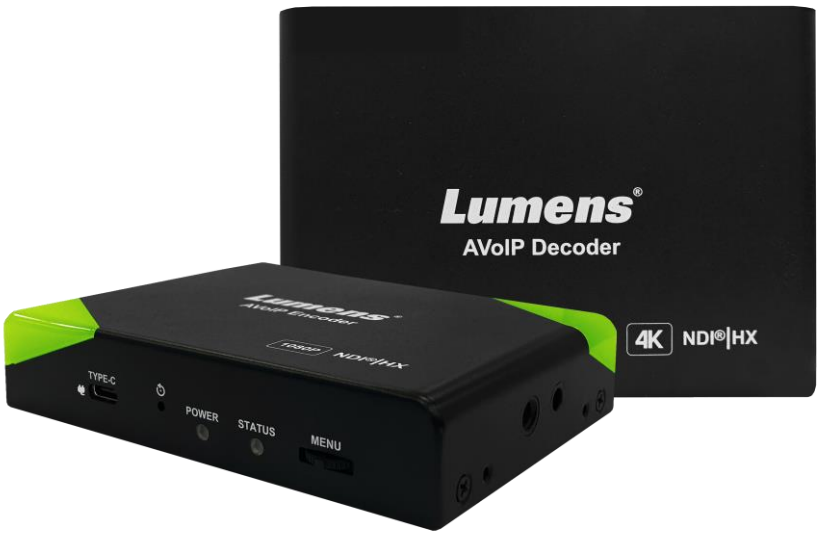
OIP-N60D/ OIP-N60D, Dante AV-H Bridge

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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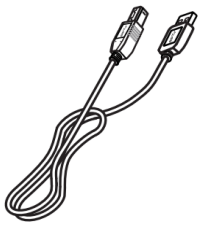
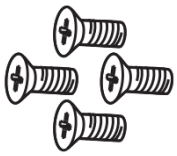
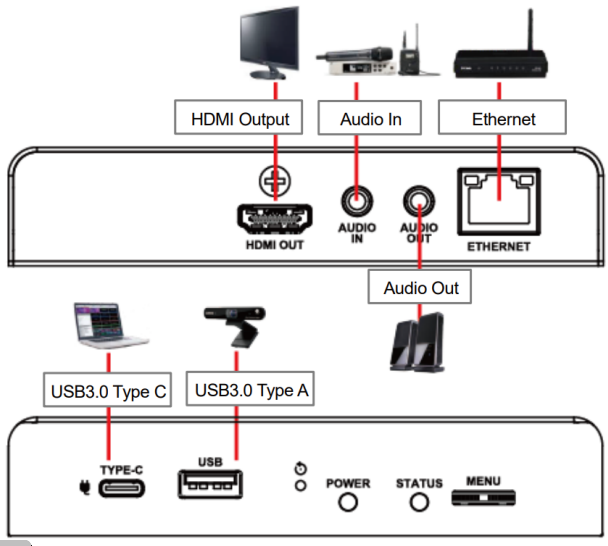
Chapter 1 Package Contents

OIP –N60D Bridge	USB 2.0 cable (1.8 M) (Type A Type C)	Locking metal plate (x2)
		
M3 metal plate screw (4x4)		
		

Chapter 2 Product Installation

2.1 I/O Interface

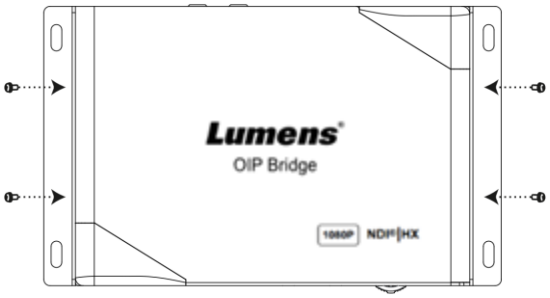


Note We recommended using high-performance USB-C cables (10Gbps or higher)

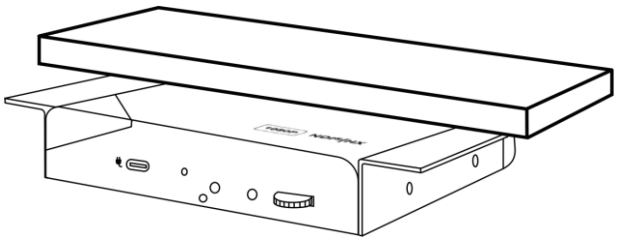
2.2 Product Installation

- 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

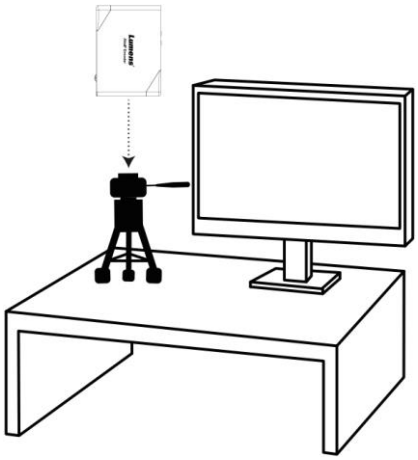


2. Screw the metal plate to the desk or other surface as required.



- 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.



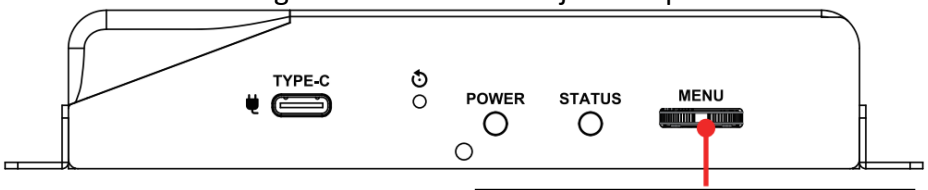
2.3 Description of Indicator Display

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

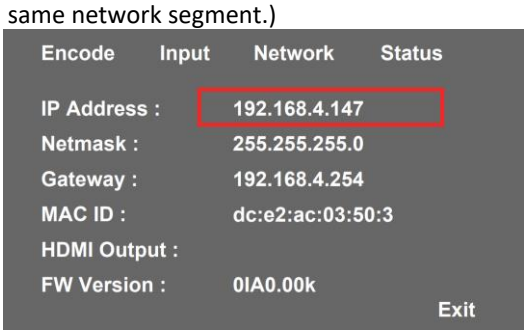


- Rotate: Adjust parameters and Navigate in the menu
- Press: Enter/ Confirm

3.2 Operate via webpages

(1) Confirm the IP address

Refer to 3.1Using the rocker switch, 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：admin**
- **Password：9999**

Chapter 4 Product Application and Connection

4.1 Signal Source Transmission

The OIP-N60D can convert in IP signal source to USB or HDMI.

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

(1) Connection Method

Connect the OIP-N60E and the computer to the network switch using network cables, so that you can access the OIP-N60D webpage for configuration.

(2) USB Output (IP to USB)

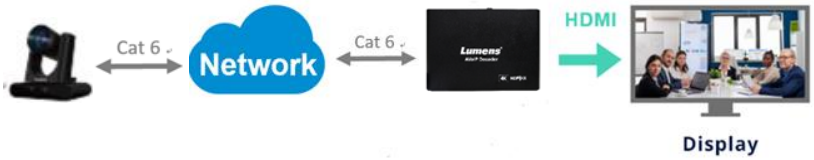
Connect a camera on the network then enable the Virtual USB Output to display the UVC image from an IP camera on a computer.

[Source] list > Connect camera > Press [Source 1] or [Source 2] to display image
[System] > [Output] > Enable [Virtual USB Output]

(3) HDMI Output (IP to HDMI)

Connect a camera on the network then display it on the HDMI display.

