OIP-N60D/ OIP-N60D, Dante AV-H Bridge

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



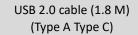
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Chapter 1 Package Contents

OIP -N60D Bridge



Locking metal plate (x2)





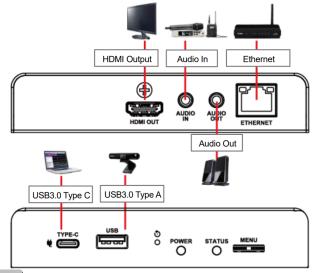


M3 metal plate screw (4x4)



Chapter 2 Product Installation

2.1 I/O Interface



Note We recommended using high-performance USB-C cables (10Gbps or higher)

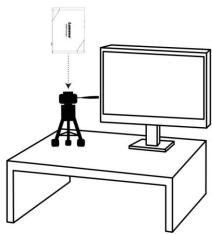
2.2 Product Installation

- 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 OIP Bridge
 - Lumens*
 OIP Bridge
- 2. Screw the metal plate to the desk or other surface as required.



■ Tripod mounting

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 OIP Bridge.



2.3 Description of Indicator Display

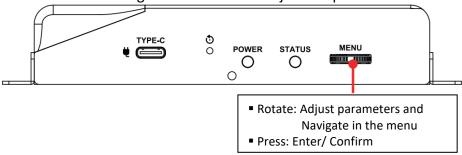
Power Status	Tally Status	Power	Standby	Tally
Startup in progress	-	Red light	-	Flickering
(initialization)				Red/Green light
	Signal	Red light	Green light	-
la usa	No Signal			-
In use	Preview			Green light
	Program			Red light



Chapter 3 Product Operation

3.1 Operating using the rocker switch

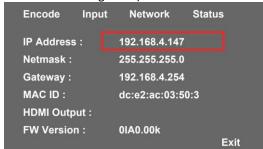
Connect the HDMI OUT to the display, press the Menu dial to enter the OSD menu. Move the rocker switch to navigate the menu and adjust the parameters



3.2 Operate via webpages

(1) Confirm the IP address

Refer to <u>3.1Using the rocker switch</u>, confirm the IP address in Status (If the OIP-N40E 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.)



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



(3) Please enter the account/password to log in

Account : adminPassword : 9999

Chapter 4 Product Application and Connection

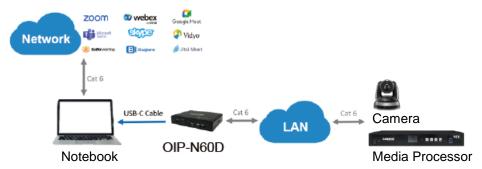
4.1 Virtual USB Network Camera

OIP-N60D can convert IP signal source to USB (UVC) for seamless integration with video conferencing platforms.

Note: When using a USB connection to the OIP, a USB 3.1 Gen2 (10Gbps) cable is required.

(1) Connection Method

- Connect the OIP-N60D to the LAN
- Connect the computer to the OIP-N60D using a 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 selected stream

(3) USB Camera Screen Output

- Launch Zoom, Microsoft Teams, or your preferred conferencing application.
- In the application, change the video source to:

Note Source Name: Lumens OIP-N60D

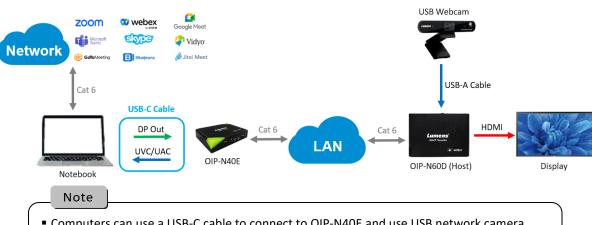
4.2 USB Network Camera Extension (OIP-N40E/OIP-N60D required)

OIP supports network bridging. Use OIP-N40E with OIP-N60D to extend the range of USB cameras over the local area network.

Note: When using a USB connection to the OIP, a USB 3.1 Gen2 (10Gbps) cable is required.

