



Video {processing} for any scale

mini Quick Start



- USB capture video complying with UVC for live streaming
- 4CH HDMI inputs
- 2" TFT display on board to Live preview four input
- Auto cut and manual switch (T-Bar)
- 14 transition effects on T-Bar
- Support PIP
- Audio offers embed 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 mobile phone (via APP)
- Compact design

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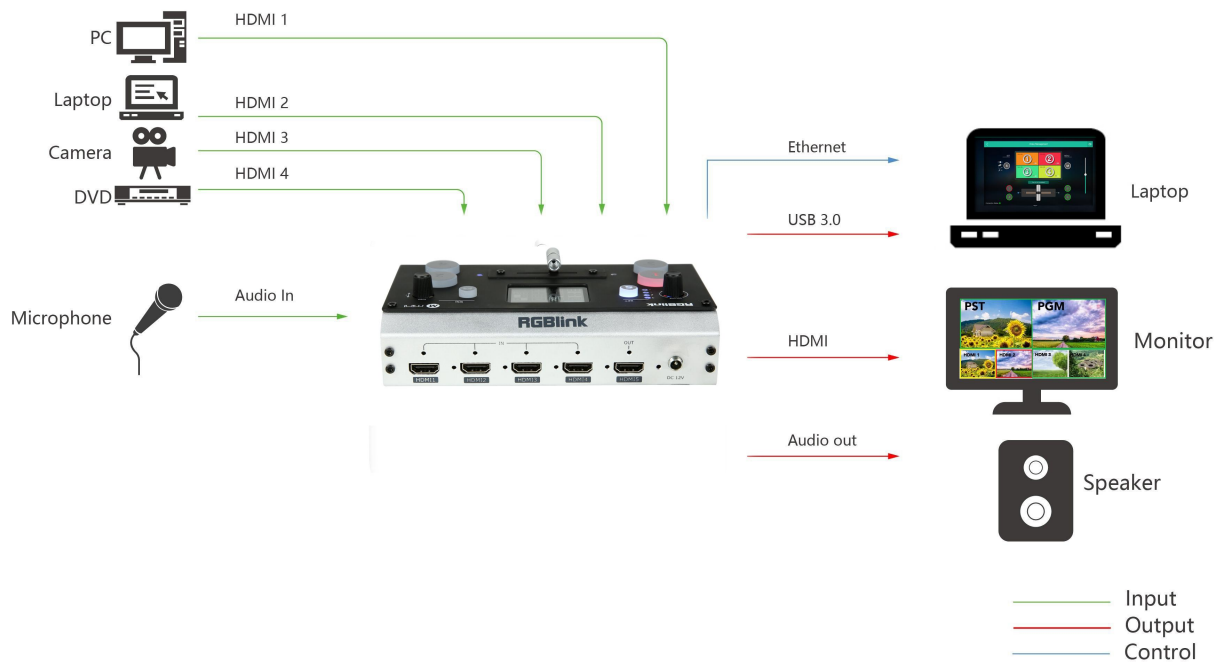
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Product Introduction

mini 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 third party live streaming software such as OBS. It adopt compact design, equipped with a 2 inch TFT sreen 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 indentifying color depeth of RGB4:4:4, YUV4:4:4, YUV4:22,YUV4:2:0. Licensed features including DSK, logo, PTZ carnera control will be available at additonal cost. It is also esay to operate either on board or on dedicated app on PC.

System Connection Diagram



mini System Connection Diagram

RGBlink[®]

Packing Configuration

Power Adapter



USB3.0 Cable



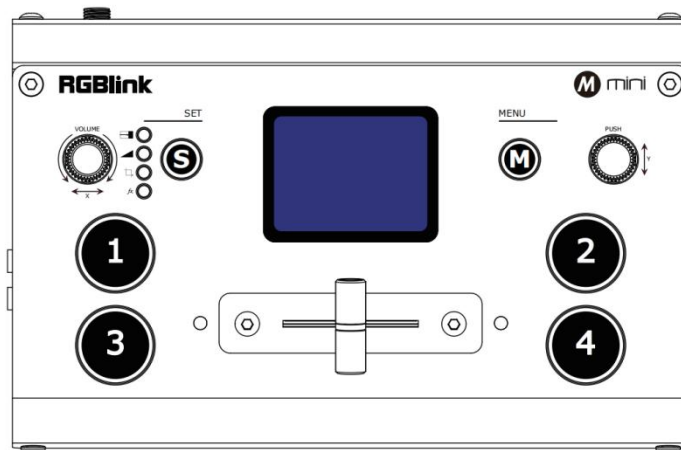
Note:

Power adapter supplied as standard according to destination market. There are CN,US,GB,EU,AU standard available to choose.



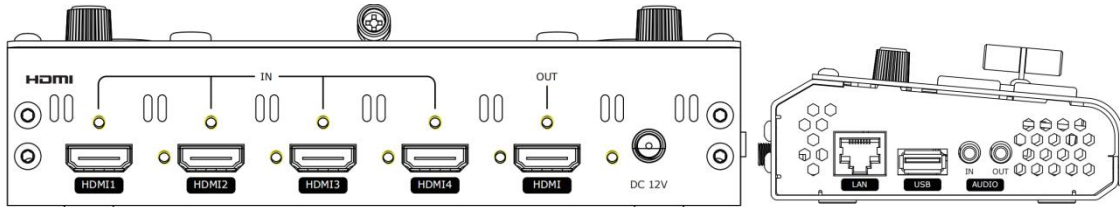
Hardware Orientation

Front Panel



<u>TFT display</u>	To display 4 inputs and menu
<u>PUSH</u>	Knob, turn to select menu item, push to confirm 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>M(menu)</u>	Menu and Back Button
<u>S</u>	Function Select button, to select Transition effect, Switch Mode (Fast or T-Bar), PIP and FX (reserved licensed feature for future)
<u>VOLUME</u>	Turn to adjust volume of PGM
<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.

