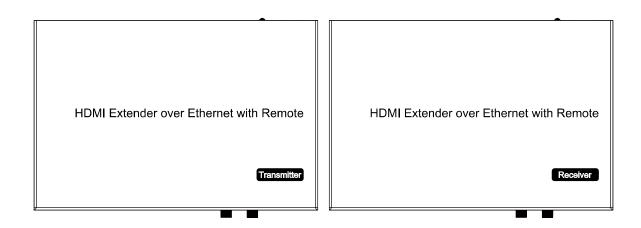
Operating Instructions

## H.264 HDMI Extender over IP Extender With LED, Remote, POE, RS232

**Operating Instruction** 



#### Introduction

This HDMI over IP Extender use the advanced H.264 as the compression type, which makes it occupy lower bandwidth and transmit over the LAN more smoothly. It supports 120m over single cat5e/6 cable at point to point, as well as point to many and many to many over Ethernet switch. The over IP solution is widely used in various locations, like meeting room, class room, metro, airport, home, mall advertisement...etc.

#### 1. Features

1). Using H.264 compression encoding, support resolution up to 1080p@60hz

2). Transmit up to 120m over single Cat5e/6 cable, with 1x looping HDMI output

3). With IR Remote to choose the source, with LED to show the Group ID

- 4). Comply with TCP/IP protocol, streaming bit rate is up to 15Mbps
- 5). Support LPCM audio format
- 6). Smart IP Address Setting: Dynamic Host Configuration Protocol (DHCP)
- 7). Wide-band IR pass through to control the source (38khz to 56khz)
- 8). By pass 2 way UART/RS232 (Up to 115200), use remote controller to select 8 group Baud rate

9). Support one to one, one to many, many to one, many to many modes, with large cascade

10). Dual power input: 802.3af compliant POE & DC 5V (No need power supply when connecting with POE Switch)

- 11). HDCP Compliant
- 12). Support PC tool control
- 13). DC 5V 1A power supply

## 2.1 Specifications

Performance	
Protocol	H.264 encoder over TCP/IP
Support Video format	480i/480p/576i/576p/720p/1080i/1080p@60HZ
Support Audio format	LPCM, Audio sampling rate 48KHZ
Streaming Bit Rate	15Mbps
HDCP	Compliant
IR Frequency	38 -56 KHZ
RS232 Baud rate	Default 2400bps, total 8 kinds optional
IP setting &Group ID setting	
Default IP	TX: 192.168.1.11 ; RX: 192.168.1.12
Group ID	Group 00 ~ group 63
Request for Switch/Router	Support IGMP, support DHCP
Connectors on Transmitter	
Input	1xHDMI Female port
Output	1x RJ45 output , 1x HDMI looping output
RS232	Phoenix RS232 port
	IR TX port (Support 38K-56KHz)
IR	IR Ext port (Support 38KHz)
Connectors on Receiver	
Input	1xRJ45 input
Output	1x HDMI Female port looping output
RS232	Phoenix RS232 port
ID	IR RX port (Support 38K-56KHz)
IR	IR Ext port (Support 38KHz)
Environmental & Power Requirements	
Operating temperature	-5 to +35 °C (+23 to +95°F)
Operating Humidity Range	5 to 90%RH (No Condensation)
Power supply	DC 5V 1A
Power consumption	Max 3 watt
Physical	
Dimension	TX: 119x79.5x28mm ; RX: 119x79.5x28mm
Net Weight	TX: 0.28KG ; RX:0.28KG

2. 1 Supported input resolution	
Frequency	Resolution
	576i
	576P
50Hz	720P
	1080P
	1080i
	480i
	480P
60Hz/59.94Hz	720P
	1080P
30Hz/29.97Hz	1080P
24Hz	1080P
25Hz	1080P

### 2. 1 Supported input resolution

## **VESA** Resolution

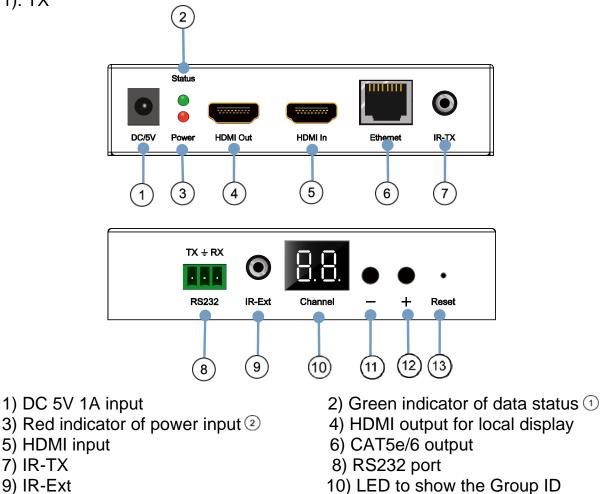
Frequency	Resolution
	576i
	576P
50Hz	720P
	1080P
	1080i
	480i
	480P
60Hz/59.94Hz	720P
	1080P
30Hz/29.97Hz	1080P
24Hz	1080P
25Hz	1080P

#### 3. Packing content

- 1). 1x Transmitter
- 2). 1x Receiver
- 3). 1x IR-TX cable
- 4). 1x IR-RX cable
- 5). 2X IR Ext Cable
- 6). 1x Manual
- 7). 8x screws
- 8). 4x detachable mounting ears
- 9). 2x Phoenix plugs for RS232 cable termination
- 10). 2x Remote controller
- 11). 2x Power adapter 5V 1A

