

VENUS X3 Upgrade Guide

1. Apply to

Upgrade X3 from previous version to V2.65 and above.

2. Upgrade priority

For VENUS X3 firmware version 2.65 and above, 4k input firmware was included in package firmware. And the priority of subprogram update are as follow:

First priority : communication board MCU firmware which named "COM_Main.bin".

	COM_MAIN.bin	Mcu	0	2.65
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Second priority: After "COM_Main.bin" upgraded, restart X3 and upgrade the remain MCU firmware.

 All	File Name	Type	ID	New Version
	COM_INPUT.bin	Mcu	1	2.01
	COM_OUTPUT.bin	Mcu	2	2.01
	INPUT_DVI.bin	Mcu	3	2.18
	X3_4K.bin	Mcu	16	2.16
	IN_HDBASET.bin	Mcu	26	1.03
	IN_MAIN1.bin	Mcu	5	1.11
	IN_MAIN2.bin	Mcu	6	1.09

Third priority: After MCU upgraded, restart X3 and upgrade video and FPGA firmware.

 All	File Name	Type	ID	New Version
	12G_FPGA.lzm	Fpga	87	1.05
	pvw_core.lzm	Fpga	90	2.02
	IN4K60_VIDEO1.b	Video	1	1.25
	IN4K60_VIDEO3.b	Video	3	1.00
	IN4K60_VIDEO4.b	Video	4	1.25
	Keypad.bin	Mcu	13	1.11
	COM_MAIN.bin	Mcu	0	2.65

3. Firmware Package Upgrade

File name: VENUS X3_Package_xx.bin

3.1. Connect the device

Serial upgrade is recommended for its stability.

Use the serial cable (Figure 1)or USB cable (A to B) (Figure 2) to connect computer and the USB port in the "CONT" area of the VENUS X3 back panel;

Note:

When update X3 to V2.65 or above, please update by serial cable or USB cable. X3 Ethernet update is not recommended for updating failed.



Figure1 Serial cable



Figure2 USB cable (A to B)



Figure4 CONT area

3.2. Turn on the device.

Please remove all the inputs when do upgrade.



3.3. Install XTOOL

Get XTOOL software from upgrade Tool folder and follow setup wizard to install XTOOL.

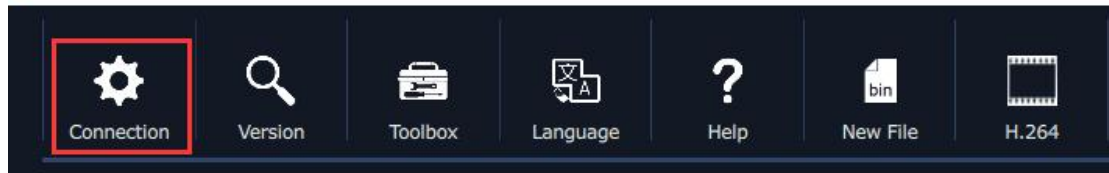


3.4. Open XTOOL

Open XTOOL. Click “语言” to switch the language.

3.5. Communication setting

XTOOL



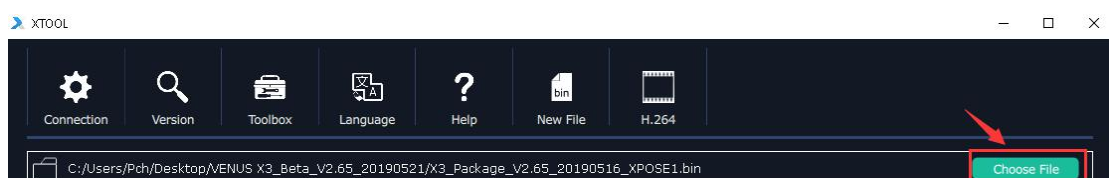
Serial communication: Click “Connection” in the communication settings dialog box, select “serial communication” select the corresponding serial number, Baud rate is set to “115200”, click “OK”.



Remark: If the serial number is not recognized, check whether there is a USB serial port driver.

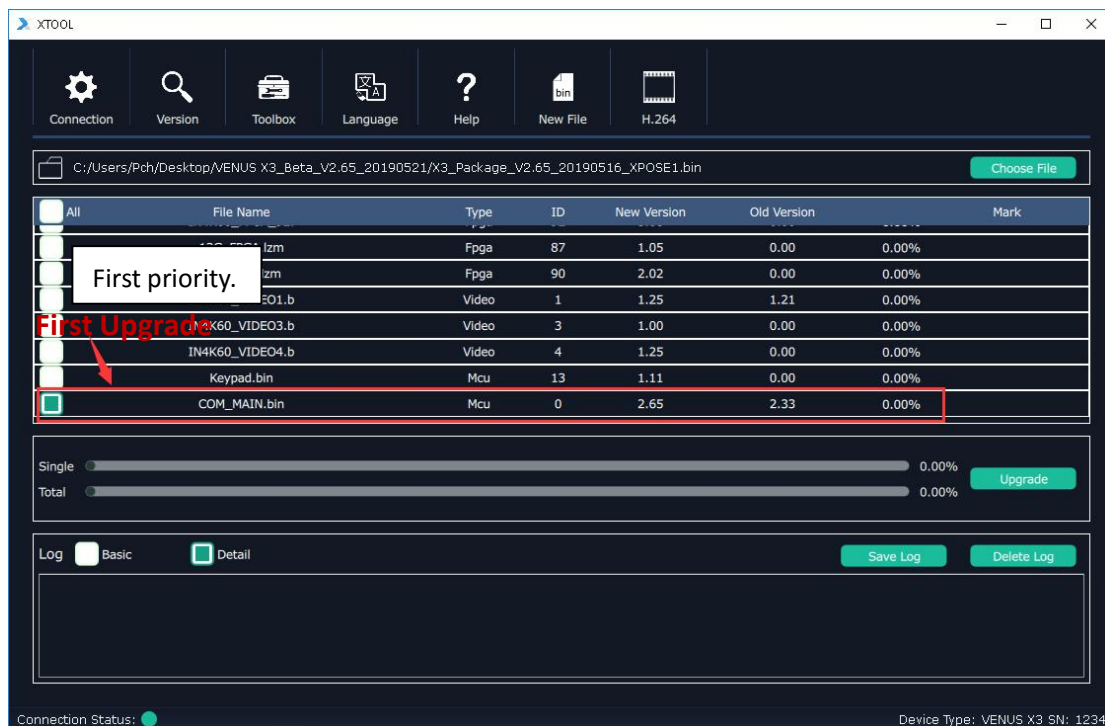
3.6. Select the bin file in the firmware package

