Manuals+ — User Manuals Simplified.

Lumens
OIP-D40E AVoIP
Decoder

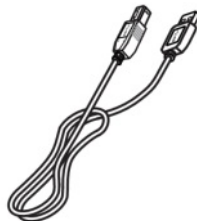# LUMENS OIP-D40E AVoIP Decoder User Manual

LUMENS OIP-D40E AVoIP Decoder

Important

To download the latest version of Quick Start Guide, multilingual user manual, software, or driver, etc., please visit Lumens **https://www.MyLumens.com/support**
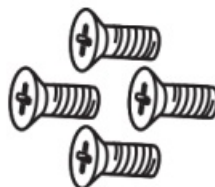
Package Contents

Encoder/Decoder

USB 2.0 cable (1.8 M)
(Type A Type C)

Locking metal plate (x2)


M3 metal plate screw (4x4)

Product Installation

I/O Interface

OIP-N40E

HDMI Input	HDMI Output	Audio In	Ethernet

HDMI IN   HDMI OUT   AUDIO IN   AUDIO OUT   NDI|HX

Audio Out

Tally Light	USB3.0 Type C

TYPE-C   POWER   STATUS   MENU

OIP-N60D

HDMI Output	Audio In	Ethernet

HDMI OUT   AUDIO IN   AUDIO OUT   ETHERNET

Audio Out

| USB3.0 Type C	USB3.0 Type A

TYPE-C   USB   POWER   STATUS   MENU
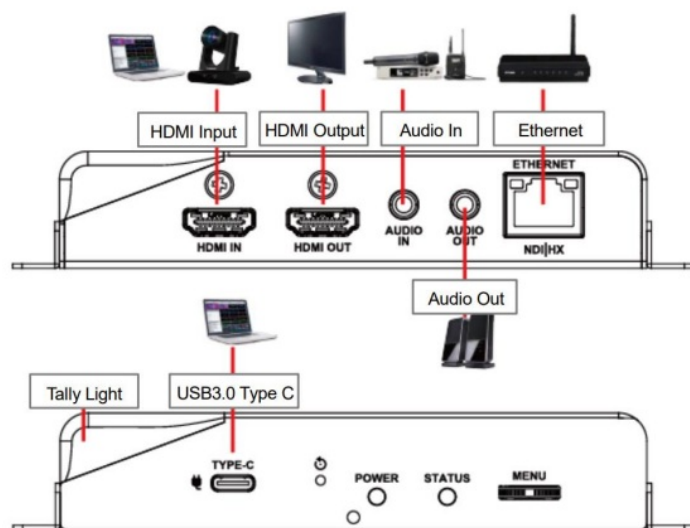
Note USB-C cables are recommended to have a transmission speed specification of 10Gbps or higher
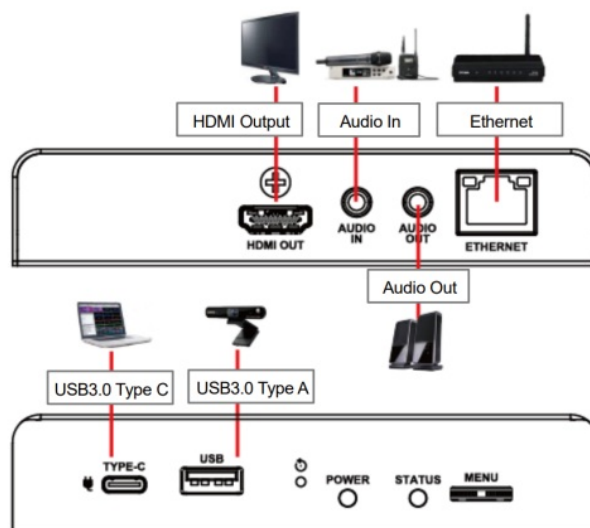
## Product Installation

- Using the accessory metal plates

1. Lock the accessory metal plate with screws (M3 x 4) to the lock holes on both sides of the encoder/decoder
2. Install the metal plate and encoder on the table or cabinet according to the spatial area
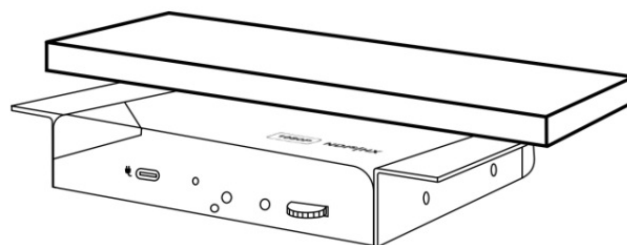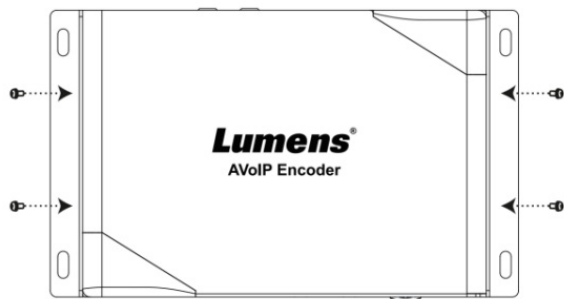
Use tripod
The camera can be mounted on a 1/4"-20 UNC PTZ tripod deck by using the lock holes on the side for the tripod of encoder
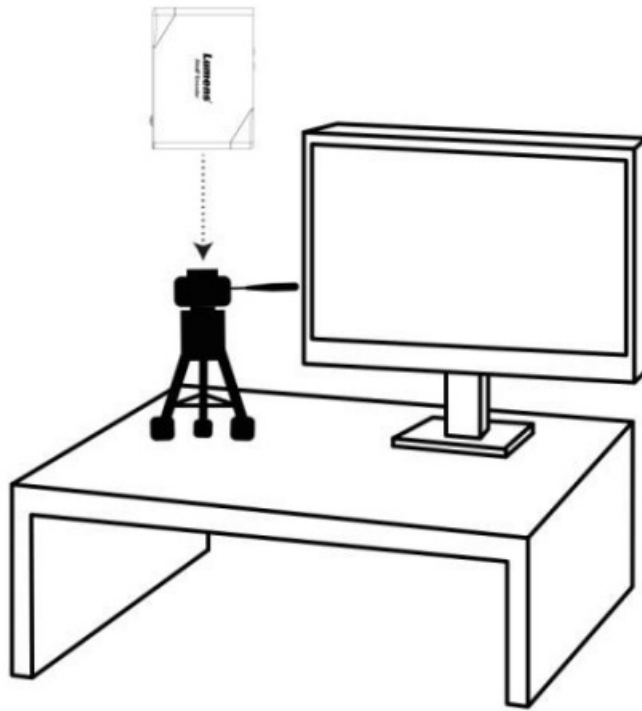
Description of Indicator Display