#### 4. Panel description





9) IR-Ext 11) Press the button for the previous Group ID

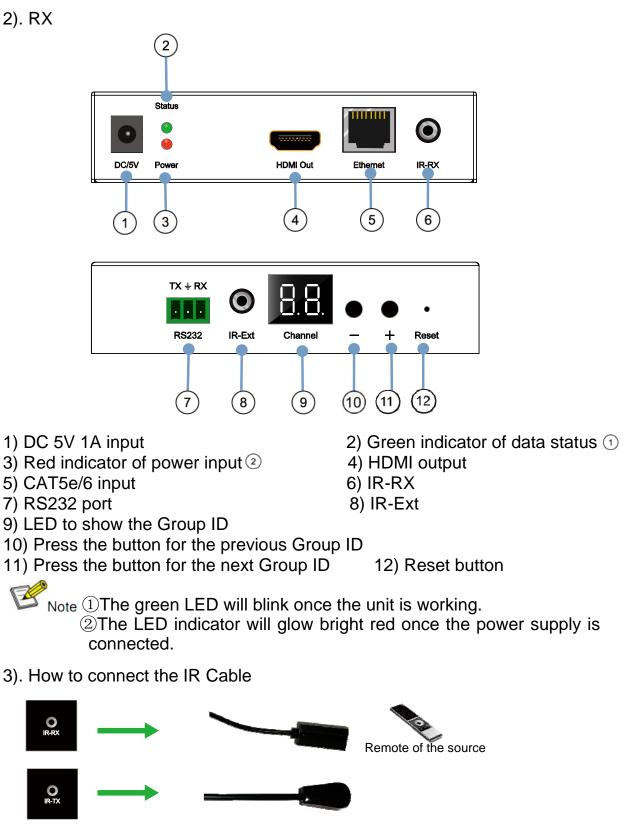
12) Press the button for the next Group ID

- 13) Reset button
- Note ①The green LED will blink once the unit is working.

2 The LED indicator will glow bright red once the power supply is connected.

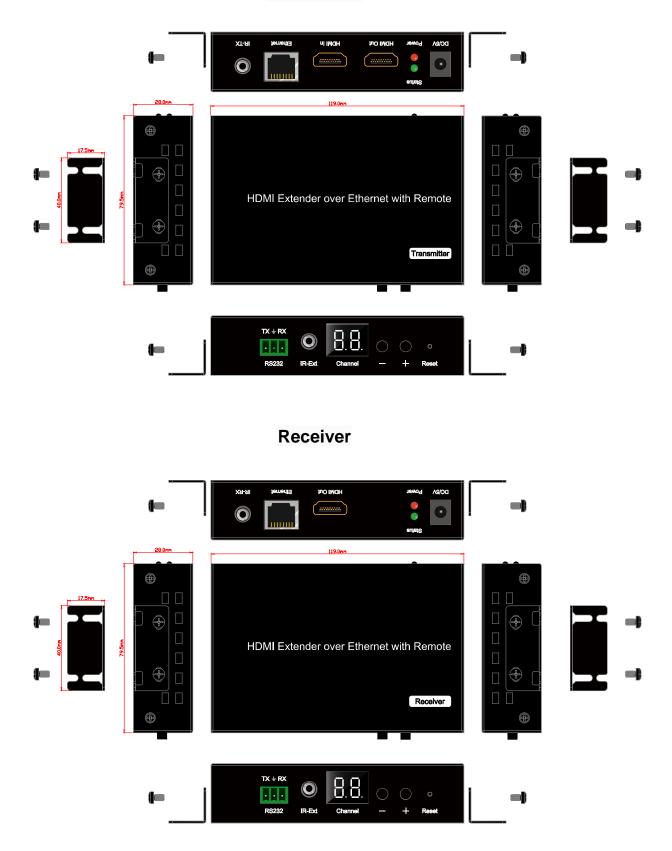


O IR-Ext



Remote of the HDMI extender

## 4.1. Panel Drawing



Transmitter

#### 5. Installation and Configuration

#### 5.1 Setup HDMI TX and RX

When connecting point to point, no need to configure TX and RX, When connecting point to many, many to point and many to many, please make sure every TX and RX has unique IP and MAC address, every TX has unique group ID.

Our this over IP Extender has been assigned unique default MAC address for every TX and RX, so you don't have to set the MAC for the units. You just need to set the IP address and Group ID following bellowing steps.

### 5.1.1 Setting the IP address

#### A). DHCP (Dynamic host configuration protocol)

If you are using a Switch that supports DHCP, please enable DHCP so that the Switch will assign an unique IP for TX and RX, and you don't need to change the IP for the units manually.