[Source] list > Connect camera > Press [Source 1] or [Source 2] do display image



4.2 ▪ USB Camera Extension over network (OIP-N40E/OIP-N60D required)

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

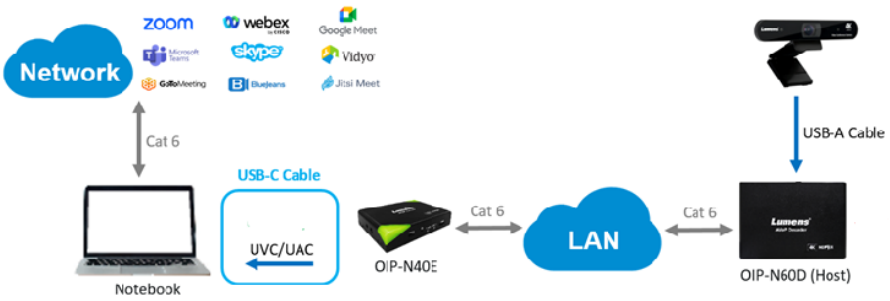
Note: When using a USB connection to the OIP, a USB 3.1 Gen2 (10Gbps) cable is required.

(1) USB Webcam extension

- Connect the OIP-N40E with the OIP-N60D in the Source list.
- Connect the USB camera to the OIP-N60D using a USB-A cable
- Connect a computer to the OIP-N40E using a USB-C cable.

OIP-N60D: [System] > [Output] > Enable [USB Extender] and [Virtual USB]
OIP-N40E: [System] > [Output] > Connect the OIP-N60D in the [Extender Source List]

The USB camera image will be output to the computer though the OIP-N40E's USB output.

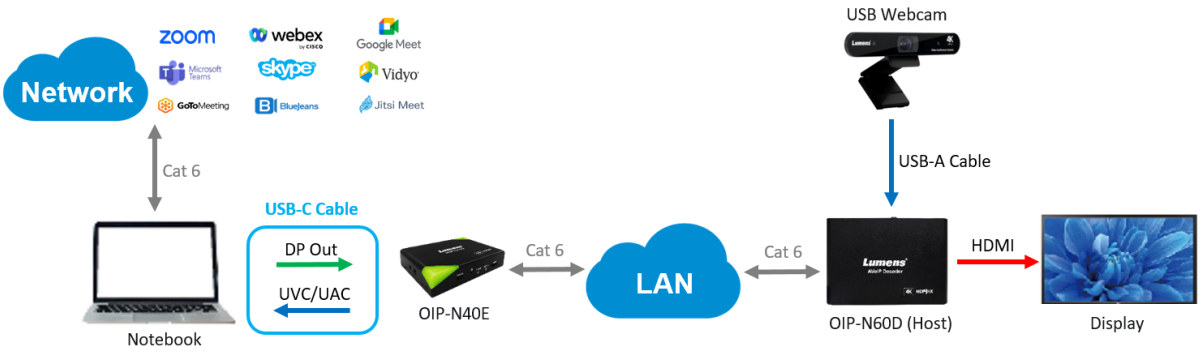


(2) USB Webcam extension + DP output

- Connect the OIP-N40E with the OIP-N60D in the Source list.
- Connect the USB camera to the OIP-N60D using a USB-A cable
- Connect a computer to the OIP-N40E using a USB-C cable

OIP-N60D: [System] > [Output] > Enable [USB Extender] and [Virtual USB]
OIP-N40E: [System] > [Output] > Connect the OIP-N60D in the [Extender Source List]
OIP-N40E: [Stream] > [Source]> [Select DP]

The computer can use the USB camera as the webcam and project the meeting live view to the HDMI display.



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

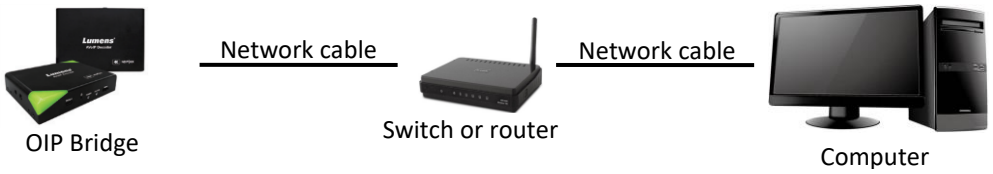
1st Level Major Items	2nd Level Minor Items	3rd Level Adjustment Values	Function Descriptions
Source	Source List	-	Display the signal source list
	Blank Screen	-	Display black screen
	Scan	-	Update the signal source list
Output	HDMI Audio From	**Off /** Follow Stream/Follow Routing/ Follow Dante	Select the HDMI audio source
	Audio Out From	**Off /** Follow Stream/Follow Routing/ Follow Dante	Select where audio outputs to
	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

Chapter 6 Webpage Interface

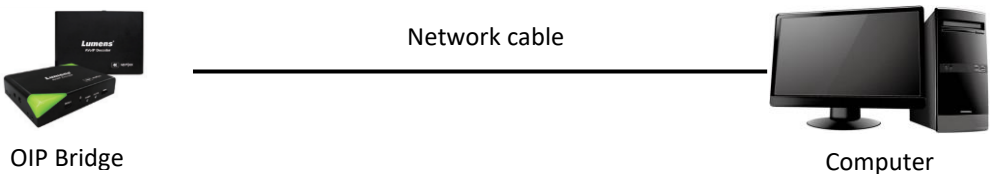
6.1 Connecting to Internet

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

   Note For a first-time login, please refer to **6.1.10 System- User** to change the default password

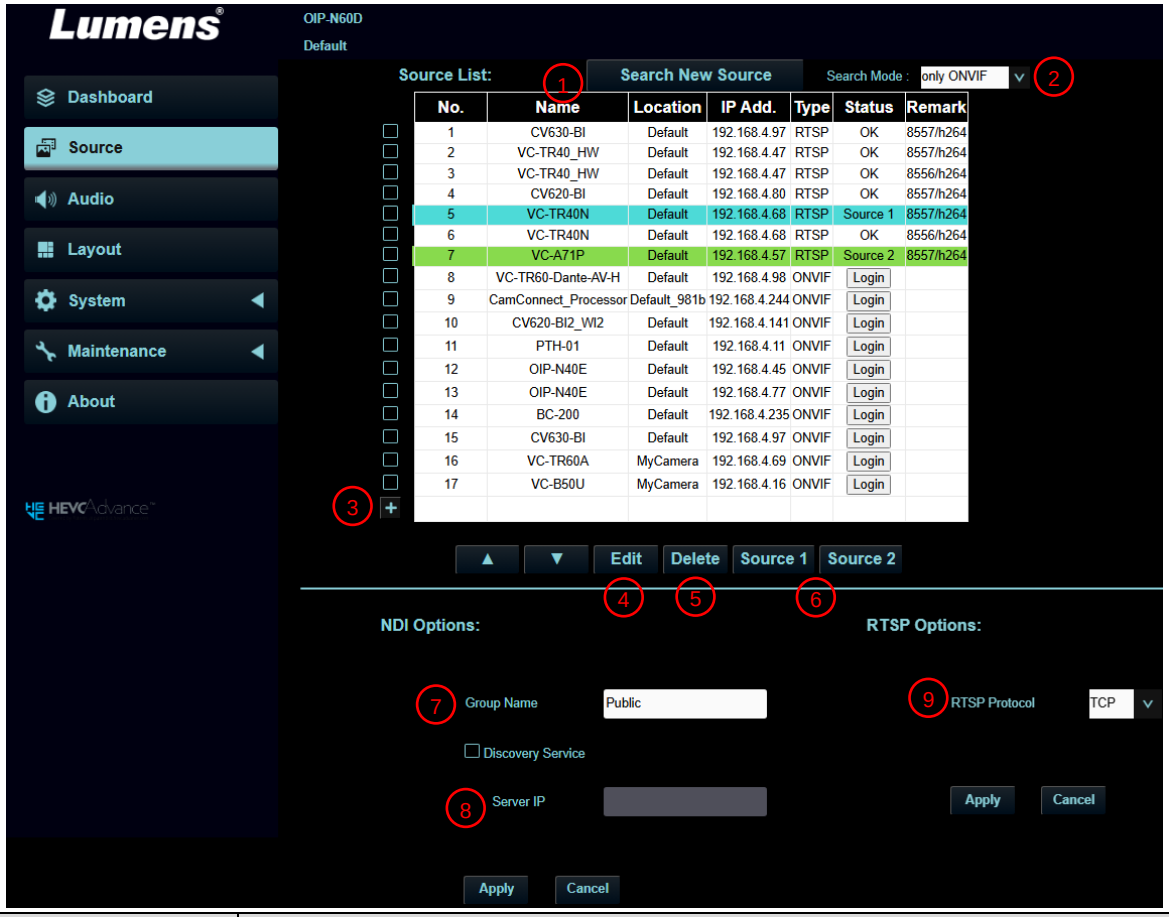
   Lumens OIP Bridge
   - Account: admin
   - Password: 9999 (Default)

