

# VHD-JX1700U

## DATASHEET - MANUAL



### MAIN FEATURES

- Ultra 4K HD Support 4K Ultra HD with super resolution up to 4K@30fps/25fps encoding output, and downcompatible with 1080p,720p.
- USB 3.0 Full functional USB, 3.0 connection, power supply, video and audio all in one and support 2 streaming USB video signal and one audio source.
- AF Lens Complete customized auto focus non-distortion lens, view angle up to 46° / 84° / 120°, small lens with big view, supporting EPTZ.
- Built in Microphone Built in microphone array, omnidirectional pickup, pickup distance up to 12 meters, noise suppressing algorithm with excellent sound.
- WDR Support WDR, can handle different lighting environment.
- Low Light Star-level ultra-high noise ratio of the new CMOS image sensor can effectively reduce the low noise in the case of image noise, while the application of 2D and 3D noise reduction algorithm, significantly reducing the image noise, even under low light conditions, still keep the picture clean and clear, the image signal to noise ratio up to 55dB or more.
- Easy Installation Equipped with damping rotary shaft bracket, to meet the market almost 100% of the display, easy to install, stable and reliable.

## CAMERA

VIDEO SYSTEM (HDMI)	4K@30FPS/25FPS, 1080P@60/50/30/25FPS, 1080I@60/50FPS, 720P@60/50FPS
SENSOR	1/2.5", CMOS, EFFECTIVE PIXEL: 8.51M
SCANNING MODE	PROGRESSIVE
LENS MOUNT	M12
LENS 1	FOCUS: F=7.35MM, FOV: 46°
LENS 2 (DEFAULT)	FOCUS: F=3.5MM, FOV: 84°
LENS 1	FOCUS: F=2.8MM, FOV: 120°
AUTOFOCUS	SUPPORT
MINIMAL ILLUMINATION	0.05 LUX @ (F1.8, AGC ON)
SHUTTER	1/30S ~ 1/10000S
WHITE BALANCE	AUTO, INDOOR, OUTDOOR, ONE PUSH, MANUAL
CAMERA BRACKET	BRACKET WITH DAMPER
DIGITAL NOISE REDUCTION	2D,3D DIGITAL NOISE REDUCTION
BACKLIGHT COMPENSATION	SUPPORT

## USB FEATURES

OPERATE SYSTEM	WINDOWS® 7 (1080P AND UNDER ONLY), WINDOWS 8.1, WINDOWS 10 OR HIGHERMACHOS™ 10.10 OR HIGHERGOOGLE™ CHROMEBOOK™ VERSION 29.0.1547.70 OR HIGHERLINUX
HARDWARE REQUIREMENT	2.4 GHZ INTEL® CORE 2 DUO PROCESSOR OR HIGHER2 GB RAM OR MOREUSB 2.0 PORT (USB 3.0 REQUIRED FOR 4K)
COLOR SYSTEM / COMPRESSION	H.265 / H.264 / MJPEG / YUY2
RESOLUTION	4K, 1080P, 720P, 960X540P, 640X360P, 320X240P
FRAME RATE	30FPS, 25FPS, 24FPS, 20FPS, 15FPS, 10FPS, 7.5FPS, 5FPS
USB VIDEO COMMUNICATION PROTOCOL	UVC V1.0/V1.1/V1.5
UVC PTZ	SUPPORT(EPTZ)

## INPUT/OUTPUT INTERFACE

USB INTERFACE	1XUSB 3.0: TYPE B, FEMALE
HDMI INTERFACE	1XHDMI: VERSION 1.4
AUDIO INTERFACE	1X 3.5MM AUDIO JACK: LINE IN

## GENERAL SPECIFICATION

INPUT VOLTAGE	5V (USB POWER SUPPLY)
CURRENT CONSUMPTION	1A
OPERATING TEMPERATURE	-10°C ~ 40°C (14°F ~ 104°F)
STORAGE TEMPERATURE	-40°C ~ 60°C (-40°F ~ 140°F)
POWER CONSUMPTION	3.5W(TBD)
SIZE	194MM X 34MM X 42MM (WITHOUT BRACKET)
NET WEIGHT	0.5KG(TBD)
MTBF	30000H

