

# Network Media Encoder

# User Manual

**(v2.1)**

## Chapter 1: Getting Start Guide

### About This Guide

This Guide gives step-by-step instructions for setting up encoders and relative Warranty, Safety, Regulatory, and Environment Notice. Please note that the model you have purchased may appear slightly different from those shown in the illustrations.

### Step 1 Unpack the equipment package

Open the shipping carton and carefully unpack its content. Please check the following packing list

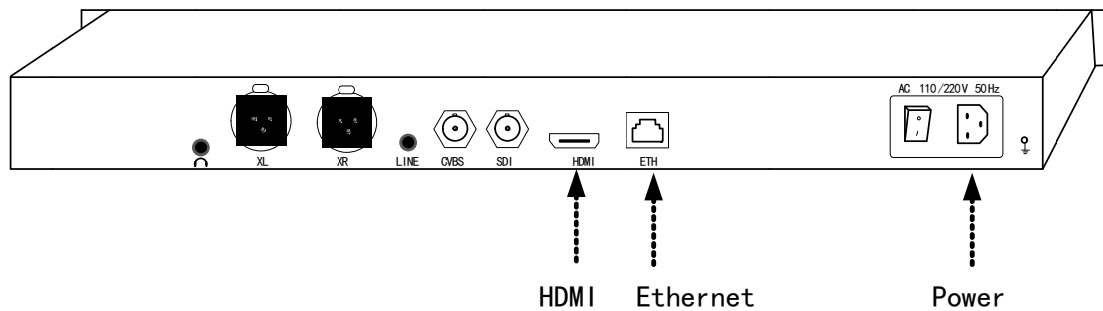
1. One Aura Network Media Encoder
2. Power Cord

### Step 2 Installation the equipment

For safe encoder installation and operation, it is recommended that you:

- Visual inspect the power cord to see that it is secured fully to the AC power connector
- Make sure that there is proper heat dissipation and adequate ventilation around the encoder
- Do not place heavy objects on the encoder

#### 1. Connecting Cables and Power Cord



- 1). Connecting the Ethernet cable
- 2). Connecting the HDMI cable
- 3). Connecting the power cord

#### 2. Power ON

Turning on the switch, and waiting about 1 minute. IF the login light becoming green, the equipment is starting finished

### Step 3 Setting the IP address by front panel

1. Pressing the Confirm/Enter button about 3 milliseconds, the LCD display will show the setting menu.

[1]:IP Address State      <-

[2]:IP Address Config

2. Selecting the “IP Address Config” menu, and pressing the Confirm/Enter button to enter the IP address configuration sub menu.

```
[1]:IP Address State  
[2]:IP Address Config <-
```

Selecting the “Manual Set IP address” and confirm

```
[2.1]:Auto IP Get  
[2.2]:Manual IP Set <-
```

```
[2.2.1]:IP ADDR: 192.168.001.011 <-  
[2.2.2]:NETMASK: 255.255.255.000
```

Pressing the Confirm/Enter button entering the edit mode, and next edit the IP address

```
[2.2.1]:IP ADDR: 192.168.001.01█ <-  
[2.2.2]:NETMASK: 255.255.255.000
```

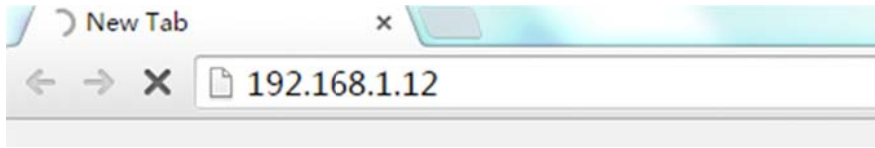
After edit finished, pressing the Confirm/Enter button to active the change

Use the same way to edit the net mask and the gateway

```
[2.2.3]:GATEWAY: 192.168.001.00█ <-  
[2.2.1]:IP ADDR: 192.168.001.012
```

### Step 4 Setting encoder parameter by equipment web

In the internet explorer address field, Input the IP address of the equipment, which last step configured



The internet explorer will pop up a login dialog box. The user name is “admin” and the default password is “admin”.