(1) Connection Method

- Connect the OIP Bridge to the local network
- Connect the USB camera to the OIP-N60D using USB-A cable
- Connect a monitor to the OIP-N60D using a HDMI cable
- Connect a computer to the OIP-N40E using a USB-C monitor transmission cable



- Computers can use a USB-C cable to connect to OIP-N40E and use USB network camera
- Computers can transmit images onto a TV through a USB-C connection to OIP-N40E



- (2) OIP-N60D Webpage Settings
 [System] > [Output], open USB Extender
- (3) OIP-N40E Webpage Settings
 - [System] > [Output] > Extender Source List
 - [Search new Source] > Click [Available] to select the OIP-N60D > Connection displays
 Connected
- (4) USB Camera Screen Output
- Launch Zoom, Microsoft Teams, or your preferred video conferencing app.
- Choose the video source, to output USB camera images

Note Source Name: Select the USB Camera ID



Chapter 5 Setting Menu

Using the rocker switch **[Menu]** enter the setting menu; the **bold underlined** values in the following table are defaults.

5.1 OIP-N60D

1st Level 2nd Level 3rd Level		3rd Level	Function Descriptions
Major Items	Minor Items	Adjustment Values	Function Descriptions
	Source List	-	Display the signal source list
Source	Blank Screen	-	Display black screen
	Scan	-	Update the signal source list
	HDMI Audio From	Off / Follow Stream/Follow Routing/ Follow Dante	Select the HDMI audio source
	Audio Out From	Off / Follow Stream/Follow Routing/ Follow Dante	Select where audio outputs to
Output	Output 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
	IP Mode	Static/ <u>DHCP</u> / Auto	Dynamic Host Configuration
	IP Address	192.168.100.200	
Network	Subnet mask (Netmask)	255.255.255.0	Configurable when set to <i>Static</i>
	Gateway	<u>192.168.100.254</u>	
Status			Display the current machine status



Chapter 6 Webpage Interface

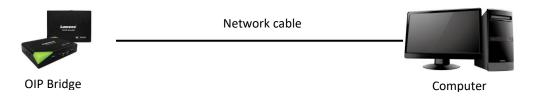
6.1 Connecting to Internet

Two common connection methods are shown below

1. Connecting via switch or router



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



6.2 Log into 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

For a first-time login, please refer to <u>6.1.10 System- User</u> to change the default password

Lumens OIP Bridge

• Account: admin

Password: 9999 (Default)



6.3 Webpage Menu Description

6.3.1 Dashboard



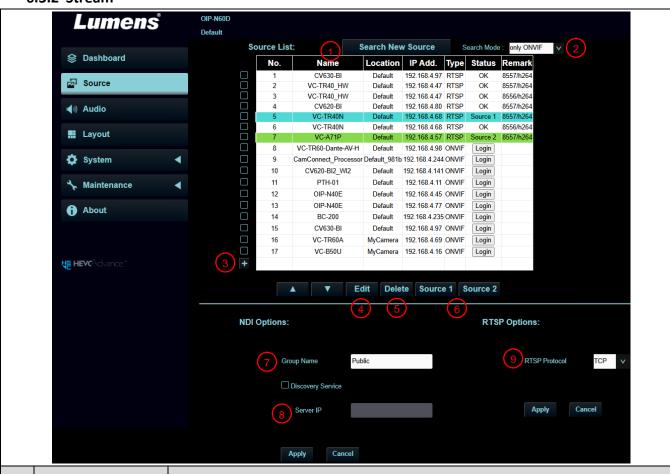
Function Descriptions

Display output, source, and system related information

HELLO: Enable this button to make the indicator light on the unit blink for one minute. It will then automatically turn off.