Interface Panel



<u>HDMI OUT</u>	1 HDMI Output port, connect to display to show Preview (6 pictures) or PGM.
<u>HDMI IN</u>	4 HDMI Inputs, connect to input source from HD camera or PC
<u>DC 12V</u>	1 DC Jack for power input, connect to 12V/4A power adapter.
<u>LAN</u>	Communication port to link dedicated software for control
<u>USB</u>	USB3.0 output, capture signal via third party streaming software and push to live broadcasting websites
<u>AUDIO IN/OUT</u>	AUDIO In, analog audio input port, connect to microphone AUDIO OUT, analog audio output port, connect to loudspeaker.

Use Your Product

MENU

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



Main Menu

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

Input

Push MENU and select the first menu item <Input>

Push knob to enter <Input> menu

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



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: 1920×1080@60

MAIN	HDMI	
OUTPUT		PREVIEW
FORMAT	1920x1080x60	

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 HDMI.

Output: Choose PGM or Preview

Format: 1920×1080@60

MAIN	USB3.0	
OUTPUT		PREVIEW
FORMAT	1920x1080x60	

Audio

Choose <AUDIO>

SOURCE: EMBEDDED or EXTREANAL

AUDIO BAR: ON/OFF

MAIN	AUDIO	
SOURCE		EXTERNAL
AUDIO BAR		ON

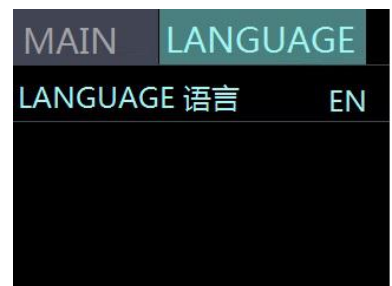
IP Setting

Manually set IP address



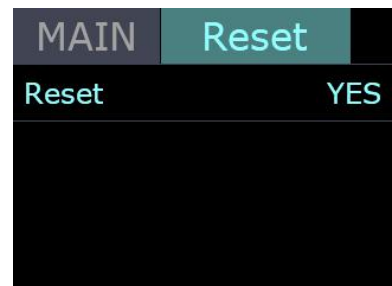
LANGUAGE

LANGUGE, select Chinese or English



Factory Reset

Factory Reset: Yes or No



INFO

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

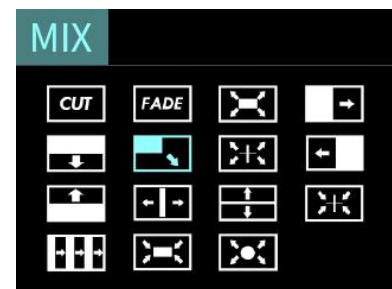
MAIN	INFO	MAIN	INFO
DEVICE SN:		2020XXXXXXXXXXXX	
IP ADDRESS:		192.168.0.100	
MAIN	INFO	MAIN	INFO
MAC ADDRESS:		VIDEO VER:	
18.20.40.96.0a.20		1.10	
MCU VER:			
0.30			

Button S

Push button S, the TFT will show the transition effect menu <MIX>.The <MIX> led indicator beside will light up. Push again, it will skip to next menu MODE, and again to PIP and again back to MIX unless the device got license, it will skip to FX (Additonal 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.

MIX

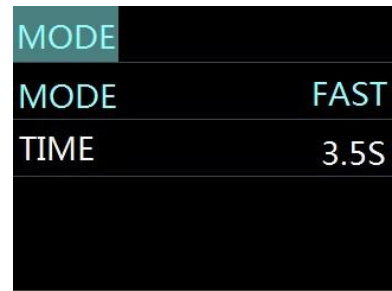
Push button S once to open up the transition effect menu, Use knob to select the desired transition effect icon and push the knob to confirm.



MODE

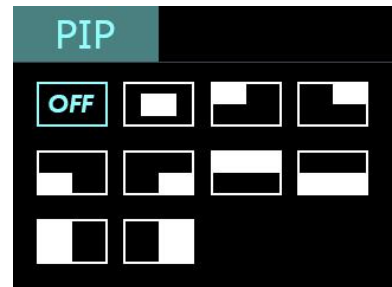
Push the button S twice to open up MODE menu.
MODE:FAST or T-Bar
TIME:0.5~5.0S
Choose FAST, the switching will be with transition effect in set time.
Choose T-Bar, the switching will be with selected transiton effect by pushing T-Bar





PIP

Push Button S three time to open PIP menu.
PIP menu offers 8 layouts for main picture and sub picture.



FX

FX is advanced features asking for license at additional cost and reserved features of DSK, logo and PTZ camera control.

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.

PIP (Picture-In-Picture or Picture by Picture) 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 swithcing, the selected green button turns to red.



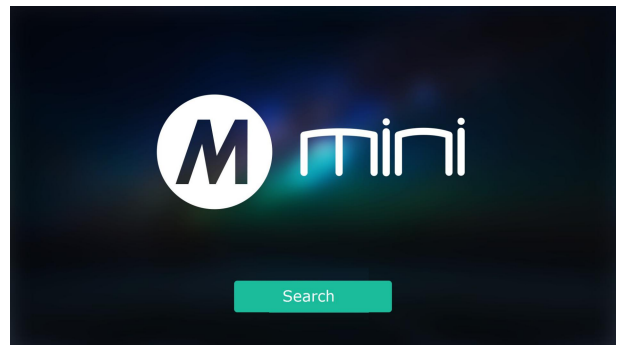
after PIP mode is selected, the main pictute can not be changed unless go back to choose PIP OFF and restart the above steps.