If username and password are both correct, the web page will be shown like following

Serial No. vx3f43758d2  
Mac 00:4F:E2:69:51:CE

## Network Media Encoder

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### Equipment Status

Source Status			
Video		Audio	
Interface	HDMI	Interface	HDMI
Active	Yes	Active	Yes
Picture Resolution	1920x1080i/50	Sample Frequency (Hz)	48000

Encoding Status			
Video Encode 0	Yes	Video Encode 2	Yes
Video Encode 1	Yes	Video Encode 3	Yes
		Audio Encode	Yes

System Status			
DHCP Mode	Disable	Network Submask	255.255.255.0
Local IP Address	192.168.1.12	Default Gateway	192.168.1.1

Hardware Version	v0.2.1	Software Version	v0.5
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1. Click the “Encoder” on the left bar  
Select the video interface and audio interface to HDMI

## Network Media Encoder

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Encoder Configuration

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Video Interface	HDMI	Audio Interface	HDMI
		Audio Bitrate	64 kbps

Encoder	Video Enable	Video Std	Video Bitrate	Audio Enable
Enc0	Yes	H264	2000 kbps	Yes
Enc1	Yes	H264	3000 kbps	Yes
Enc2	Yes	H264	2500 kbps	Yes
Enc3	Yes	H264	2000 kbps	Yes

Advanced Configure >>

OK Cancel

2. Click the Status” on the left bar, and Click the “Misc Status” on the submenu

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Equipment Status

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Source Status			
Video		Audio	
Interface	Active	Interface	Active
HDMI	Yes	HDMI	Yes
Picture Resolution	1920x1080i/50	Sample Frequency (Hz)	48000

Encoding Status			
Video Encode 0	Yes	Video Encode 2	Yes
Video Encode 1	Yes	Video Encode 3	Yes
		Audio Encode	Yes

System Status			
DHCP Mode	Disable	Network Submask	255.255.255.0
Local IP Address	192.168.1.12	Default Gateway	192.168.1.1
Hardware Version	v0.2.1	Software Version	v0.5

Check the interface status. IF both video and audio interface “Active” is “Yes”, the encoder is working normally.

### Step 5 Using VLC player view the stream output from encoder

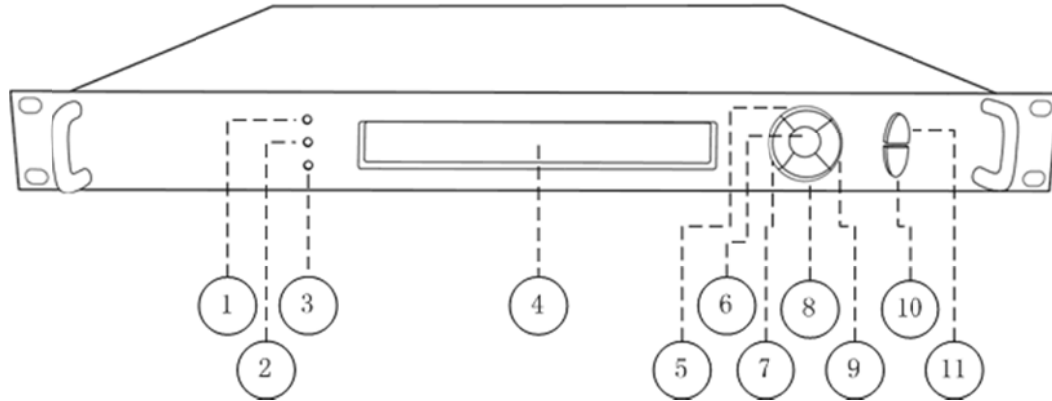
1. Open VLC player, click the “Media” on the menu bar and click the “Open Network Stream” on the submenu
2. In the URL field, input the stream URL (for example `http://192.168.1.12:8010/enc0`)



Now player will show the real time video which is streaming out from the encoder.

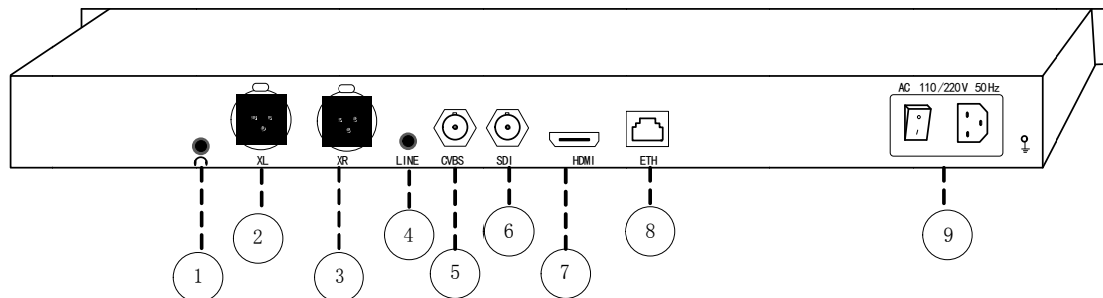
## Chapter 2: Equipment Structure

### 1. Front



1	Equipment power LED indicator	2	Equipment system login LED indicator
3	Equipment running status LED indicator	4	LCD display
5	Navigator UP button	6	Confirm/Enter button
7	Navigator LEFT button	8	Navigator DOWN button
9	Navigator RIGHT button	10	Confirm/Enter button
11	Cancel/Escape button		

### 2. Back



1	Real time talking port	2	XL audio input port
3	XR audio input port	4	Analog audio input port (3.5mm)
5	CVBS video input port	6	SDI input port
7	HDMI input port	8	10/100/1000M Ethernet port
9	Power switch		

If you want to use the Real time talking function, Please contact us.