Power Status	Tally Status	Power	Standby	Tally
Startup in progress (initialization)	–	Red light	–	Flickering Red/Green light
In use	Signal	Red light	Greenlight	–
	No Signal			–
	Preview			Greenlight
	Program			Red light

Product Operation

Operate through the body button
Connect the HDMI OUT to the display, press the Menu dial to enter the OSD menu. Through the Menu, dial to navigate the menu and adjust the parameters

- Rotate: Adjust parameters and Navigate in the menu
- Press: Enter/ Confirm
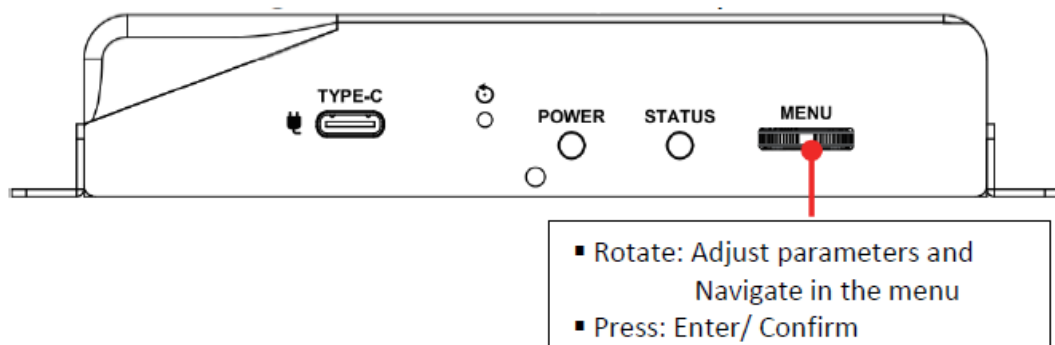
Operate via webpages

Confirm the IP address
Refer to 3.1 Operate through the body button, confirm the IP address in Status (If the encoder is directly

connected to the computer, the default IP is 192.168.100.100. You need to manually set the computer's IP address in the same network segment.)

Encode	Input	Network	Status

IP Address : 192.168.4.147
Netmask : 255.255.255.0
Gateway : 192.168.4.254
MAC ID : dc:e2:ac:03:50:3
HDMI Output :
FW Version : 0IA0.00k

Exit

Open the browser and input the IP address, e.g. 192.168.4.147, to access the login interface.

C ⌂ 🌐 192.168.4.147

Please enter the account/password to log in

■ Account：admin

■ Password：9999

Product Application and Connection

HDMI Signal Source Transmission Network (For OIP-N40E)
OIP-N40E can transmit HDMI signal source to IP devices

Connection Method

- Connect the signal source device to the encoder's HDMI or USB-C input port using HDMI or USB-C monitor transmission cable
- Connect the encoder and computer to the network switch using network cable
- Connect the encoder HDMI OUT to the display using HDMI cable
- Connect the HDMI signal source to the encoder HDMI IN, which can capture and synchronize the signal source to the display (Pass-through)

HDMI Type-C

Cat 6 Network Cat 6 Lumens HDMI

OIP-N40E Display
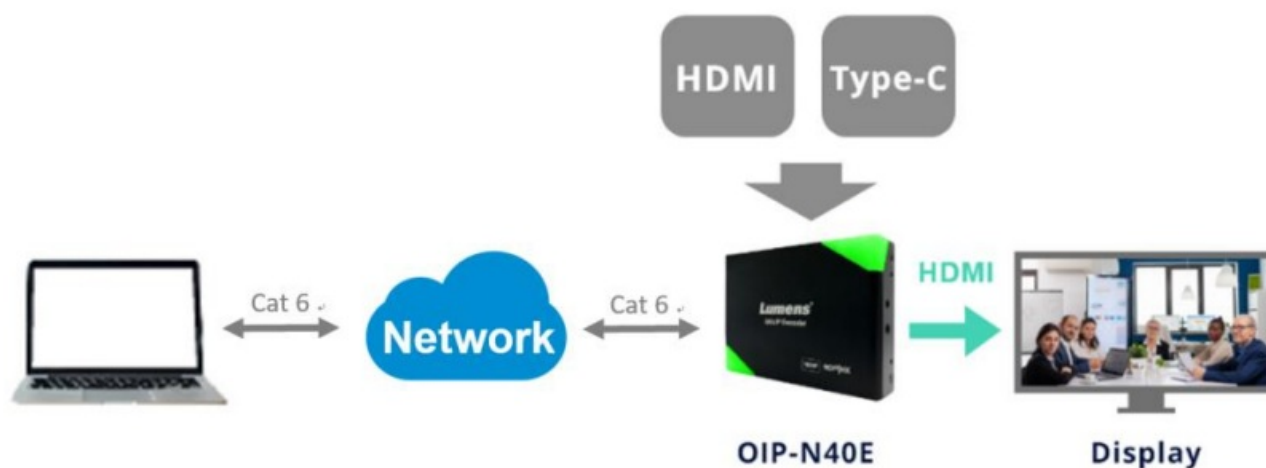
- Webpage Settings [Stream] > [Source] to select the output signal > [Stream Type] > [Apply]
- Streaming Output Open streaming media platforms such as VLC, OBS, NDI Studio Monitor, etc., for streaming output

Virtual USB Network Camera (For OIP-N60D)
OIP-N60D can convert IP signal source into USB (UVC) for seamless integration with video conferencing platforms.

1. Connection Method
   - Connect the decoder to LAN
   - Connect the computer to the decoder using USB-C 3.0 cable
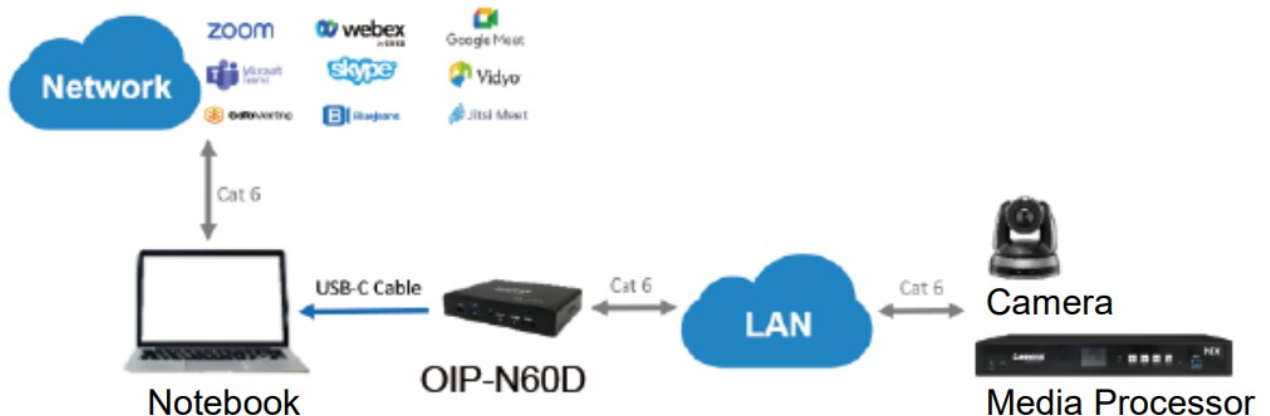
2. Webpage Settings
   - [System] > [Output], open Virtual USB Setting
   - [Source] > [Search new Source] > Select the desired output device > Click [Play] to output device signal source
3. USB Camera Screen Output
   - Launch a video software like Skype, Zoom, Microsoft Teams, or other similar software
   - Choose the video source, to output USB network camera images