## APPEARANCE AND INTERFACE



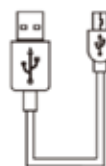
## PACKING LIST



Camera x 1



Remote Control  
(option) x 1

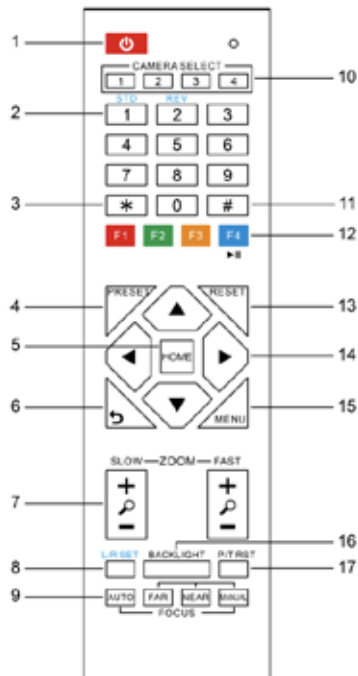


USB Cable x 1



User Manual x 1

## REMOTE CONTROL



## PRODUCT FEATURES

### 4K ULTRA HIGH DEFINITION

Support 4K ultra high definition, ultra high definition with ultra high resolution, the maximum can provide 4K@30fps/25fps image output, while down compatible with 1080p, 720p and other resolutions.

### USB 3.0

Full function USB 3.0 interface, power supply, video, audio in one, it also can support two channels of USB video signal source and one channel audio source.

### AF LENS

Full custom auto focus without distortion lens, wide angle field of view up to 84 degrees, small lens, wide vision. At the same time support EPTZ, with unmovable brake, more larger, more clear.

### WDR

Support WDR, easy to cope with different lighting environments, no matter how harsh the environment can restore the most real you.

### BUILT-IN-MICROPHONE

With a built-in microphone array, you can pick up a full range of sounds, and pick up the sound distance up to 12 meters. The unique noise suppression algorithm makes your voice perfect.

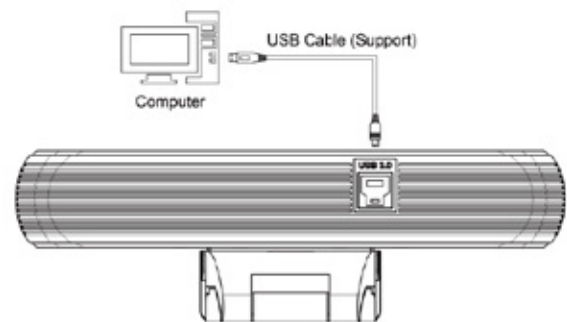
### EASY INSTALLATION

Standard damping rotary shaft support, suitable for market 100% monitor, easy installation, stable and reliable.

## LOW-LIGHT

The application of 2D and 3D noise reduction algorithm greatly reduces the image noise.

Even under the condition of ultra-low illumination, it still keeps the picture clean and clear, and the SNR of image is as high as 55dB.



No.	Name	Function Description
1	Standby Key	Enter into standby mode (not support)
2	Number Key	Preset setting or transfer preset
3	*Key	Equipped with other keys for using
4	Preset Key	Preset : Setting Preset + Number key ( 0-9 )
5	PTZ Control key	The PTZ will back to the middle position
6	Return Key	Return back the last level menu
7	Zoom Button	Making the lens wide angle/narrow angle slowly or quickly
8	Left/Right Setting Key	<ul style="list-style-type: none"> <li>Standard: Simultaneously press Left/Right setting key + 1</li> <li>Reverse: Simultaneously press Left/Right setting key + 2</li> </ul>
9	Focus Key	auto/manual/far-end/near-end focus
10	Selection Key	Select the camera need to control
11	#Key	Need to equipped with other key
12	IR Remote Control Key	[*+ # +F1/F2/F3/F4]: NO. 1/2/3/4 address (not support)
13	Reset Key	Delete preset
14	PTZ control key	PTZ moved according to the arrow indicates after zoom
15	Menu Key	Enter or exit OSD Menu after pressed it
16	Backlight Key	Turn on/off backlight consumption (loop)
17	PTZ reset key	Only applicable to the PTZ cameras

## SAFETY PRECAUTIONS

### CAREFUL INSTALLATION

This product should be placed on the smooth desktop. The shell of the product is an organic material and is strictly prohibited from contact with any liquid, gas or solid material that may cause corrosion to the shell.

