Al-Box1

User Manual-English



Version: 1.2.3

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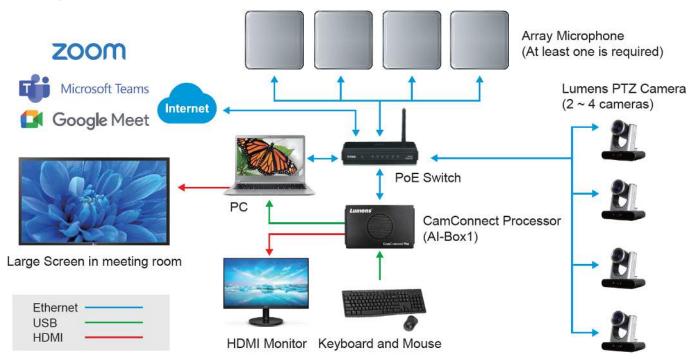


Table of Contents
Chapter 1 System Connection and Application
1.1 System Connection2
1.2 Al-Box1 IO Interface2
Chapter 2 Support Devices
2.1 Shure
2.2 Sennheiser
2.3 Nureva
2.4 Yamaha3
Chapter 3 Operation Interface Description
3.1 Microphone Setting4
3.2 Camera Control & Status5
3.3 Control and Preview5
3.3 Microphone orientation and camera preset relationship setting7
3.4 System Setting7
3.5 Video Output Setting8
3.6 Start Video Output9
3.7 Information9
Chapter 4 Web Page Function10
4.1 Device Setting10
4.2 Network11
4.3 Video Output Setting12
4.4 Maintenance12
4.5 About13
Chapter 5 Connect to a conference video software
5.1 Set the output mode of AI-Box1 to UVC and click the start streaming
option14
5.2 Launch a video software like Skype, Zoom, Microsoft Teams, or other
similar software14
5.3 Choose the video source, to output camera images14
Chapter 6 Troubleshooting15
Copyright Information16

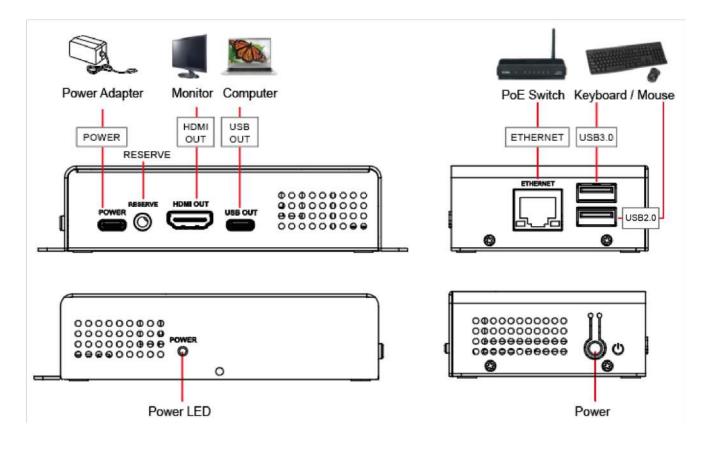
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System Connection and Application

1.1 System Connection



1.2 AI-Box1 IO Interface





2.1 Shure

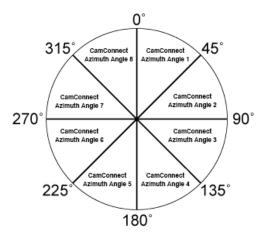
- Shure MXA310 Table Array Microphone
- Shure MXA910 Ceiling Array Microphone
- Shure MXA920 Ceiling Array Microphone

2.2 Sennheiser

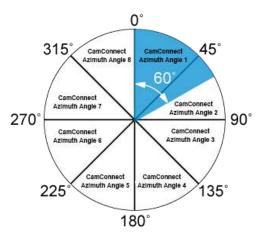
Sennheiser TeamConnect Ceiling 2 (TCC2) Ceiling Microphone

<Note> When using TCC2 with CamConnect, please set and configure the channels on the Sennheiser Control Cockpit software first.