Click “Choose File” and load the *.bin file from “Upgrade Files” folder which located in firmware package.

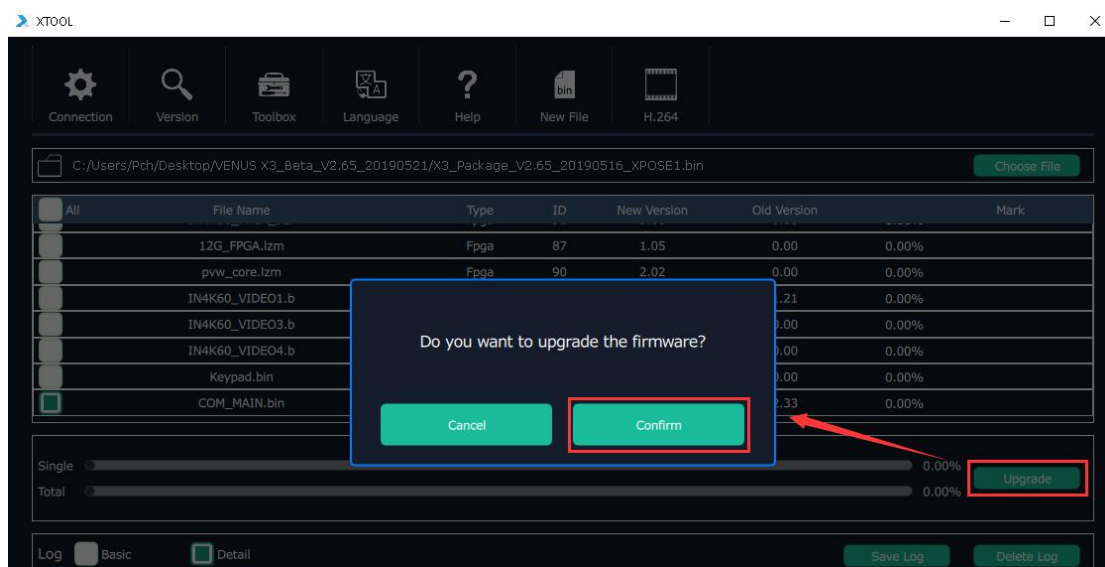


3.7. Firstly, upgrade “COM_Main.bin” firmware.

3.7.1. Drop down the firmware and only select “COM_Main.bin” at the bottom.



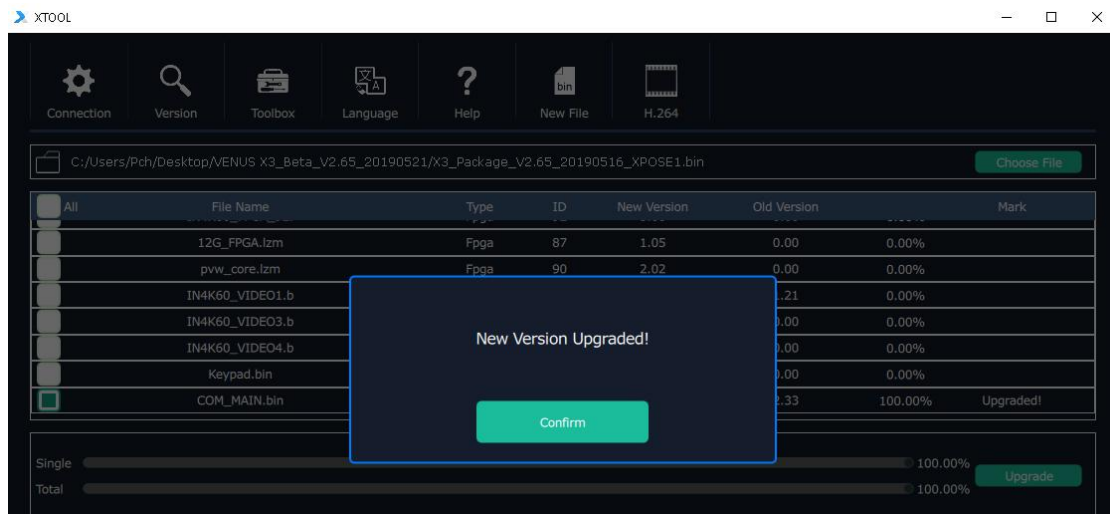
3.7.2. Select "upgrade" and it will pop-up "whether to upgrade firmware" dialog box, click "confirm" to upgrade "COM_Main.bin".