Ethernet:											
Use DHCP											
Default IP address: 1	92	168	1		. 11	1					
Default Netmask: 25			. 255	1	0						
Default Gateway: 192	2 . 16	8	. 1	-(	1						
Submit											
Uart Setting:											
Baud Rate: 115200	-										
Submit											
Submit											
File to Upgrade En	coder Fir	mwar	e:					[浏]	览	Jpgrade!	
Encoder Reset	Reboot	K	LogC	but							
Licoder Reser	Treboon		Logo	, ut							
Use DHCP											
Default IP address	s: 192	1	68	٦.6	1	٦	12				
Default Netmask:		. 25		. 25		. 0		7			
Default Gateway:		. 168		. 1	5	. 1		-1			
	152	. 100	,	•							
Update DHCP											
Multicast Group:	Group 0	1(239	255.4	2.43	) [	- 1	ort:	500-	4		
Update						_					
opullo											
Uart Baud Rate:	115200	•									
Update											
opuaro											
						_					
Reboot											

## B). Set the IP via web browser

If you are using a Switch that doesn't support DHCP, please change the default IP for TX (192.168.1.11) and RX (192.168.1.12) manually. A HTTP server is embedded in each TX and RX. You can set up IP address for HDMI Extender via web browser The default IP address of the **TX is 192.168.1.11, user** name: admin, password: admin The default IP address of the **RX is 192.168.1.12** 

#### Step 1: Make sure the Transmitter and PC are in the same domain.

Access the Network Setting Control Panel in Windows and locate your Lan connection. Under Windows 7, this can be done by clicking Start > Control Panel >Network Sharing center>Change adapter settings > Properties >Internet Protocol Version4 (TCP/IPv4). Change the IP address fi eld to 192.168.1.1

(0-255). After that press "OK" to save the configuration.

Note \* The PC and TX/RX should be in the same domain.
\* The IP address of PC should be different from the IP address of TX and RX.

**Step 2:** Use an Ethernet Cable to connect the PC (or laptop) and the extender. the power LED for the extender is red and the green status is blinking.

Step 3: Login in IE: 192.168.1.11 (default IP for TX) or 192.168.1.12(default IP for RX), You can setup IP address for the TX and RX. TX requires user name: admin and password: admin

Please set IP address for each TX and each RX, IP: 192.168.1.XX (XX:1-255. all IP address for TX and RX must be different and can't be same as the PC's address.)

Step 4: After selecting "Use DHCP" or reset the IP Address, click "Submit" (transmitter) or "update DHCP" (Receiver).

Step 5: Click "Reboot".

Use DHCP					
Default IP address: 192	. 168	. 1	. 8		
Default Netmask: 255	. 255	. 255	. 0		
Default Gateway: 192	. 168	. 1	. 1		
Update DHCP					
Multicast Group: Group 0	1(239.255.4	42.43)	• Port:	5004	
Uart Baud Rate: 115200	•				
Update					
Debug					
Reboot					
Ethernet:					
Use DHCP					
Default IP address: 192	168 . 1	. 1	1		
Default Netmask: 255 . 2	. 25	5.0			
Default Gateway: 192 . 1	68 . 1	. 1			
Submit					
Uart Setting:					
Baud Rate: 115200 💌					
Submit					
File to Upgrade Encoder Fi	rmware:			_ 浏览	•• Upgrade!
Encoder Reset Rebo	ot Lo	gOut			

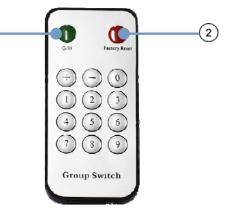
**Step 6:** Restart the extender after resting the IP Address.

## 5.1.2 Choose the Group ID and Baud Rate by Remote controller

(When the LED shows "00", it's ready to work)

1) Press the button, switch to choose the Group ID or Baud rate.

2 Factory reset. Press the button for 3 seconds, the LED will flicker then turn to "00", you have successfully finished the factory reset.



#### Choose Group ID 00-63

1). Press "+" or "-" to change to the previous or next Group ID. 2). Press the No to change Group ID. For example, if you need change to 01, press "0", then press"1".

#### **Choose the Baud Rate**

Press the Button, switch to Baud Rate mode, press "+" or "-" to change the Baud Rate.

F0 = 2400 (default) F1 = 4800F2 = 9600F3 = 19200F4 = 28800F5 = 38400F6 = 57600F7 = 115200

3). How to choose the source:

For example, when the connection is:

Source (DVD1) - TX (TX1) - Gigabit Switch – RX (RX1) - TV1 Source (DVD2) - TX (TX2) - Gigabit Switch - RX (RX2) - TV2 Source (DVD3) - TX (TX3) - Gigabit Switch – RX (RX3) - TV3

The group ID of transmitters is:

TX1 (01)

TX2 (02)

TX3 (03)

If you need display Source on TV1, then just set Group ID of RX1 same as TX1: 01(see below picture).





5.1.3 Set the group ID for TX and RX via web browser Step 1: Make sure the Transmitter and PC are in the same domain. (Refer to 5.1.1)

Step 2: Use an Ethernet Cable to connect the PC (or laptop) and the Extender, the power LED for the extender is red and the green status LED is blinking.

**Step 3:** Power on the TX or RX with 5V 1A power supply.

Step 4: Login in IE: 192.168.1.11 (default IP for TX) or 192.168.1.12(default IP for RX), TX requires user name: admin and password: admin.

Step5: Change the group ID at "Stream setting", "00" means group "00" here which can be chosen from 00 to 63.

Step 6: Click "Submit" (transmitter) or update (receiver).

Stream Setting:

Transfer: Multicast Multicast IP: 00(239.255.42.42) 
• Port: 5004

Multicast Group: Group 00(239.255.42.42) V Port: 5004 Update



Remote Note \* When you change the group ID on both Web browser and Remote controller, the units will follow the latest one.