CamConnect is divided into 8 equal parts according to Senheisser's horizontal angle of view. They correspond to CamConnect Azimuth Angle 1 to 8.



If the forbidden area is enabled on the Sennheiser Control Cockpit software, the corresponding position of CamConnect will also be affected. Example: If the forbidden area is set to 0° to 60°, the audio signal from 0° to 45° of CamConnect Array Azimuth 1 and 45° to 60° of Array Azimuth 2 will be ignored.



2.3 Nureva

- HDL300 Audio Conferencing System
- HDL310 Audio Conferencing System
- HDL410 Audio Conferencing System

2.4 Yamaha

Yamaha RM-CG Ceiling Array Microphone



Chapter 3 Operation Interface Description

Sennhesen TCC2 Shure: MXA310 Supported Devices & Settings	Advanced		Device & C	umura Mapping	
Devices : Sermheiser, TCC2 V	Audio Trigger Level > dB :	-55	Azimu	th Angle Camera	Preset No.
Device IP :		L5 Sec	0 0	- 45 Off	V 1 V
Port :	a second a second se	10 Sec	e 45	- 90 00	V 2 V
Connect:	Back to Home Camera :	All V	90	- 135 Off	× 3 ×
	Back To Home Position : Home	4	0 135		× 4 ×
		Appir	0 180	The second se	7) ¥ 5 ¥
			225		
			270		7 0
			315		
			V	- <u>380</u> Cit	
Camera	Add	Control Status			
VC-A61PN	192 168 11 16	Connect	PTZ Control	At Setting	
Veriase)	192,166,11,17.	Disconder	PTZ Control	Al Setting	
VC-A6IPN	192 168 11 22	Connect	PTZ Control	AI Setting	

3.1 Microphone Setting

	Supported Devices & Settings	Advanced		
3	Devices : Sennheiser: TCC2 V	Audio Trigger Level > dB : -55		
3 4 5 6	Device IP :	9 Time To Trigger Preset : 1.5 Sec 🗸 🗸		
5	Port : 45	Back To Home Time : 10 Sec 🗸 🗸		
6	Connect :	🚺 Back to Home Camera : 🛛 🛛 🖂 🗸		
		Back To Home Position : Home S 0		
No	Item	Function Descriptions		
1	Device Number	Select the desired number of microphones to connect		
2	Device List	Display the devices according to the Device Numbers		
3	Devices	Select Microphone Device		
4	Device IP	Enter the IP address of the microphone		
		Display based on the connected devices		
		• Shure : 2202		
5	Port	Sennheiser : 45		
		■ Nureva : 8931		
		<remark> Only Nureva allows customized input of PORT</remark>		
	Connect	Enable/Disable microphone connection		

7	Setting Mode	Enable/Disable Setting mode When the Setting mode is enabled, the microphone can receive signals, but it will not trigger the camera to the preset position. Enabling this mode is recommended when setting the preset position, to prevent microphone from interference from other sounds, triggered to unintended positions.
8	Audio Trigger Level > dB	Triggered only if audio source exceeds the preset dB <pre></pre> <pre><!--</th--></pre>
9	Time To Trigger Preset	Audio Reception Delay Settings When a second sound trigger occurs, there will be a delay in calling the preset position based on the configured duration in seconds.
10	Back To Home Time	Back To Home Time Settings If there is no audio input at the venue, it will trigger, after the set seconds, and return to Home
11	Back to Home Camera	Back To Home Camera Setting
12	Back To Home Position	Home Position Setting
13	Apply	Setting completed; click Apply