6.3.2 Stream



No	Item	Description
1	Search New Source	Click to search for devices in the same network segment and display them in a list
	Search Mode	
2	(Only exists in	Search from NDI&ONVIF / Only NDI / Only ONVIF
	non-Dante version)	
3	+Add	Manually add a device
4	Edit	Edit a connected device in the list.
5	Delete	Delete selected device in the list
		After connecting the source, click the Source button to output the image. A maximum of
6	Source1 &2	two sources can be output at the same time.
	6 Source1 &2	Note: The "Source 2" option will only be visible when the PBP or PIP function has been
		enabled in the Layout section.(Please refer to the section 6.3.4 Layout)
7	Group Name	The group name can be modified here and set with Access Manager - Receive in NDI Tool
8	Server IP	Discovery service. Select to enter the Server IP address
9	RTSP Protocol	Choose from TCP and UDP



Dante controller



To ensure the unit OIP-N60D can be recognized by the Dante Controller after enabling the Dante function, please follow the steps below:

- 1. Access the OIP-N60D web page
- 2. Navigate to the [Source] section
- 3. Select [Dante AV-H] as the source
- 4. Click [Source] to activate the stream

Remark: If the Source button is not activated, the device will not be detected properly by the Dante Controller.

6.3.3 Audio

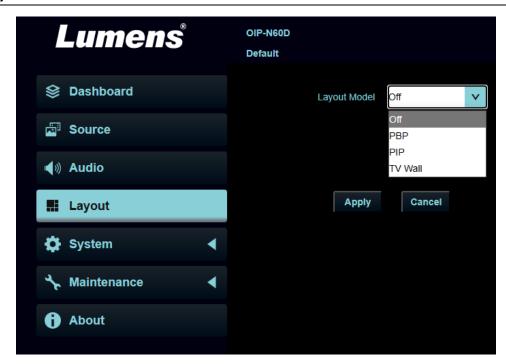


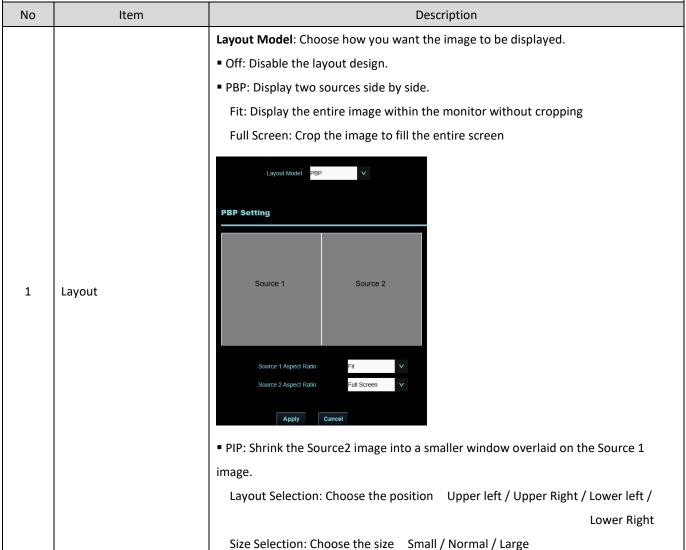


		Audio Out Source:		
		- Follow Stream: Output the sound of the device you connected in the N60D Source section.		
		- Follow Dante: Output the sound from a Dante device you connected with Dante		
		Controller. - Follow Routing: Output the sound from the audio in.		
		■ Audio Volume: 0~10		
		■ Audio Delay Time: 1~500ms		
		HDMI Audio Out		
		Audio Source Follow Stream V		
		Audio Volume 5		
		☐ Audio Delay		
		Audio Delay Time(-)		
2	HDMI Audio Out	■ HDMI Audio Out: Enable or disable HDMI Audio		
		Audio Source:		
		- Follow Stream: Output the sound of the device you connected in the N60D Source section.		
		- Follow Dante: Output the sound from a Dante device you connected with Dante		
		Controller.		
		- Follow Routing: Output the sound from the audio in.		
		■ Audio Volume: 0~10		
		■ Audio Delay Time: 1~500ms		
		Talk Back Audio		
		Audio Source Audio In ✓		
		Encode Type AAC V		
		Encode Sample Rate #8 KHz V		
		■ Talk Back Audio: Enable or disable Talk Back		
3	Talk Back Audio	■ Audio Source:		
		- Audio in: Outputs audio from a device connected to the 3.5mm audio input on the N60D.		
		- USB Audio: Outputs sound from a device such as a laptop connected via USB.		
		■ Encode Type: AAC		
		■ Encode Sample Rate: 48KHz		
		Dante Audio		
4 Dante Audio		Audio Source USB Audio V		
		Encode Sample Rate 48 KHZ V		
	Danto Audio	■ Dante Audio: Enable or disable Dante		
	Dante Audio	■ Audio Source:		
		- Audio in: Outputs audio from a device connected to the 3.5mm audio input on the N60D.		
		- USB Audio: Outputs sound from a device such as a laptop connected via USB.		
		■ Encode Sample Rate: 48KHz		
<u></u>	<u>L</u>			

