HANERGY

HD Conference Camera
User Manual

Version V5.0(English)

Contents

Attention

1. Foreword

Thanks for choosing our VHD series conference cameras.
Please read this manual carefully before using the product.

2. Notice

·To avoid damage from stress, violent vibration, soaking during transportation, storage and installation.
·Take care of each components of camera during installation, and install camera at where is affordable enough, to avoid drop or scratches of camera case.
·Handle the camera parts gently, do not squeeze the camera units hard. Please do not touch the camera lens by hand directly to avoid the lens scratched and image quality affected.
·Do not apply excessive voltage. (Use only the specified voltage) Otherwise, you may get an electric shock or a fire may occur.
·Do not aim the camera at the sun or the other high luminous objects, otherwise it may cause image blurring or lens flare, even cause permanent damage to the camera.
·Do not clean camera with active chemical or corrosive detergents, and remove dust or dirt on the surface of the lens with a blower (Commercially available)
·Do not disassemble any camera components, in case of abnormal operation; contact your authorized dealer or the store where you purchased the product.

3. Supplied Accessories

(1) HD conference camera   (2) DC12V-2A power supply

(3) Ceiling mount   (4) Mounting screws

(5) Manual   (6) Remote control

(7) Serial port control cable   (8) USB cable

Performance Characteristics

## 1. Camera technical parameters

Electric		Communication	
Input Voltage	DC12V	Baud	9600/38400bps
Power	12W	Protocol	VISCA/PELCO-D/PELCO-P
Decoder	internal	Address Set	1~255
Operation		**Surroundings**	
Horizontal Rotation	±170°	Operating Environment	0°~+50°
Vertical Rotation	120°	Operating Temp	0~95%
Rotation Speed	100°/s		non-condensing
Physics		**Installation Method**	
Preset Point	Preset Point: 9 for remote control, 256 for PELCO, 64 for VISCA.	Support desktop,wall mount,ceiling mount and tripod installation	
Net-Weight	1.46kg		

2. Camera Parameters

Spec　　lens	Fixed focus	3x optical zoom	10x optical zoom	20x optical zoom
Image Sensor	1/2.1" HD color CMOS	1/2.7" HD color CMOS	1/2.9" SONY HD CMOS	1/3" SONY HD CMOS
Effective Pixel	2.1 Mega Pixel	2.1 Mega Pixel	2.1 Mega Pixel	2.1 Mega Pixel
FOV	138°	128°~37°	51.3°~4.64°	55.5°~3.0°
Focal Length	2.1mm lens	F=3.0-10.0mm	F=5.0-50.0mm	F=4.7-94mm
HD Format	1080P(1920*1080) 720P(1280*720)			
HD Interface	USB			
Resolution	1080P/720P			
Signal System	NTSC/PAL			
Control parameters				
Preset	Preset Point: 9 for remote control, 256 for PELCO, 64 for VISCA.			
Translation/ Pitching Angle	-170°~170° -30°~90°			
Translation/ Pitching Speed	100°/s 80°/s			
Control Protocol	VISCA,PELCO-D,PELCO-P(RS-232, RS485)			
Common Parameters				
Size	Product：260*175*180mm packaging：296*225*218mm			
Color	black			

Quick Start

1. Interface definition
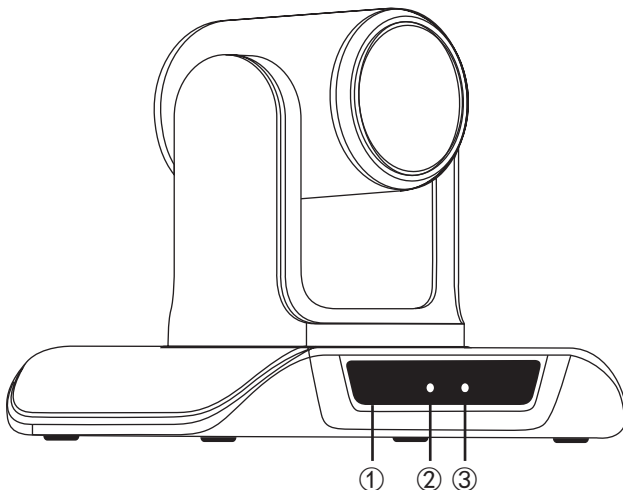
(1)IR Receiver   (2)Power indicator
(3)Standby indicator   (4)IR Receiver
(5)USB   (6) RS-232
(7)RS-485   (8)DC12V