6.3 Webpage Menu Description

6.3.1 Dashboard

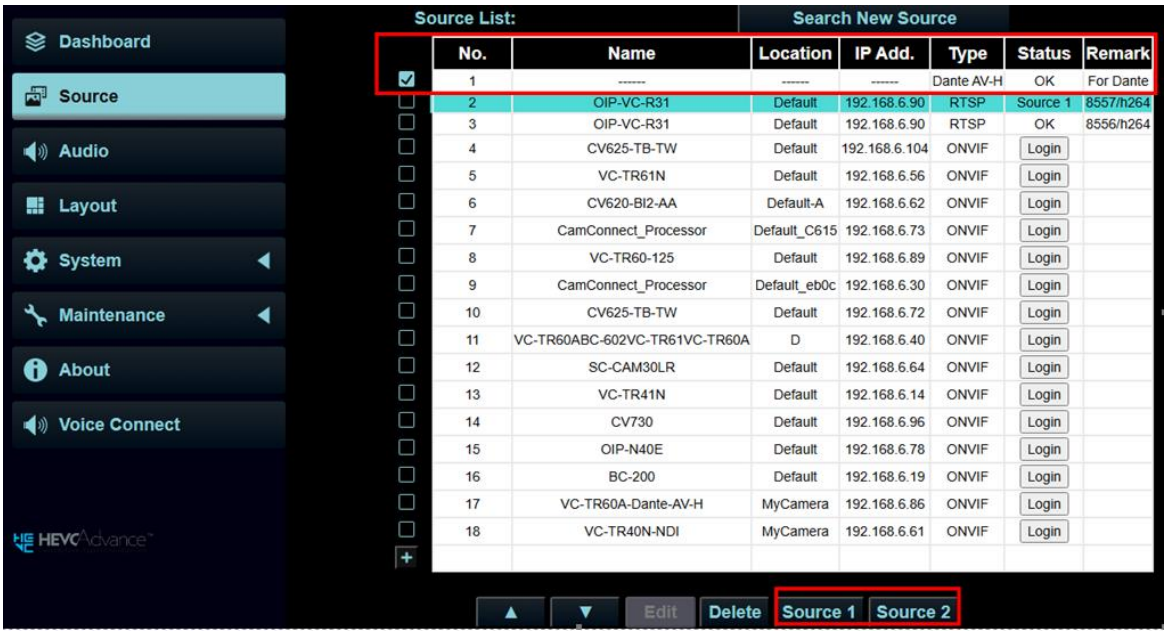
Function Descriptions
Display output, source, and system related information HELLO: Enable this button to make the indicator light on the unit blink for one minute. It will then automatically turn off.

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
2	Search Mode (Only exists in non-Dante version)	Search from NDI&ONVIF / Only NDI / Only ONVIF
3	+Add	Manually add a device
4	Edit	Edit a connected device in the list.
5	Delete	Delete selected device in the list
6	Source1 &2	After connecting the source, click the Source button to output the image. A maximum of two sources can be output at the same time. 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

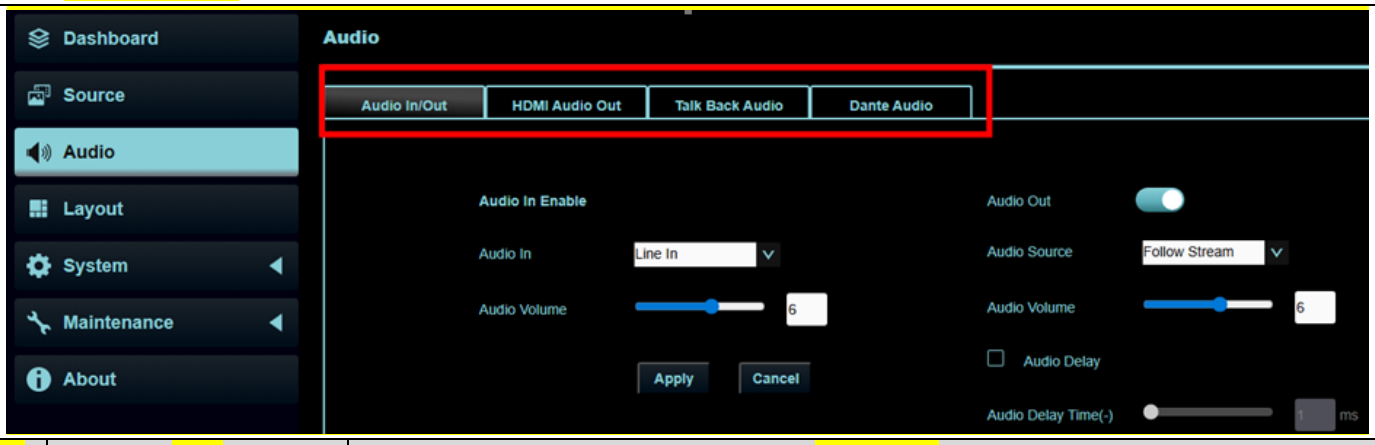


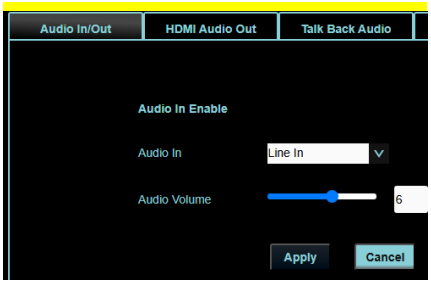
To ensure the unit OIP-N60D can be recognized by the Dante Controller after enabling the Dante function, please follow the steps below:

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.

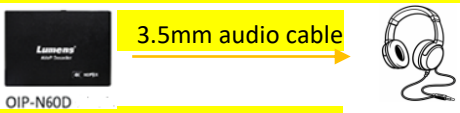
6.3.3 Audio



No	Item	Description
1	Audio In / Out	▪ **Audio In**: Select Line in or Mic in for the Audio Input port 

▪ **Audio Out**: Enable or disable the Audio Output port.

The 3.5 mm output port can be connected to devices such as earphones or speakers

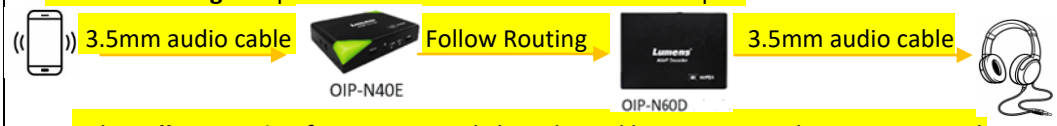


▪ **Source of the Audio Output port**:

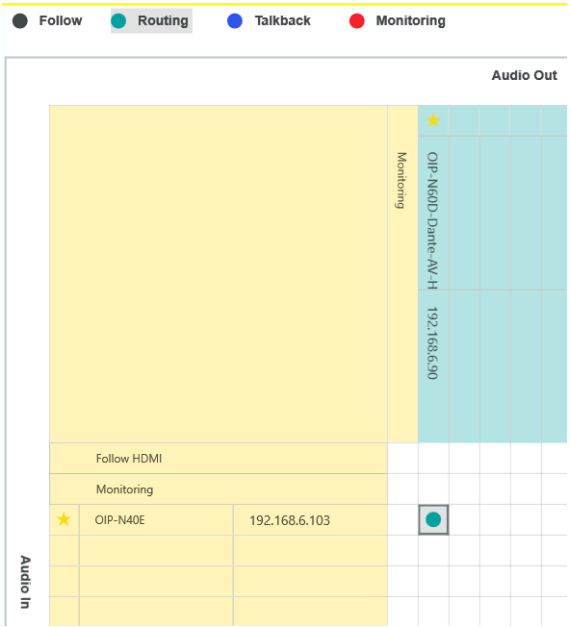
- Follow **Stream**: Output the sound of the camera you connected in the N60D Source section.