Software Operation

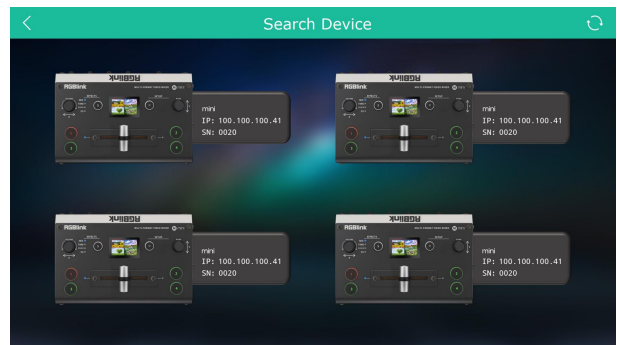
After software is installed, click the icon and login the software.



Click Search to search mini device.




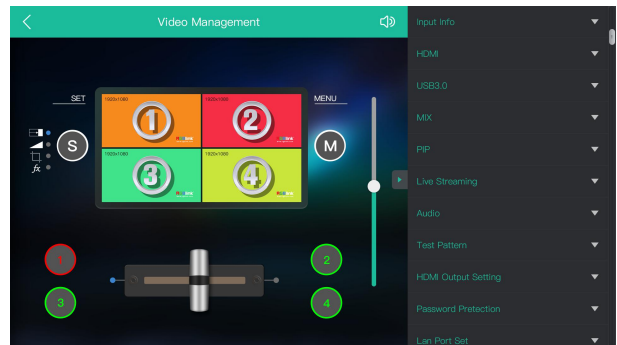
After searching, all available mini devices in the subnet can be found, up to 128 devices can found if there are.



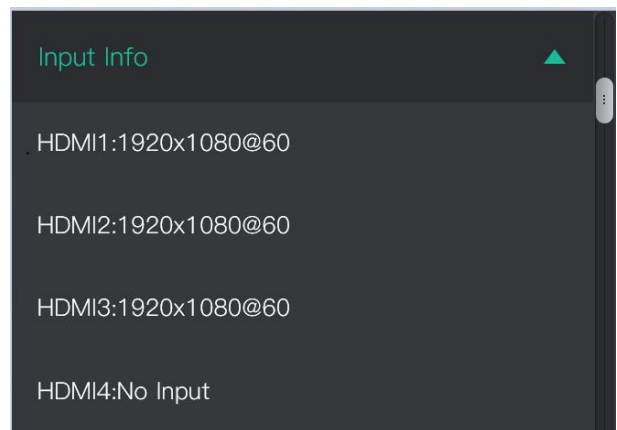
Select the desired device by SN and IP and enter the management interface. The software interface is a simulation of operation panel on real mini device.



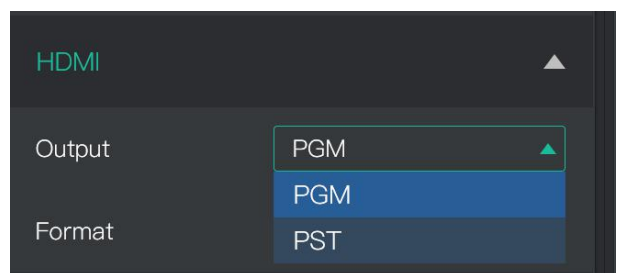
For example, clicking Button M  can open up menu as on the device.