3.7.2.1. Check the upgrade progress by scroll bar, you can press the "stop" to stop the upgrade.

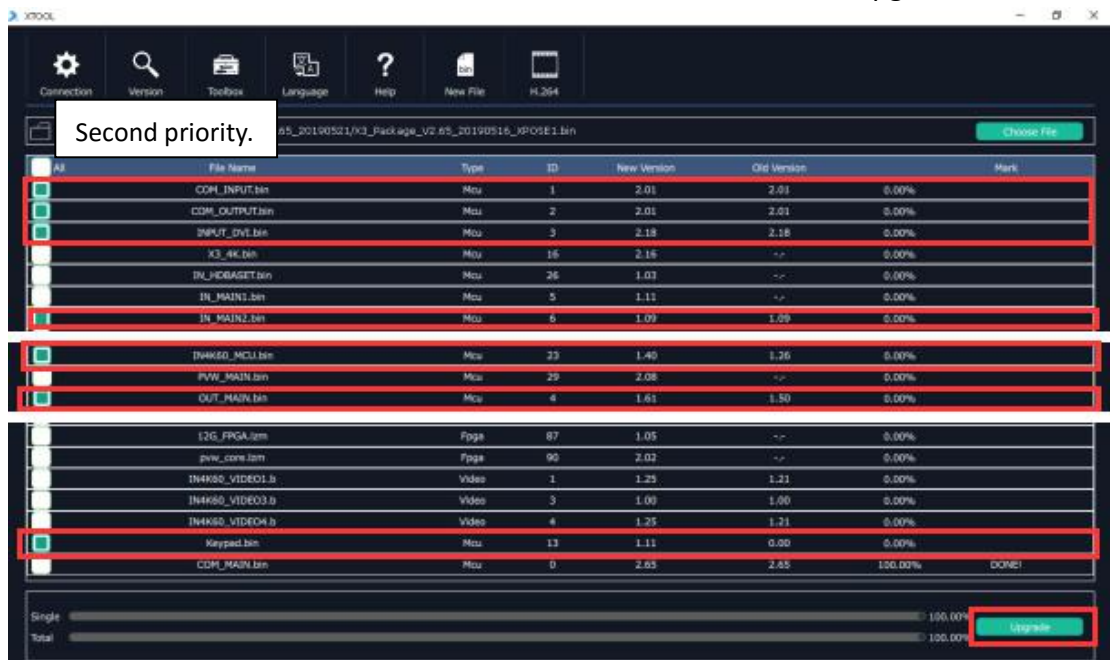


3.7.2.2. After the upgrade is completed, the "New Version Upgrade Complete" prompt dialog box will pop up.

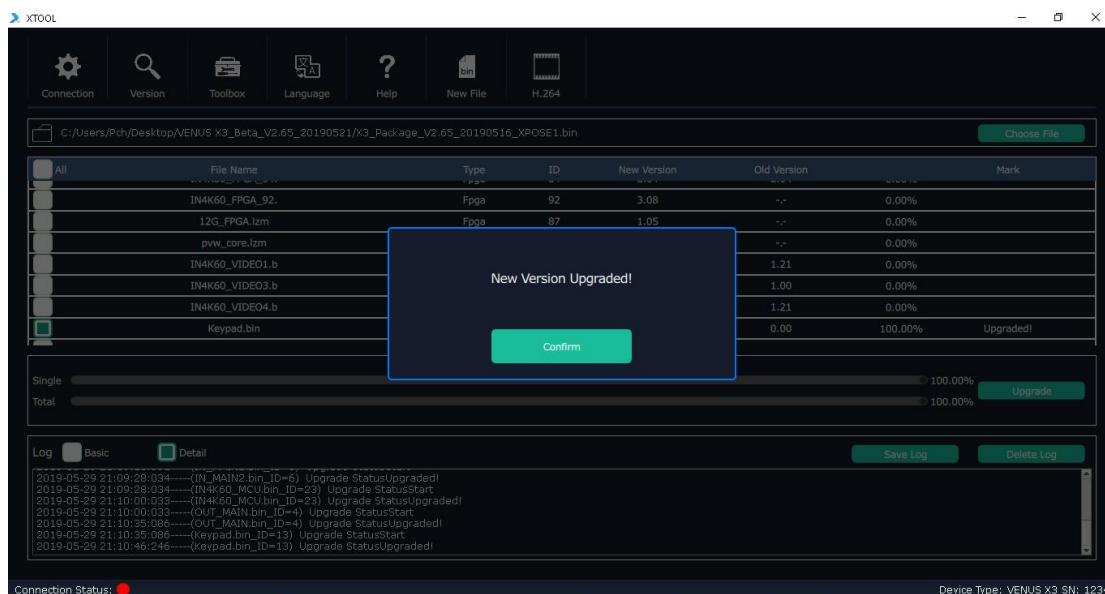


3.8. Secondly, upgrade the remain MCU firmware.

3.8.1.1. Restart X3 and select the remain MCU firmware then do upgrade as before.



3.8.2. After the upgrade is completed, the "New Version Upgrade Complete" prompt dialog box will pop up. Power off X3 for 30 seconds.