- Follow **Dante:** Output the sound from a Dante device you connected with Dante Controller.

- Follow **Routing**: Output audio from the OIP-N40E's audio input.

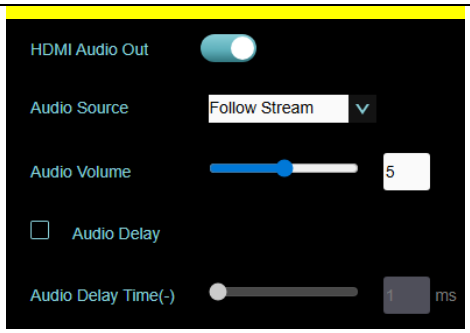
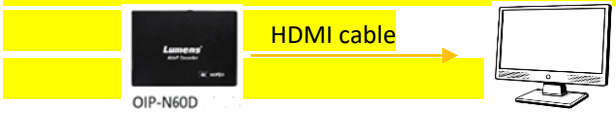
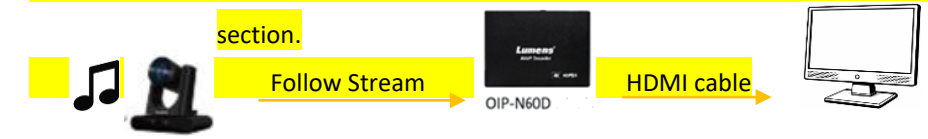
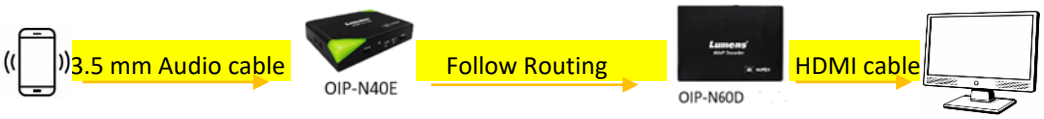


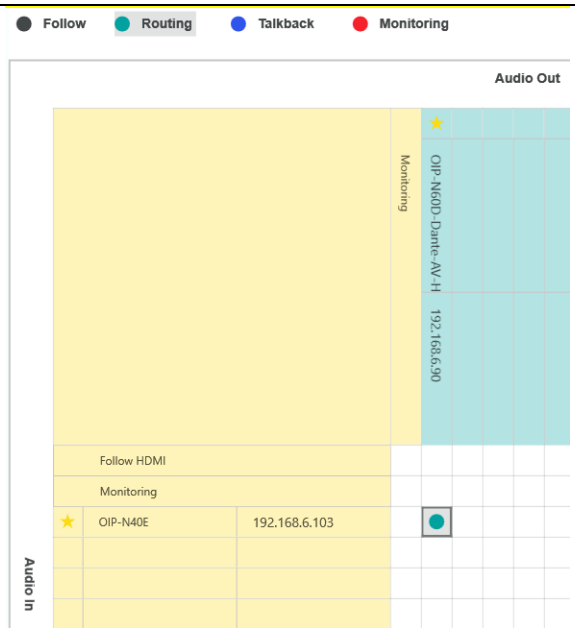
*<The **Follow Routing** function can only be achieved by connecting the OIP-N60D and OIP-N40E using the Lumens Routing Switcher software.>*



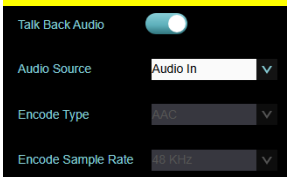
▪ **Audio Volume**: 0~10

▪ **Audio Delay Time**: 1~500ms

2	HDMI Audio Out	 ▪ **HDMI Audio Out**: Enable or disable HDMI Audio out  ▪ **Audio Source:** - Follow **Stream**: Output the sound of the camera you connected in the N60D Source section.  - Follow **Dante**: Output the sound from a Dante device you connected with Dante Controller.  - Follow **Routing**: Output audio from the OIP-N40E's audio input.  *<The Follow Routing function can only be achieved by connecting the OIP-N60D and OIP-N40E using the Lumens Routing Switcher software.>*



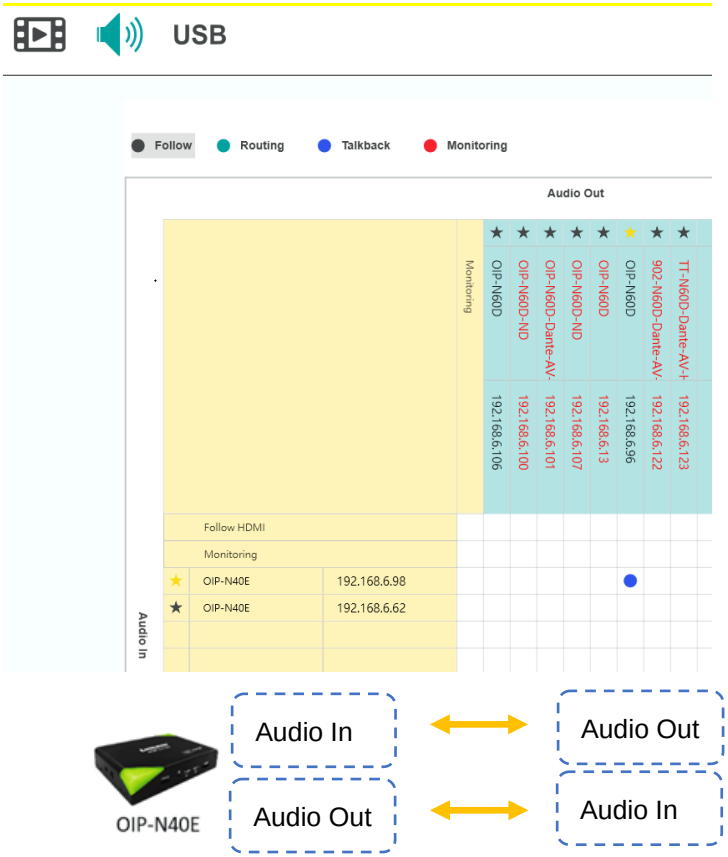
- **Audio Volume**: 0~10
- **Audio Delay Time**: 1~500ms