[1]:IP Address State <-  
[2]:IP Address Config

there are 3 option in the primary menu:

1	IP Address State	inspect the equipment IP, net mask, gateway and dhcp mode
2	IP Address Config	configuration the equipment IP, net mask, gateway
3	Factory Default	reset the equipment to preset state, and the equipment will auto restart

#### IP Address State

[1.1]:DHCP: OFF  
[1.2]:IP ADDR: 192.168.1.12

1	DHCP	ON: IP address is auto get by DHCP; OFF: IP address is manual configured
2	IP ADDR	IP address of the equipment
3	NETMASK	net sub mask of the equipment
4	GATEWAY	default gateway of the equipment

#### IP Address Config

[2.1]:Auto IP Get <-  
[2.2]:Manual IP Set

1	Auto IP Get	Set the equipment IP automatic by DHCP. If press the confirm/enter key, the DHCP mode is enabled.
2	Manual IP Set	Set the equipment IP, net mask, gateway by user. Press the confirm/enter key, into the IP details submenu

[2.2.1]: IP ADDR: 192.168.001.01 ←  
 [2.2.2]: NETMASK: 255.255.255.000

1	IP ADDR	Set the IP address of the equipment
2	NETMASK	Set the net sub mask of the equipment
3	GATEWAY	Set the default gateway of the equipment

-- Press the confirm/enter key into edit mode.

-- Use left and right key to move the cursor to the character which you want change.

-- Use up and down navigator key to change the value.

-- Press the confirm/enter key to active the changes

#### *Factory Default*

[3.1]: Cancel ←  
 [3.2]: Confirm

1	Cancel	Discard reset all parameters
2	Confirm	Active the reset process, if cursor selected and press the confirm/enter key

If active the reset process, the equipment will auto restart, and all parameters will be reset to the factory preset.

## Chapter 4: Equipment Web Control

For compatible reason, the following internet explorers are recommended.

1	Microsoft IE 6.0 or above
2	Google Chrome
3	Mozilla Firefox
4	Opera

Users visit the web control pages need username and password. The factory default user name is “admin” and password is “admin”

Web control pages include several areas

**Network Media Encoder** Serial No. vxsf43758d2  
Mac 00:4F:E2:69:51:CE

**Equipment Status**

Source Status			
Video		Audio	
Interface	HDMI	Interface	HDMI
Active	Yes	Active	Yes
Picture Resolution	1920x1080i/50	Sample Frequency (Hz)	48000

Encoding Status			
Video Encode 0	Yes	Video Encode 2	Yes
Video Encode 1	Yes	Video Encode 3	Yes
		Audio Encode	Yes

System Status			
DHCP Mode	Disable	Network Submask	255.255.255.0
Local IP Address	192.168.1.12	Default Gateway	192.168.1.1

Hardware Version	v0.2.1	Software Version	v0.5
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- [MISC](#)
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In the Navigation Area, there are 6 menus.

1	Status	Provide the many of the equipment’s status and information
2	Encoder	Used to set the encoding parameters, like AV interface, bit rate, etc
3	Stream	Used to set the push stream parameters, like push protocol, targets, etc
4	System	Used to set the equipments system parameter, like IP, web control password, etc.
5	Preview	Used to preview input video
6	Update	Used to upgrade the equipment’s firmware

## 1. Status

Status including 3 submenus, “Misc Status” “Push Status” and “Pull Status”

Equipment Status				
* <a href="#">Status</a>	Source Status			
	Video		Audio	
	Interface	HDMI	Interface	HDMI
	Active	Yes	Active	Yes
* <a href="#">Encode</a>	Picture Resolution	1920x1080i/50	Sample Frequency (Hz)	48000
* <a href="#">Stream</a>	Encoding Status			
* <a href="#">System</a>	Video Encode 0	Yes	Video Encode 2	Yes
* <a href="#">Preview</a>	Video Encode 1	Yes	Video Encode 3	Yes
* <a href="#">Update</a>	System Status			
	DHCP Mode	Disable	Network Submask	255.255.255.0
	Local IP Address	192.168.1.12	Default Gateway	192.168.1.1
	Hardware Version	v0.2.1	Software Version	v0.5

Misc status provides audio and video interface status, encoding status, equipment IP status, equipment temperature.