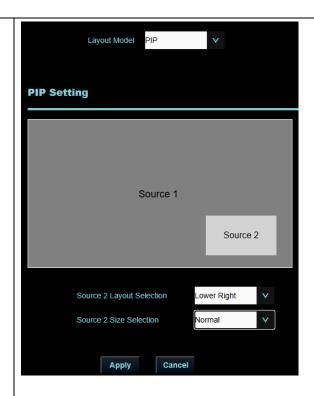


6.3.4 Layout









■ TV Wall



1. Size: (unit: 0.1mm)

Overall Width: Enter the total width of the display wall
Overall Height: Enter the total height of the display wall
Video Width: Enter the width of the video signal source
Video Height: Enter the height of the video signal source

2. Position

Horizontal Monitor Count: Select how many monitors are lined up from left to right $(1^{\sim}3)$

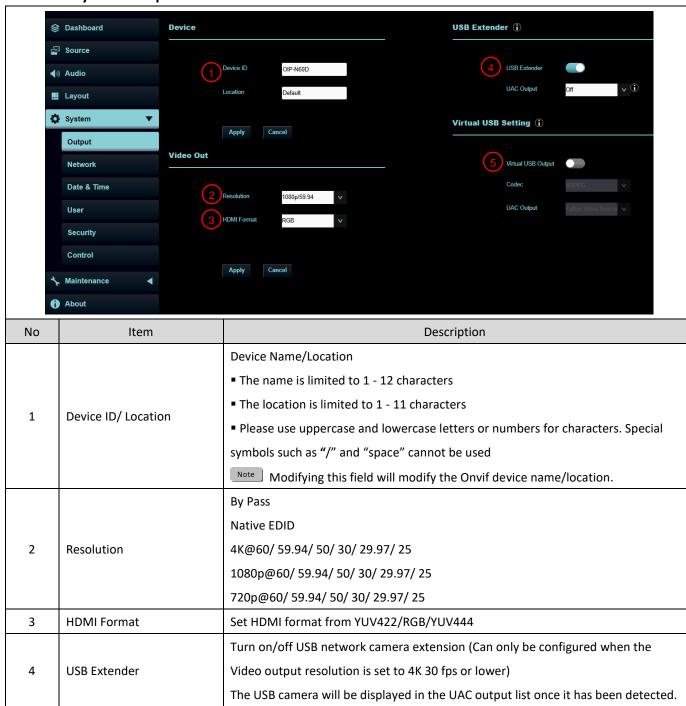
Vertical Mount Count: Select how many monitors are stacked from top to



	bottom (1~3).
	Horizontal-Position: Choose the position of the monitor in a row.(A $^{\sim}$ C)
	Vertical-Position: Choose the position of the monitor in a column.(1~3)



6.3.5 System- Output



Enable / Disable

lower)

