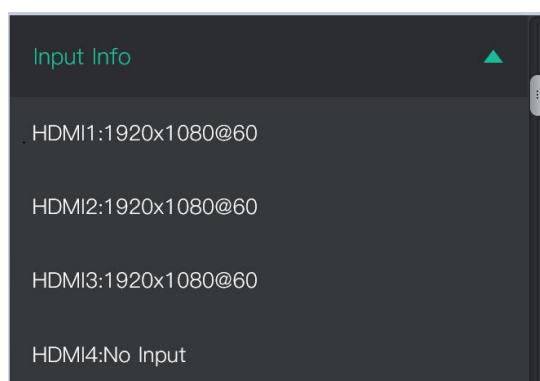
After searching, all available mini devices in the subnet can be found, up to 128 devices can found if there are.



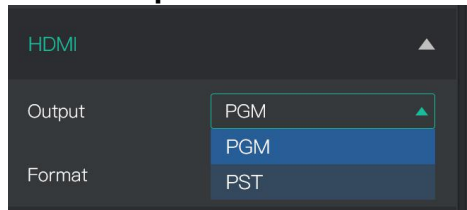
Select the desired device by SN and IP and enter the management interface. The software interface is a simulation of operation panel on real L1 device.



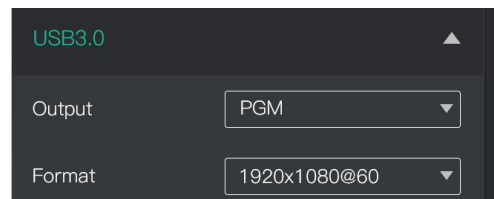
## INPUT INFO



## HDMI Output

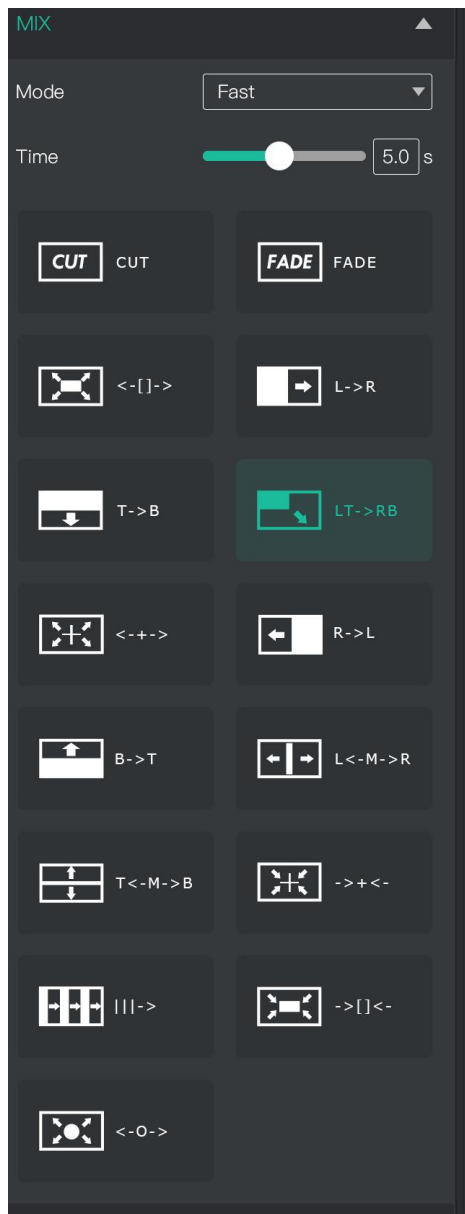


## USB3.0 Output



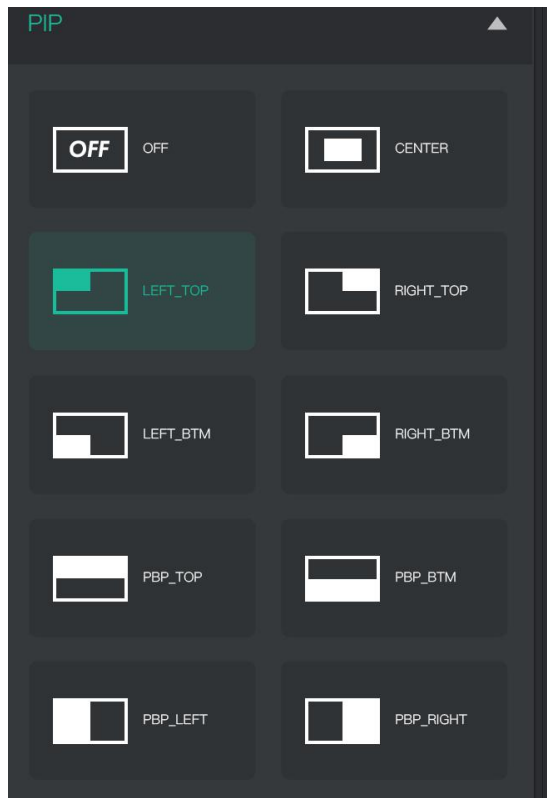
## <MIX>

Choose switch time and transition effect.