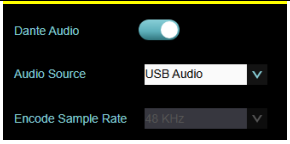


- **Talk Back Audio**: Enable or disable Talk Back

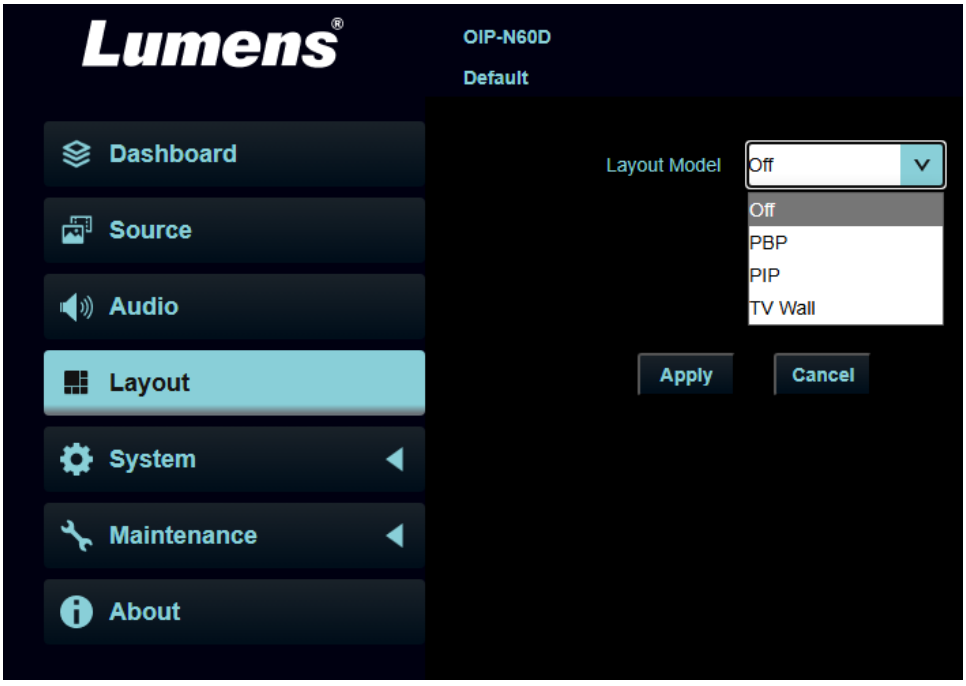
After connecting the OIP-N60D and OIP-N40E using the Lumens Routing Switcher software (see the screenshot below), the Talk Back function enables two-way audio communication, allowing each device's input to be routed to the other device's output.

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
4	Dante Audio	 ▪ **Dante Audio**: Enable or disable Dante audio out ▪ **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

6.3.4 Layout

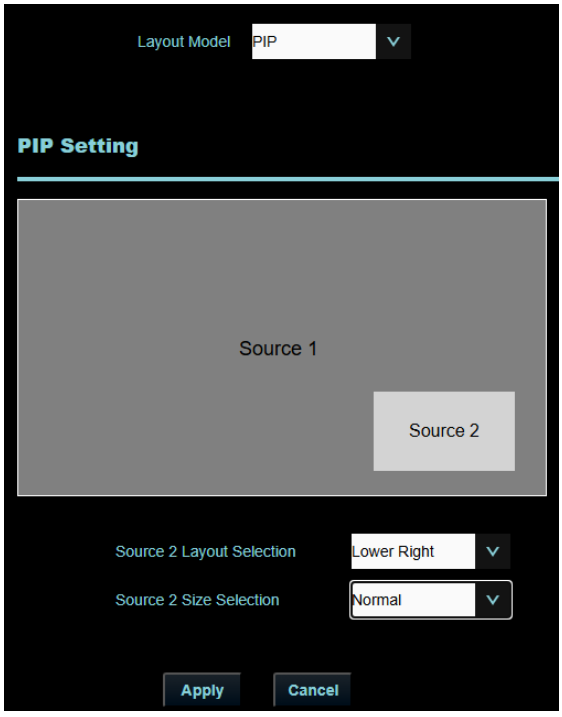


No	Item	Description
1	Layout	**Layout Model**: Choose how you want the image to be displayed. ▪ Off: Disable the layout design. ▪ PBP: Display two sources side by side. Fit: Display the entire image within the monitor without cropping Full Screen: Crop the image to fill the entire screen

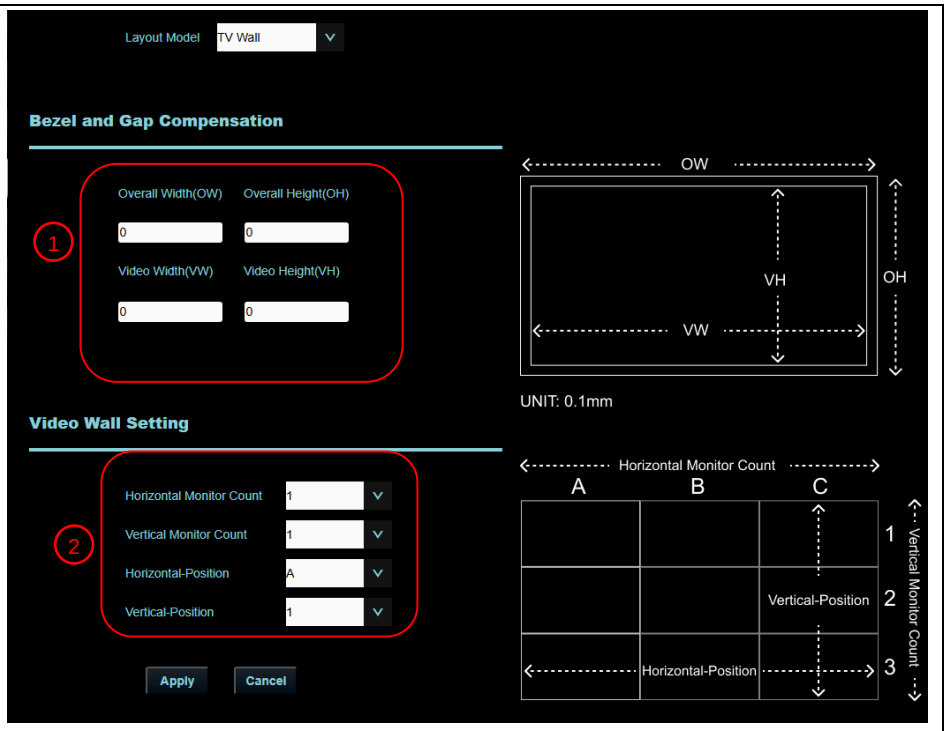
▪ PIP: Shrink the Source2 image into a smaller window overlaid on the Source 1 image.

Layout Selection: Choose the position Upper left / Upper Right / Lower left / Lower Right

Size Selection: Choose the size Small / Normal / Large



▪ 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

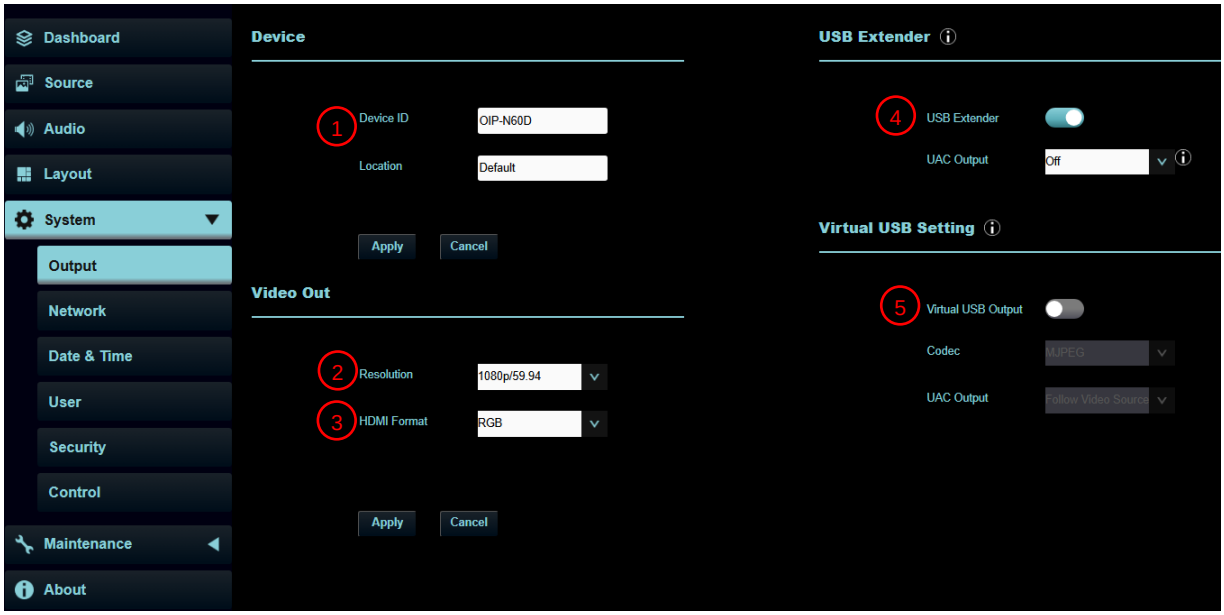
Horizontal Monitor Count: Select how many monitors are lined up from left to right (1~3)