### DO NOT UNAUTHORIZED DISASSEMBLE

This product has no parts which can be repaired by the user. The damage caused by the user's own disassembly is not covered by warranty. Electromagnetic fields at specific frequencies may affect image of machine.

### PRODUCT SPECIFICATIONS

Camera	
Sensor	1/2.5", CMOS, Effective Pixel: 8.0M
Scanning Mode	Progressive
Lens Mount	M12
Lens Focus	3.5mm
Wide Angle	84°
Distortion	0.46%
Auto Focus	Support
Minimal Illumination	0.05 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Digital Noise Reduction	2D, 3D digital noise reduction
Backlight Compensation	Support
USB Features	
Operate System	Windows XP/2003/VISTA/7/8/10, Linux, Mac OS
Color / Compression	YUY2/MJPEG/H.264/NV12
Resolution	<ul style="list-style-type: none"> <li>YUY2 : 640x480 (default), 640x360</li> <li>MJPEG : 3840x2160 (default), 160x120, 176x144, 320x240, 352x288, 640x480, 720x576, 1600x896, 1280x720, 1024x768, 1024x576, 960x540, 848x480, 800x600, 800x448, 640x360, 480x272, 424x240, 320x180, 1920x1080</li> <li>H.264 : 1920x1080 (default), 320x240, 352x288, 640x480, 720x576, 1600x896, 1280x720, 1024x768, 1024x576, 960x540, 848x480, 800x600, 800x448, 640x360, 480x270, 424x240, 320x180, 3840x2160</li> <li>NV12 : 1920x1080 (default), 640x480, 1280x720, 640x360</li> </ul>
USB Communication Protocol	UVC 1.0 ~ UVC 1.5
UVC PTZ	Support (EPTZ)
Input/Output Interface	
USB Interface	1 x USB 3.0: Type B, female
Physical Parameter	
Input Voltage	5V (USB power supply)
Current Consumption	0.5A (Max)
Operating Temperature	-10°C ~ 40°C
Storage Temperature	-40°C ~ 60°C
Power Consumption	3W
Size	194mm x 34mm x 42mm (without bracket)
Net Weight	0.34 Kg
MTBF	> 30000h

### TROUBLESHOOTING

Image have jitter when the camera lens at max multiple:

- 1) Check whether the camera installed position be stabled.
- 2) Check whether have vibrating machinery or object near the camera.

Remote control can not control:

- 1) Check and replace the new battery for the remote controller.
- 2) Check whether the camera working mode is correct.

### TOXIC AND HARMFUL SUBSTANCES

Part Name	Toxic or harmful substances or elements					
	(Pb)	(Hg)	(Cd)	(CrVI)	(PBB)	(PBDE)
Metal	x	o	o	o	o	o
Plastic	o	o	o	o	o	o
Glass	x	o	o	o	o	o
Circuit board	x	o	o	o	o	o
Power	x	o	o	o	o	o
Attached	x	o	o	o	o	o

This form is compiled in accordance with SJ/T 11364.

O: Indicates that the content of the hazardous substance in all homogenized materials of the component is subject to the limit specified in GB/T 26572.

x: Said the hazardous substance in at least one of the components homogenized material content in excess of the GB/T 26572 limit requirements, and there are no mature alternatives.

### WARRANTY CARD

If failure caused by non-human causes occurs within one year from the date of purchase of the machine, you may enjoy the warranty service of the product. Any of the following circumstances is not covered by the warranty:

- Without disassemble, modification such as fault causes.
- Use of an environment does not conform to requirements of the product.
- Irresistible factors, such as fire, earthquake, lightning strike, etc.
- Warranty card does not match the product number or it is altered.

User Name	
User Address/Post Code	
Contact Number	
Product Model	
Product Series	
Purchasing Date	
Invoice No.	
Sales Department	

User save, lost or not compensated. Sales Department: (seal).