NOTE
Source Name: Lumens OIP-N60D Decoder

USB Network Camera Extension (OIP-N40E/OIP-N60D required)
When used with the OIP-N encoder and decoder, it can extend the range of USB cameras through the network to improve installation flexibility.

Connection Method

- Connect the OIP-N encoder/decoder to the local network
- Connect the USB camera to the decoder using USB-A cable
- Connect the monitor to the decoder using HDMI cable
- Connect the computer to the encoder using USB-C monitor transmission cable
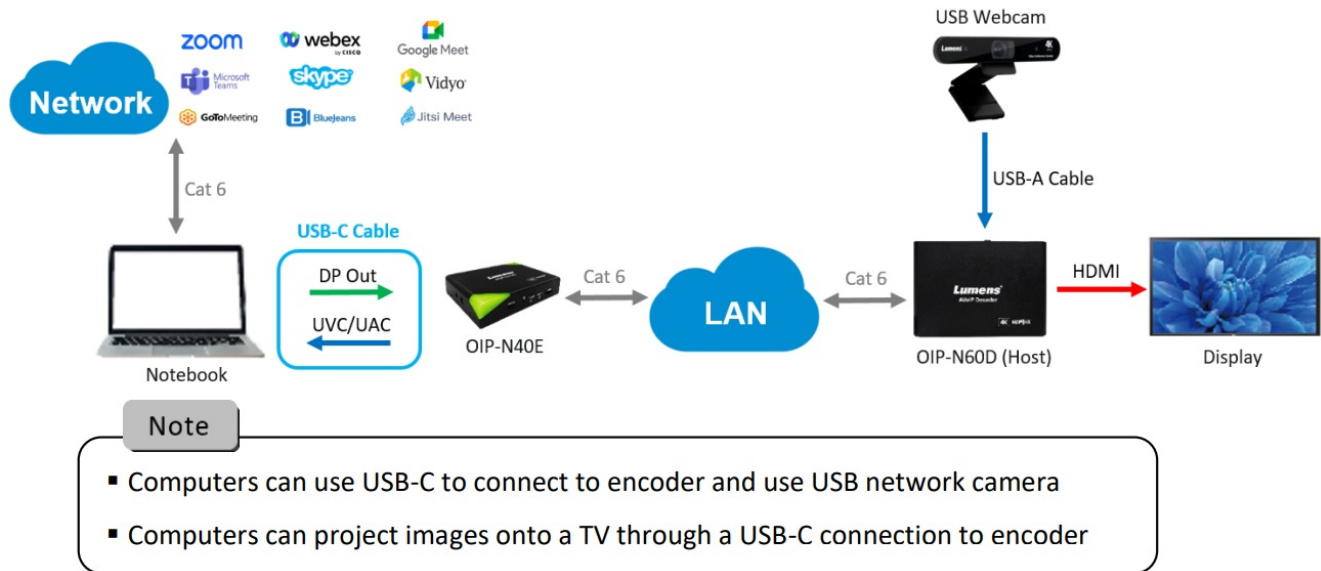
OIP-N60D Webpage Settings
[System] > [Output], open USB Extender

OIP-N40E Webpage Settings

- [System] > [Output] > Extender Source List
- [Search new Source] > Click [Available] to select the OIP-N60D decoder > Connection displays Connected

USB Camera Screen Output

- Launch a video software like Skype, Zoom, Microsoft Teams, or other similar software
- Choose the video source, to output USB camera images

NOTE
Source Name: Select according to the USB Camera ID

Setting Menu

Through body button [Menu] to enter the setting menu; the bold underlined values in the following table are defaults.

OIP-N40E

1st Level Major Items	2nd Level Minor Items	3rd Level Adjustment Values	Function Descriptions
Encode	Stream Type	**NDI**/ SRT/ RTMP/ RTMPS/ HLS/ MPEG-TS over UDP/ RTSP	Select the stream type
Input	HDMI-in From	**HDMI**/ USB	Select the HDMI-in source
Network	IP Mode	Static/ **DHCP**/ Auto	Dynamic Host Configuration
	IP Address	**192.168.100.100**	
	Subnet mask (Netmask)	**255.255.255.0**	Configurable when set to *Static*
	Gateway	**192.168.100.254**	
Status	**–**	–	Display the current machine status

OIP-N60D

1st Level Major Items	2nd Level Minor Items	3rd Level Adjustment Values	Function Descriptions
Source	Source List	–	Display the signal source list
	Blank Screen	–	Display black screen
	Scan	–	Update the signal source list
Output	HDMI Audio From	**Off**/ AUX/ HDMI	Select the HDMI audio source
	Audio Out From	**Off**/ AUX/ HDMI	Select where audio outputs
	HDMI Output	By Pass **Native EDID** 4K@60/ 59.94/ 50/ 30/ 29.97/ 25 1080p@60/ 59.94/ 50/ 30/ 29.97/ 25 720p@60/ 59.94/ 50/ 30/ 29.97/ 25	Select the HDMI output resolution
Network	IP Mode	Static/ **DHCP**/ Auto	Dynamic Host Configuration
	IP Address	**192.168.100.200**	Configurable when set to *Static*
	Subnet mask (Netmask)	**255.255.255.0**	
	Gateway	**192.168.100.254**	
Status			Display the current machine status

Webpage Interface

Connecting to Internet
Two common connection methods are shown below

1. Connecting via switch or router

Network cable   Network cable

Encoder/Decoder   Switch or router   Computer

2. To connect directly through network cable, the IP address of the keyboard/computer should be changed and set as the same network segment
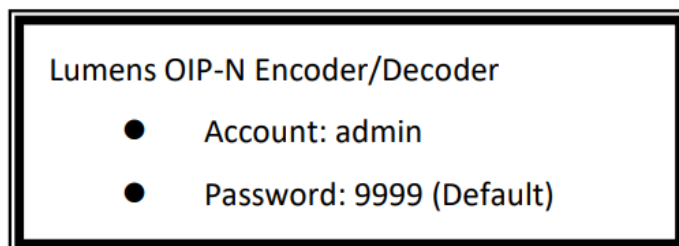
Network cable

Encoder/Decoder   Computer

Log in to the webpage

1. Open the browser, and enter the URL of OIP-N in the IP address bar E.g.: http://192.168.4.147

2. Enter the administrator's account and password

NOTE
For first-time login, please refer to 6.1.10 System- User to change the default password.