#### **※** If you change the Group ID on web browser, it can't be shown on the LED.

## 5.2 Preparing the switch

When doing point to many and many to many, it requires a switch to distribute the sources. We suggest you use the Switch that supports IGMP and DHCP. IGMP feature help to manage the group ID which is related to switch the sources; DHCP allow the switch to assign an IP for TX and RX automatically, please enable DHCP of the switch.

## **5.3 Connection**

Kernet Note Please don't insert into or pull out HDMI cable when power on. Please connect cable only when power is off.

#### 5.3.1 Point to point

1. Connect the source device and the Transmitter unit with HDMI Cable. 2. Connect the HDMI looping output of the Transmitter to the local HDMI display.

3. Connect another HDMI display and the HDMI Receiver unit with HDMI Cable.

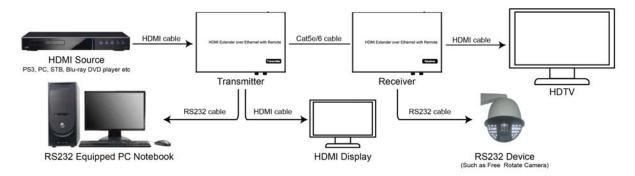
4. Connect the Transmitter and Receiver with Cat5e/6 cable

5. Connect the IR TX cable into "IR TX" port of the transmitter; Connect the IR RX cable into "IR RX" port of the receiver. Then you can control the source at the RX side with IR.

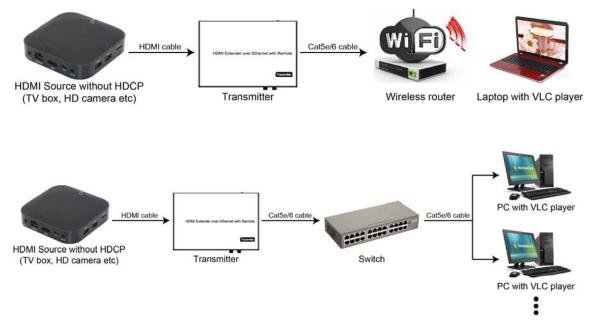
6. Connect one RS-232 Cable from the PC or automation system to the RS-232 port on the Transmitter; Connect one RS-232 cable from the Receiver to the RS-232 device to be controlled.

7. Power on Transmitter and Receiver with adapter 5V 1A.

#### NOTE: Insert/Extract cables gently.



## 5.3.2 Compatible with Video Player such as VLC etc



#### 5.3.3 Point to many

1. Setting the IP address for Transmitter & Receiver and preparing the switch following the steps as instructed above (5.1.1&5.2)

2. Connect the source device and the Transmitter unit with HDMI Cable.

3. Connect the HDMI looping output of the Transmitter to the local HDMI Display.

4. Connect the transmitter and the switch/router with cat5e or cat6 cable.

5. Connect all the Receivers and the switch/ router with Cat5e/6 cable.

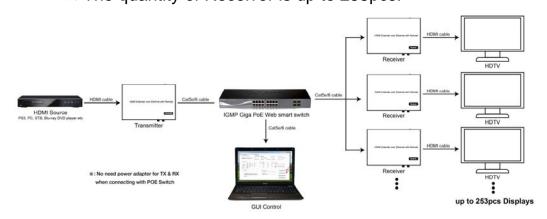
6. Connect the HDMI displays and the HDMI Receiver units with HDMI Cable.

7. Connect the IR TX cable into "IR TX" port of the transmitter; Connect the IR RX cable into "IR RX" port of the receiver. Then you can control the source at the RX side with IR.

8. Connect one RS-232 Cable from the PC or automation system to the RS-232 port on the Transmitter; Connect one RS-232 cable from the Receiver to the RS-232 device to be controlled.

9. Power on Transmitter and Receiver with adapter 5V1A, power on the switch with its adapter.

Note X Daisy chain the switch if its RJ45 port is not enough. X The quantity of Receiver is up to 255pcs.



#### 5.3.4 Many to many

1. Setting the IP address for Transmitter & Receiver and preparing the switch following the steps as instructed above (5.1.1&5.2)

2. Connect the source device and the Transmitter unit with HDMI Cable.

3. Connect the HDMI looping output of the Transmitter to the local HDMI Display.

4. Connect the transmitters and the switch/router with cat5e or cat6 cable

5. Connect the Receivers and the switch/ router with Cat5e/6 cable

6. Connect the HDMI displays and the HDMI Receiver units with HDMI Cable.

7. Connect the IR TX cable into "IR TX" port of the transmitter; Connect the IR RX cable into "IR RX" port of the receiver. Then you can control the source at the RX side with IR.

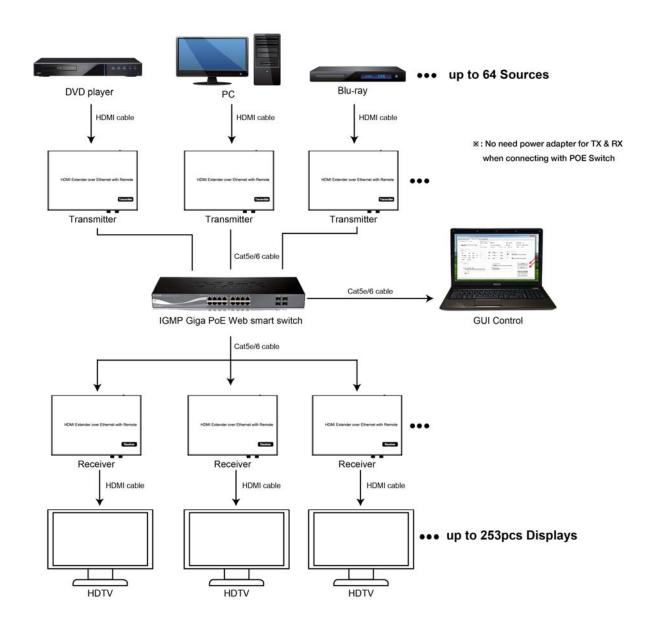
8. Connect one RS-232 Cable from the PC or automation system to the RS-232 port on the Transmitter; Connect one RS-232 cable from the Receiver to the RS-232 device to be controlled.