3.2 Camera Control & Status

	ra Control 4, Status urtion : 1507/1000 V FPS : 000 V	1	3	(4)	(5)
	Camera VC-A61PN	IP/ USB 192.168.11.15	Control Status Connect	Operation PTZ Control	Al Setting
	VC-R30 VC-A61PN	192.188.11.17 192.188.11.22	Disconnect Connect	PTZ Control PTZ Control	At Setting At Setting
No	Item		Function Desc	riptions	
1	Resolution/ FPS	Resolution/FPS Settir	ngs (must match the	camera output se	ettings)
2	Refresh/ Add	Click to search IP, and click [Add] to ※ Please ensure tha segment.			
		Click [Connect] to est [Disconnect] to canc The connected came	el the connection		or /
		Disconnected:			
3	Connect/ Disconnect	Camera VC-R30	IP / USB 192.168.11.14		Control Status Connect
		Connected:			
		Camera VC-R30	IP / USB 192 168 11 14		Control Status Disconnect
4	PTZ Control	Click to enable PTZ c Refer to <u>3.2.1 PTZ Co</u>		escription	
5	AI Setting	Enable/Disable AI Per •Center Stage: After t will be positioned in th seconds •Continuous Tracking	riggering to the pres ne center of view and I: The system will con	I tracking will stop	after 5
		keep them positioned	in the center		



3.2.1 PTZ Control

	CamConnect	Image: Antipage of the state of the sta
No	Item	Function Descriptions
1	Preview window	Display the screen currently captured by the camera
2	L/R Direction	L/R Direction / Normal
3	Mirror / Flip	Set image mirroring/ flip
4	Pan/Tilt/Home	Adjust the Pan/Tilt position of the camera screen Click [Home] button to return to its central position
5	Preset setting	Click the number keys directly to call the preset Save preset: Click Clear preset: Click first and then a number key
6	AF/MF	Switch to Auto/Manual Focus. Focus can be adjusted in Manual
7	Zoom	Zoom In/ Zoom Out ratio
8	Exit	Exit the PTZ Control page

3.3 Microphone orientation and camera preset relationship setting

After the microphone device is connected, the camera can be controlled to turn to the corresponding preset position according to the microphone detection position.

	Dev	vice & Camera Mapp	ing (3)			
		Azimuth Angle	Camera		Preset	No.
	•	0~45	VC-A61P(192.168.4.29)	V	1	\sim
	•	45~90	VC-A51PN(192.168.4.114)	V	2	\sim
	•	90~135	Off	V	3	\sim
	۰	135 ~ 180	Off	V	4	$\mathbf{\vee}$
	۰	180 ~ 225	Off	V	5	\sim
	٠	225 ~ 270	Off	V	6	V
	•	270 ~ 315	Off	V	7	\mathbf{v}
	•	315 ~ 360	Off	V	8	V
o	ltem		Function	n Dese	cripti	ons

No	Item	Function Descriptions
1	Indicator	This indicator shows the status of microphone signal reception. (A green light indicates successful reception)
2	Array No. Azimuth Angle	 Array No.: For Shure models: Azimuth Angle: Applicable to Sennheiser, Nureva, and Yamaha models. The angle can be manually adjusted
3	Camera	Select the desired camera from the dropdown menu
4	Preset No.	Select the preset position for the camera from the dropdown menu

3.4 System Setting

		e: a: it: 30 sec
No	Item	Function Descriptions
1	Language	English
2	Auto Connection	Auto connection settings Sound Device: Microphone



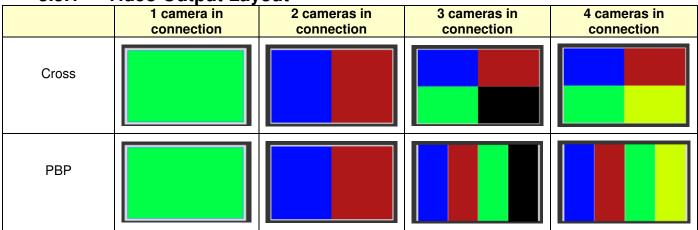
		 Camera: Camera Video Output: Automatic image output
3	Auto Save	Set automatic save interval in seconds
4	Reset/ Apply	Reset/Apply your settings
5	Network	System Network IPV4 Method : DHCP Address : 192168.100.201 Netmask : 255255.255.024 Gateway : 192168.1001 Ethernet Setting. When it is set to Static IP, the setting can be modified. Once the settings are completed, click Apply.

