

VHD-V60CL

DATASHEET - MANUAL



MAIN FEATURES

- H.265 Support the first H.265 encoding support conference video camera in the world, enabling full HD. 1080p/60fps video stream by ultra-low bandwidth.
- 1080P Full HD Apply Panasonic's 1/2.7 inch, 2.07 million effective pixels high quality HD CMOS sensor, can reach maximum 1920x1080 high resolution and achieve quality image.
- Ultra-high Frame Rate The output frame rate up to 60fps in 1080P, up to 120fps output in 720P (supported by network only), 640x480P can be as high as 240fps (supported by network only, optional).
- Face Detection Built-in face detection module, enabling PTZ tracking (optional).
- AAC Audio Encoding Support AAC audio encoding, better sound quality and smaller bandwidth.
- Local Storage Support local storage module, directly recording to local USB flash disk without NVR.
- Low-light High SNR of CMOS sensor combined with 2D and 3D noise reduction algorithm, effectively reduce the noise, even under low illumination conditions, picture can still keep clean and clear.
- Abundant & Perfect Interface Support HDMI output, 3G-SDI interface, effective transmission distance up to 150 meters (under 1080p30). HDMI, SDI, Network can output at the same time. It also support CVBS interface (supported by V60 only).
- 20x Optical + 32x Digital Zoom Use TAMRON high quality super telephoto lens, support 20x optical zoom, and 32x digital zoom (optional).
- Remote Control Using RS232/485 interface, all the parameters of the camera can be remote controlled by the high-speed communications.

CAMERA

VIDEO SYSTEM	HD: 1080P/60, 1080P/50, 1080I/60, 1080I/50, 1080P/30, 1080P/25, 720P/60, 720P/50, 720P/30, 720P/25SD: 480I, 576I
SENSOR	1/2.7", CMOS, EFFECTIVE PIXEL: 2.07M
SCANNING MODE	PROGRESSIVE
LENS	20X, F4.42MM ~ 88.5MM, F1.8 ~ F2.8
DIGITAL ZOOM	32X (OPTIONAL)
MINIMAL ILLUMINATION	0.5 LUX @ (F1.8, AGC ON)
SHUTTER	1/30S ~ 1/10000S
WHITE BALANCE	AUTO, 3000K/INDOOR, 4000K, 5000K/OUTDOOR, 6500K_1, 6500K_2, 6500K_3, ONE PUSH, MANUAL
BACKLIGHT COMPENSATION	SUPPORT
DIGITAL NOISE REDUCTION	2D&3D DIGITAL NOISE REDUCTION
VIDEO S/N	≥55dB
HORIZONTAL ANGLE OF VIEW	60.7° ~ 3.36°
VERTICAL ANGLE OF VIEW	34.1° ~ 1.89°
HORIZONTAL ROTATION RANGE	±170°
VERTICAL ROTATION RANGE	-30° ~ +90°
PAN SPEED RANGE	1.7° ~ 100°/S
TILT SPEED RANGE	1.7° ~ 69.9°/S
H & V FLIP	SUPPORT
IMAGE FREEZE	SUPPORT
POE	SUPPORT (OPTIONAL)
LOCAL STORAGE	SUPPORT
NUMBER OF PRESET	255
PRESET ACCURACY	0.1°

IPC FEATURES

VIDEO COMPRESSION	H.265/H.264/MJPEG
VIDEO STREAM	MAIN STREAM, SUB STREAM
MAIN STREAMRESOLUTION	1920X1080, 1280X720, 1024X576
SUB STREAMRESOLUTION	720X576, 720X480, 320X240
VIDEO BIT RATE	128KBPS ~ 8192KBPS
BIT RATE TYPE	VARIABLE RATE, FIXED RATE
FRAME RATE	50HZ: 1FPS ~ 50FPS, 60HZ: 1FPS ~ 60FPS, 720P120: 120FPS, 640X480P240: 240FPS
AUDIO COMPRESSION	AAC
AUDIO BIT RATE	96KBPS, 128KBPS, 256KBPS
SUPPORT PROTOCOLS	TCP/IP, HTTP, RTSP, RTMP, ONVIF, DHCP, MULTICAST, ETC.

INPUT/OUTPUT INTERFACE

HD OUTPUT	1XHDMI: VERSION 1.3 1X3G-SDI: BNC TYPE, 800MVP-P, 75Ω, ALONG TO SMPTE 424M STANDARD
SD OUTPUT	1XCVBS: 3.5MM MINI JACK, 1VP-P, 75Ω
NETWORK INTERFACE	1XRJ45: 10M/100M ETHERNET INTERFACE
AUDIO INTERFACE	1-CH: 3.5MM AUDIO INTERFACE, LINE IN
USB	1XUSB2.0: TYPE A FEMALE JACK
COMMUNICATION INTERFACE	1XRS232 IN: 8PIN MIN DIN, MAX DISTANCE: 30M, PROTOCOL: VISCA/ PELCO-D/PELCO-P - 1XRS232 OUT: 8PIN MIN DIN, MAX DISTANCE: 30M, PROTOCOL: VISCA NETWORK USE ONLY - 1XRS485: 2PIN PHOENIX PORT, MAX DISTANCE: 1200M, PROTOCOL: VISCA/PELCO-D/PELCO-P
POWER JACK	JEITA TYPE (DC IN 12V)