9. Power on Transmitter and Receiver with adapter 5V1A, power on the switch with its adapter.

10. Choose the source by Remote controller or Web browser as instructed above (5.1.2)



- Note \* Daisy chain the switch if its RJ45 port is not enough.
  - \* The quantity of Transmitter is no more than 64 pcs.
  - \* The total quantity of Transmitter and Receiver is less than 256 pcs.



Note %The total qty of TX, RX, Switch is less than 256pcs.

#### 6. RS232 and Baud rate

The unit provides a path to pass through the RS232 signal, RS232 passes

**Operating Instructions** 

from TX to RX or from RX to TX, connect to your RS232 devices, such as PC, IP Camera, Creston control panel, Smart Matrix, printer and Scanner and so on. It works when TX, RX and your RS232 devices baud rate is the same. The default baud rate of TX and RX is 2400 which is frequently used for most devices.

## 6.2 Baud rate setting

#### 6.2.1 Setting the Baud rate via Web Browser

Login TX and RX with their default IP (TX: 192.168.1.11; RX: 192.168.1.12) to modify the Baud Rate which range from default 2400 to 115200.

Uart Setting:

Baud Rate: 115200 🔻

Solution Note When you change the Baud rate on both Web browser and Remote controller, the units will follow the latest one.

※ Please send the data in the same group ID.

#### 7. Firmware update

We provide the firmware to upgrade the units when it is necessary. Please follow up bellowing steps to update the firmware.

Step1: Connect TX / RX to the PC with a short Cat5e cable

Step2: Power on TX/ RX with power adapter 5V1A.

Step3: Login TX or RX with their default IP (TX: 192.168.1.11; RX:

192.168.1.12) on web browser, TX requires user name: admin and password: admin

Step4: Click "choose File" on the interface and find out the latest version firmware

Step5: Click "Upgrade", the process will takes seconds, please DO NOT interrupt or power off the units during the time.

```
File to Upgrade Firmware:
Choose File No file chosen
```

Upgrade!

## 8. One key recovery to default setting

It is available to recover the setting to factory setting, use a tiny pin to insert the reset hole and hold about 10 seconds, when the unit is connected.

C	Rea	set	נ
		-	in entr

#### 9. PC Tool Instructions

Step 1: Make sure the Transmitter and PC are in the same domain. (Refer to 5.1.1)

Step 2: Open the PC Tool.



Step 3: Click "Start Scan".

IPTV Control Center Device Scan Page			42	12	
Scan Setup Device Scan Time'	5	Seconds		Start S	can
Output Window- Tx Device: 1 IPTX			Rx Device: (	0	

e Scan Page Tx Setup Page	Rx Setup Page						
Device Selection	Tx Device In	fo					
K	Device Name:	I	PTX		Device 3	IP:	192.168.1.11
LPTX -	Tx	4	. 0. 0. 0. 2016	30627	Encoder		7.1.2.0.11.2016062
PTX	Lan Status:	L	ink Vp	Video Lo	ck: Unlo	ck	HDCP: Off
rameter Setup							
IP Setup			Bitrate	_	Downsca	le Setup	
IP: 192 .168 . 1	. 11	FHD:	15000	Kbps	Full	Full H	_
Netmask: 255 . 255 . 255	. 0	HD:	12000	Kbps	HU .	Lett 10	· ·
Gateway: 192 . 168 . 1	. 1	1728			HD:	ш	
DHCP : On		SD:	4000	Kbps		[] III	•
lisc Setup							
Group ID			-Vart Baud	rate			Update
0			2400			•	
Stream Output Path			-Mac Addre	55			Reboot
Loopthrough and Network	k Outpu 🔻		00393D2B	CD93			
- Device Name							Firmware Upgrade
IPTX							

## Step 4: Choose the TX or RX Name.

# 9.1 Firmware Upgrade Upgrade for TX

Step 1: Click "Firmware Upgrade".

C Device S IPTX IPTX	age Tx Setup Page Selection	Rx Setup Pag Tx Device Device Nam Tx Lan Status	Info e: Il 4.	РТХ . 0. 0. 0. 2016 ink Vp	30627 Video Loc	Device IP: Encoder k: Unlock	192.168.1.11 7.1.2.0.11.20160627 HDCP: Off
arameter S	Setup						
IP Setup IP:	192 . 168 . 1	. 11	-Video F旧:	Bitrate 15000	Kbps	Downscale Se	
Netmask:	255 . 255 . 255	. 0	HD:	12000	Kbps	HUL Ful.	1 HD 🔻
Gateway: DHCP:	192 . 168 . 1	. 1	SD:	4000	Kbps	HD: HD	•
Misc Setu	IP.						
Group I	CD			-Vart Baud	rate		Update
	0			2400		•	
Stream	Output Path			-Mac Addre	55		Reboot
Loop	pthrough and Networ	k Outpu 💌		00393D2B	CD93		
Device	Name						Firmware Upgrade
IPTX	{						
							Factory Reset