3.5 Video Output Setting

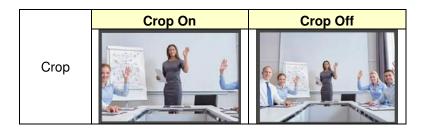
	CamConnect F	
No	Item	Function Descriptions
1	Video Output Mode	Set the Output Mode to either UVC or HDMI
2	Video Output Layout	Configure the layout of the video output according to the provided reference in section <u>3.5.1 Video Output Layout</u> • Cross: 4-split screen • PBP: Picture by Picture screen • Crop: Screen cropping function < Remark> Choose either Cross/PBP only
3	Seamless Switching	Enable/disable the microphone connection function The system is set up for single screen output, and the screen switching is triggered by the microphone signal.



3.5.1 Video Output Layout



If there are three connected cameras, they will be displayed in a 4-grid layout, with one grid showing a black screen.

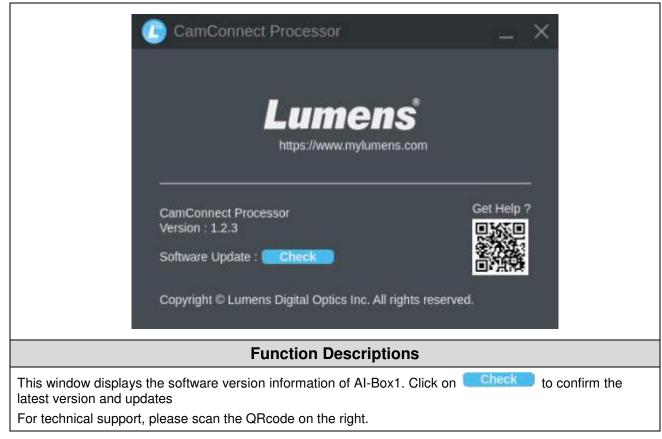


3.6 Start Video Output

Click to output the camera images to HDMI or UVC devices

<Note> Choose only either HDMI/UVC output. For setting the Output Mode, please refer to <u>3.5 Video Output</u> <u>Setting</u>

3.7 Information





Chapter 4 Web Page Function

4.1 Device Setting

Preset No
X 2
v 2 v 4
v 4 v
V 6 V V 7 V
V 8 V
Apply
Operation Operation
PTZ Control Al Setting PTZ Control Al Setting
PTZ Control Al Setting
ons
connect
ione
ut of PORT
on
and's same and the
audio source exceeds the
y Settings. When a second
calling the preset position
ettings. If there is no audio
conds, and return to Home.
g



		 Resolution/FPS: Resolution/FPS Settings (must match the camera output settings) Refresh: Perform a device search again Add: Manually enter the specified ip address and click on Add to add Remark> Please ensure that the camera and Al-Box1 are on the same network segment. Connect/Disconnect: Click [Connect]to establish a connection with the camera or / [Disconnect] to cancel the connection The connected camera will be highlighted in white 		
		Disconnected	Connected	
2	Camera & Control Status	Control Status Connect	Control Status Disonnect	
		PTZ Control: Click to appage the samera's webpage settings		
		 PTZ Control: Click to access the camera's webpage settings Default username and password: admin/999 		
		Please refer to the camera user manual for function description		
		 AI Setting: Enable/Disable AI People Tracking 		
		Center Stage: After triggering to the preset position, the tracked person will be positioned in the center of view and tracking will stop after 5 seconds		
		Continuous Tracking: The system and keep them positioned in the	em will continuously track a person	
	Device & Camera mapping	 Indicator: This indicator shows the status of microphone signal reception. (A green light indicates successful reception) 		
		 Array No. / Azimuth Angle: 		
3		Array No.: For Shure models:		
		Azimuth Angle: Applicable to Sennheiser, Nureva, and Yamaha models. The angle can be manually adjusted		
		 Camera: Select the desired camera from the dropdown menu 		
		 Preset No.: Select the preset position menu 	on for the camera from the dropdown	

4.2 Network

✤ Device & Setting	Network
Network	Network
Video Output Setting	
★ Maintenance	Method DHCP V
f) About	IP Address 192, 168, 100, 201
	Netmask 255 255 024
	Gateway 192.188.100.1
	Apply
	Function Descriptions
Ethernet Setting. When it is set to St click Apply.	atic IP, the setting can be modified. Once the settings are completed,
umens	