## <PIP>

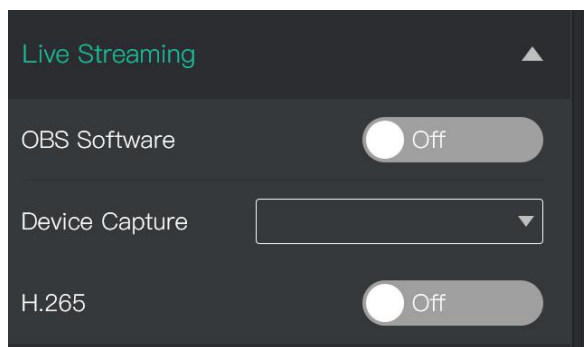
Choose layout mode for PIP



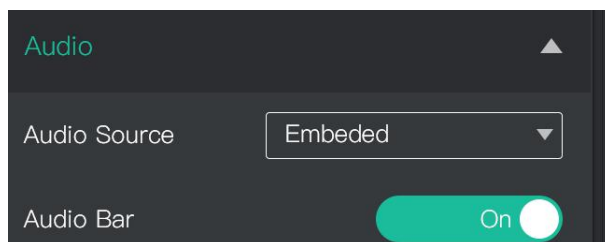
## Streaming

Capture Device:choose FEELWORLD USB3.0 Capture

OBS:Slide On



## AUDIO





TEST PATTERN

Test Pattern ▲

Output

USB ▼

Test Pattern

☐ Off

Red

1920

Green

1920

Blue

1920

HDMI Output Setting

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

Set password for the device. After password is set, password will be required when enter the software operation interface.

Password Protection▲

Enable Password

☐ Off

Enter Password

Confirm Password

Set

## IP Setting

Manually set Gateway, MASK and IP for the device.

Lan Port Set▲

Current Settings

Method	Manual
IP	192.168.255.100
MASK	255.255.255.0
GATEWAY	192.168.0.255

Adjust Settings

DHCP

☐ Off

Set

GATEWAY▼

192

168

0

255

Set

## VERSION

Version Info ▲	
Software Version	V1.00
MCU Ver	V1.00
Video Ver	V1.00

## T-Bar Calibration

Tbar Calibration ▲

Tbar Calibration ☒ On

Step 1: Push the Tbar to the left side

Step 2: Turn on ☐ Off

Step 3: Push the Tbar to the right side

Step 4: Turn on ☐ Off

Calibration successful!