Lumens OIP-N Encoder/Decoder

● Account: admin

● Password: 9999 (Default)

Webpage Menu Description

Dashboard

Function Descriptions
Display encoder/decoder output/input, encoding/decoding, and system-related information

Stream (Applicable to OIP-N40E)

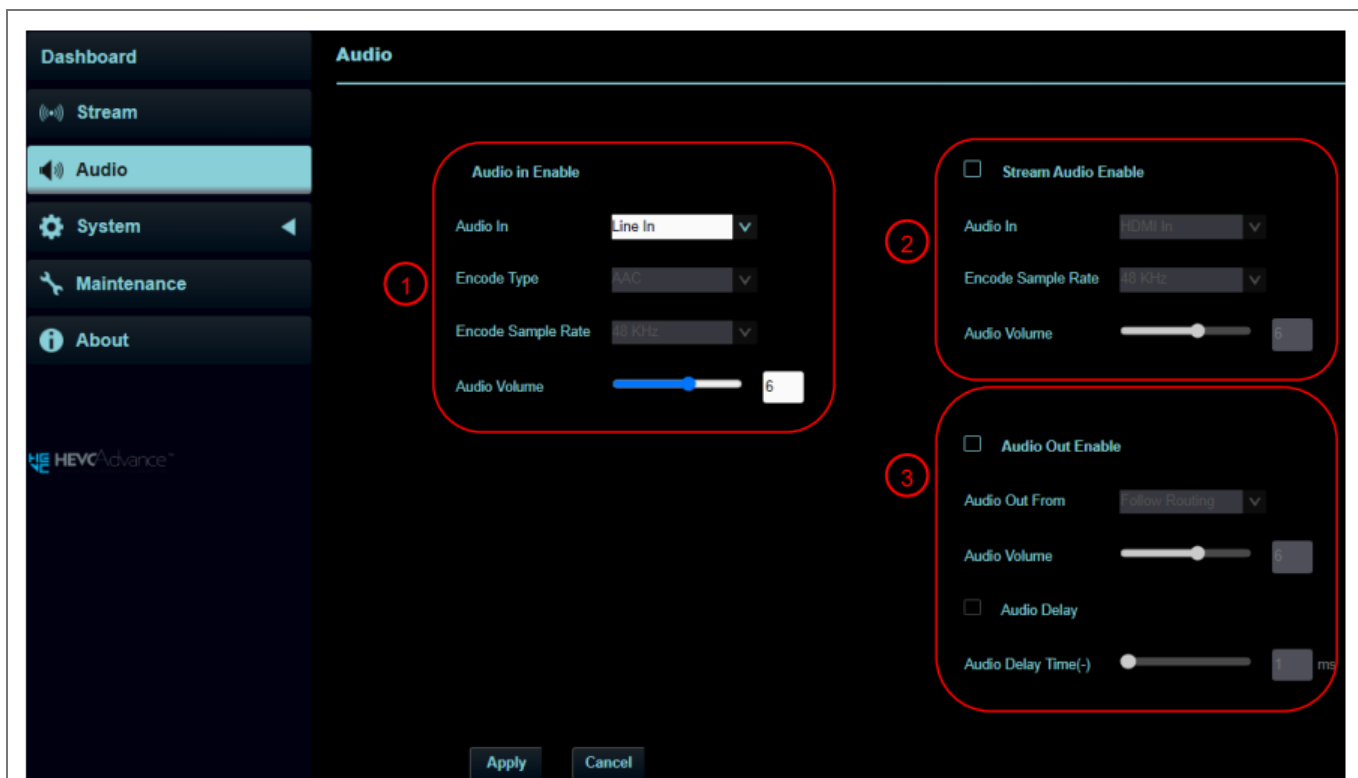| No	Item	Description
1	Source	Choose the signal source
2	Resolution	Set output resolution
3	Frame Rate	Set frame rate
4	IP Ratio	Set IP Ratio
5	Stream Type	Select the stream type and make relevant settings based on the stream type
6	NDI	• Camera ID/Location: Name/Location display according to System Output settings

		§ Group Name: The group name can be modified here and set with Access Manager – Receive in NDI Tool § NDI|HX: HX2/HX3 is supported § Multicast: Enable/Disable Multicast It is suggested to enable Multicast when the number of users online watching the live image simultaneously is more than 4 § Discovery Server: Discovery service. Check to enter the Server IP address
6.1	RTSP/ RTSPS	 § Code (Encode Format): H.264/HEVC § Bit Rate: Setting range 2,000 ~ 20,000 kbps § Rate Control: CBR/VBR § Multicast: Enable/Disable Multicast It is suggested to enable Multicast when the number of users online watching the live image simultaneously is more than 4 § Authentication: Enable/Disable Username/Password Authentication The username/password is the same as the webpage login password, please refer to **6.1.10** **System- User** to add/modify account information