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~C)

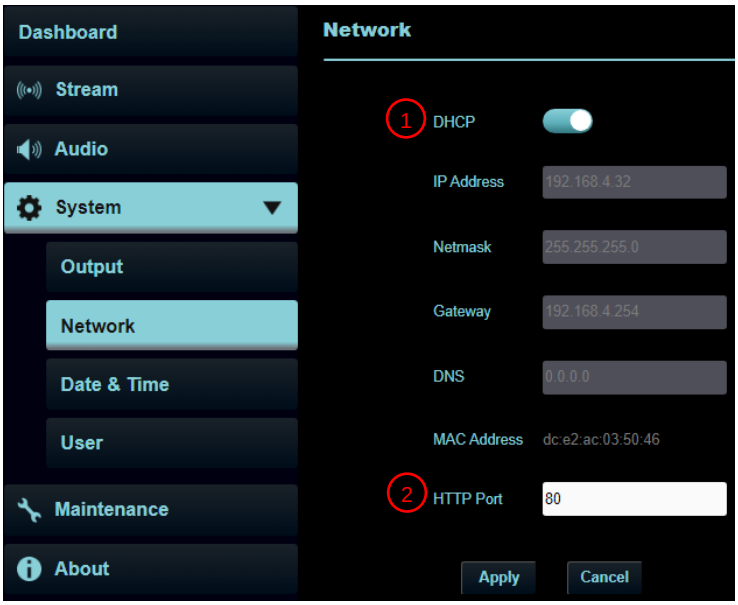
Vertical-Position: Choose the position of the monitor in a column.(1~3)

6.3.5 System- Output



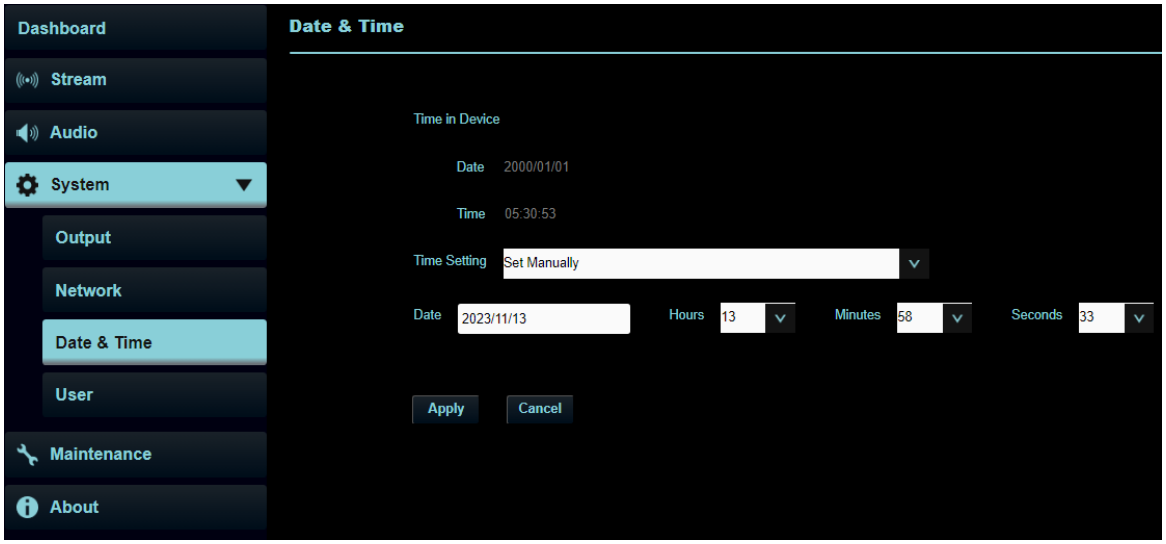
No	Item	Description
1	Device ID/ Location	Device Name/Location ▪ The name is limited to 1 - 12 characters ▪ The location is limited to 1 - 11 characters ▪ Please use uppercase and lowercase letters or numbers for characters. Special symbols such as **"**/" and "space" cannot be used Note Modifying this field will modify the Onvif device name/location.
2	Resolution	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
3	HDMI Format	Set HDMI format from YUV422/RGB/YUV444
4	USB Extender	Turn on/off USB network camera extension (Can only be configured when the Video output resolution is set to 4K 30 fps or lower) The USB camera will be displayed in the UAC output list once it has been detected.
5	Virtual USB output	Enable / Disable 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 lower)

6.3.6 System- Network



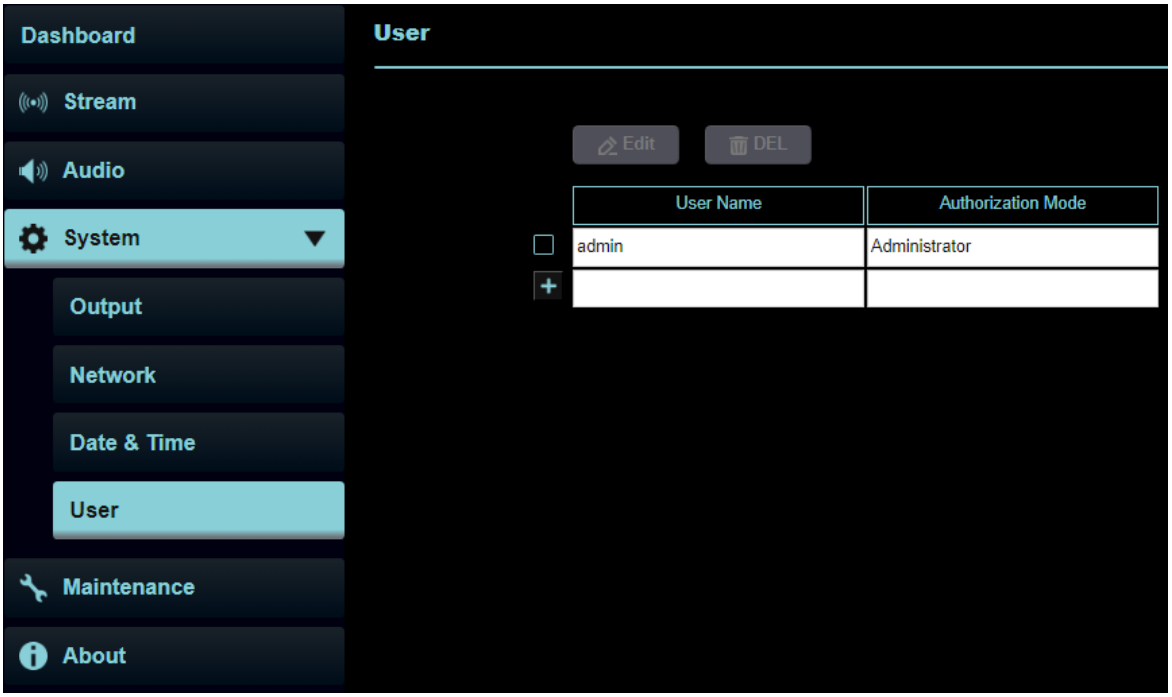
No	Item	Description
1	DHCP	Ethernet setting for OIP Bridge. Change of setting is available when DHCP function is disabled.
2	HTTP Port	Set HTTP port. The default Port value is 80