INPUT INFO



HDMI Output



USB3.0 Output

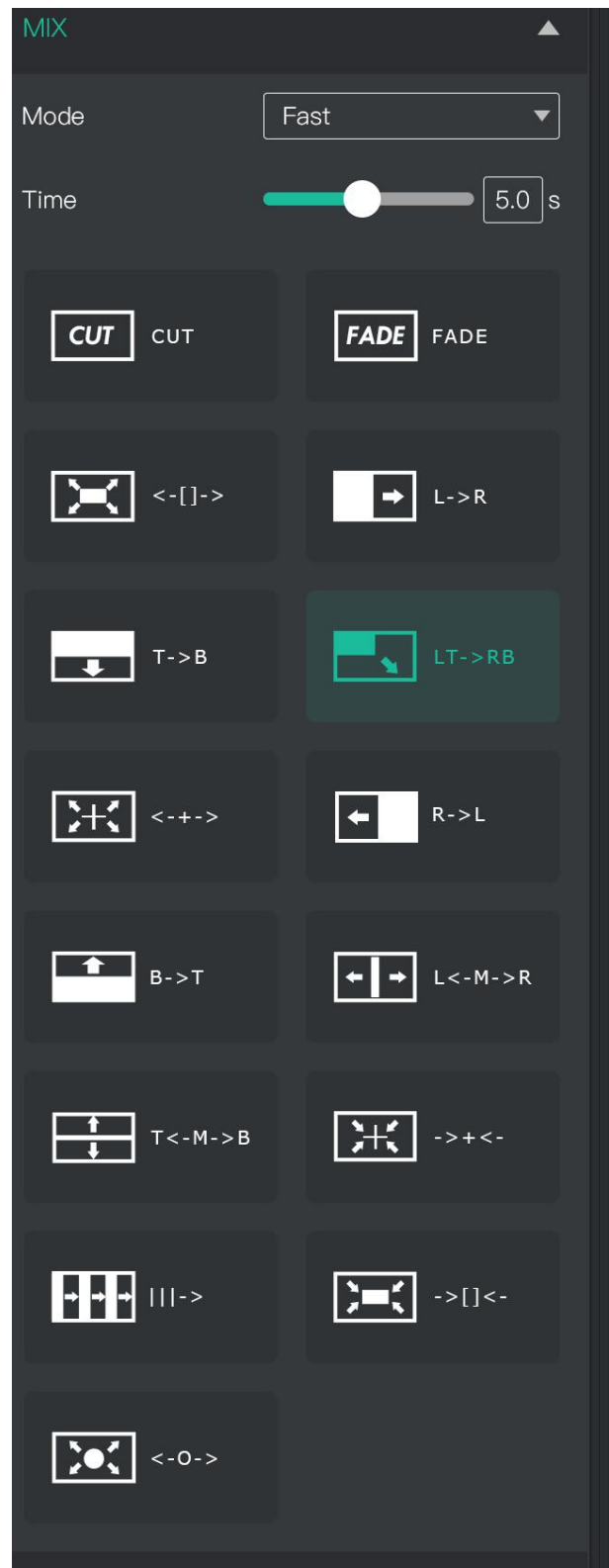
USB3.0 ▲

Output	PGM ▼
Format	1920x1080@60 ▼



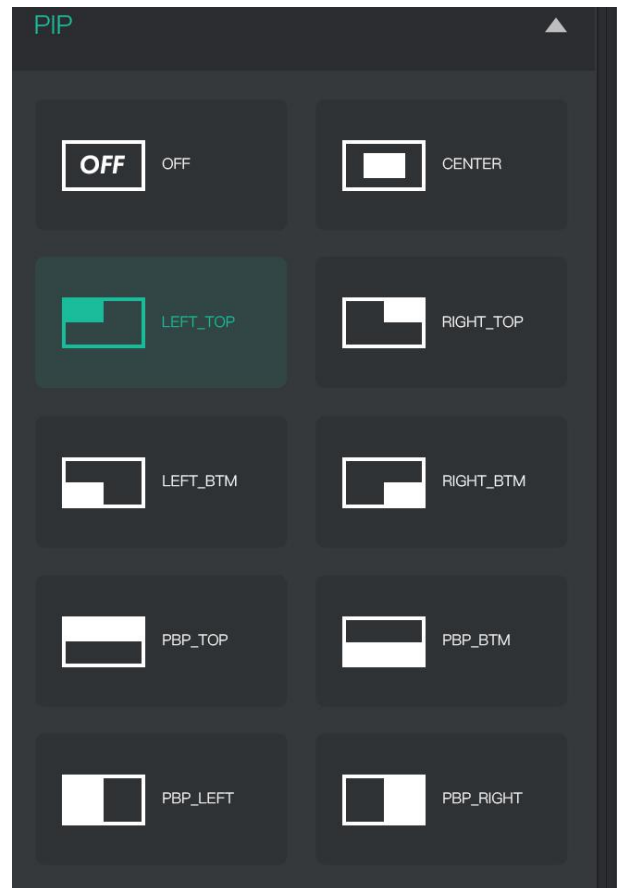
<MIX>

Choose switch time and transition effect.



<PIP>

Choose layout mode for
PIP

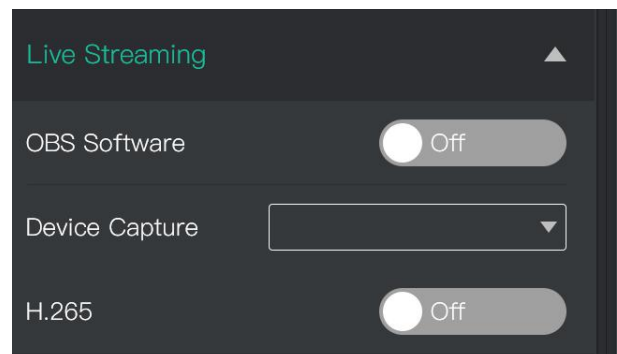


Streaming

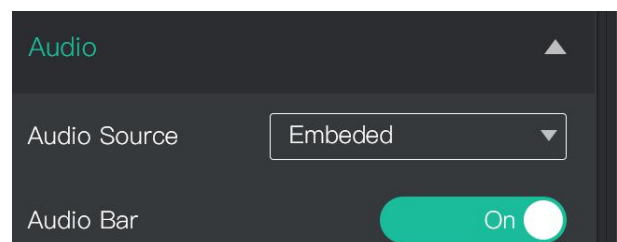
Capture Device:choose RGBlink USB3.0

Capture

OBS:Slide On



AUDIO



TEST PATTERN

The screenshot shows the 'Test Pattern' settings menu. At the top, the title 'Test Pattern' is displayed in green. Below it, there are four settings: 'Output' is a dropdown menu set to 'USB'; 'Test Pattern' is a toggle switch currently turned 'Off'; 'Red' is a slider control with a value of 1920; 'Green' is a slider control with a value of 1920 and a small green Chinese character '设置' (Set) above it; and 'Blue' is a slider control with a value of 1920.

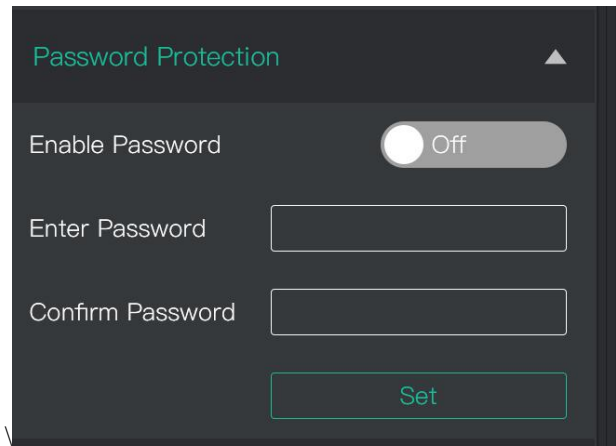
HDMI Output Setting

The screenshot shows the 'HDMI Out Setting' menu. The title 'HDMI Out Setting' is at the top in green. The settings include: 'DVI/HDMI' dropdown set to 'HDMI'; 'Bits' dropdown (empty); 'Color Space' dropdown set to 'Image'; 'DE On/Off' toggle switch set to 'Off'; 'DE H Pos', 'DE V Pos', 'DE H Size', and 'DE V Size' are all empty input fields; 'DE H Polarity' and 'DE V Polarity' are both toggle switches set to 'Off'; and a 'Set' button is at the bottom.