x Device Selection —	Tx Device In Device Name: Tx		Device IP: Encoder	192.168.1.11 7.1.2.0.11.20160627
TIY	Lan Status:		o Lock: Unlock	HDCP: Off
ar ameter Tx Upgrade	3			<u> </u>
IP Setu			1	
IP:				Latter Charles
			Upgra	ade Tx FW
Netmasl				
Netmasl Gateway				Encoder FW
Gateway DHCP:				Encoder FW
Gateway				Encoder FW
Gateway DHCP: Misc Se		2400		Encoder FW
Gateway DHCP: Misc Ser Group	h		Upgrade	Encoder FW
Gateway DHCP: Misc Set Group 0 Stream Output Pat	h ud Network Outpu 💌	2400 Mac Address 00393D2BCD93	Upgrade	Encoder FW
Gateway DHCP: Misc Set Group 0 Stream Output Pat		Mac Address	Upgrade	Encoder FW

## Step 2: Click "Upgrade Encoder FW" first.

'x Device Selection		Setup Page Tx Device Inf Device Name:	° IPTX	Device IP:	192. 168. 1. 11
IPTX Tx Upgra	121	Τ	4 0 0 0 90160697	Fncoder	7 1 2 0 11 20160627
arameter :					grade Tx FW
IP Setup IP:					ade Encoder FW
Netmask:					
Gateway: DHCP:				Upgrading	
	Ungra	de Result		23	
Misc Setup	opgia				
Misc Setup Group ID O				-	Update
Group ID	ith (	j) Firmware	Upgrade Is Success!	-	Update Reboot
Group ID O Stream Output Pa	ith (	<b>j</b> Firmware	Upgrade Is Success! 确定		

Step 3: After the step 2 is finished, click "Firmware Upgrade" again, then click "Upgrade TX FW".

: Device S IPTX	election T	Tx Device Inf Device Name: Tx Lan Status:	o IPTX 4.0.0.0.20160627 Link Up Video	Device IP: Encoder Lock: Unlock	192.168.1.11 7.1.2.0.11.20160627 ЖDСР: Off
arameter S	Tx Upgrade				23
IP Setup					
IP:				Upg	rade Tx FW
Netmask:					
Netmask: Gateway:				Upgrad	de Encoder FW
				Upgrad	de Encoder FW
Gateway:				Upgrad	de Encoder FW
Gateway: DHCP:	1			Upgrad	de Encoder FW
Gateway: DHCP: Misc Setu	1		2400		de Encoder FW
Gateway: DHCP: Misc Setu -Group I			2400 Mac Address		de Encoder FW
Gateway: DHCP: Misc Setu Group I Stream	0	ork Outpu 👻			
Gateway: DHCP: Misc Setu Group I Stream	O Output Path othrough and Netw	ork Outpu 🔹	Mac Address		

## Upgrade for RX

Step 1: Click "Firmware Upgrade".

Rx Device Se	6	Rx Setup Page Rx Device I Device Name	Info e: IP	PRX		Device IP:	192. 168. 1. 12
IPRX IPRX	-	Rx Lan Status:		.0.0.0.2016 ink Vp	50627 Video Lock	Encoder k: Unlock	7.1.2.0.11.20160627 HDCP: Off
Parameter Se	stup						
IP Setup IP:	192 . 168 . 1	. 12	-Video I FHD:	Bitrate 15000	Kbps	Downscale Set	
Netmask:	255 . 255 . 255	. 0	<b>Ю</b> :	12000	Kbps	HU.	
Gateway:	192 . 168 . 1	. 1	SD:	4000	Kbps	HD: HD	•
Misc Setup							
Group ID				- Vart Baud	Irate		Update
ſ	0	6		2400		•	
Stream C	Output Path			Mac Addre	:55		Reboot
Loopt	through and Networl	k Outpu 🔻		00393D2B0	CD93		
Device N	lame						Firmware Upgrade
IPRX							
							Factory Reset

Step 2: Click "Upgrade Rx FW".

x Device S	election T	-Rx Device Info Device Name: Rx Lan Status:	IPRX 4.0.0.0.20160627 Link Up Video L	Device IP: Encoder Lock: Unlock	192.168.1.12 7.1.2.0.11.20160627 HDCP: Off
arameter S	Rx Upgrade				23
IP Setup					K
IP:					rade Rx FW
Netmask:					
Netmask: Gateway:					de Encoder FW
Gateway: DHCP:					
Gateway: DHCP: Misc Setu					
Gateway: DHCP:			2400		
Gateway: DHCP: Misc Setu; Group I			2400 Mac Address	Upgra	
Gateway: DHCP: Misc Setu Group I Stream	0	rk Outpu 🔻		Upgra	de Encoder FW
Gateway: DHCP: Misc Setu Group I Stream	O O Output Path othrough and Netwo	rk Outpu 🔻	Mac Address	Upgra	de Encoder FW