Stream Push Status				
* <a href="#">Status</a>	Targets			
	Encoding	Protocol	Connecting	Target
	Enc0	RTMP	Yes	rtmp://192.168.2.250:1935/OzEa4/livex0

Push status provides the push protocol (UDP, RTP, RTMP PUSH) status, connected or disconnected

Stream Pull Status					
* <a href="#">Status</a>	Service				
	Protocol	Client Count	Service Port	Access Point	
	RTSP	0	554	enc0	
	RTSP	0	554	enc1	
	RTSP	0	554	enc2	
	RTSP	0	554	enc3	
	* <a href="#">Encode</a>	RTMP	0	1935	live/enc0
	* <a href="#">Stream</a>	RTMP	0	1935	live/enc1
	* <a href="#">System</a>	RTMP	0	1935	live/enc2
	* <a href="#">Preview</a>	RTMP	0	1935	live/enc3
	* <a href="#">Update</a>	HTTP-TS	0	8010	enc0
		HTTP-TS	0	8010	enc1
		HTTP-TS	0	8010	enc2
		HTTP-TS	0	8010	enc3
		HTTP-FLV	0	8020	enc0
		HTTP-FLV	0	8020	enc1
	HTTP-FLV	0	8020	enc2	
	HTTP-FLV	0	8020	enc3	
	HLS	0	8030	enc0.m3u8	
	HLS	0	8030	enc1.m3u8	

Pull status provides the pull protocols access information and client counts status. Each pull protocol of each channel can serve maximum 4 clients.

## 2. Encoder

**Network Media Encoder**

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**Encoder Configuration**

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Video Interface	HDMI	Audio Interface	HDMI
Audio Bitrate		64	kbps

Encoder	Video Enable	Video Std	Video Bitrate	Audio Enable
Enc0	Yes	H264	2000 kbps	Yes
Enc1	Yes	H264	3000 kbps	Yes
Enc2	Yes	H264	2500 kbps	Yes
Enc3	Yes	H264	2000 kbps	Yes

Advanced Configure >

OK Cancel

There are 3 buttons on the encoder page.

-- Advanced Configure: Open or close the advanced encoding parameters.

-- OK: Active the parameter changes

-- Cancel: Discard the parameter changes

This equipment provide 4 video bitrate output, though the advanced configure buttons can set more parameters.

## 3. Stream

**Network Media Encoder**

Serial No. vx3f43758d2  
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**Push Stream Configuration**

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Target			
Encoding	0	Protocol	TSUDP
Address		Port	
App Name	N/A	Stream Name	N/A
Username		RTMP Authen	Disable
Password		Add Target	

Encoding	Protocol	Address	Port	App	stream	Auth	Delete
0	RTMP	192.168.2.250	1935	OzEa4	livex0		Del

OK Cancel

Add the push protocol for the stream. This equipment provide 3 push protocols (UDP TS, RTP TS, RTMP PUSH). Select Encoding, It has 0123 four parameters, representing 4 bit rate video stream. Each protocol can add maximum 4 targets.

-- Select the Encoding Number

-- Select the protocol

-- Fill the Target IP Add, Target Port, Target Application, and Target Stream Name. (Target Application and Stream Name is only available by RTMP)

-- Click ADD button on the right to add this target

-- Click Del on right of the added target to delete this target, if you do not need this target any more

-- Click OK to active all of the changes, or click Cancel if you want to discard the changes

## 4. System

**System Configuration**

» [Status](#)

\* [Encode](#)

\* [Stream](#)

\* **System**

\* [Preview](#)

\* [Update](#)

Equipment Address					
IP address	192.168.1.12	IP submask	255.255.255.0	Gate way	192.168.1.1
DHCP	Disable				
<input type="button" value="OK"/>			<input type="button" value="Cancel"/>		

<input type="button" value="Reboot System"/>	<input type="button" value="Parameter Rese"/>	<input type="button" value="Set DNS&gt;&gt;"/>	<input type="button" value="Change Password&gt;&gt;"/>
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In the System content, users can change the equipment IP, web control password, and reboot equipment, reset all parameters.

reboot equipment and reset parameter will cause the equipment auto restart

## 5. Preview

**Network Media Encoder**

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**Video Preview**

» [Status](#)

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\* [System](#)

\* **Preview**

\* [Update](#)



rtmp://192.168.1.12:1935/live/enc0

enc0
enc1
enc2
enc3

### Emit infrared code

- Insert the IR emitter cable in to the correspond channel
- Make sure the Study Mode filed is unchecked
- Press the button which you want to emit
- If success, pop out “OK”.
- If pop out “Key is not study”, this key code is not learned, and need learn the infrared code first

## 6. Update

### Equipment Update

Update Packet	<input type="button" value="选择文件"/> 未选择文件	<input type="button" value="Update"/> <input type="button" value="Reset"/>
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Click the “Choose” to select the firmware package which Aura provided, and Click “Update”. If success, the web page will show “File upload success”, and the equipment will auto restart. If Failed, the web page will show “File upload Failed”, and users need to double check the firmware package just selected is from Aura and suitable for this equipment.