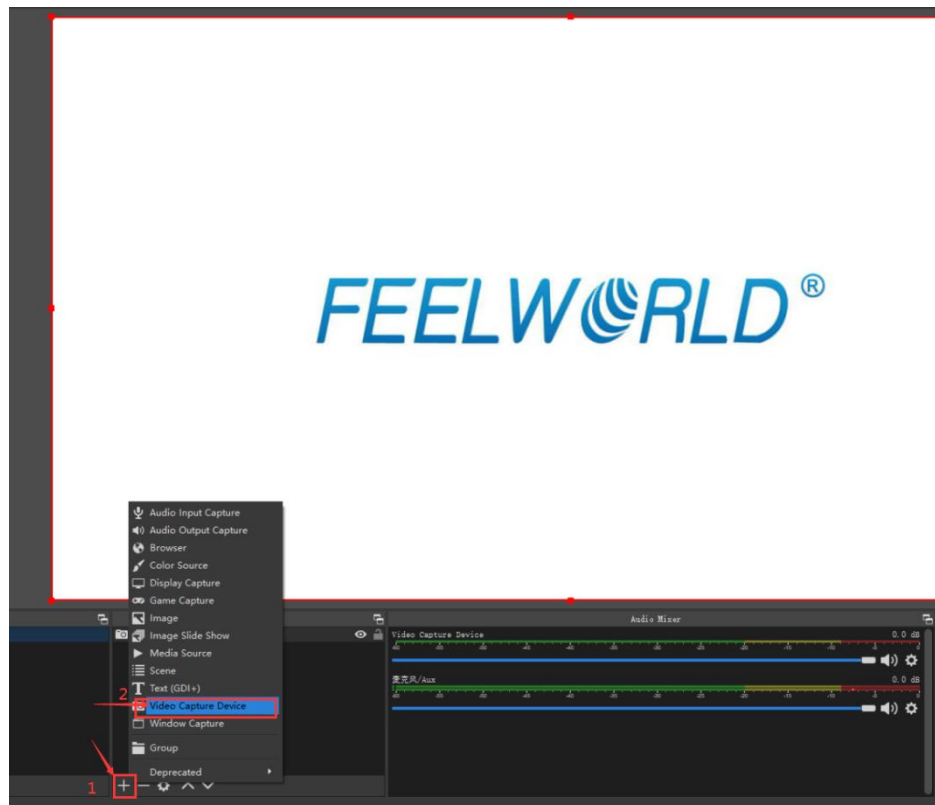
## Factory Reset

Reset ↺

## 5.OBS Streaming

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

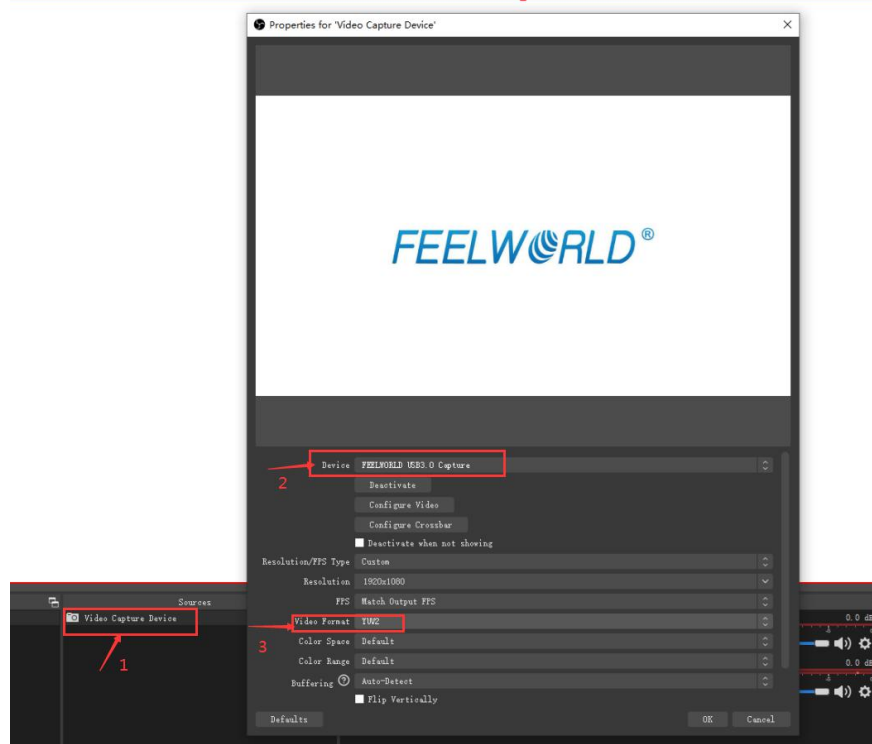
- 1.Click”+”icon
- 2.choose video capture device
- 3.Click video capture device to open up setting page
- 4.Choose : FEELWORLD USB 3.0 Capture
- 5.Choose Video Format YUY2



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



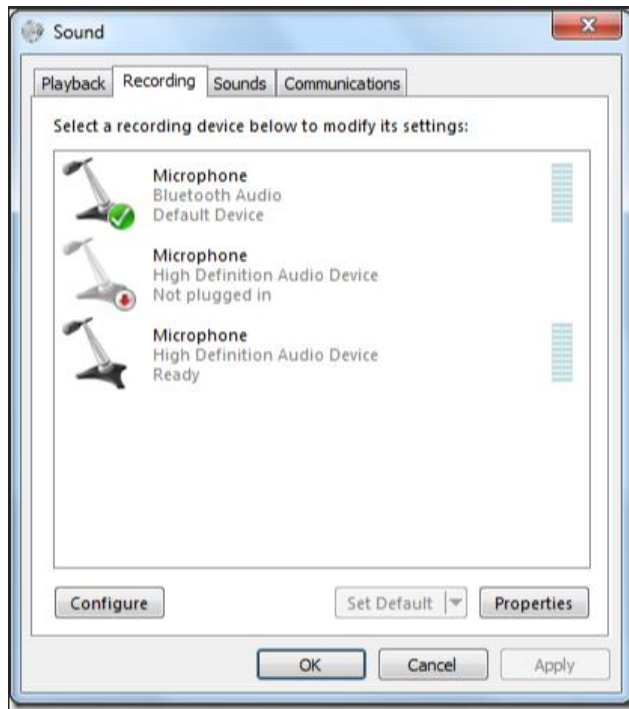
If the captured video is showing mosaic, change the video format to YUY2.