Remark:

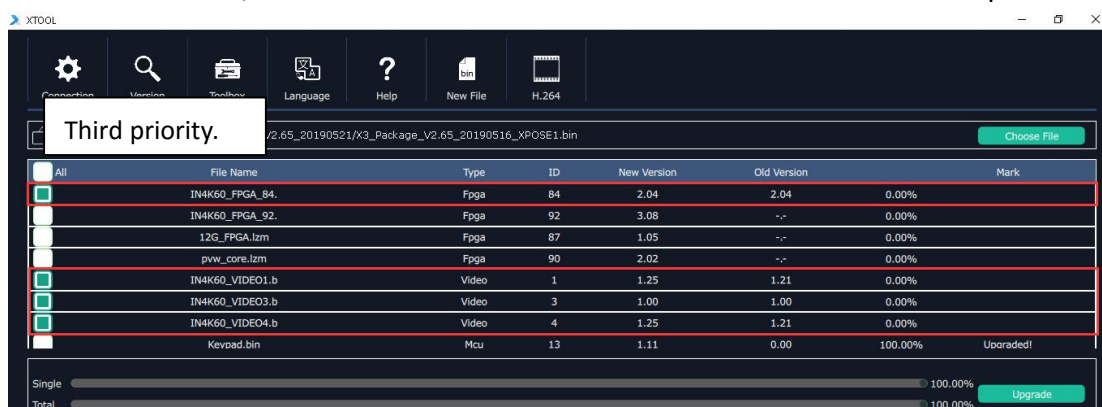
No 4K@30HZ , HDBAET and SDI input board equipped in the X3, so it show nothing in old version.Usually, there is no need to upgrade firmware with "—" mark.

If X3 equipped with these board and XTOOL still show nothing in old version.Check if communication MCU upgrade is done. Please plug out and plug in the module which fail to recognized.

	File Name	Type	ID	New Version	Old Version	Mark
	COM_INPUT.bin	Mcu	1	2.01	2.01	0.00%
	COM_OUTPUT.bin	Mcu	2	2.01	2.01	0.00%
	INPUT_DVT.bin	Mcu	3	2.18	2.18	0.00%
	X3_4K.bin	Mcu	16	2.16	--	0.00%
	IN_HDBASET.bin	Mcu	26	1.03	--	0.00%
	IN_MAIN1.bin	Mcu	5	1.11	--	0.00%
	IN_MAIN2.bin	Mcu	6	1.09	1.09	0.00%
	INPI IT SDI bin	Mcu	1R	1.4R	--	0.00%

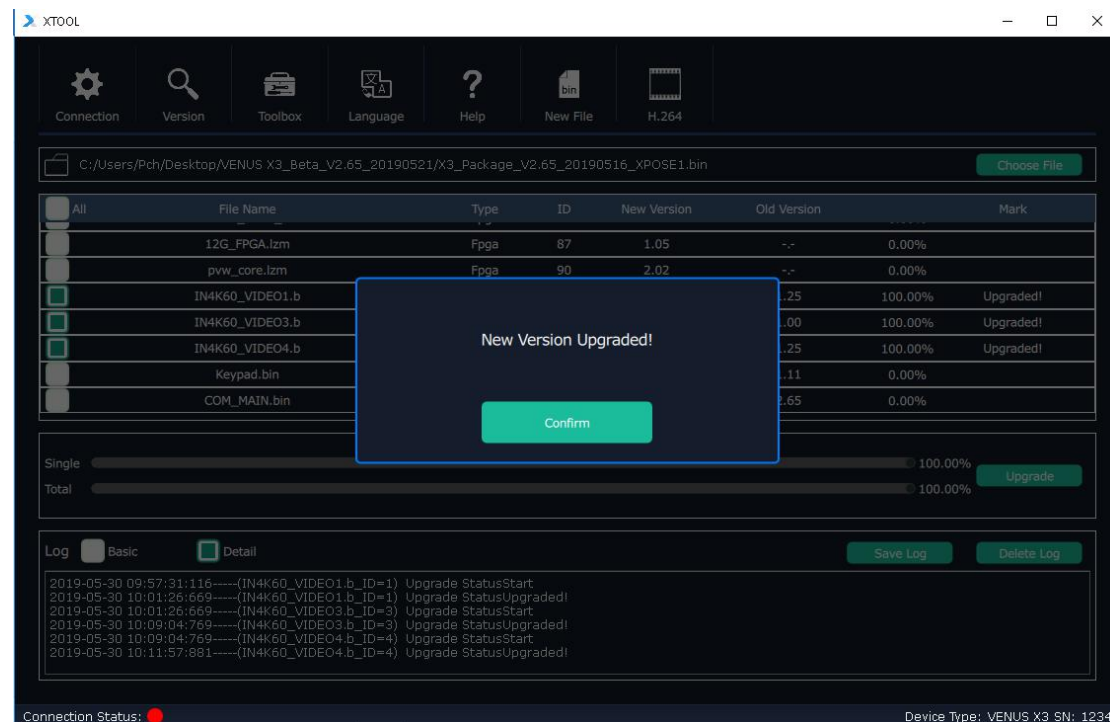
3.9. Thirdly, upgrade video and FPGA firmware.