Audio (Applicable to OIP-N40E)
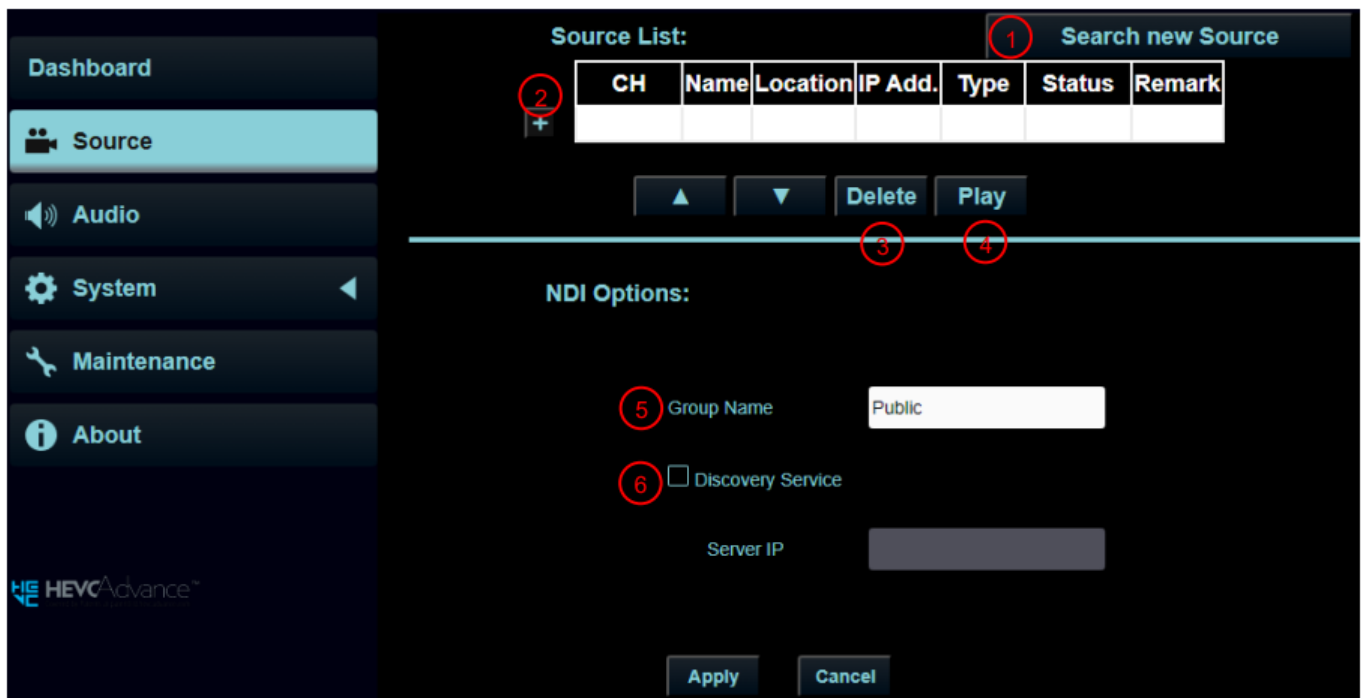
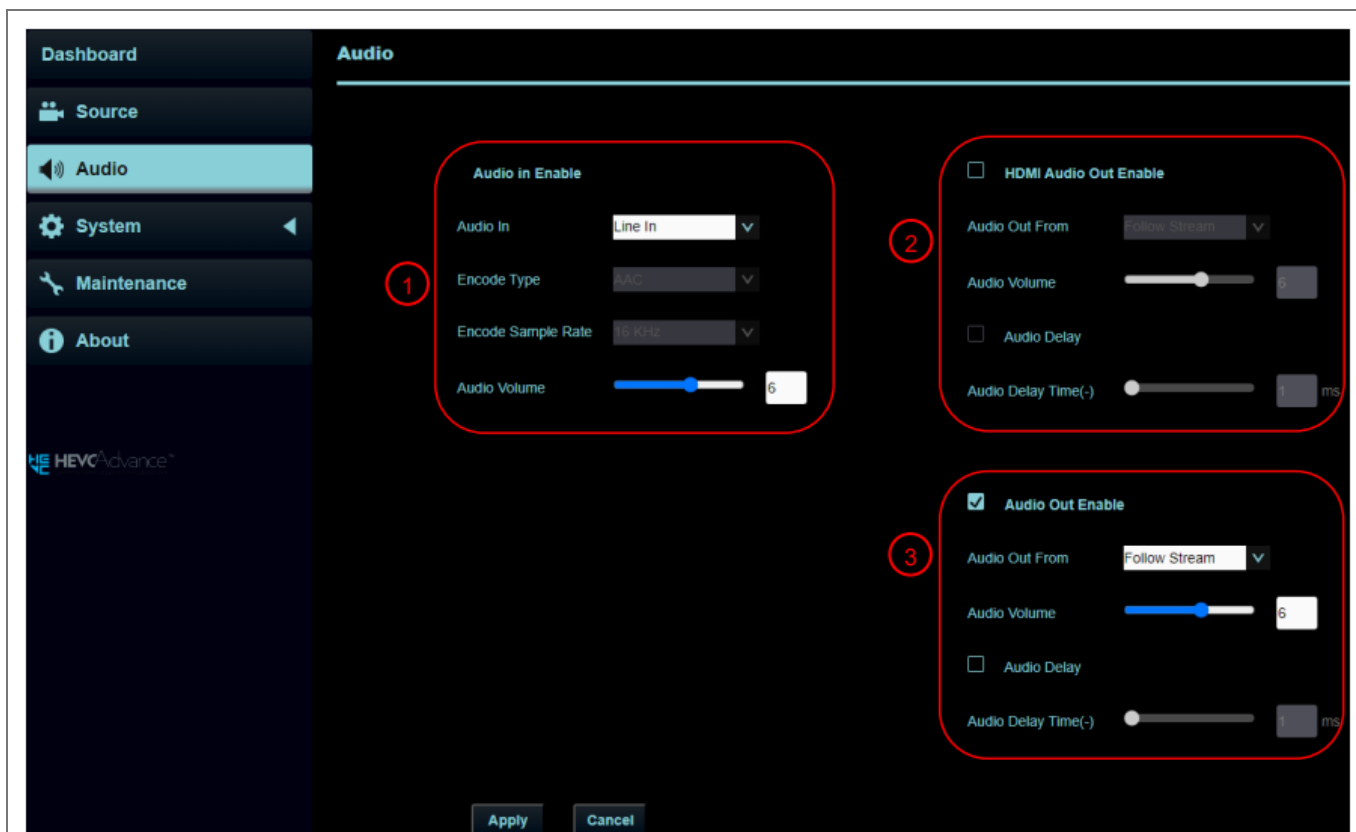| No	Item	Description
1	Search New Source	Click to search for devices in the same network segment and display them in a list
2	+Add	Manual adding device
3	Delete	Check the device, click to delete
4	Play	Check the device, click to play
5	Group Name	The group name can be modified here and set with Access Manager – Receive in NDI Tool
6	Server IP	Discovery service. Check to enter the Server IP address

Audio (Applicable to OIP-N40E)

No	Item	Description
1	Audio In Enable	§ Audio In: Enable/disable audio

No	Item	Description
		§ Encode Type: Encode Type AAC
		§ Encode Sample Rate: Set Encode sample rate
		§ Audio Volume: Volume adjustment
2	Stream Audio Enable	§ Audio In: Enable/disable audio
		§ Encode Sample Rate: Set Encode sample rate
		§ Audio Volume: Volume adjustment
3	Audio Out Enable	§ Audio Out From
		§ Audio Volume: Volume adjustment
		§ Audio Delay: Enable/disable Audio Delay, set the audio delay time (-1 ~ -500 ms) after enabling

Audio (Applicable to OIP-N60D)