## Audio Setting

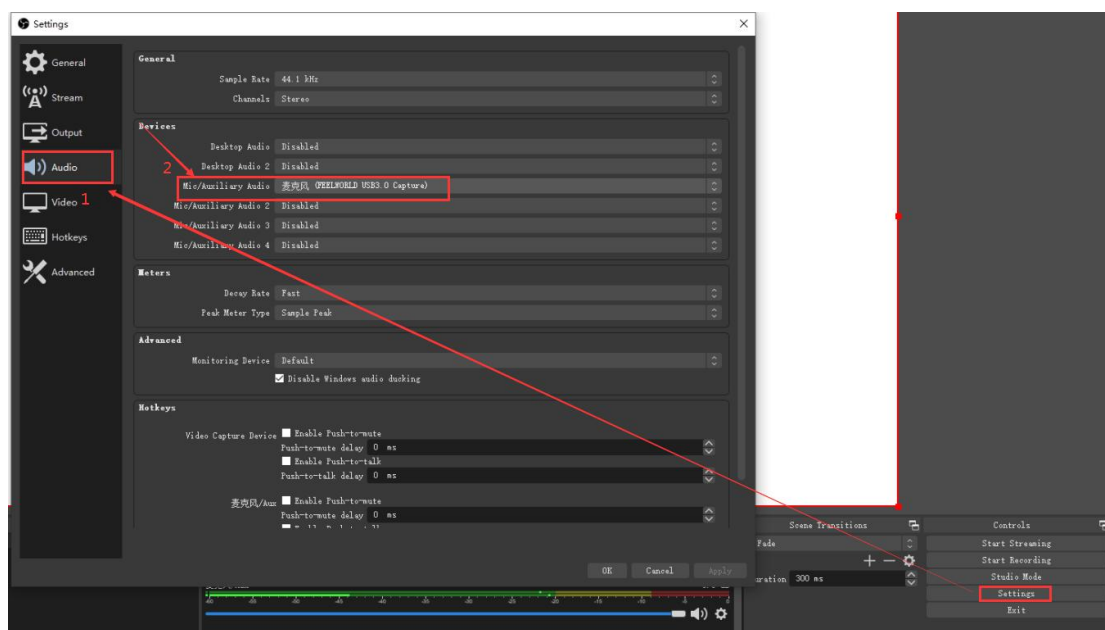
When there is no audio playing first check the video source see if the it is set in default value and then check the audio setting on OBS.

1.Set Default for the audio source.