Choose from Follow Video source / Follow Dante / Follow Routing

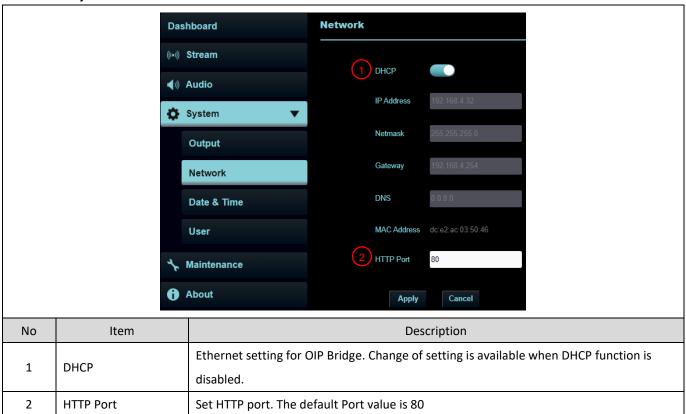
(Can only be configured when the Video output resolution is set to 4K 30 fps or



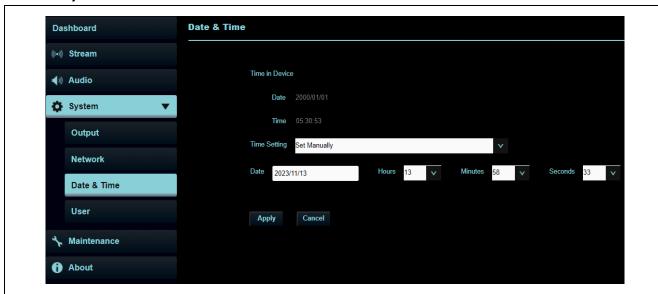
5

Virtual USB output

6.3.6 System- Network



6.3.7 System- Date & Time



Function Descriptions

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



6.3.8 System-User



Function Descriptions

Add/Modify/Delete user account

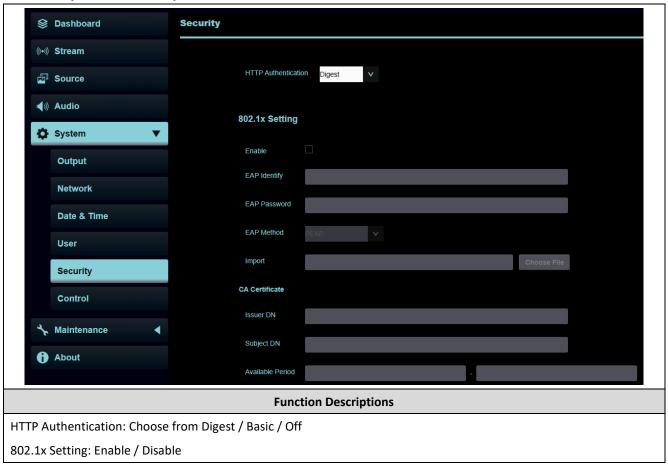
- Supporting 4 32 characters for user name and password
- Please use uppercase and lowercase letters or numbers for characters. Special symbols or the underlined cannot be used
- Authentication Mode: Set the new account management permissions

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

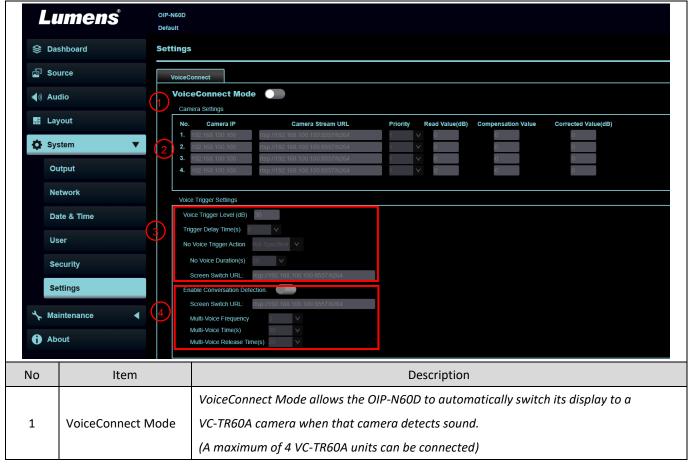
₩When Factory Reset is executed, it will clear the user's data



6.3.9 System - Security



6.3.10 System – Settings – VoiceConnect Mode (Requires VC-TR60A)





1. Enable / Disable VoiceConnect Mode

2. Camera Settings

- Camera IP: Enter the VC-TR60A's IP address
- Camera Stream URL: Enter the VC-TR60A's stream URL
- Priority: Set the priority rank from 1 to 4 for each camera when more than one VC-TR60A detects sound.
- Sound Value: Displays the current detected sound's value in dB.