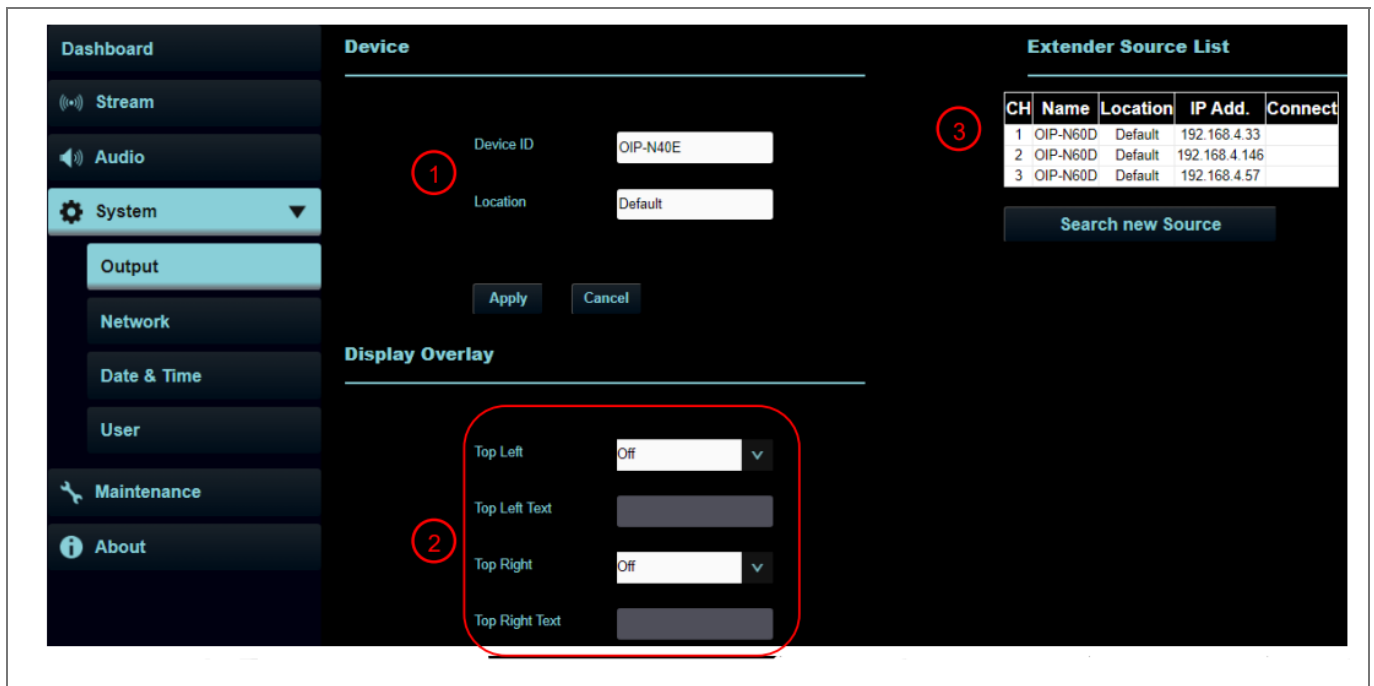| No	Item	Description
1	Audio In Enable	§ Audio In: Enable/disable audio § Encode Type: Encode Type AAC § Encode Sample Rate: Set Encode sample rate § Audio Volume: Volume adjustment
2	HDMI Audio Out Enable	§ Audio Out From: Audio output source § Audio Volume: Volume adjustment § Audio Delay: Enable/disable Audio Delay, set the audio delay time (-1 ~ -500 ms) after enabling
3	Audio Out Enable	§ Audio Out From: Audio output source § Audio Volume: Volume adjustment § Audio Delay: Enable/disable Audio Delay, set the audio delay time (-1 ~ -500 ms) after enabling

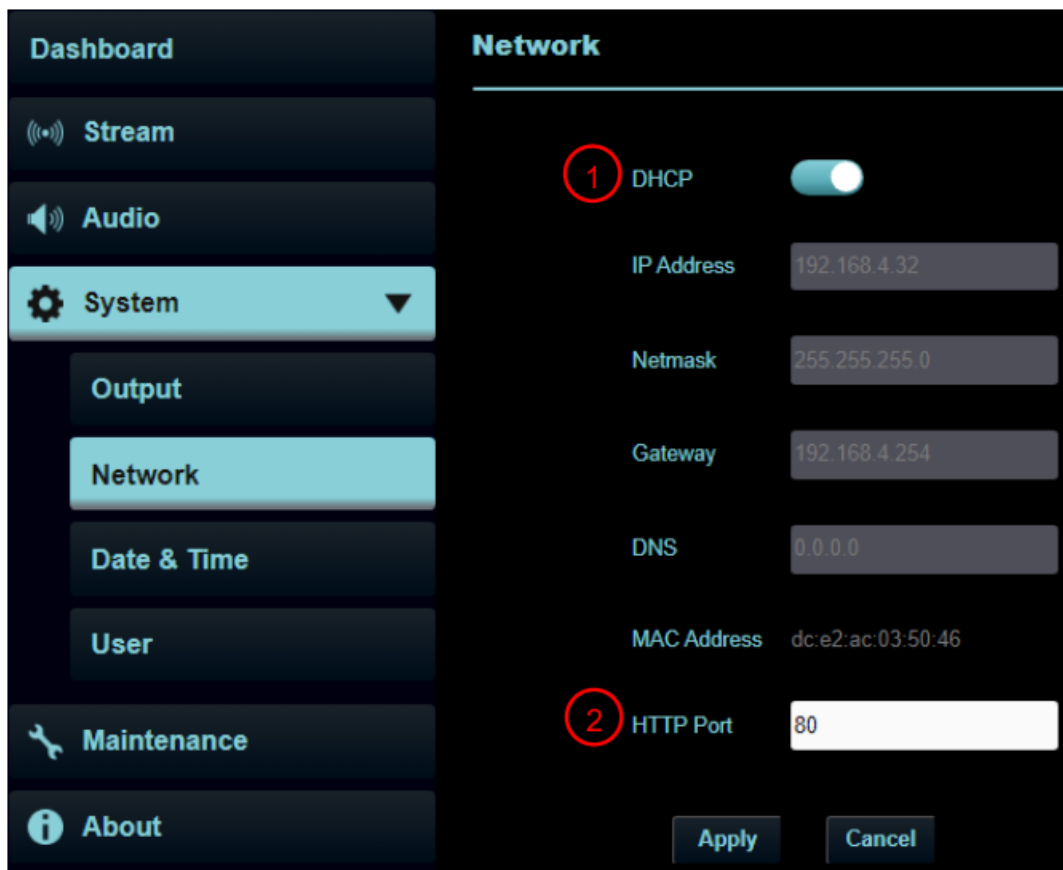**System- Output (Applicable to OIP-N40E)**

No	Item	Description
1	Device ID/ Location	Device Name/Location § The name is limited to 1 – 12 characters § The location is limited to 1 – 11 characters § Please use uppercase and lowercase letters or numbers for characters. Special symbols such as "/" and "space" cannot be used Modifying this field will modify the Onvif device name/location synchronously
2	Display Overlay	Set the stream to display "date and time" or "custom content" and to display location
3	Extender Source List	Display the extendable signal source device