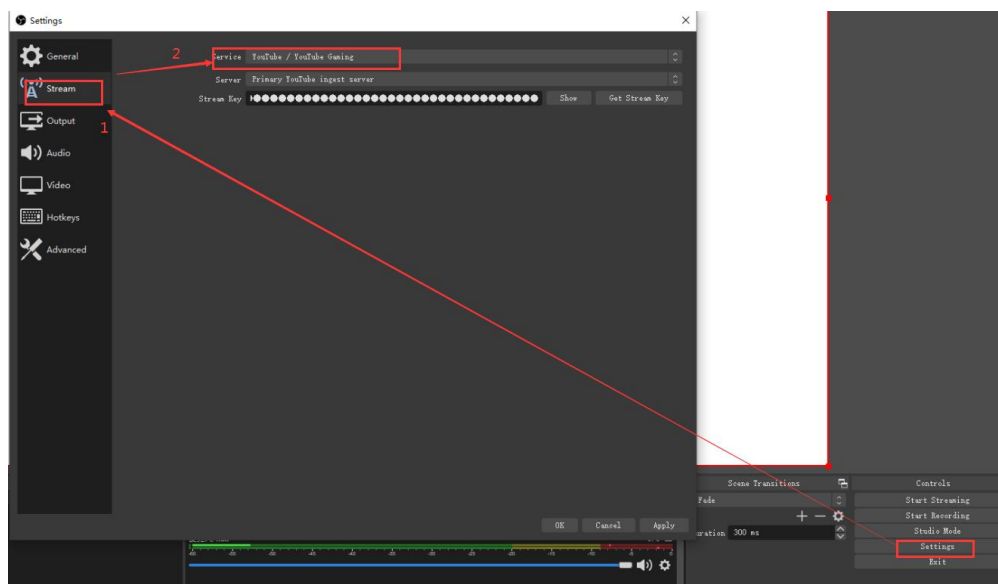
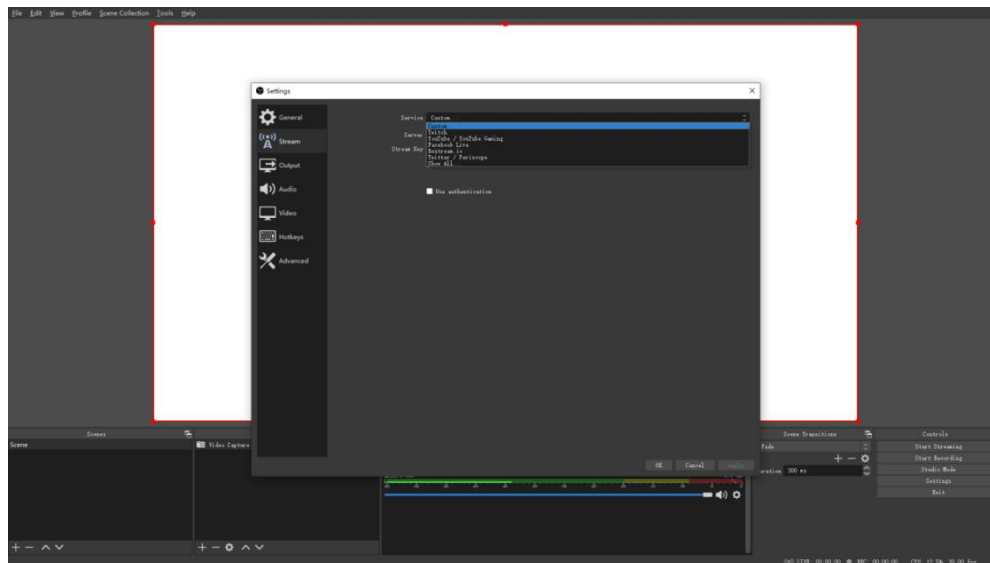
2. Audio setting on OBS.

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 V1.0.1.6, Cat 6 cable



### 2. Upgrade by LAN port

2.1 Power on the device connect LAN ports between PC and device by Cat 6 cable;

2.2 FEELWORLD device default IP address is 192.168.0.99, to make sure the LAN communication, IP of PC must be under the same IP section, which means the IP of PC must be 192.168.0.XXX (but must not be completely same as the device).

Check IP of PC:

Step 1. Press Windows + X  keys together and open Windows

Power Shell  (or Command Prompt).

Step 2. Type ipconfig and hit Enter, then the information will be displayed in the window.

```
Administrator: Windows PowerShell
PS C:\WINDOWS\system32> ipconfig

Windows IP Configuration

Ethernet adapter SSTAP 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 
Wireless LAN adapter 本地连接* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 
Wireless LAN adapter 本地连接* 12:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 
PPP adapter VPN Connection:

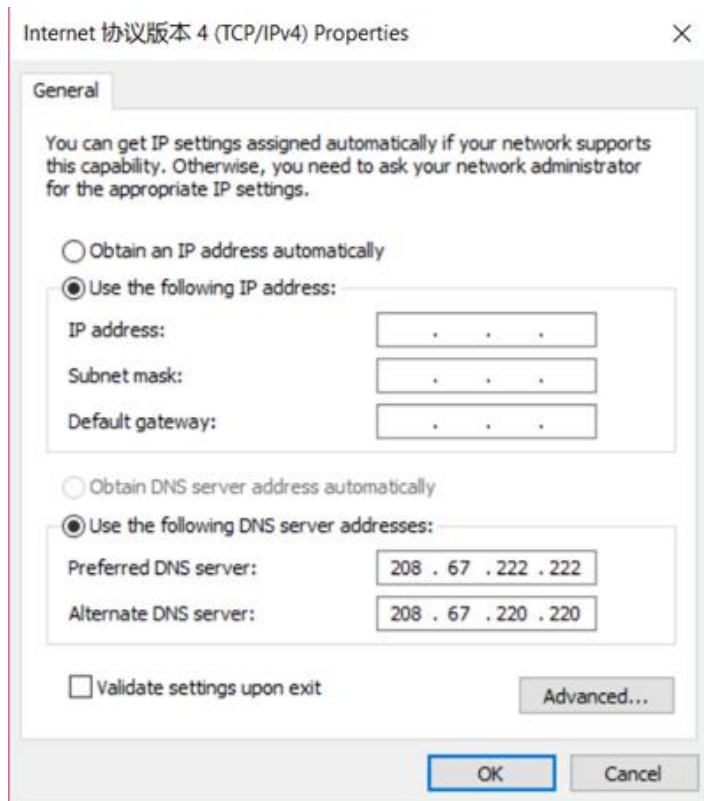
    Connection-specific DNS Suffix  . : 
    IPv4 Address. . . . . : 10.
    Subnet Mask . . . . . : 255
    Default Gateway . . . . . : 0.0
Wireless LAN adapter WLAN:


    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80
    IPv4 Address. . . . . : 192.
    Subnet Mask . . . . . : 255.
    Default Gateway . . . . . : 192.
```