3. Voice Trigger Settings

- Voice Trigger Level (dB): Set the threshold that determines when the VC-TR60A image will switch.
- Trigger delay time: How long it takes for the image to switch after the VC-TR60A detects sound.
- No Voice Trigger Action: Choose whether a specific camera stream will be displayed when no sound is detected.
 - a. No Voice Duration: Select the time (3 30 seconds) after which the specific stream will be activated.
 - b. Screen Switch URL: Enter the URL of the stream you want to output.

4. Conversation Detection

When two VC-TR60A cameras are in use and the OIP switches between them repeatedly, the system will display the preset stream URL after the defined switching times.

- Screen switch URL: Enter the URL of the camera stream that should be displayed when Conversation Detection is activated.
- Multi Voice Frequency: Define how many times the camera must switch before triggering Conversation Detection (3 ~ 6 times).
- Multi Voice Time: Set the time range (10 $^{\sim}$ 30 seconds) during which Conversation Mode will be activated.
- Multi Voice Release Time: Set the duration (10 $^{\sim}$ 30 seconds) after which Conversation Detection will be deactivated.

6.3.11 Ststem – Settings - Custom Image



Functions Description

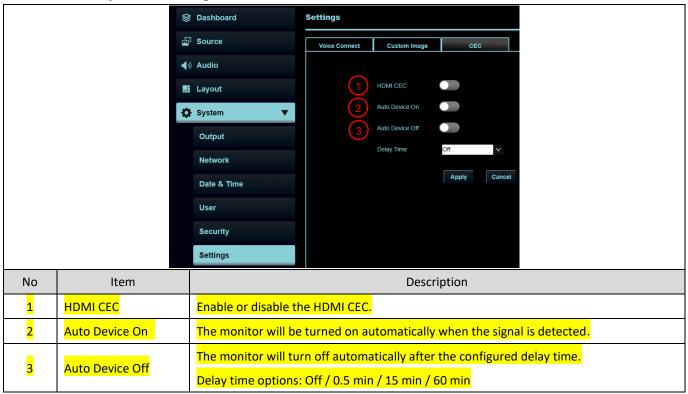
The user can upload a custom image (JPEG / BMP) to be displayed as the background when no signal is detected.



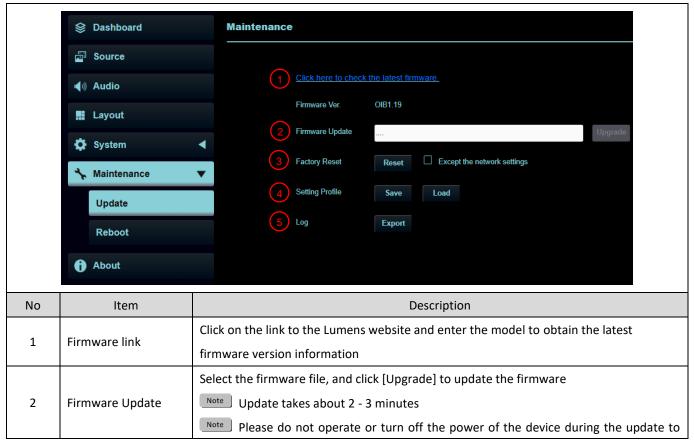
Select [...] to locate your image, then click Upload and Apply to save it.

System Information: Enable this option to display product details such as the IP address and firmware version on the monitor.