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

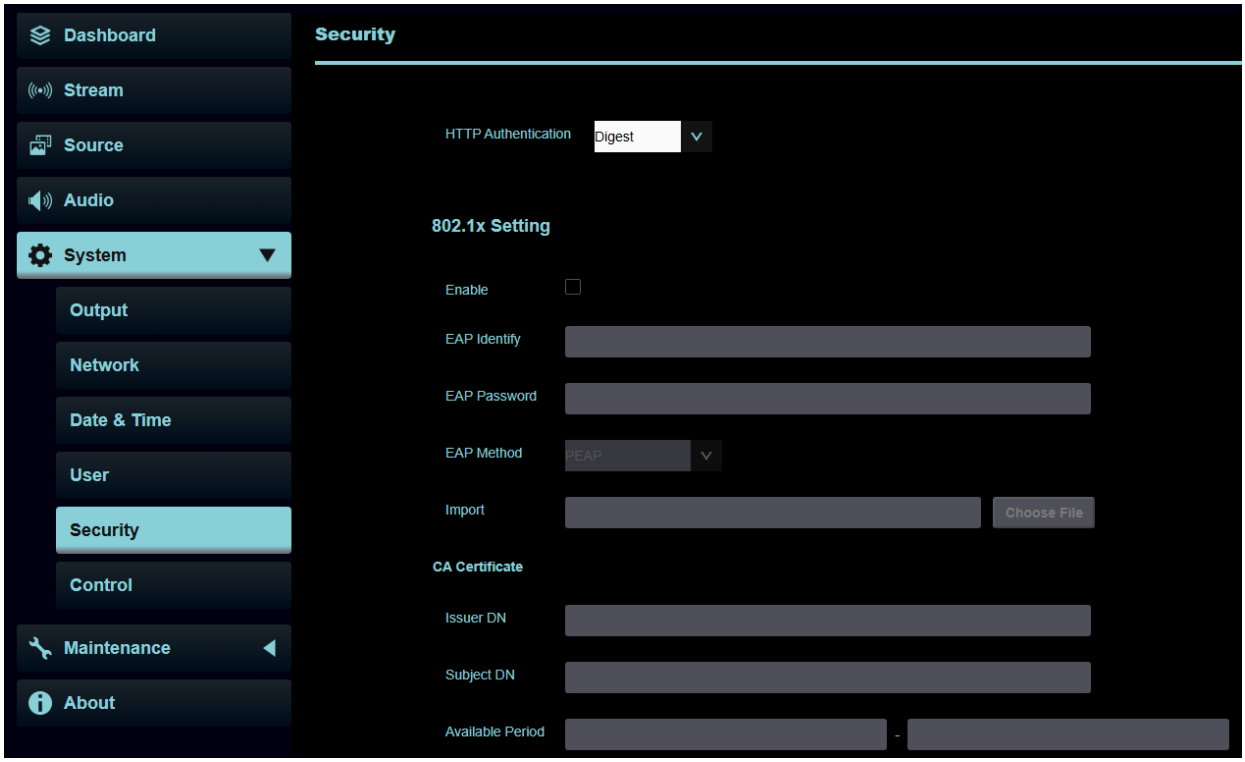
Add/Modify/Delete user account

- 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 management	**V**	**X**

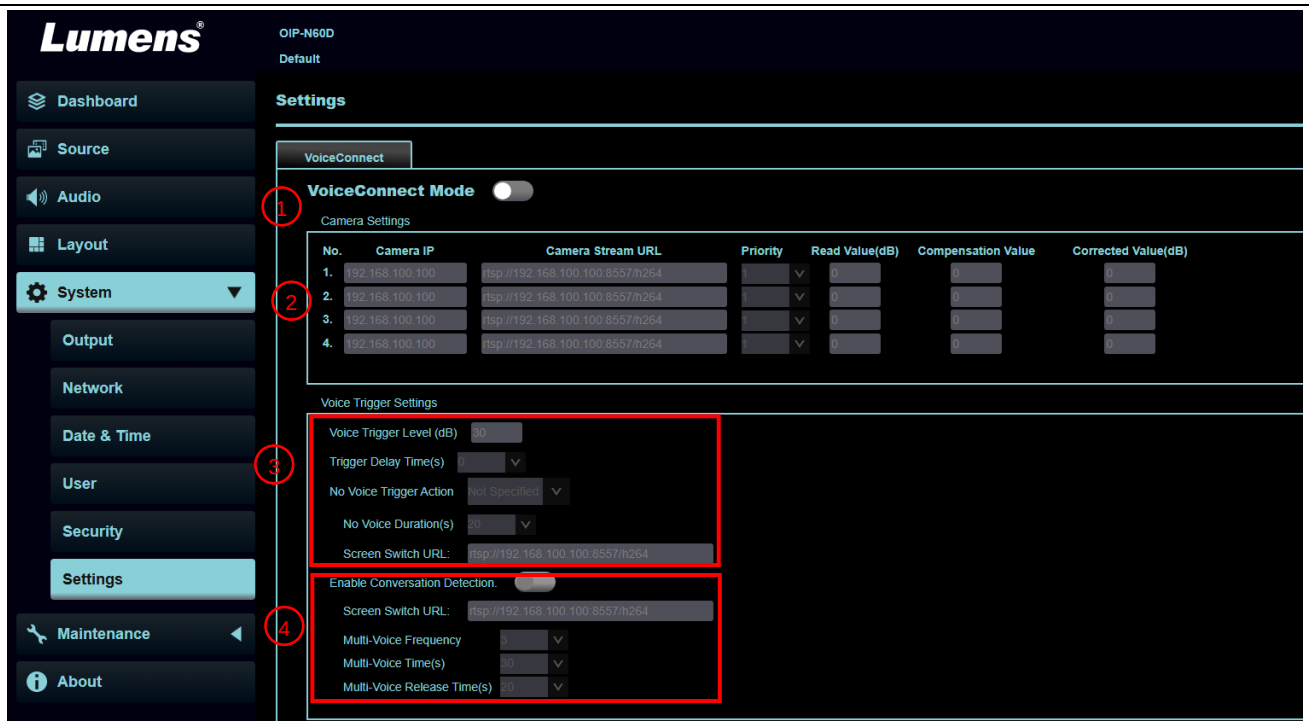
※When Factory Reset is executed, it will clear the user's data

6.3.9 System – Security



Function Descriptions
HTTP Authentication: Choose from Digest / Basic / Off 802.1x Setting: Enable / Disable

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



No	Item	Description
1	VoiceConnect Mode	*VoiceConnect Mode allows the OIP-N60D to automatically switch its display to a VC-TR60A camera when that camera detects sound.* *(A maximum of 4 VC-TR60A units can be connected)*

		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 ~ 30 seconds) during which Conversation Mode will be activated. - Multi Voice Release Time: Set the duration (10 ~ 30 seconds) after which Conversation Detection will be deactivated.

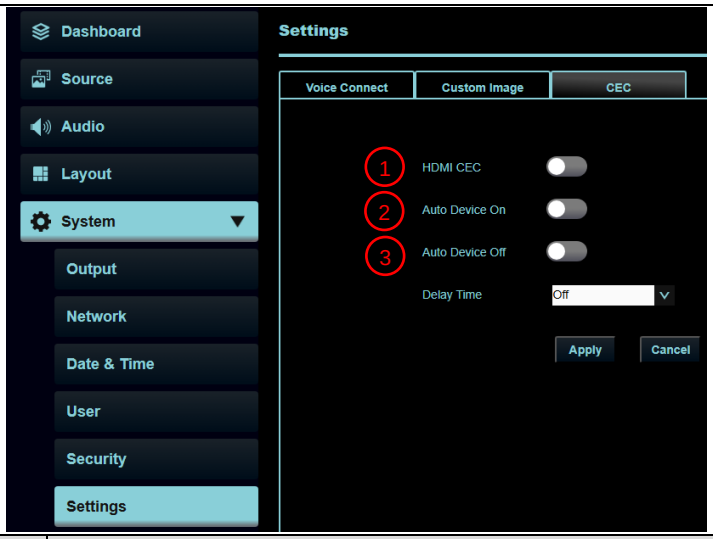
6.3.11 Ststem – Settings - Custom Image

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.