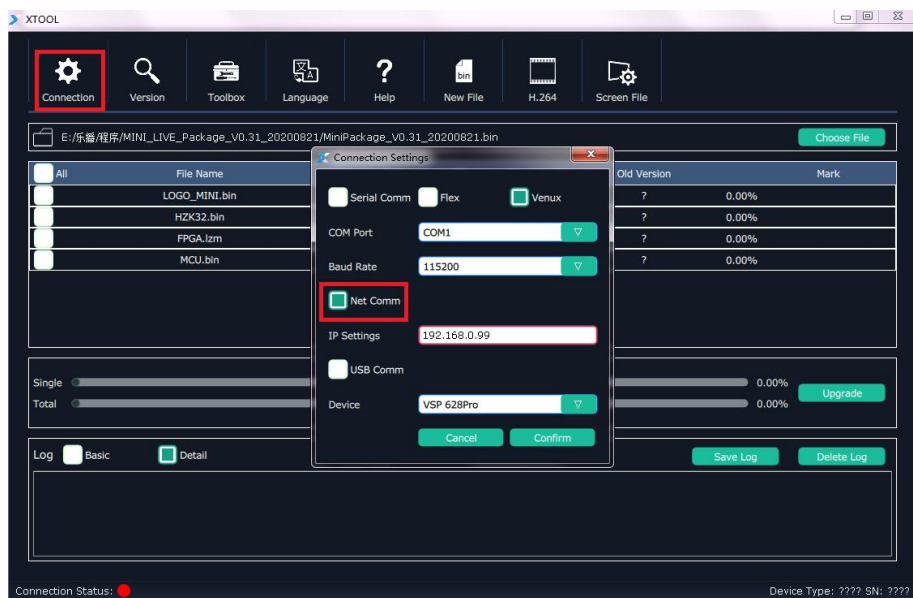
If the IP address is not in the same section, manual change of IP address is required. Here are the steps:

- Step 1. Click Start menu, then type **Control Panel** and click the option on the result.
- Step 2. Open **Network and Internet > Network and Sharing Center**.
- Step 3. On the left pane of the new window, click **Change adapter settings**.
- Step 4. You will be displayed with **Network Connections** of the PC.  
**Important note:** Right click on “Ethernet” or “Local Area Connection” if you want to change IP of any physical connection. And right click on “WLAN” in case you wish to change IP of any wireless connections.
- Step 5. Choose **Properties** after right clicking on the network name.
- Step 6. Select the **Internet Protocol Version 4 (TCP/IPv4)**, then click **Properties**.
- Step 7. **Obtain an IP Address automatically** should be selected by default, but please choose the **Use the Following IP Address**.
- Step 8. Now put your desired IP Address according to your wish its correct format. Change **Subnet mask and default gateway** if you want to.





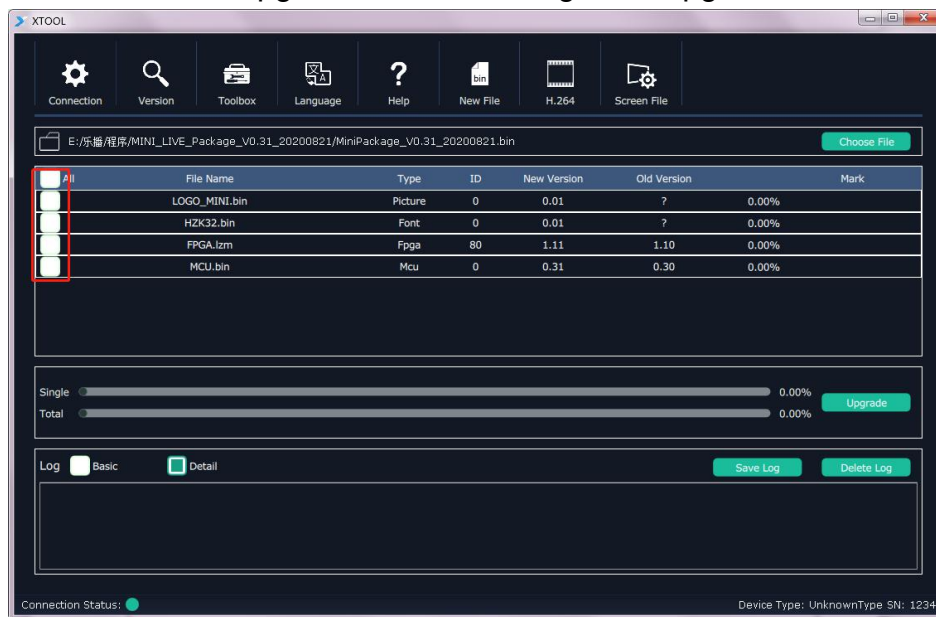
2.3 Open XTOOL  on PC, Click Communication  
2.4 Choose Net Comm in pop up window and confirm



