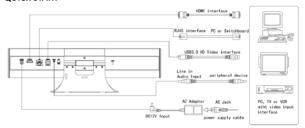


Packing list

Check all bellow	items when	open the	package

Camera	1
Power Adapter ·····	······· 1
Power Cable ·····	······· 1
USB3.0 Cable·····	1
Remote Controller	1
User Manual ······	1
QC certification ······	1

QUICK START



Product Advantages:

- Adopt advanced DSP, Sony 1/2.8 inch 8.42 megapixel sensor and high quality 12 megapixel lens, to output Ultra high definition, crystal clear image
- USB3.0 and USB2.0 YUY2/MJPG/ H.264/ H.265 video format, works with Windows, MACOS, Android, Linux OS.
- HDMI, USB3.0 / 2.0, RJ45 multi interface output.
- 120degree field of viewing.
- Lens distortion rate less than 4% (120°FOV).
- Support Line in external audio input.
- Support WDR, 3DNR, Anti-flicker feature.

- Standard UVC 1.5 protocol, compatible with your favorite video conferencing software and platform..
- The low noise CMOS effectively enables the ultra-high signal-to-noise ratio of the camera video, and keeps clear and sharp image even under the condition of ultra-low illumination
- Support Auto frame: Auto-frame participants at meeting start or enter, leave, or change positions; Auto-frame can be closed via remote controller.

Uses Microphone Array Algorithms

By sampling and processing the spatial characteristics of sound field, the background sound can be removed to the maximum extent, leaving only the needed sound waves, even in the noisy environment, it can make the voice sound clear without noise:

High Definition Audio

 $16\mbox{K}$ pickup and $24\mbox{K}$ playback, to make voice crystal clear, sounding like face-to-face meeting.

360° Omni-directional pickup, the pickup range is up to 5 meters and voice quality is most ideal in 3 meters.

Outstanding Full Duplex Communication

Freely and fluent two-ways communication in 5 meters.

Advanced Speech Algorithms

360° Omni-directional and long distance pick

Full duplex communication

384ms acoustic echo cancellation

Background noise suppression

Auto-level loud and soft voices

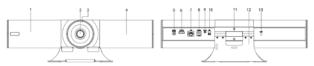
Peak-limiting algorithm eliminates even momentary speaker clipping to prevent distortion

Product Spec

Model		4K UHD Video Camera
Sensor		1/2.8 inch high quality, 8.42 megapixel SONY CMOS sensor
	HDMI	3840*2160P30/25 1920*1080P60/50/30/25/59.94/29.97 1920*1080I60/50/59.94 1280*720P60/50/30/25/59.94/29.97
Video Format	USB (YUV)	3840*2160@20/15/10/5(U3) 2592*1944@30/25/20/15/10/5(U3) 2048*1536@30/25/20/15/10/5(U3) 1920*1080@30/25/20/15/10(U3) 1920*1080@5(U3&U2) 1280*720@30/25 (U3) 1280*720@20/15/10/5(U3&U2) 640*360@30/25/20/15/10/5(U3&U2)
	USB (MJPG/ H.264/ H.265)	3840*2160@30/25/20/15/10/5(U3&U2) 2592*1944@30/25/20/15/10/5(U3&U2) 2048*1536@30/25/20/15/10/5(U3&U2) 1920*1080@30/25/20/15/10/5(U3&U2) 1280*720@30/25/20/15/10/5(U3&U2) 960*540@30/25/20/15/10/5(U3&U2) 704*576@30/25/20/15/10/5(U3&U2) 640*480@30/25/20/15/10/5(U3&U2) 640*480@30/25/20/15/10/5(U3&U2) 320*240@30/25/20/15/10/5(U3&U2)
Digital Zo	RJ45	None (only for power, control and upgrade) 4X
Field of \		120°
Sensor Resolution		8.42 megapixel
Control F	Port	USB3.0/USB2.0(UVC)/RJ45(IP VISCA)
Video Po		HDMI, USB3.0/USB2.0
S/N Ra Focal L		>50dB f=2.20mm

Minimum Lux.	0.1 lux
White Balance	Auto/Manual/Indoor/Outdoor
Iris	F No. 2.2
Anti-Flicker	50HZ/60HZ/OFF
WDR	Supported
Edge Enhancement	Supported
Digital Noise Reduction	2D&3D
Image Flip	Supported
Electronic Pan/Tilt	Supported
Backlight Compensation	Supported
Voice Pick Distance	3~5meters
Line in	Supported, AAC/LPCM
USB Audio	Supported
Microphone	Omnidirectional microphone (100~16KHz)
Sensitivity	-26±2dB RL=2.2KΩ Vs=2.0V
Input Voltage	DC port
Speaker	4Ω/8W 100-24KHz 2inch Anti-magnetic speaker
POE	Support
Dimension(L x Wx H)	395mm×113mm×112mm
Net Weight	1KG

CAMERA INTERFACE:



1. Speaker

6. HDMI interface

11. Adjustable spindle

2. Camera lens

7. RJ45 network interface

12. Rotatable bracket13. Safety cord interface

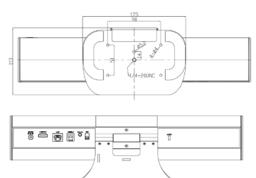
Status indicator light
 Multi array microphone

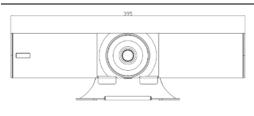
8. USB3.0 interface9. Line in interface

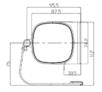
5. DC12V power interface

10. Dial switch

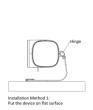
CAMERA DIMENSION(MM):

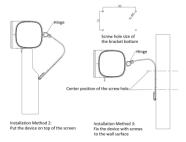






Installation Modes:





Instructions for wireless remote control:





Led function indication

Press any button to show red color: it means that the present selection is to control camera 1;

Press any button to show green color: it means that the present selection is to control camera 2;

Press any button to show blue color: it means that the present selection is to control camera 3;

CAM1/CAM 2/CAM3:

Press the key shortly to select the camera to be controlled, press the key for 3s to set the camera address.