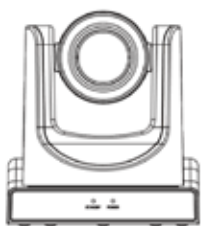
GENERIC SPECIFICATION

INPUT VOLTAGE	DC 12V / POE (802.3AF)
CURRENT CONSUMPTION	1.0A (MAX)
OPERATINGTEMPERATURE	-10°C ~ 40°C (14°F ~ 104°F)
STORAGE TEMPERATURE	-40°C ~ 60°C (-40°F ~ 140°F)
POWER CONSUMPTION	12W (MAX)
NET WEIGHT	1.35KG (3.0LB)

APPEARANCE AND INTERFACE



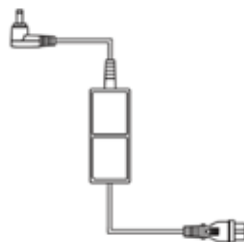
PACKING LIST



Camera x 1



Remote Control x 1



AC Power Adaptor x 1

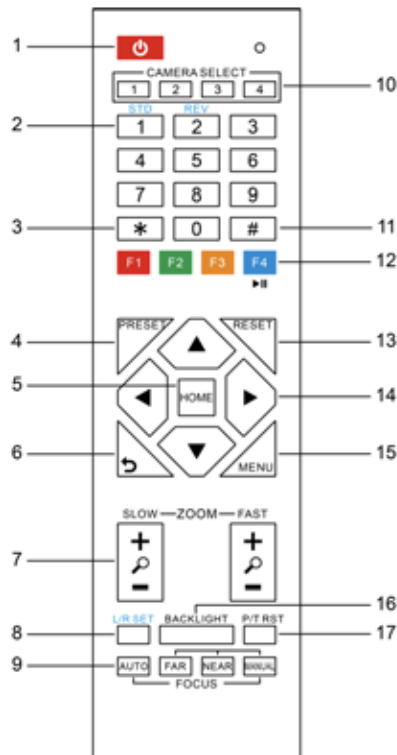


RS232 Cable x 1



Quick Start x 1

REMOTE CONTROL



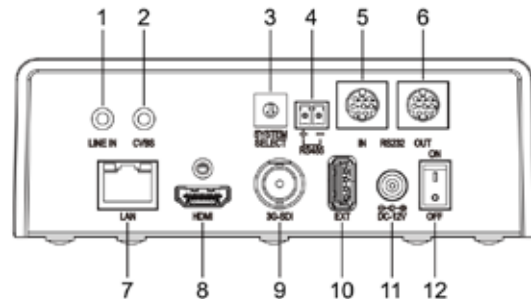
WARRANTY CARD

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.



No.	Name	No.	Name
1	LINE IN interface	7	Network Interface
2	CVBS Interface	8	HDMI Interface
3	System Select Switch	9	3G-SDI Interface
4	RS485 Interface	10	USB 2.0 Interface
5	RS232 IN Interface	11	DC 12V Interface
6	RS232 OUT Interface	12	Power Switch


*Video Format					
0	1080P/60	6	1080P/30	C	--
1	1080P/50	7	1080P/25	D	576i
2	1080I/60	8	720P/30	E	480i
3	1080I/50	9	720P/25	F	--
4	720P/60	A	--		
5	720P/50	B	--		



- Notice**
- After switching the video format, you need to restart the camera before taking effect!
 - 720P/30 and 720P/25 only take effect when HDMI output.

No.	Name	Function Description
1	Standby Key	Enter into standby mode by pressed it
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"> • Standard: Simultaneously press Left/Right setting key + 1 • Reverse: Simultaneously press Left/Right setting key + 2
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
13	Reset Key	Delete preset
14	PTZ control key	PTZ moved according to the arrow indicates
15	Menu Key	Enter or exit OSD Menu after pressed it
16	Backlight Key	Turn on/off backlight consumption (loop)
17	PTZ reset key	PTZ starts to self-test after pressed it

RS232 INTERFACE

Interface diagram	No.	Function	No.	Function
	1	DTR	5	RXD
	2	DSR	6	GND
	3	TXD	7	IR OUT
	4	GND	8	NC

SAFETY PRECAUTIONS



ELECTRICAL SAFETY

The installation and use of this product must strictly comply with local electrical safety standards.

POWER POLARITY

This product uses DC+12V power, please pay attention to the power polarity.

CAREFUL INSTALLATION

Do not grab the camera head to move the camera. Do not rotate head of camera by hand, it may cause mechanical problems.

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 the image of the machine.
- Do not hot-plug the power supply during the use of the IP Camera.

TOXIC AND HARMFUL SUBSTANCES

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

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

○: 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.

TROUBLESHOOTING

IMAGE

- The monitor shows no image:
 - 1) Check that the camera power supply is connected, the voltage is normal, and the power indicator light is always on.
 - 2) Turn off the power switch to check whether the camera is self-testing.
 - 3) Check the cable of video platform and TV whether correct connection.

- Sometimes without the image: Check the cable of video platform and TV whether correct connection.

- 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.

- There is no image in IE Browser Please visit VLC website (<http://www.videolan.org/vlc>) download and install VLC media player, after it installed, visit IP Camera will have normal image display.

- Unable to access IP Camera through IE browser:
 - 1) Using PC to access the network to test whether the network access can work properly, first of all, the network fault caused by the PC virus can be eliminated, until the PC and IP Camera can communicate with each other Ping.
 - 2) Disconnect the network, connect IP Camera and PC separately, and reset the IP address of PC.
 - 3) Check IP address, subnet mask, and gateway settings for IP Camera.
 - 4) Check whether the MAC address is conflicts.
 - 5) Check whether the Web port is occupied by another device.

- Forget IP address or website login password. Please remember (The default IP address: 192.168.100.88; default user name: admin; Default password: admin).

- 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.

- Series port can not control:
 - 1) Check whether the camera protocol, address such is the same.
 - 2) Check whether the control line is connected well.