High Speed USB HD Video interfare

keyboard control

RS-422/485

TV

VISCA OUT   VISCA IN

PC

DC 12V Output AC 220V Input

IR   USB VISCA IN RS-232 OUT RS-485 DC 12V

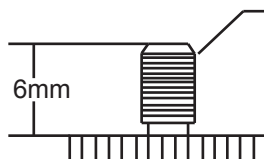④⑤ ⑥ ⑦⑧
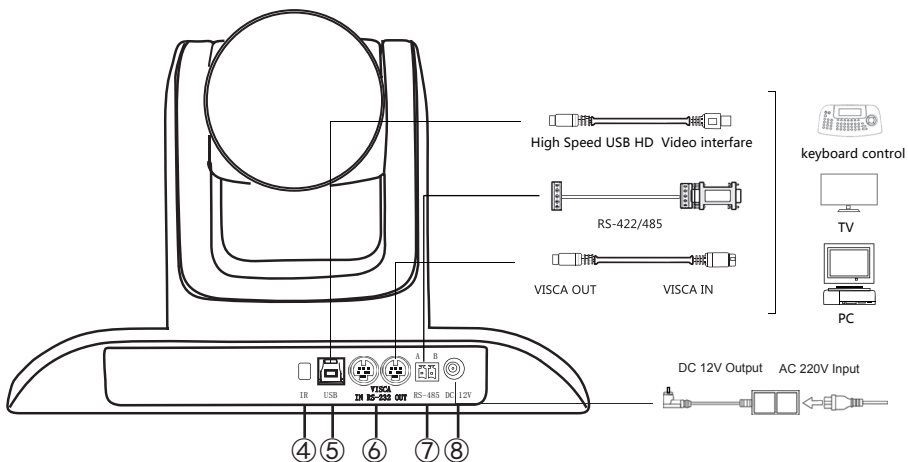
2.Installation instructions

(1)Surface Installation

Put the camera on the desk flat, and make sure the camera in level. If want to put the camera on oblique surface, please make sure the angle of inclination less than 15 degree for ensure camera pan and tilt working in normal operation.
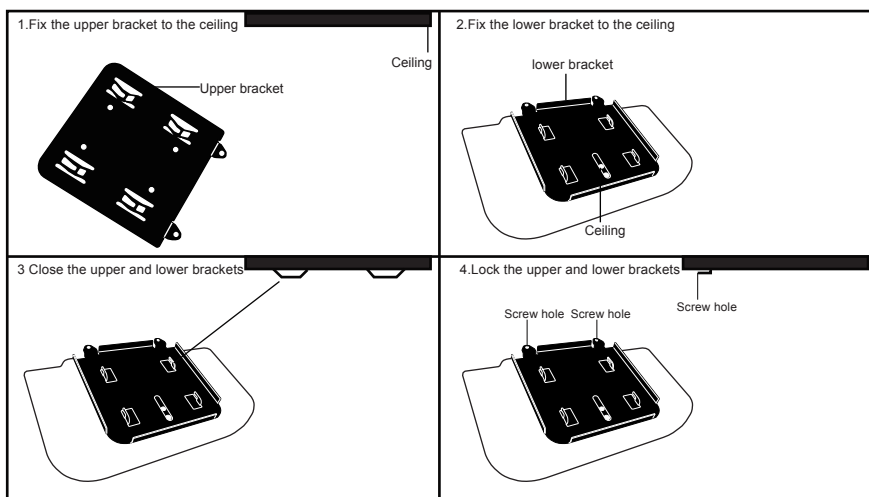

(2) Tripod Mount Installation

Twist the tripod's screw on the camera tripod hole, then the tripod could be installed on the bottom of camera. The tripod screw must fit below.

Screw specification 1/4-20UNC

6mm

(3) Ceiling Mount Installation

1.Fix the upper bracket to the ceiling
Ceiling
Upper bracket

2.Fix the lower bracket to the ceiling
lower bracket
Ceiling

3 Close the upper and lower brackets

4.Lock the upper and lower brackets
Screw hole
Screw hole Screw hole

Remote control button description

(1)Remote Control Launch Window

(2) 【POWER】Standby Button, pressing it, camera goes into Standby Mode; pressing again, camera goes Power ON.

(3) 【P/T Reset 】 Camera Pan/Tilt reset Function same with⑧（P/T RESET）

(4) 【CAMERA SELECT】Choose the camera number that needed to control, to correspond the dial-up code on the back of camera;

(5) 【POSITION】Preset position setup keys, include 【PRESET】and【RESET】.

(6) 【UP】：camera rotating horizontally in regular installed direction

(7) 【DOWN】：camera rotating horizontally in reversed installed direction

(8) 【PAN-TILT】【PAT-TILT】camera rotation control key: press this button and move by the arrow direction, press

Press 【HOME】to back to the center of vertical and horizontal position.

(9) 【Camera Pan/Tilt Reset 】：Camera Pan/Tilt reset；

(10) MENU. Not Applicable for this model.