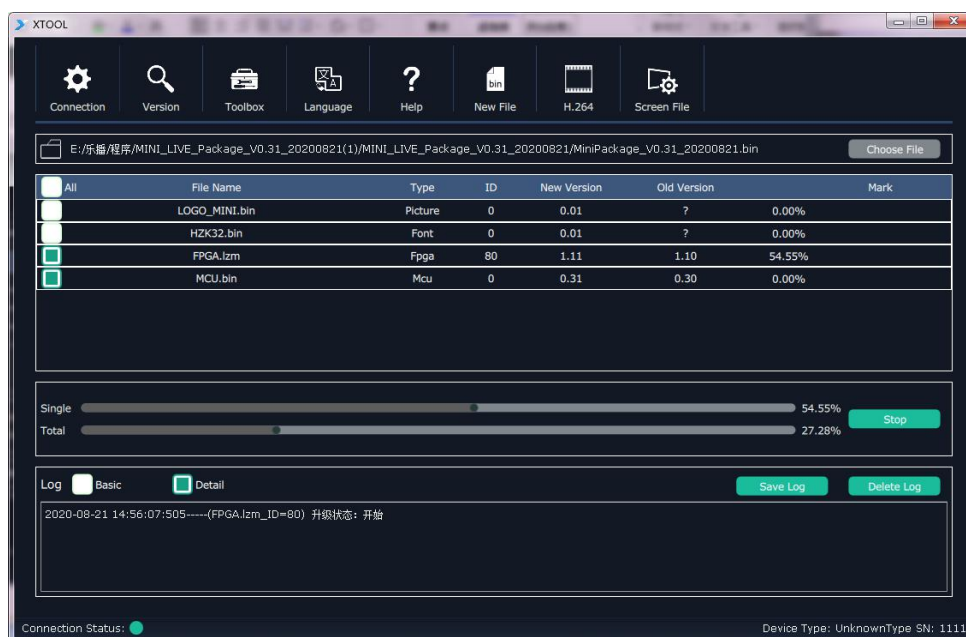
## 2.5 Upgrade Program

After communication setting is done, the status light in bottom left turns green. Choose ALL and XTOOL will automatically select the all latest programs version even when there are other old files in list. User can also manually choose MCU or

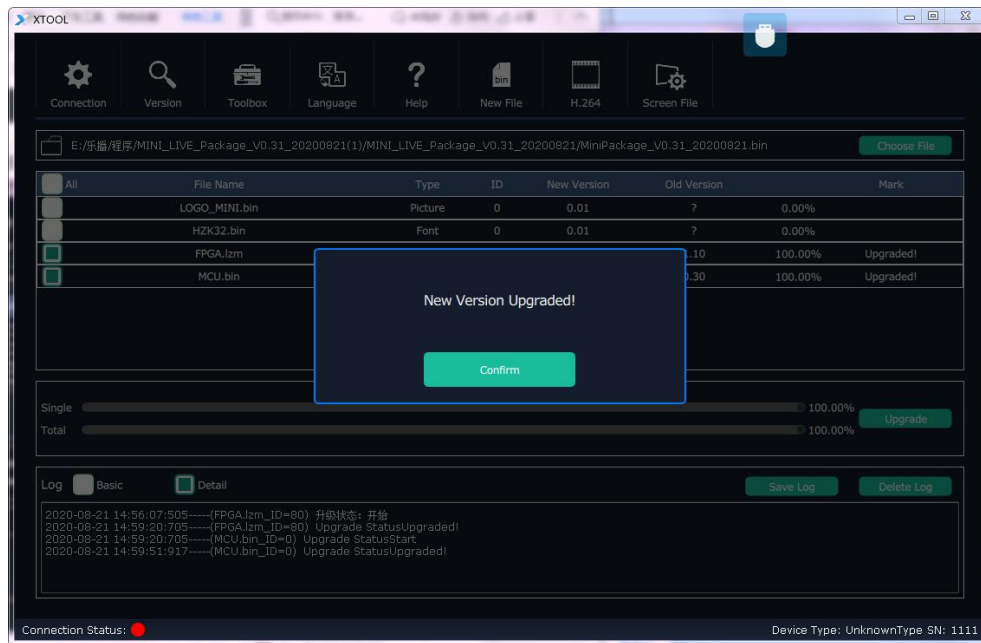
FPGA bin file to upgrade. After selecting, click upgrade.