6.3.12 System – Settings – CEC



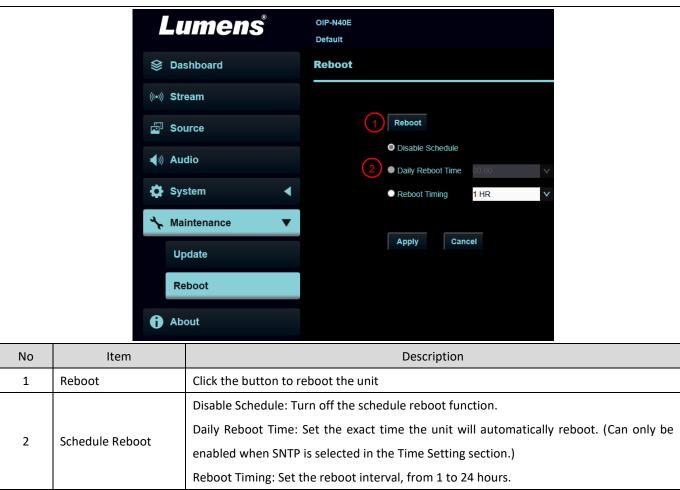
6.3.13 Maintenance - Update



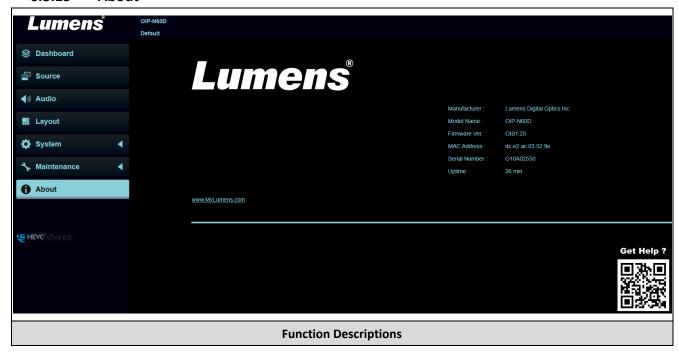


		avoid firmware update failure
3	Factory Reset	Reset all configurations to factory default settings
4	Setting Profile	Save setup parameters. Users can download and upload device setup parameters
5	Log	Export the log file containing the records from the recent period.

6.3.14 Maintenance – Reboot



6.3.15 About





Display the firmware version, serial number, and other related information of the OIP Bridge For technical support, please scan the QR Code at the bottom right for assistance



Chapter 7 Troubleshooting

This chapter describes problems you may encounter while using OIP Bridge. 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		
	OIP-N40E webpage USB extender	Confirm that the OIP-N60D has enabled the USB extender function		
1.	cannot find OIP-N60D on the same	2. Confirm that the management switch in the network has disabled		
	network segment	the blocking of multicast packets		
	Recommended specifications for			
2.	USB-C cables	Transfer rate of 10 Gbps or higher		
		When using OIP-N products with a network switch, it is recommended		
		to configure the following settings:		
		1. Select a switch where every port supports 1Gbps transmission		
		2. Use a switch that supports QoS (Quality of Service) with 4 queues and		
3.	Recommended Switch	strict priority; QoS should be enabled when both 100Mbps and 1Gbps		
J.	Configuration	devices exist in the same local network		
		4. Enable IGMP Snooping		
		5. It is recommended to choose a managed switch (Layer 2 or above)		
		6. It is advisable to disable EEE (Energy Efficient Ethernet) or simila		
		power-saving features		



Chapter 8 Safety Instructions

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

1 Operation

- 1.1 Please use the product in the recommended operating environment, away from water or source of heat.
- 1.2 Do not place the product on a tilted or unstable trolley, stand or table.
- 1.3 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.
- 1.4 Do not block the slots and openings in the case of the product. They provide ventilation and prevent the product from overheating.
- 1.5 Do not open or remove covers, otherwise it may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 1.6 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.

2 Installation

2.1 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.

3 Storage

- 3.1 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.
- 3.2 Unplug this product during thunderstorms or if it is not going to be used for an extended period.
- 3.3 Do not place this product or accessories on top of vibrating equipment or heated objects.

4 Cleaning

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

5 Batteries (for products or accessories with batteries)

- 5.1 When replacing batteries, please only use similar or the same type of batteries
- 5.2 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 receiver.
- Connect the equipment into 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 noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe B prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.



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