(11)Slow Zoom Key

【Zoom SLOW+】T：Zoom out at low speed

【ZOOM SLOW-】W：Zoom in at low speed

(12) Fast Zoom Key

【ZOOM FAST +】：Zoom out at fast speed

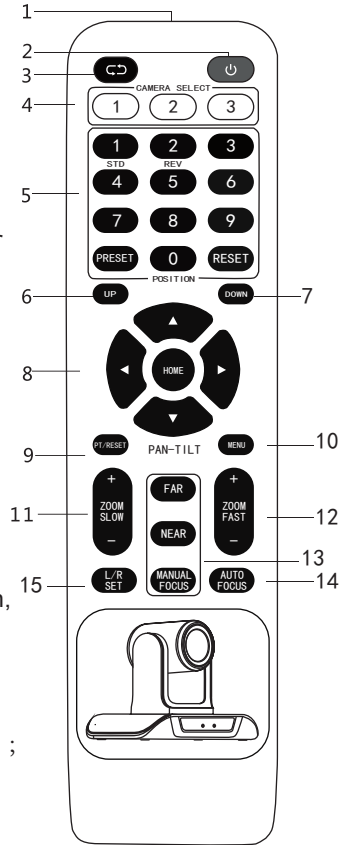【ZOOM FAST -】：Zoom in at fast speed

(13) Manual Focus Mode

【MANUAL FOCUS】：Start manual focus function

【FAR】：Manually far focus button, clearer for the distant objects, loose finger to stop.

【NEAR】：Manually near focus button, clearer for the nearby objects, loose finger to stop.

(14) 【AUTO FOCUS】：Auto Focusing Button

(15) 【L/R DIRECTION/SET】：Not Applicable for this model.
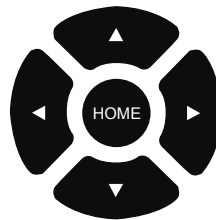
Common Operations Introductions

1. Camera Select

Refer to the dial-up at the back of camera and choose
camera address number that you want to control（1-3）。

2. Camera Direction Control

    Turning up

    Turning down

    Turning to left

    Turning to right

*Note: Press direction key to move the camera.Press the
direction key when you need to change the angle. If you
want to move the camera slowly, just click the direction
key; If you want to move the camera fast at a large scale,
just long-press the button.

3. Camera Focusing Mode Control

【AUTO】Switch the focus mode to AUTO
【MANUAL】Switch the focus mode to MANUAL
【FAR】Far focus manually
【NEAR】Near focus manually
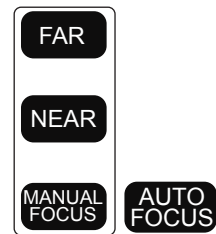
4. Camera Zoom Control
Press any one of the 4【ZOOM】
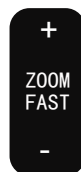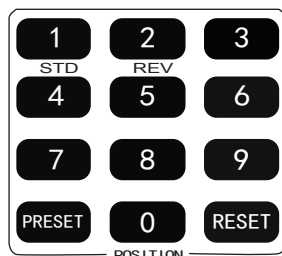to make the zoom functioning.
These 4 keys are not applicable
for fixed focus camera.

5. Preset Setup,Call,Cancel
(1) Reserve Preset: Press【PRESET】
then press one of the number（1-9）to
reserve a preset that correspond to the
NUMBER.

*Note: you can setup 9 presets at most by the remote control.
(2) Call Preset: Press the NUMBER（1-9）directly to call the-
reserved preset.

*Note: It won't work if there's no preset reserved in the cor-
responded number.

(3) Remove Preset: Press【RESET】, then press one of the-
number（1-9）to remove a preset that correspond to the NU-
MBER.

★Attentions for Remote Control
1. If remote control doesn't work, please replace batteries.
2. If there is an object between remote control and
specialized remote control sensor, the camera will not work.
Please make sure the remote control is aimed at the sensor
which in front of the camera when controlling it.
3 L/R SET and Menu keys are not applicable for this model.
4 Fast zoom key, slow zoom key, manual and auto focus keys
not applicable for fixed focus model.

Camera Address set

PTZ Add.	SW1 DIP-1	SW1 DIP-2	SW1 DIP-3	SW1 DIP-4	SW1 DIP-5	SW1 DIP-6	SW1 DIP-7	SW1 DIP-8
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
....								
255	ON	ON	ON	ON	ON	ON	ON	ON