Password Protection

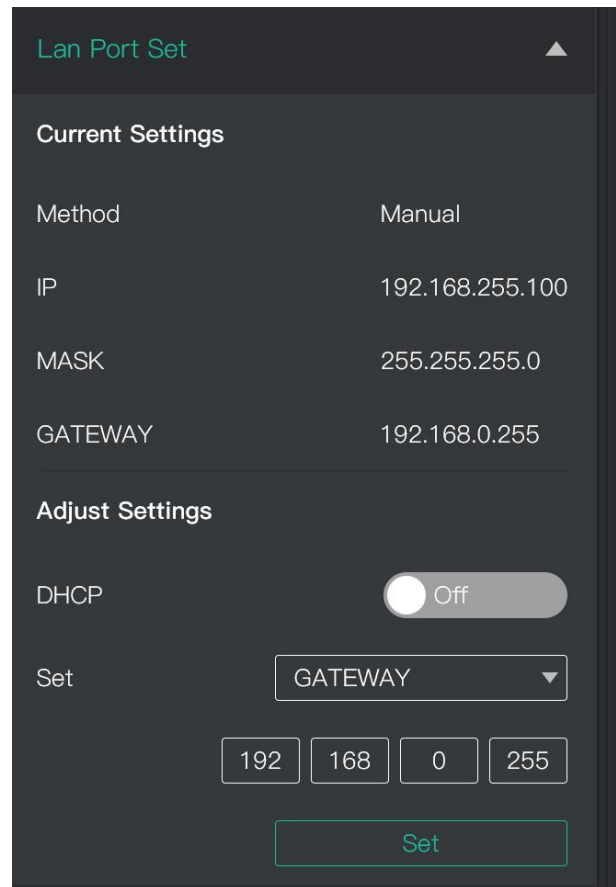
Set password for the device. After password is set, password will be required when enter the software operation interface.



The screenshot shows the 'Password Protection' settings page. At the top, the title 'Password Protection' is displayed in green. Below it, there is a toggle switch for 'Enable Password' which is currently turned 'Off'. Underneath, there are two input fields: 'Enter Password' and 'Confirm Password'. At the bottom of the form, there is a green 'Set' button.

IP Setting

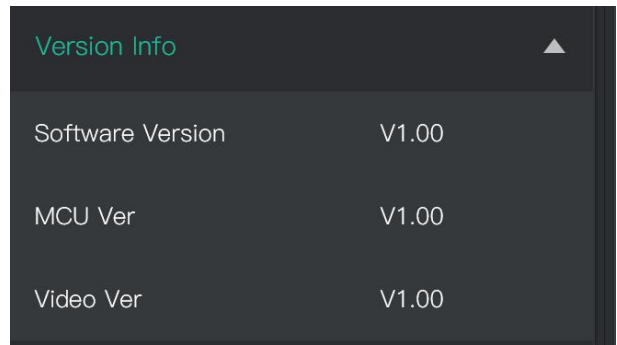
Manually set Gateway, MASK and IP for the device.



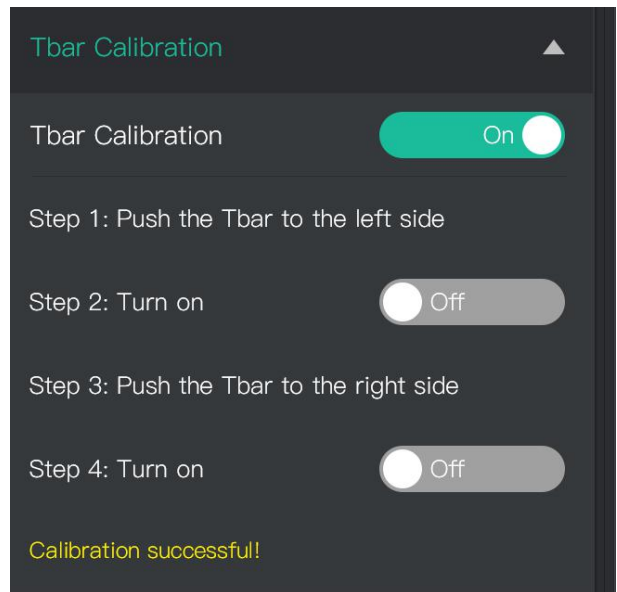
The screenshot shows the 'Lan Port Set' settings page. The title 'Lan Port Set' is at the top in green. Below the title, there is a section for 'Current Settings' which lists: Method (Manual), IP (192.168.255.100), MASK (255.255.255.0), and GATEWAY (192.168.0.255). Below this is the 'Adjust Settings' section. It features a 'DHCP' toggle switch set to 'Off'. Underneath, there is a 'Set' label followed by a dropdown menu currently showing 'GATEWAY'. Below the dropdown are four input boxes containing the numbers '192', '168', '0', and '255'. At the bottom, there is a green 'Set' button.



VERSION



T-Bar Calibration



Factory Reset

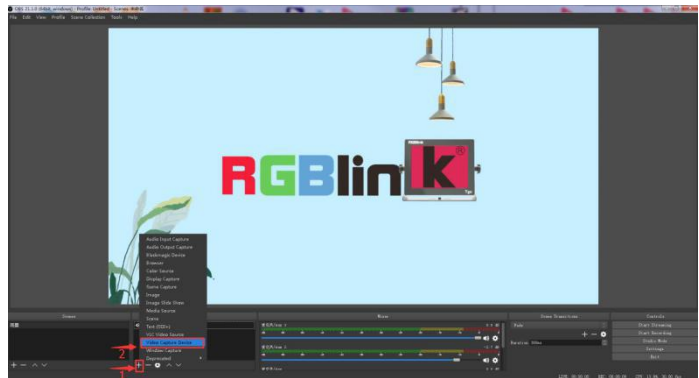


OBS Streaming

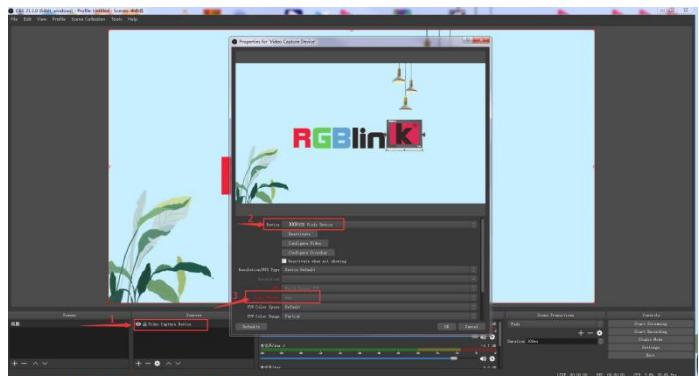
OBS Setting

mini 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 :RGBlink 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)