3.9.1. Restart X3 ,then select all of the Video and FPGA firmware need to update.



3.9.2. Video and FPGA firmware upgrade process will take 15-20minutes.

3.9.3. After upgraded X3 video and FPGA, X3 will emit a "buzz" sound.



Remark:

- (1) X3 without buzzer won't make sound of "buzz". Just wait for 10 minutes after upgraded.
- (2) If upgraded by wrong step, please follow the upgrade guide and re-upgrade X3.

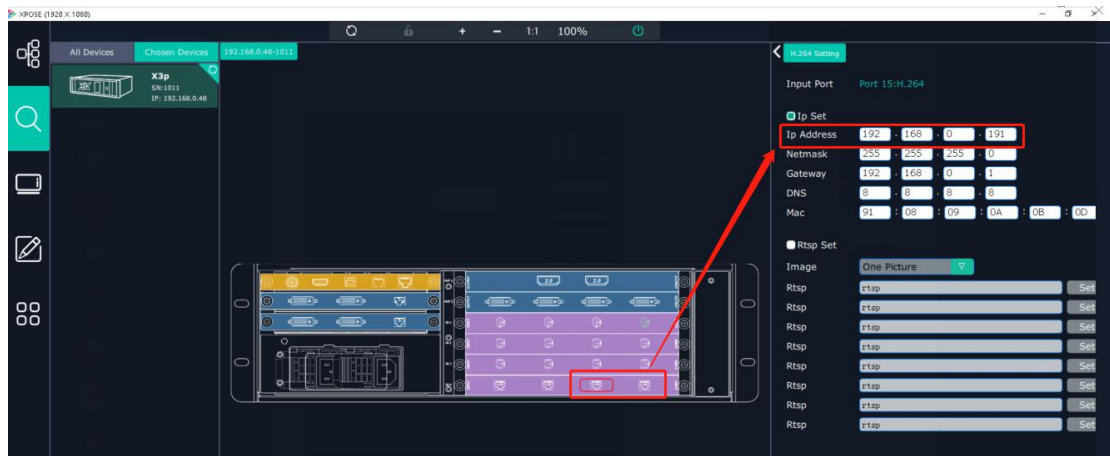
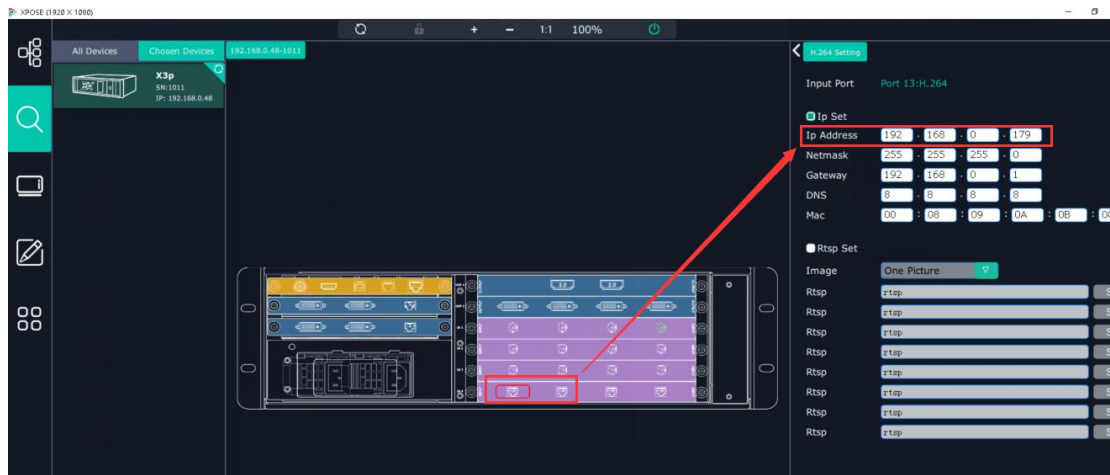
For VENUS X3 equipped with H.264 input board, there is no need to update H264 input core board firmware(up.rar) unless the core board firmware is updated or lost.

4. H264 Input Core board Upgrade

File name: up.rar

4.1. Check the IP of X3 H.264 input board

Connect X3 with XPOSE 2.0 and click the H.264 input board to get the IP address.



According to the picture below:

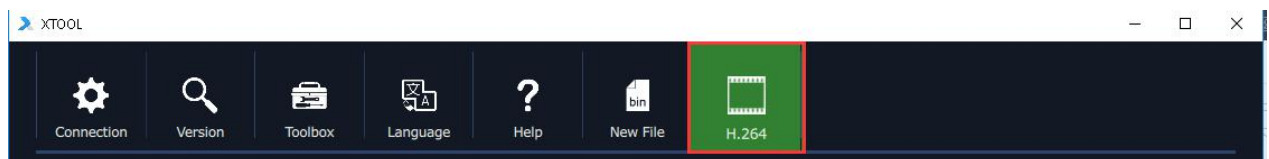
The IP of X3 H.264 port1 and port 2 is :192.168.0.179