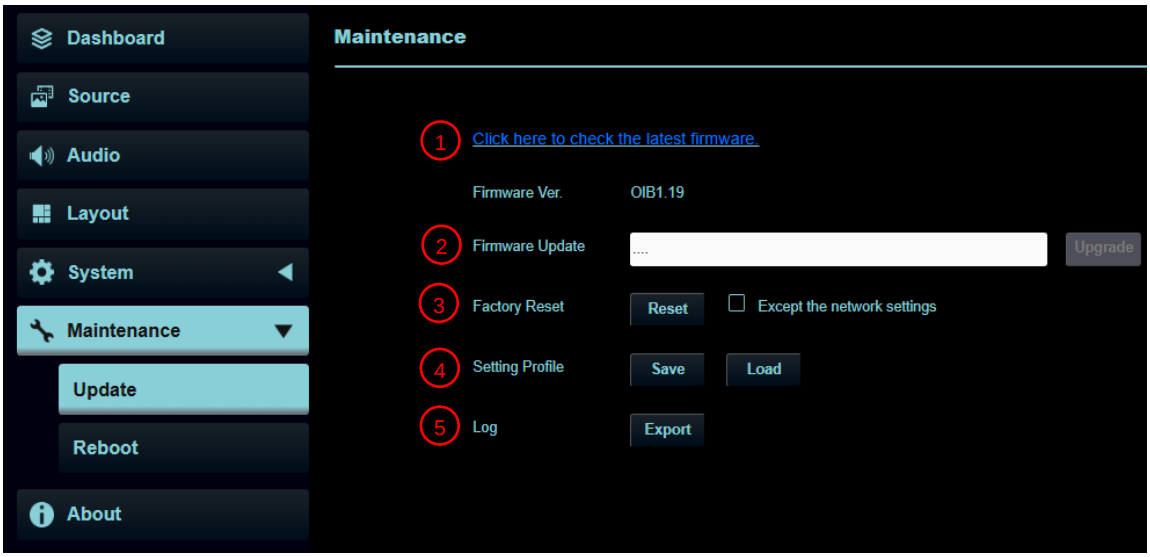
System Information: Enable this option to display product details such as the IP address and firmware version on the monitor.

6.3.12 System – Settings – CEC



No	Item	Description
1	HDMI CEC	Enable or disable the HDMI CEC.
2	Auto Device On	The monitor will be turned on automatically when the signal is detected.
3	Auto Device Off	The monitor will turn off automatically after the configured delay time. Delay time options: Off / 0.5 min / 15 min / 60 min

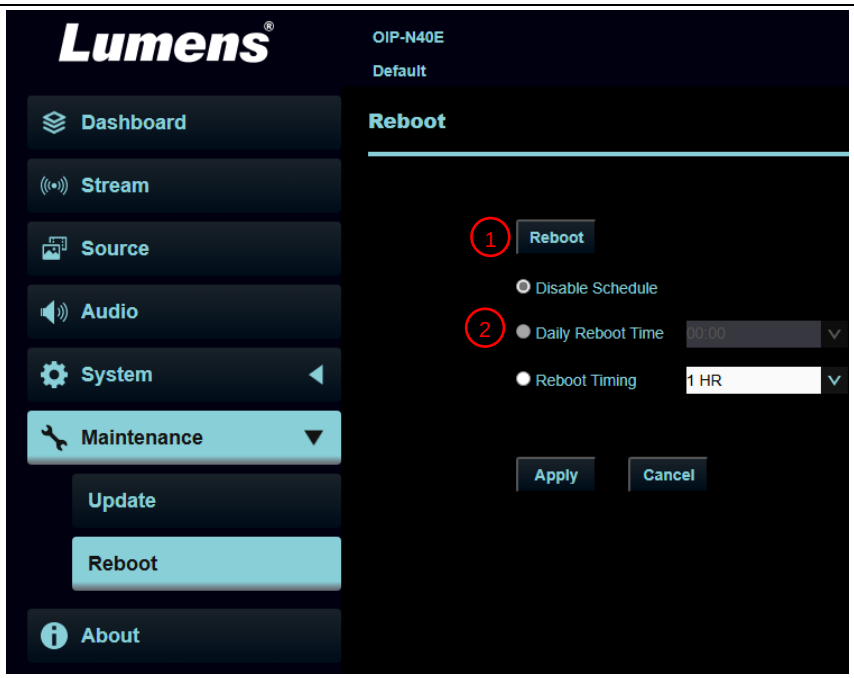
6.3.13 Maintenance - Update



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 Note Update takes about 2 - 3 minutes Note Please do not operate or turn off the power of the device during the update to

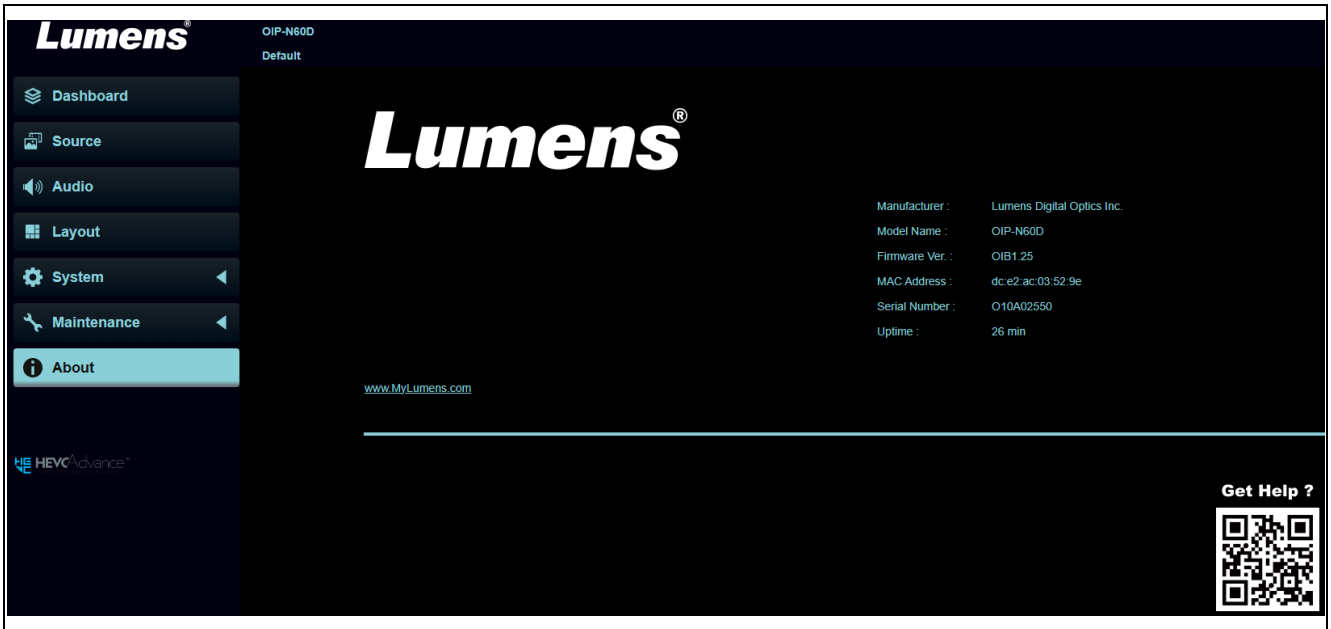
		avoid firmware update failure
3	Factory Reset	Reset all configurations to factory default settings
4	Setting Profile	Save setup parameters. Users can download and upload device setup parameters
5	Log	Export the log file containing the records from the recent period.

6.3.14 Maintenance – Reboot



No	Item	Description
1	Reboot	Click the button to reboot the unit
2	Schedule Reboot	Disable Schedule: Turn off the schedule reboot function. Daily Reboot Time: Set the exact time the unit will automatically reboot. (Can only be enabled when SNTP is selected in the Time Setting section.) Reboot Timing: Set the reboot interval, from 1 to 24 hours.

6.3.15 About



Function Descriptions

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
1.	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
2.	Recommended specifications for USB-C cables	Transfer rate of 10 Gbps or higher
3.	Recommended Switch Configuration	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 strict priority; QoS should be enabled when both 100Mbps and 1Gbps 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 similar 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

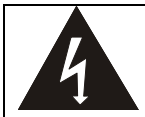
4.1 Disconnect all the cables prior to cleaning and wipe the surface with a dry cloth. Do not use alcohol or volatile solvents for cleaning.

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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