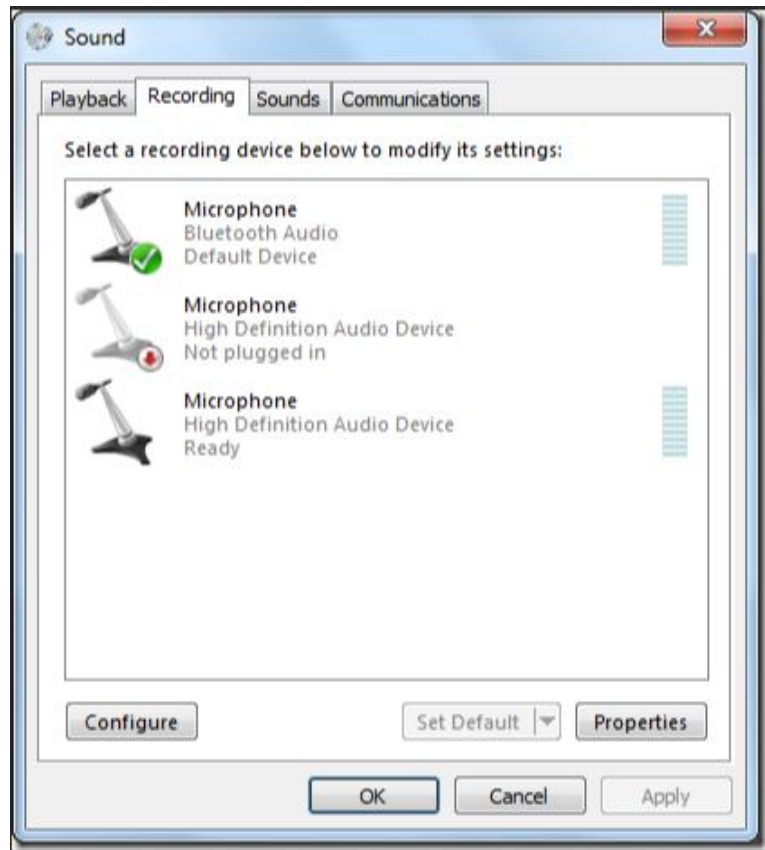
If the captured video is showing mosaic, change the video format to YUY2.

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.

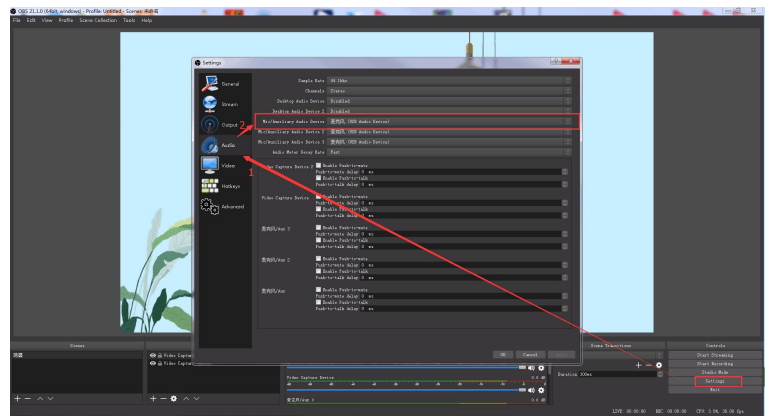


1. Set Default for the audio source.



2. audio setting on OBS.

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



Streaming Setting

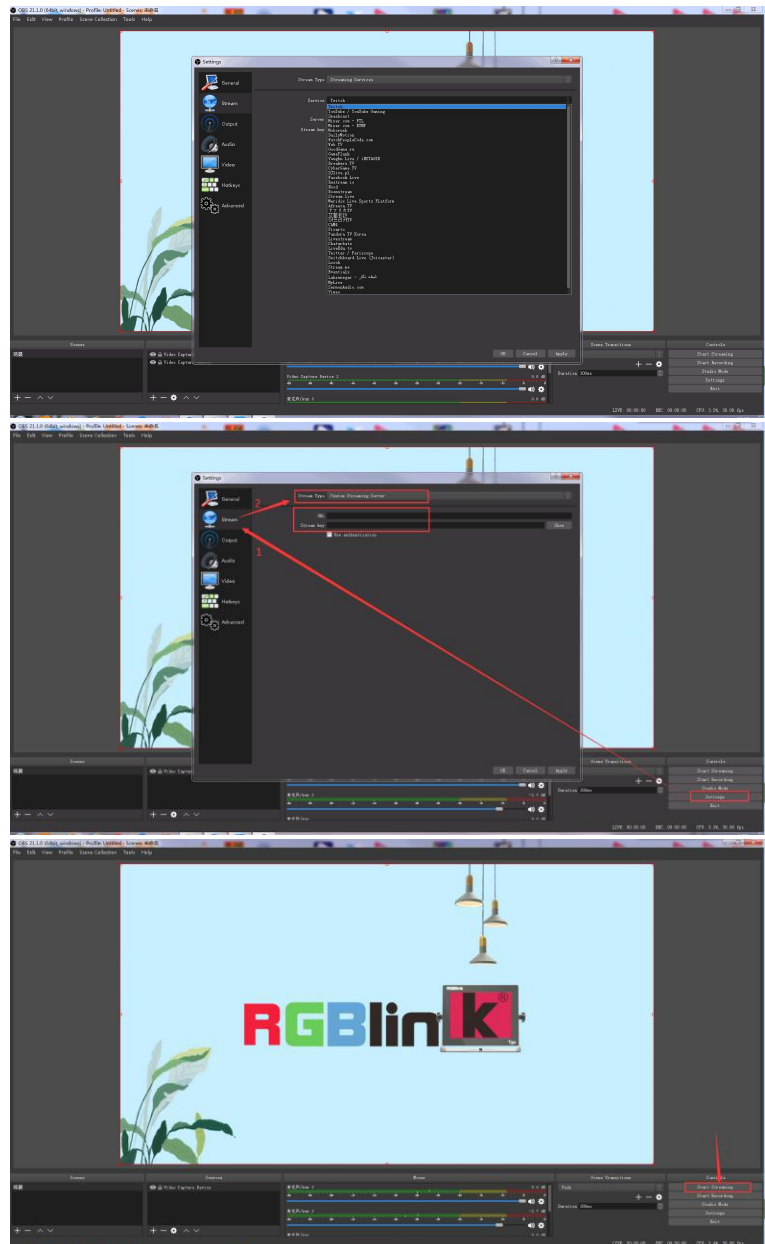
1. Find the UL and Live Streaming Code provided by streaming broadcast website.