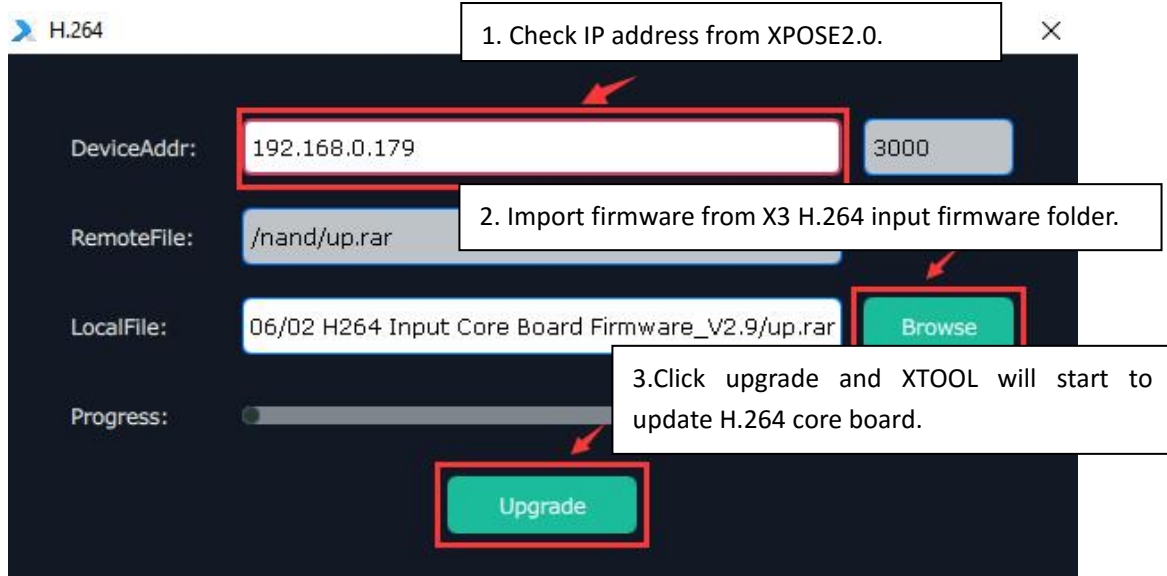
The IP of X3 H.264 port3 and port 4 is :192.168.0.191

4.2. Ethernet Connection

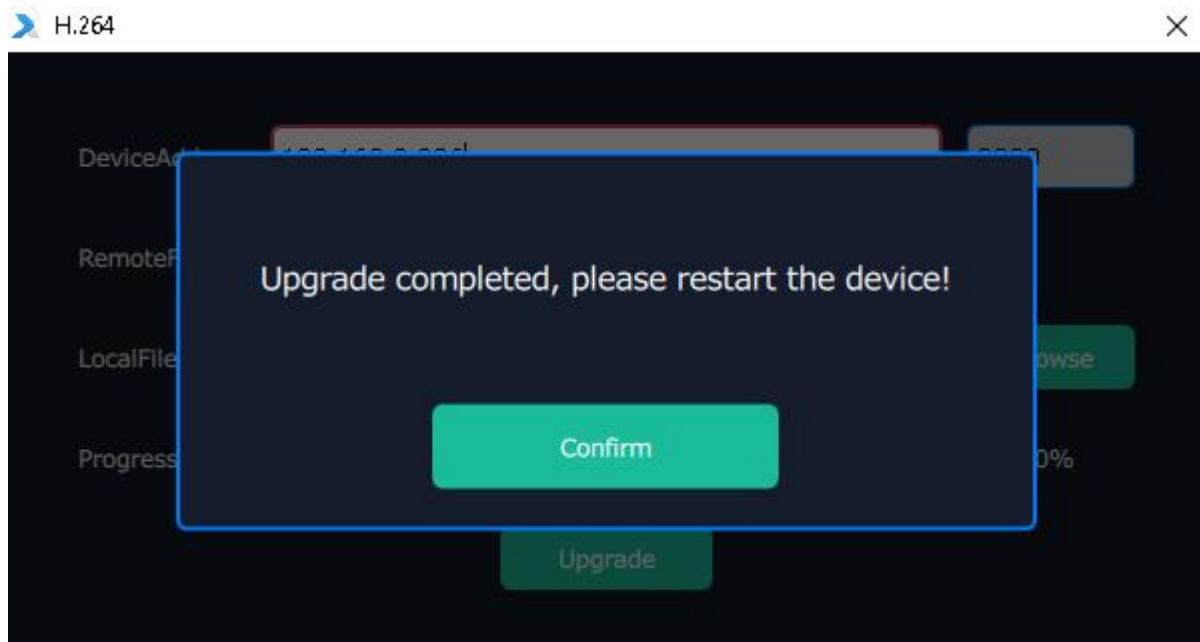
Connect X3 H.264 input board Ethernet port1 with PC.

4.3. Open XTOOL and update H.264 output core board firmware.





- 4.4. Copy the IP of H264 output to "Device Addr", which can check from XPOSE2.0.
- 4.5. Press "Browse" and select H264 input core board firmware. (File name: up.rar)
- 4.6. Press "Upgrade", waiting for progress bar to the end.



- 4.7. After updating H264 input port 1 ,pull the network cable out port 1 and connect PC with H.264 input port3.Then upgrade H264 input port 3 in the same way.
- 4.8. Press "Reboot", (need to wait for 10 seconds) or unplug and plug VENUS X3 power supply.