Rx Upgrade		23
To opgrade	Server Rep. (PD) Ser	
PRX		20160
		Upgrade Rx FW
ameter		
P Setu		Upgrade Encoder FW
r Setu IP:		
	Upgra	ding
Netmas		
and the second		
Gateway. 192 . 100		· [HD] •
Gateway 192 100 DHCP: On	SD:         4000         Kbps         nu           Upgrade Result         XX	· [HD •]
	SD: 4000 Kbps	
DHCP: On	Upgrade Result	· HD ·
DHCP: On	SD: 4000 Kbps	
DHCP: On isc Setup Group ID O	SD: 4000 Kbps Upgrade Result	Update
DHCP: On isc Setup Group ID O Stream Output Path	SD: 4000 Kbps Upgrade Result	Update
DHCP: On isc Setup Group ID O	SD: 4000 Kbps Upgrade Result	Update

#### 9.2 Other settings

Step 1: Change the IP/Netmask/Gateway/DHCP/Uart Baudrate/Group ID/Mac Address/ Device name on the PC tool interface.

Step 2: Click "Update", after "Update" is finished, click "Reboot".

Device Selection	Tx Device Device Nam Tx	e: II	PTX 0. 0. 0. 2016	60627	Device IP: Encoder	192. 168. 1. 11 7. 1. 2. 0. 11. 20160627
PTX	Lan Status	: Li	ink Up	Video Loc	k: Unlock	HDCP: Off
rameter Setup						
P Setup TP: 192 . 168 . 1	11	-Video F田:	Bitrate 15000	Kbps	-Downscale S	etup
Netmask: 255 . 255 . 25		<b>Ю</b> :	12000	Kbps	Full Fu HTI	11 Ю 🔻
Gateway: 192 . 168 . 1	. 1	SD:	4000	Kbps	Ю: Ю	•
DHCP: 🔲 On			4000			
isc Setup						
Group ID			-Vart Baud	rate		Update
0			2400		•	
Stream Output Path			Mac Addre	55		Reboot
Loopthrough and Netwo	ork Outpu 🔻		00393D2B	CD93		
Device Name						Firmware Upgrade
IPTX						

IPRX IPRX	6	kx Setup Page Rx Device I Device Name Rx Lan Status:	info : Il 4.	PRX 0.0.0.2016 ink Up		Device IP: Encoder k: Unlock		192.168.1.12 7.1.2.0.11.20160627 HDCP: Off
arameter Se	etup							
IP Setup			Video FHD:	Bitrate	Kbps	Downscale	Setup	
IP:	192 . 168 . 1	. 12	riw.	15000	KUPS	Full F	ull HD	<b>_</b> ]
Netmask:	255 . 255 . 255	. 0	HD:	12000	Kbps	ਮਾ। 🖻		
Gateway:	192 . 168 . 1	. 1	SD:		70	но: Гн	n	•
DHCP :	🔲 On		20.	4000	Kbps			
Misc Setup								
Group II	0			-Vart Baud	Irate			Update
	0	1		2400		•		
Stream (	Dutput Path			Mac Addre	55			Reboot
Loop	through and Network	Outpu 💌		00393D2B	CD93			
Device 1	Name							Firmware Upgrade
IPRX		1						
								Factory Reset

ice Scan Fa 'x Device Se		Rx Setup Pag						
X DeAlce 20	erection	Device Nam		IPTX		Device IP:	19	2. 168. 1. 11
IPTX	•	Tx		4.0.0.0.201	60622	Encoder	7.	1.2.0.11.20160622
		Lan Status	:	Link Up	Video Lo	ck: Unlock	Ю	CP: Off
arameter Se	etup							
IP Setup				o Bitrate		Downscale	Setup	
IP:	192 . 168 . 1	. 11	FHD	15000	Kbps	Full F	ึ่งป่า หม	_
Netmask:	255 . 255 . 255	. 0	Ю:	12000	Kbps	ਮ⊓∙ ੯	ur 10	
Gateway:	192 . 168 . 1	. 1	SD:	4000	Kbps	но: Г	۵	•
DHCP :	0n			4000	nop 2			
Misc Setup	С							
Group II	)			-Vart Bau	irate			Update
	0			2400		•		
Stream (	Dutput Path			Mac Addre	255			Reboot
Loop	through and Networl	k Outpu 🔻		00393D2E	CD93			
Device 1	Name							Firmware Upgrade
IPTX							- Г	

#### 9.2 Click "Factory Reset" on TX or RX.

Device S		x Setup Page Rx Device : Device Name Rx	Info 2: Il 4.	PRX . 0. 0. 0. 2016		Device II Encoder	7.1	. 168. 1. 12 . 2. 0. 11. 20160622
		Lan Status:	: L:	ink Up	Video Loo	k: Unloc	k HDC	P: Off
rameter S	etup							
IP Setup			Video FHD:	Bitrate	Vh	Downscal	e Setup	
IP:	192 . 168 . 1 .	12	rπυ.	15000	Kbps	Full	Full HD	•
Netmask:	255 . 255 . 255 .	0	HD:	12000	Kbps	HTI ·		
Gateway:	192 . 168 . 1 .	1	80.00	1		HD:	т	
DHCP :	0n		SD:	4000	Kbps		m	
lisc Setur	0							
Group II				-Vart Baud	Irate		_	Update
0.0000000000000000000000000000000000000	0			2400		•		
Stream	Output Path			-Mac Addre	255			Reboot
	through and Network	Outpu 🔻		00393D2B	CD93			
Device 1	Nome						E	'irmware Upgrade
IPRX								
								Factory Reset

**10. After sale Service and Warranty.** 

#### 11. How to use VLC

Step1: Make sure the Transmitter and PC are in the same domain. (Refer to 5.1.1)

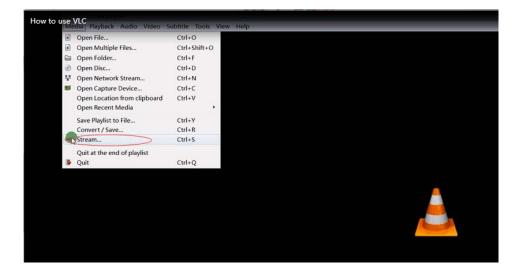
Step2: Connect the HDMI Source without HDCP with the transmitter and power on the device.