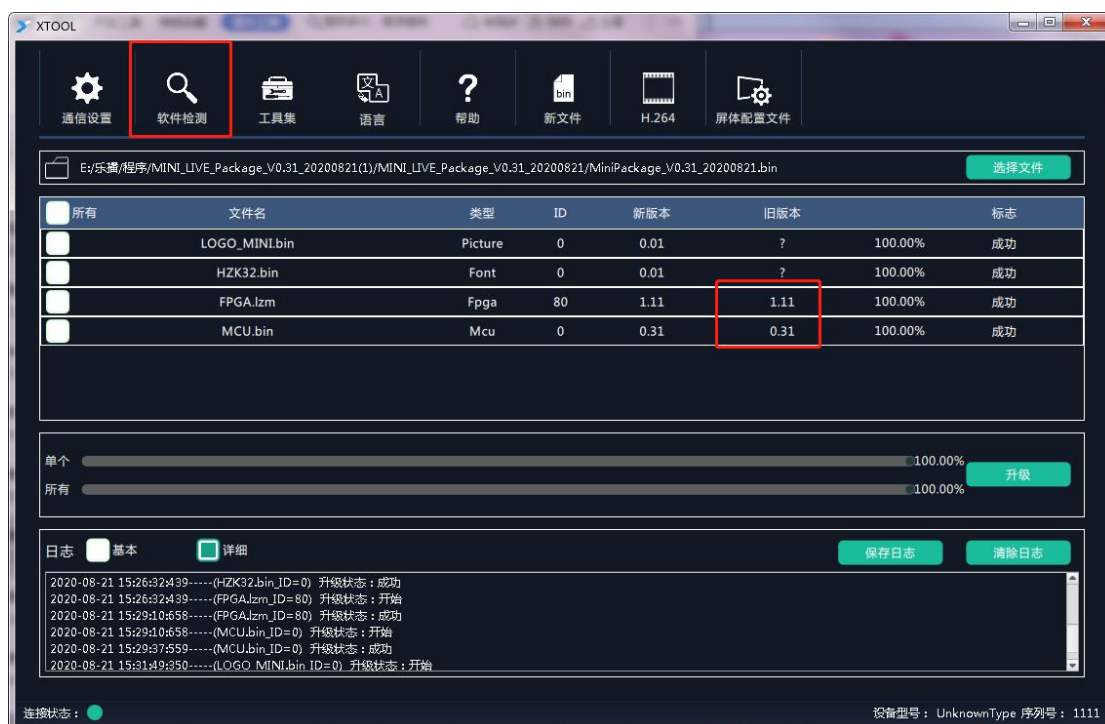
2.5.1 During the process of upgrading, each upgrading status and upgrade result of each program file is showing.



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



2.5.3 Click “Version” XTOOL will show the latest version info of the device so that users can check if the upgrade is successful or not.



## 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 1080p@23/24/30/50/60 VESA:1024 X 768@60 1280 X 720@60 1280 X 768@60  1280 X 800@60 1280 X 1024@60 1360 X768@60 1366 X 768@60 1440 X 900@60 1600 X1200@60 1680X1050@60 1920X1080@60 19200 X 1080@60i 1920 X 1080@50i 1920 X 1200@60	
		HDMI SMPTE:720p@60  1080p@60 VESA:1024 X 768@60 1280 X 720@60 1280 X 768@60 1280 X 800@60 1280 X 1024@60  1360 X768@60 1366X 768@60 1440 X 900@60  1680 X 1050@60   1920 X 1080@60 Streaming:1280 X 720@60  1920 X 1080@60	
	Output Resolutions		
Supported Standards	Supported Standards	HDMI	1.3
		USB	3.0
Power	Input Voltage	DC 12V/1.5A	
	Max Power	18W	
Environment	Temperature	-0℃～70℃	
	Humidity	10%~85%	
Physical	Weight	648g	
	Dimension	185(L) x 110(W) x 39(H)mm	