System- Output (Applicable to OIP-N60D)

No	Item	Description
1	Device ID/ Location	Device Name/Location § The name is limited to 1 – 12 characters § The location is limited to 1 – 11 characters § Please use uppercase and lowercase letters or numbers for characters. Special symbols such as "/" and "space" cannot be used Modifying this field will modify the Onvif device name/location synchronously
2	Resolution	Set output resolution
3	HDMI Format	Set HDMI format to YUV422/YUV420/RGB
4	USB Extender	Turn on/off the USB network camera extension
5	Virtual USB output	Turn on/off virtual USB network camera output

System- Network

No	Item	Description
1	DHCP	Ethernet setting for encoder/decoder. Change of setting is available when DHCP

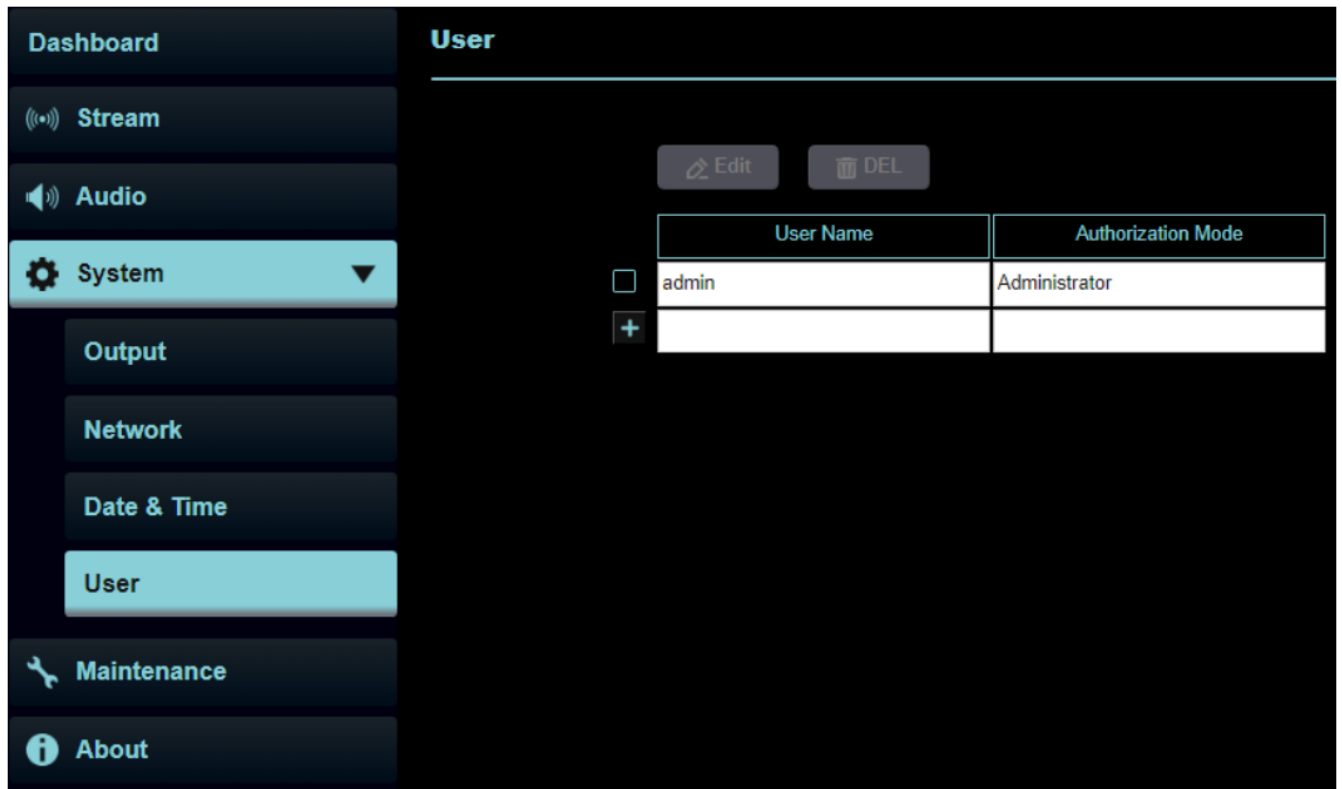|		function is closed
2	HTTP Port	Set HTTP port. The default Port value is 80

System- Date & Time

Function Descriptions
Display the current device/computer date and time, and set the display format and synchronization way
When Manually Set is selected for [Time Settings], Date & Time can be customized

System- User

Dashboard			User

User

	User Name	Authorization Mode
☐	admin	Administrator
+		

Edit   DEL

Navigation:
- Dashboard
- Stream
- Audio
- System ▼
  - Output
  - Network
  - Date & Time
  - User
- Maintenance
- About

Function Descriptions

Add/Modify/Delete user account

n Supporting 4 – 32 characters for username and password

n Please mix uppercase and lowercase letters or numbers for characters. Special symbols or the underlined cannot be used

n Authentication Mode: Set the new account management permissions

User Type	Admin	Viewer	
View	V	V	
Setting/Account management	V	X	

※When Factory Reset is executed, it will clear the user's data

Maintenance
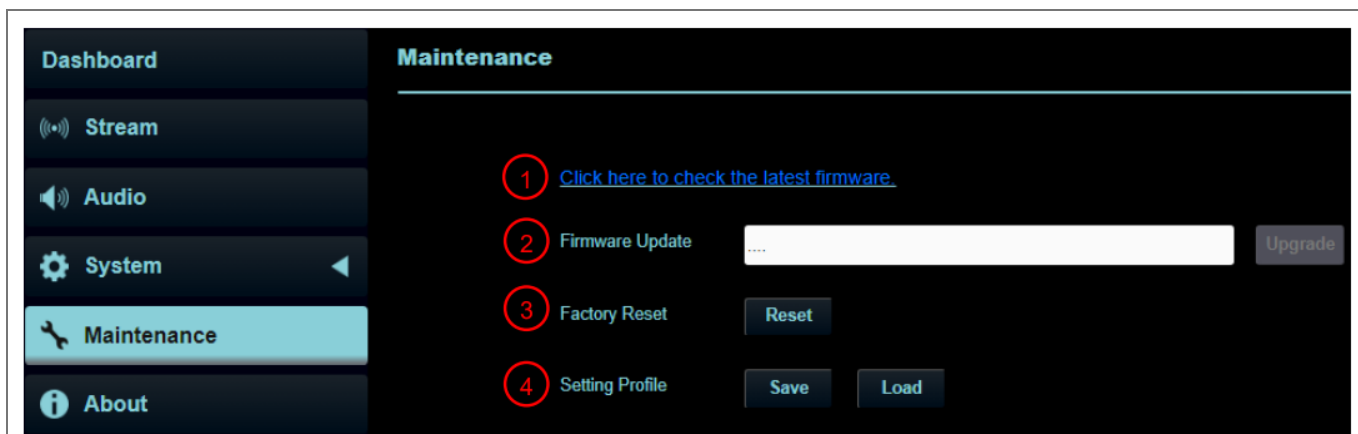
No	Item	Description
1	Firmware link	Click on the link to the Lumens website and enter the model to obtain the latest firmware version information
2	Firmware Update	Select the firmware file, and click [Upgrade] to update the firmware Update takes about 2 – 3 minutes Please do not operate or turn off the power of the device during the update to avoid firmware update failure
3	Factory Reset	Reset all configurations to factory default settings
4	Setting Profile	Save setup parameters, and users can download and upload device setup parameters