Step3: Connect the transmitter to the PC.

Step4: Check the Multicast Group on the web (refer to 5.1.3).

Step5: Open the VLC media Player, click "Stream"> "Network", Input "UDP: //@ 239.255.42.42 :5004"

✓ Note ※ 239.255.42.42 (Multicast Group) 5004 (Port)



		(			
File File	Ø Disc	Network	S Capture De	evice	
Network	Protocol				
Please	enter a net	work URL:			
udp://@	239. 255. 42.	42:5004			•
rtp:// mms:// rtsp:/	0:1234 mms.examples. /server.examp	.com/stream.avi .com/stream.asx ple.org:8080/tes e.com/watch?v=gg			
Show nor	e options		_	Car	

Step 6: Click "Next".

	edia sources to stream
your pri You shou	ard will allow you to stream or convert your media for use locally, on vate network, or on the Internet. Id start by checking that source matches what you want your input to be press the "Next" button to continue.
Source:	udp://239.255.42.42:5004

Step 7: Choose "RTP / MPEC Transport Strcan".

Add destinations following the streaming methods you need. Be sure to check with transcoding that the format is compatible with the method used.	€		
with transcoding that the format is compatible with the method used.	•		
with transcoding that the format is compatible with the method used.	fi:		
with transcoding that the format is compatible with the method used.			
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	with transcoding that the format	is compatible with the method u	ised.
		(man)	• Add
	lev destination		Add
Display locally HTTP	Display locally		
		MS-WMSP (MMSH)	
HO TROI (HROII)		RTSP	
RTSP		DTD / HERC	
		MIP / IPEG Ansport Stream	

Step 8: Click "Next".

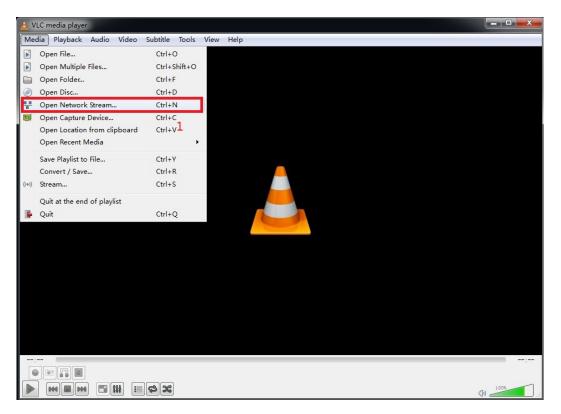
Stream Output		2 ×
ranscoding Options Select and choose transcodir	ng options	
🗹 Activate Transcoding		
Profile	Video - H. 264 + MP3 (MP4)	
	Back	Cancel
	· · · · · · · · · · · · · · · · · · ·	

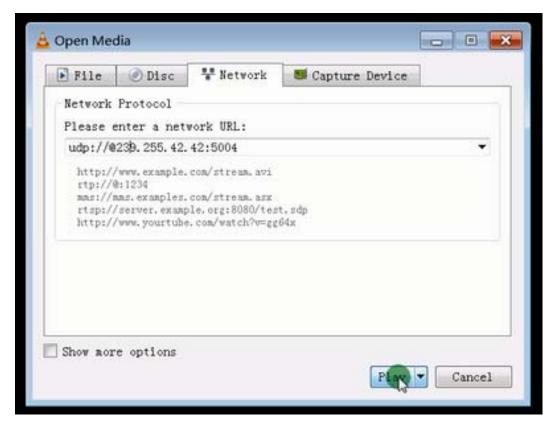
Step 9: Click "Stream".

ream Output	-9-
ion Setup et up any additional options for streaming	
Miscellaneous Options	
Stream all elementary streams	
Generated stream output string	
:sout=#transcode[vcodec=h/ <mark>好石录像专家 未注册</mark> 8, channels=: :sout-keep	2, samplerate=44100}
Back	Rrean Cance
Paals	Trean Cano

**Operating Instructions** 

Step 10: Click "Open Network Stream", then you can click "Play" to view the video.





#### WARRANTY

If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor") will, for the length of the period indicated as below, **(Parts(2)Year, Labor(90) Days)** which starts with the date of original purchase ("Limited Warranty period"), at its option either(a) repair your product with new or refurbished parts, or (b) replace it with a new of a refurbished product. The decision to repair or replace will be made by the warrantor.

During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the

original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

#### MAIL-IN SERVICE

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

#### LIMITED WARRANTY LIMITS AND EXCLUSIONS

(a)This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage.

The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment,

or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling,

misapplication, alteration, faulty installation, set-up adjustments,

misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Server, or damage that is attributable to acts of God.

(b)THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRNTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable,

travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)

(c)PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.