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 RMTMP address to server and broadcast code to stream key.

4. Click “Start Streaming”

5. Go back to live broadcast website and check the broadcasting.



Upgrade

1.Tools:

Upgrade package, XTOOL V1.0.1.6, Cat6 cable



2. Upgrade by LAN port

2.1 Power on the device connect LAN ports between PC and device by Cat6 cable;

2.2 RGBLink 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

PowerShell (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:

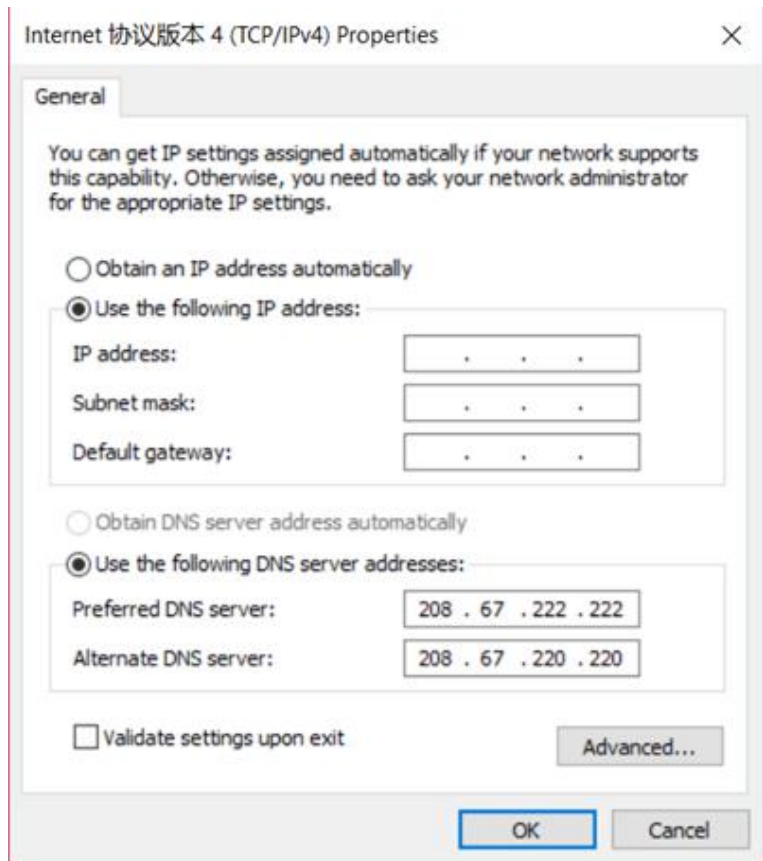
    Connection-specific DNS Suffix . . . . . :
    IPv4 Address. . . . . : 10.
    Subnet Mask . . . . . : 255
    Default Gateway . . . . . : 0.0

Wireless LAN adapter WLAN:

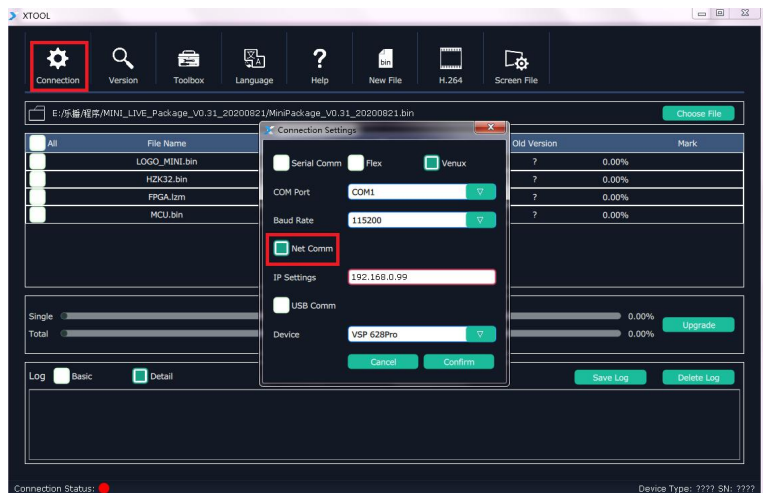
    Connection-specific DNS Suffix . . . . . :
    Link-local IPv6 Address . . . . . : fe80
    IPv4 Address. . . . . : 192.
    Subnet Mask . . . . . : 255
    Default Gateway . . . . . : 192.
```

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.

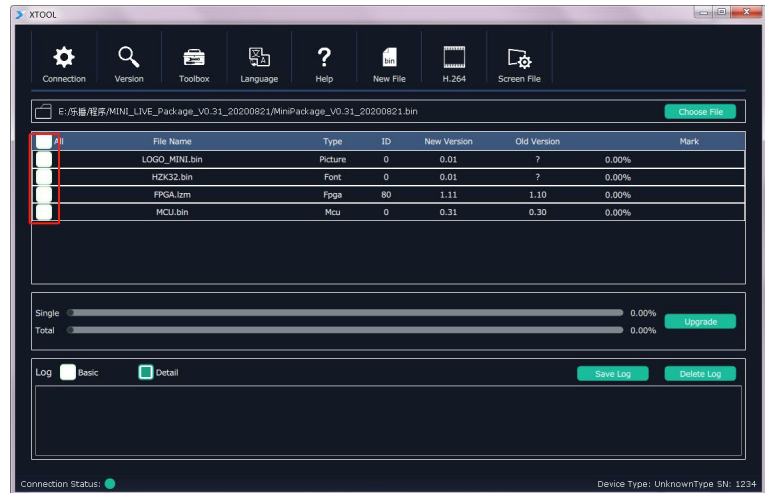


2.3 Open XTOOL on PC, Click Communication
 2.4 Choose Net Comm in pop up window and confirm

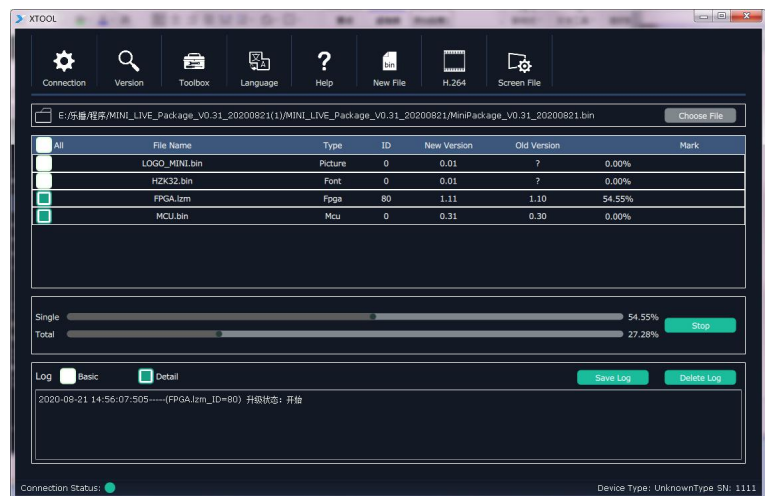


2.5 Upgrade Program

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.

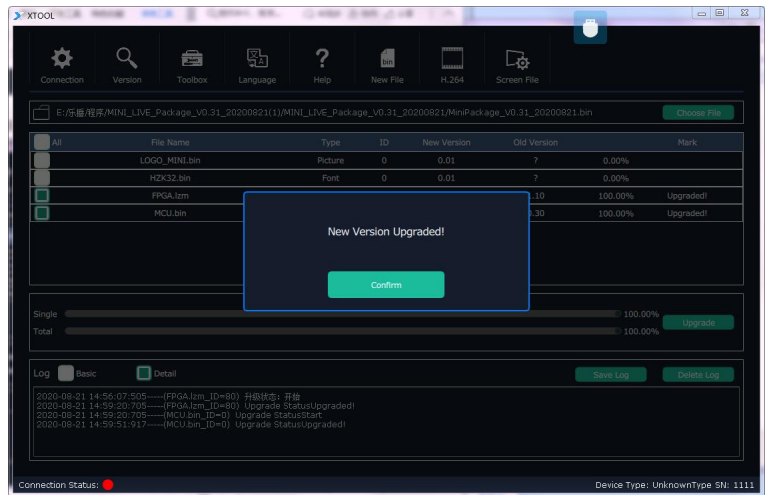


2.5.1 During the process of upgrading, each upgrading status and upgrade result of each program file is showing.

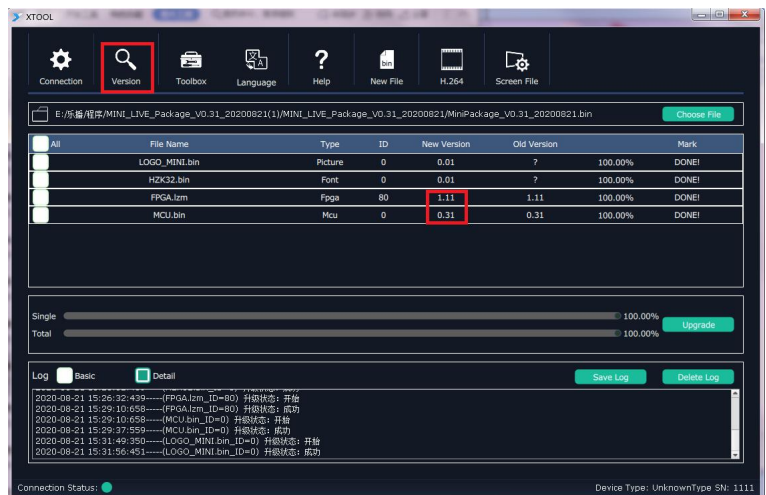


2.5.2 After upgrade is done, there will pop up a window showing “New Version Upgraded” then users need to reboot the device to let the new version take effect.





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.



Contact Information

Warranty:

All video products are designed and tested to the highest quality standard and backed by full 1 years parts and labor warranty. Warranties are effective upon delivery date to customer and are non-transferable. RGBlink warranties are only valid to the original purchase/owner. Warranty related repairs include parts and labor, but do not include faults resulting from user negligence, special modification, lighting strikes, abuse(drop/crush), and/or other unusual damages. The customer shall pay shipping charges when unit is returned for repair.

Headquarter: S601~609 Weiye Building Torch Hi-Tech Industrial Development Zone Xiamen, Fujian Province, P.R.C

- **Tel:** +86-592-5771197
- **Fax:** +86-592-5788216
- **Customer Hotline:** 4008-592-315
- **Web:**
 - ~ <http://www.rgblink.com>
 - ~ <http://www.rgblink.cn>
- **E-mail:** support@rgblink.com