Zoom adjustment key: +/-

Adjust the electronic zoom, which can only be used when AI is in OFF mode;

Power key

Standby / start camera;

BLC

Set backlight compensation ON or OFF

Navigation key: up, down, left and right

In normal working mode, it is used to adjust the position of electronic pan tilt or select menu items after entering the menu;

Confirm / Home key:

In the normal working mode, shortly press to return the electronic pan tilt to home position. Or after entering the menu, it is used to confirm the menu options:

Menu kev:



In normal working mode, press to enter the menu, and then press to close the menu;

Volume control key:

Control the volume or mute.

Video Mute/ Micro Mute

Video Mute and micro mute.



A/M

Auto-frame/Manual frame



PUSH Frame



In auto frame off mode, you can manually trigger the auto-frame once.

Preset kev:

Long press for 3 seconds to save the current position to the corresponding preset position, shortly press to call the preset position, only can be used when Auto Frame is closed.;

Mirror / Flip: RESET

Reset:

Press and hold for 3S to reset the camera parameters to the factory settings;

Digital key reuse:

As shown in the figure on the right, when setting the parameters such as IP address in the menu, you can input the number of IP address with the multiplexed number key. In the non menu mode, these keys are used as the functions identified on the keys, and can be used to set IP and other parameters after entering the menu.



OSD MENU

1.In normal working mode, press the menu button on the IR remote, to enter the OSD menu; press the menu button again to exit and save modified parameters;



- 2. Use the navigate button to select the main menu. As above picture, once been selected, the main menu will change to grey color background, and the right side will show all parameters under this sub menu::
- 3. When enter into the main OSD menu, press the up/down navigate button to select the sub menu, use left/right navigate button to set the parameter:

4.If you need to return back the last level menu, select the "return" and then press the left or right navigate button to get back to previous menu;



5. Press OSD button again to exit the menu.;

6. OSD Menu Layout:

	LANGUAGE	English/Chinese	
	PROTOCOL	Optional item: VISCA	Default: VISCA
	ADDRESS	VISCA:1~7	Default:1
	BAUD RATE	2400,4800,9600,115200 optional	Default:9600
SYSTEM	DHCP	DHCP ON/OFF	Default: OFF
	IP	IP address Default:192.168.001.188	
	MASK	Subnet mask Default:255.255.255.000	
	GW	Gateway Default:192.168.001.001	
	RETURN	Back to the main menu	

	EXPOSURE MODE	AUTO,MANUAL,SHUTTER,IRIS,BRIGHT	Default: AUTO
EXPOSURE			
LAFOSORL		Shutter speed:1/8~1/10000,	Default:1/100
	SHUTTER	only valid under MANUAL and	
		SHUTTER mode	

	GAIN		Gain setting:0dB~28dB , only valid under manual mode	Default:0
	BRIGHT		Bright setting:0~15, only valid under manual mode	Default:11
	FLICK		OFF/50Hz/60Hz	Default:50Hz
	BLC		ON/OFF	Default: OFF
	GAMMA		0~4	Default:0
	RETURN		Back to the main menu	
V			/MANUAL/INDOOR/OUTDOOR/ SODIUM /KEY CONTROL/AUTO TRACKNG	Default: AUTO
		Red a	ain level: 0~255, only valid under manual	Default:58

	WB MODE	AUTO/MANUAL/INDOOR/OUTDOOR/ SODIUM LAMP/KEY CONTROL/AUTO TRACKNG	Default: AUTO
	R_GAIN	Red gain level: 0~255, only valid under manual white balance mode	Default:58
IMAGE	B_GAIN	Blue gain level:0~255 , only valid under manual white balance mode	Default:52
	DEFOG	Set the image permeability, should not be too large, otherwise it will affect the gray level of the picture	Default:0
	RETURN	Back to the main menu	

		Set 2D noise reduction level: ON/OFF	Default: OFF
QUALITY	2D NR		

3D NR	Set 3D noise reduction level: OFF/AUTO、1~4	Default: AUTO
SHARPNESS	Sharpness setting: 0~15; the higher value, the clearer of image shape	Default:3
CONTRAST	Contrast setting: 0~15	Default:8
SATURATION	Saturation setting:0~15	Default:8
BRIGHT	Bright setting:0~15	Default:8
D-WDR	OFF/1~6	Default: OFF
RETURN	Back to the main menu	

	MIRROR	Turn the screen left and right ON/OFF	Default: OFF
	FLIP	Picture up and down (hoisting mode) ON/OFF	Default: OFF
CTRL	D/N MODE	When turned on, the camera enters night mode	Default: DAY
CIRL	GAIN LIMIT	Set auto exposure gain limit	Default:128
	AUTO FRAME	ON/OF	Default: OFF
	RETURN	Back to the main menu	

	CAM	Reset camera parameter to default
RESET	RESET	
KESET	PT RESET	Reset pan/tilt parameter to default

ALL RESET	Reset all parameter to default
RETURN	Back to the main menu

INFO	CONTROL VER	Camera movement control program version
	CONTROL DATE	Release date of camera movement control program
	FORMAT	Current video mode of camera
	BAUDRATE	Current serial port baud rate
	IP	Current IP address Default:192.168.001.188
	MASK	Current subnet mask Default:255.255.255.000
	GW	Current gateway Default:192.168.001.001
	RETURN	Back to the main menu