Protocol

Protocol	SW2 DIP-1	SW2 DIP-2
VISCA	OFF	OFF
PELCO-D	OFF	ON
PELCO-P	ON	OFF

Baud rate

Baud	SW2 DIP-3
9600	OFF
38400	ON

COM IR

COM	SW2 DIP-4
RS-232	OFF
RS-485	ON

IR Add

IR Add.	SW2 DIP-5	SW2 DIP-6
All	OFF	OFF
1	OFF	ON
2	ON	OFF
3	ON	ON

PS: RS-422/485 and RS232 Pins distribution

1、Control Interface

(1)RS485 Interface Distribution

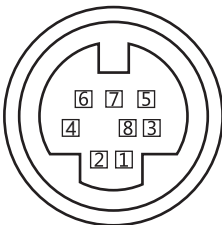| PIN NUM	FUNCTION
A	DTR IN+(connect to RS-485)
B	DSR IN+(connect to RS-485)
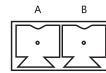
(2) RS-232 Interface Distribution

VISCA RS-232 IN
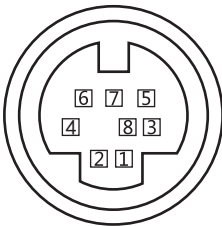
1.N.C.	1.CD
2.N.C.	2.RXD
3.TXD	3.TXD
4.GND	4.DTR
5.RXD	5.GND
6.N.C.	6.DSR
7.N.C.	7.RTS
8.N.C.	8.CTS
	9.RI

VISCA RS-232 OUT

1.N.C.	1.CD
2.N.C.	2.RXD
3.TXD	3.TXD
4.GND	4.DTR
5.RXD	5.GND
6.N.C.	6.DSR
7.N.C.	7.RTS
8.N.C.	8.CTS
	9.RI

Troubleshooting

Before request service to serviceman, it can according to below methods to remove failures, if-still can' t be solved, please contact us for help.

Q:The video of camera cannot be displayed on the screen.

A:Please check the connection between power cable,video cable, camera and monitor, fix the c-onnector on each end.

Q: It' s unable to Pan, Tilt and zoom camera.

A:Because menu was displayed on monitor. Please re-operate after exit menu.

Q: Why the camera rotates for about 10 seconds after power on.

A:This is the normal self-test of the camera.

Q: Poor Image quality while using in church or other low-light conditions.

A:1 Press【BACK LIGHT】on remote control or menu (ON/OFF) to adjust backlight effect. 2 Arr-ange the church lighting properly

Q:Remote control is not working or insensitive

A: 1 Not work, please replace batteries.

2: Not sensitive: 1Choose the correct "IR select" number to meets camera. 2 Control the camera within 15m 3 Remove the obstacles 4 Aim at the sensor which is in front of the camera when co-ntrolling it.

Q: USB interface is not identifiable.

A: Please check USB cable and extension cable are well connected or not. If yes, change to an-other USB interface and try to connect again.

Q No image after HDMI interface connects.

A: 1 check the HDMI cable and connected device are normal.

2 check the video format that is supported by the connected device or not. If not, adjust the vide-o format according to the connected device.

3 Recommended cable is no longer than 30m.

Q:It was not been controlled via RS232/RS485 when camera connect to PC.

A:Make sure it is a correct connection between camera and PC. (Reference to RS-422/485 and RS232 Pins distribution in page 16.)

Q:Why no wall mount brackets?

A: Camera comes with ceiling mount, wall mount or tripod brackets needs to buy separately.

Q: Does this camera has built-in mic?

A: No, our cameras comes with no built-in mic.

Q:Can we control the camera only by the remote control?

A: We can control the camera by remote control. Keyboard controller (joystick), and software.

Maintenance Services

All products purchased from our company are guaranteed to keep in good repair for 18 month-s. If there are any quality problems during the guarantee period, we will maintain for free.

Under any of the following warranty, elated maintenance costs will be collected:

1. Product was not normal used.

2. Fire, electric shock, outside object collapse or other natural disasters causes make the equi-pment damage.

3. Unauthorized repair, misuse, abuse and change.

HANERGY Warranty Card

Thank you very much for choosing our products.

User's info:

Name : _____ Tel: _____

Email:_____ Post code: _____

Address:_____

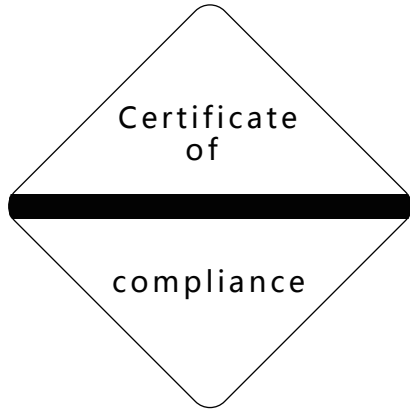## Product's information:

Product Name :_____

Factory Serial Number :_____

Purchase Date

_____

_____

_____

_____

_____

Attention:

1.This card is considered as the Protection to fix warranty, so please reserve them carefully.Please fill in truthfully.

2. Please indicate the model number, Factory Serial Number and the detailed description of the fault information.

Certificate
of

compliance

Q.A.

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