Remark:

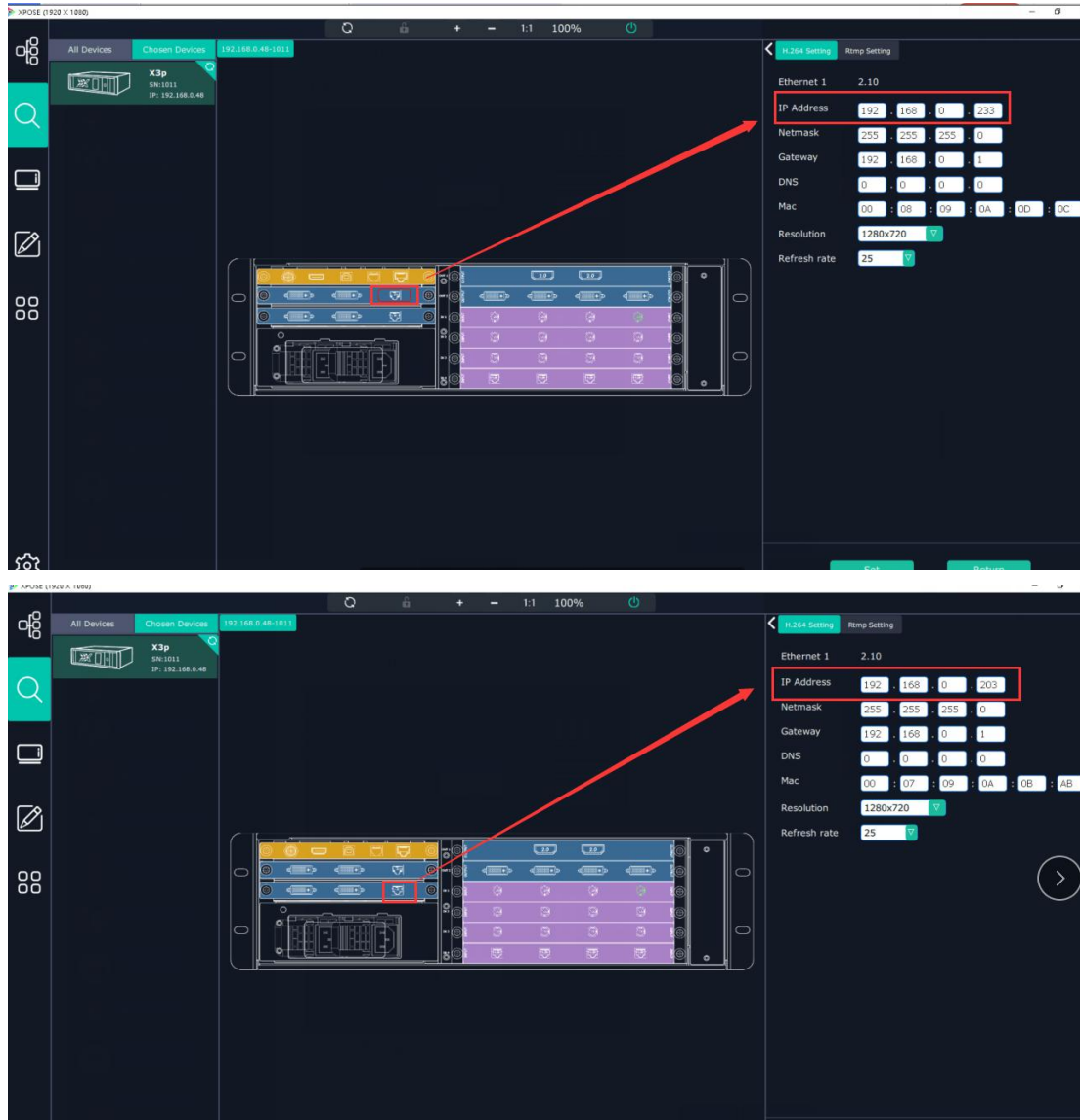
If XTOOL fail to connect the IP of 192.168.0.179, please check H.264 port and PC Ethernet was connected. If yes ,double check the IP address from T-ONE.

5. X3P PVW output core board Upgrade (only for X3P)

File name: up.rar

5.1. Check the IP of X3P PVW output board

Connect X3P with XPOSE 2.0 and click the PVW output board to get the IP address.



According to the picture below:

The IP of X3P PVW output board in slot1 is :192.168.0.233

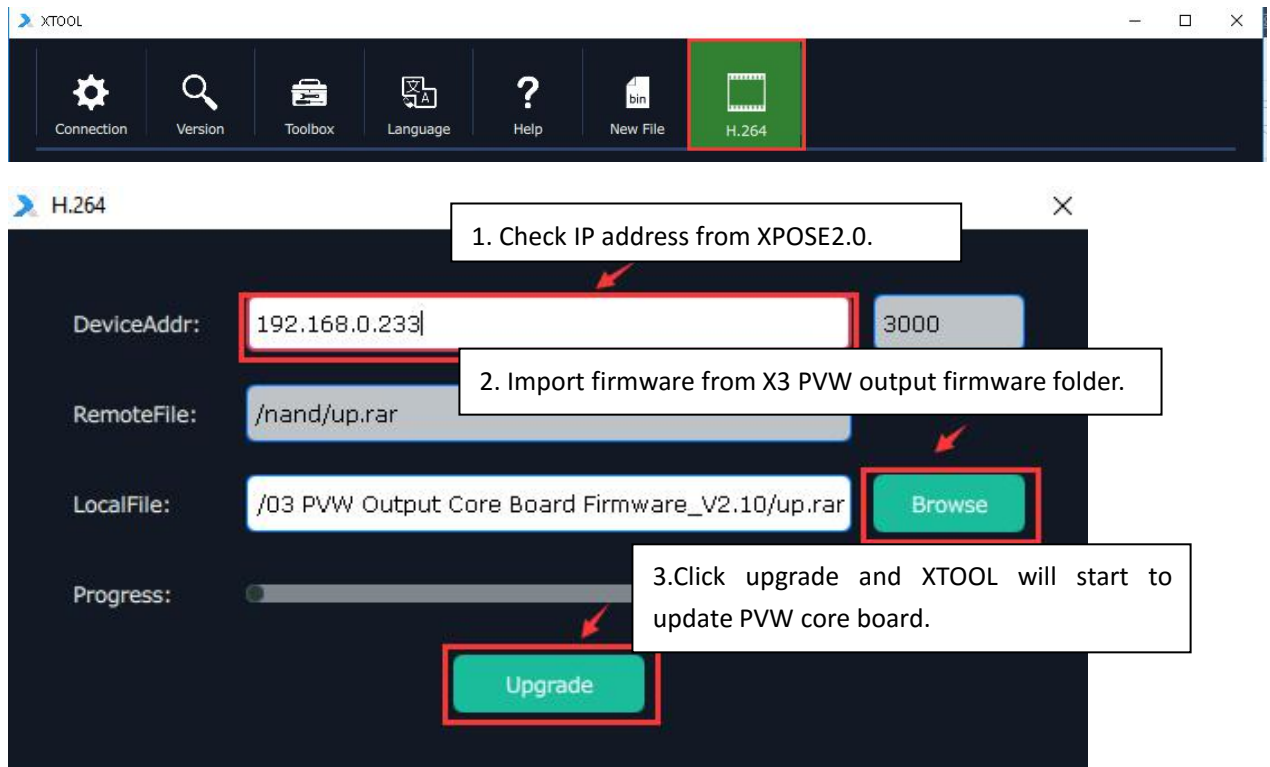
The IP of X3P PVW output board in slot2 is: 192.168.0.203

5.2. Ethernet Connection

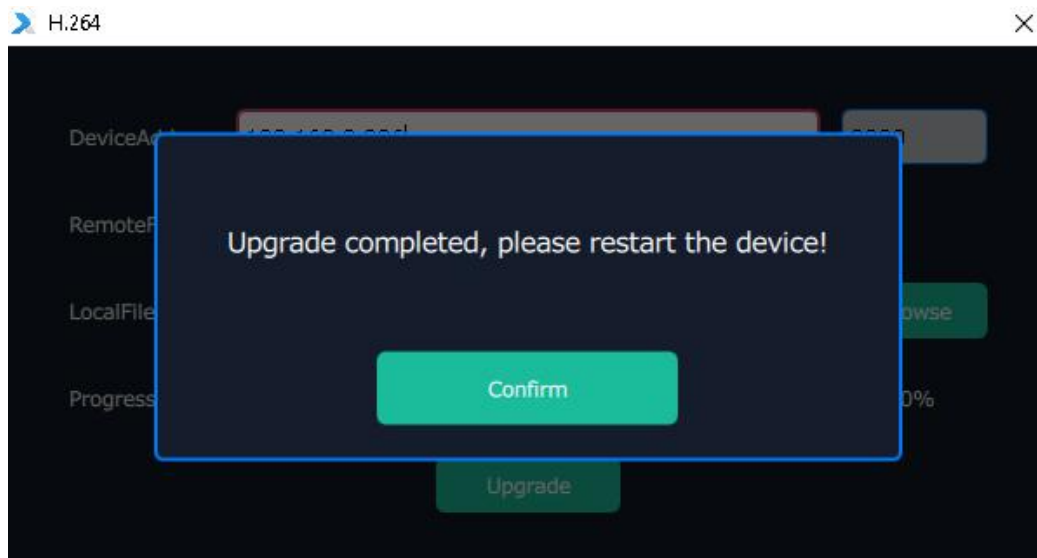
Connect X3P PVW output board Ethernet port with PC.

5.3. Open XTOOL and update PVW output core board firmware.

Address: S603.604 Weiye Building Torch Hi-Tech Industrial Development Zone Xiamen,Fujian P.R.C
 Tel: 4008 592 315 Fax: +86 592 5788216
 Email: support@rgblink.com <http://www.rgblink.com>



- 5.4. Copy the IP of PVW output to "Device Addr", which can check from XPOSE2.0.
- 5.5. Press "Browse" and select PVW output core board firmware. (File name: up.rar)
- 5.6. Press "Upgrade", waiting for progress bar to the end.



- 5.7. After updating PVW output board in slot1, pull the network cable out slot1 and connect PC with PVW output board Ethernet port on slot2. Then upgrade the second PVW output board in the same way.
- 5.8. Press "Reboot", (need to wait for 10 seconds) or unplug and plug VENUS X3P power supply.

Revision History

Revision	Time	Description	Author
Rev.1	December 1,2017	Release	Rainbow
Rev.2	May 28, 2019	The priority of sub-program upgrade when update X3 from previous version to V2.65 and above.	Rainbow
Rev.3	August 1, 2019	Delete the part about Ethernet upgrade.	Rainbow
Rev.4	December5,2019	Add H264 input and PVW output core board firmware update.	Rainbow