4.3 Video Output Setting

	✤ Device & Setting	Video Output Setting	
	Detwork	1 Video Streaming	
	Video Output Setting	g Video Streaming Enable	
	✤ Maintenance	2 Video Output Mode	
	f About	Output Mode UVC	
		3 Video Switching Mode	
		Seamless Switching	
		4 Video Output Layout	
		Cross	
		РВР	
		Сгор	
No	Item	Function Descriptions	
1	Video Streaming	Enable/disable the camera image output	
2	Video Output Mode	Set the Output Mode to either UVC or HDMI	
3	Video Switching Mode	Enable/disable the microphone connection function The system is set up for single screen output, and the screen switching is triggered by the microphone signal.	
	Video Output Layout	Configure the layout of the video output according to the provided reference in section 3.5.1 Video Output Layout	
4		Cross: 4-split screen	
		PBP: Picture by Picture screen	
		Crop: Screen cropping function	
		<remark> Choose either Cross/PBP only</remark>	

4.4 Maintenance

≁ Device & Setting	Maintenance		
Detwork			
Video Output Setting	Setting Config Export Import		
✤ Maintenance			
About			
Function Descriptions			
Users can Export/Import AI-Box1 configuration parameters			



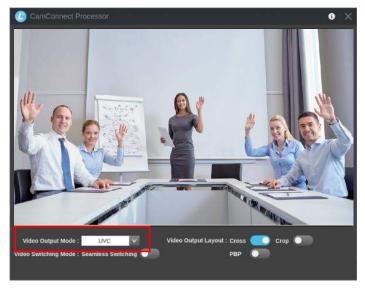
4.5 About

	✤ Device & Setting		R		
	Network		Lumens		
	Video Output Setting				
	✤ Maintenance				
	1 About			Version:	V1.2.3
				Update:	Check
			7		
					(2. St.
Function Descriptions					
This window displays the software version information of AI-Box1. Click on Check to confirm the latest version and updates					
For techni	ical support, please sca	n the QRco	de at the bottom right		

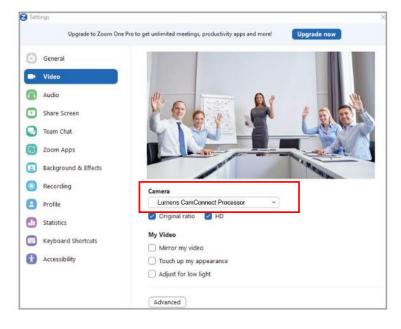


Chapter 5 Connect to a conference video software

5.1 Set the output mode of AI-Box1 to UVC and click the start streaming option



- 5.2 Launch a video software like Skype, Zoom, Microsoft Teams, or other similar software
- 5.3 Choose the video source, to output camera images
 - Video Source Name: Lumens CamConnect Processor





Chapter 6 Troubleshooting

This chapter describes problems you may encounter while using AI-Box1. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact your distributor or the service center.

NO	Problems	Solutions		
1.	Unable to search camera devices	 Check the power supply of camera or PoE power supply is stable. Make sure the PC is connected to the camera with the USB cable Replace the cables and make sure they are not faulty 		
2.	No response from the microphone detection position	Please confirm that the microphone device is in Connect status		
3.	When using with a Sennhesier microphone, no response at the specific angle	 Make sure the Azimuth Angle settings in the CamConnect software include that angle position Make sure if the angle is set as the forbidden area on Sennhesier Control Cockpit software. Refer to <u>3.2 Sennhesier Microphone</u> System for details. 		
4.	When setting camera preset positions, if the microphone detects signals from other directions, it may cause the camera to move to other positions, thus interrupting the setting	Please refer to <u>3.1 Microphone Setting</u> to enable the Setting mode Once enabled, the microphone can receive signals, but it will not trigger the camera to the preset position		
5.	Used together with Shure TCC2 microphone. Sound detection not sensitive, not accurate	Suitable for large-area positioning when Shure Designer Automatic coverage is On.		

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