About
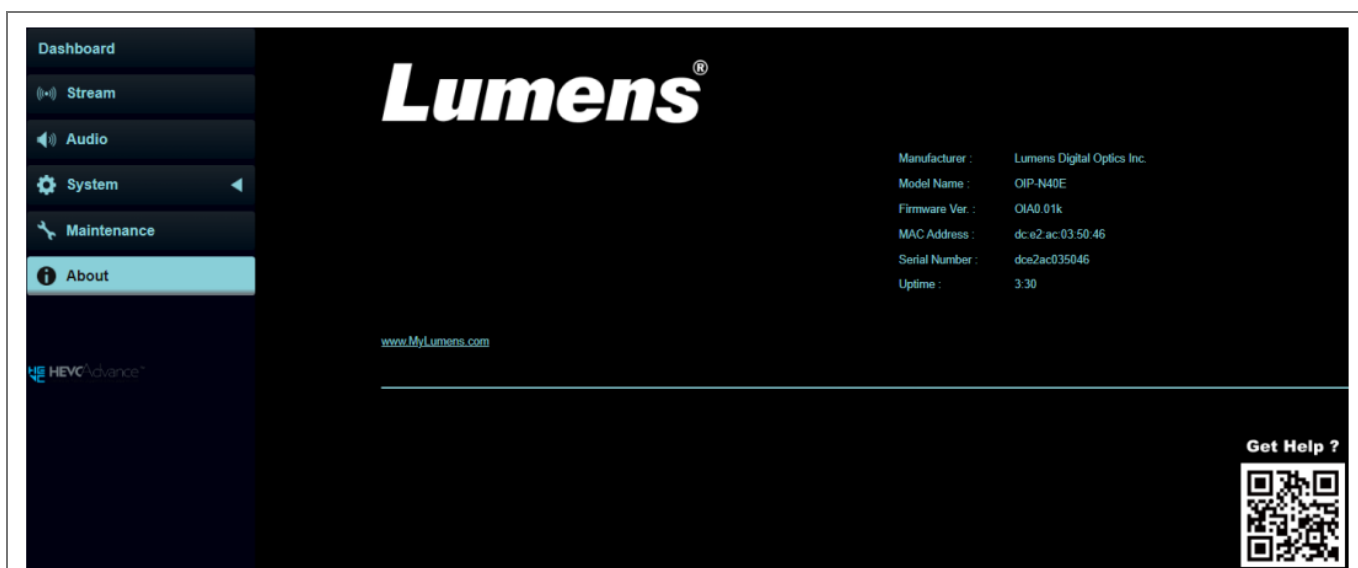
Function Descriptions

Display the firmware version, serial number, and other related information of the encoder/decoder

For technical support, please scan the QR Code at the bottom right for assistance

Troubleshooting

This chapter describes problems you may encounter while using OIP- OIP-N. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurs, please contact your distributor or the service center.

No.	Problems	Solutions
1.	OIP-N40E cannot display the signal source screen	**1.** Confirm that the cables are fully connected. Please refer to **Chapter 4, Product Application and Connection** 2. Confirm that the input signal source resolution is 1080p or 720p 3. Confirm that USB-C cables are recommended to use specifications with a transmission rate of 10Gbps or higher
2.	OIP-N40E webpage USB extender cannot find OIP-N60D on the same network segment	1. Confirm that the OIP-N60D has enabled the USB extender function 2. Confirm that the management switch in the network has disabled the blocking of multicast packets
3.	Recommended specifications for USB-C cables	Transfer rate of 10 Gbps or higher

Safety Instructions

Always follow these safety instructions when setting up and using the product:

Operation

1. Please use the product in the recommended operating environment, away from water or source of heat.
2. Do not place the product on a tilted or unstable trolley, stand, or table.
3. Please clean the dust on the power plug prior to usage. Do not insert the product's power plug into a multiplug to prevent sparks or a fire.
4. Do not block the slots and openings in the case of the product. They provide ventilation and prevent the product from overheating.
5. Do not open or remove covers, otherwise it may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
6. Unplug the product from the wall outlet and refer servicing to licensed service personnel when the following situations happen:
   - If the power cords are damaged or frayed.
   - If liquid is spilled into the product or the product has been exposed to rain or water.

Installation

1. For security considerations, please make sure the standard mount you use is in line with UL or CE safety approbations and installed by technician personnel approved by agents.

Storage

1. Do not place the product where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
2. Unplug this product during thunderstorms or if it is not going to be used for an extended period.
3. Do not place this product or accessories on top of vibrating equipment or heated objects.

Cleaning

1. Disconnect all the cables prior to cleaning and wipe the surface with a dry cloth. Do not use alcohol or volatile solvents for cleaning.

Batteries (for products or accessories with batteries)

1. When replacing batteries, please only use similar or the same type of batteries
2. When disposing of batteries or products, please adhere to the relevant instructions in your country or region for disposing of batteries or products

Precautions

	This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock. Do not remove the cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.		This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice
The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are to provide reasonable protection from harmful interference in residential installations.

IC Warning
This digital apparatus does not exceed the Class B limits for radio o noise emissions from digital apparatus as set

out in the interference-causing equipment standard entitled "Digital Apparatus," ICES 003 of Industry Canada.

Copyright Information

Documents / Resources

OIP-N40E/ OIP-N60D/ OIP-N60D, Dante AV-H AVoIP Encoder/AVoIP Decoder User Manual - English [Important] To download the latest version of Quick Start Guide, multilingual user manual, software, or driver, etc., please visit Lumens https://www.MyLumens.com/support Lumens	**LUMENS OIP-D40E AVoIP Decoder** [pdf] User Manual OIP-D40E, OIP-N40E, OIP-N60D, OIP-D40E AVoIP Decoder, OIP-D40E, AVoIP Decoder, Decoder

References

- **Download | Lumens**
- **User Manual**