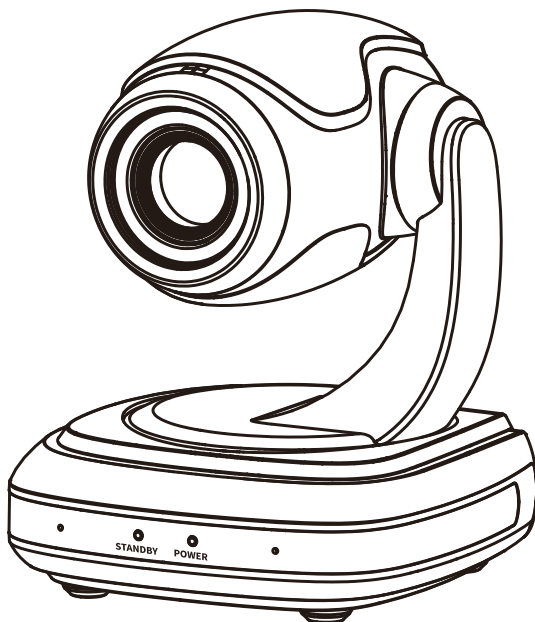


UcooQQ

USB HD Video Conference Camera



User Manual

English (V2.1)

Customer Service Email: UcooQQ_Service@163.com

Copyright

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Notice

Product specifications and information which were referred to in this document are for reference only. We may change, delete, or update any content at any time and without prior notice.

FCC NOTICE (Class A)



This device complies with Part 15 of the FCC Rules. The operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Class A ITE

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:



Warning

Operating this equipment in a residential environment may cause radio interference.

European Community Compliance Statement (Class A)



This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2014/30/EU.

1 Safety Precautions

- During the installation and operation, all electrical safety regulations of the country and region of use must be strictly observed.
- Please use the power adapter that comes standard with this product.
- Do not connect multiple devices to the same power adapter (exceeding capacity of the adapter may generate excessive heat or cause fire).
- Do not rotate the camera by hand, otherwise it may cause mechanical failure.
- When installing this product on a wall or ceiling, make sure the device securely and there are no obstacles within the rotation range; Do not power on until all installations are completed.
- To avoid heat build-up, please keep smooth ventilation around the device.

- If the device smokes, smells, or makes noises, please turn off the power and unplug the power cord immediately, then contact the dealer in time.
- This device is not waterproof, please keep the device dry.
- This product has no user serviceable parts, damage caused by disassembly by the user is not covered by the warranty.



Notice

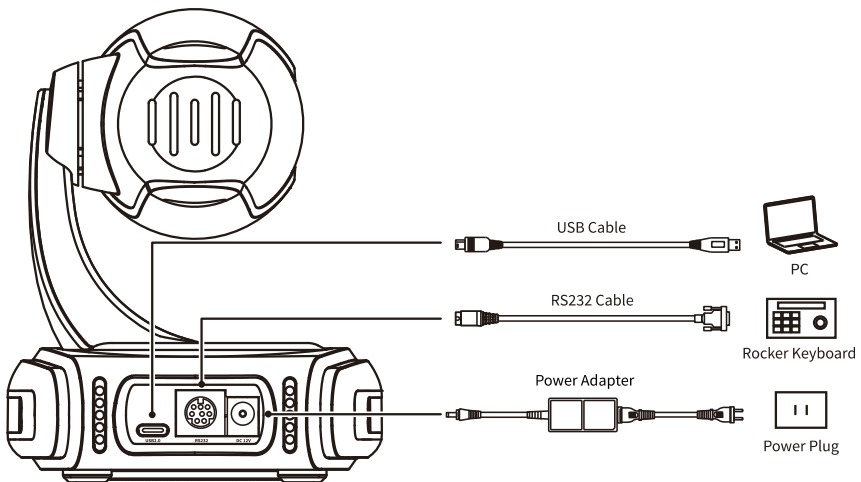
Electromagnetic field at specific frequencies may affect the image quality.

2 Packing List

Name	Quantity
Camera	1
Power Adapter	1
Remote Control	1
USB Cable	1
User Manual	1

3 Quick Start

- 1) Please check connections are correct before starting.



- 2) Connect the supplied adapter to the power connector on the rear panel of camera. The power indicator on the front panel of the camera turns on.
- 3) After powered on, the camera starts to initialize, right up to the limit position, and then both horizontal and vertical go to the middle position. The initialization is completed when the motor stops running.

4 About Product

4.1 Features

● Full Function USB Interface

Full function USB interface, support audio and encoding output, support UVC 1.1 and UAC 1.0 protocol.

● Excellent Compatibility

Support mainstream video conferencing software on the market

● Full HD Image Sensor

High-quality 1/2.9-inch HD CMOS sensor with 2.07 million effective pixels for high-quality images.

● 90° Wide-angle-lens +16x Digital Zoom

90° High-quality ultra-wide-angle lens, support 3x optical zoom and 16x digital zoom.

● AI Tracking and Auto Framing

Built-in image recognition and tracking algorithm can realize humanoid tracking and 3 people automatic frame selection.

● Leading Auto Focus Technology

Using the advanced focusing algorithm and TOF module assists focusing, lens can focus quickly, accurately and stably.

● Multiple Power Supply Modes

Simultaneously support DC 12V power adapter and USB 5V power supply.

● Low Illumination

The new CMOS image sensor with ultra-high SNR can effectively reduce the image noise under low illumination. The application of 2D and 3D noise reduction algorithm greatly reduces the image noise even under the condition of ultra-low illumination, it keeps the picture clean and clear, and the SNR of image is as high as 55dB.

● Remote Control

The camera can be controlled remotely through the RS232 and USB port.

4.2 Product Specifications

Camera	
Sensor	1/2.9-inch, CMOS, Effective Pixel: 2.07M
Scanning Mode	Progressive
Lens	3x, f=3.35mm ~ 10.05mm, F1.7 ~ F3.0
Digital Zoom	16x
Minimum Illumination	0.5 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Support
Digital Noise Reduction	2D&3D Digital Noise Reduction
SNR	≥55dB
Horizontal FOV	90° ~ 30.7°
Vertical FOV	52° ~ 18.4°
Pan Angle	±170°
Tilt Angle	-30° ~ +90°
Pan Speed	2.7° ~ 35.7°/s
Tilt Speed	2.7° ~ 31.5°/s
Image Flip	Support
Image Freeze	Support
Preset Position	255
Preset Accuracy	0.1°

USB Features	
Operate System	Windows 7, Windows 8, Windows 10, Windows 11, Mac OS X, Linux, Android
Color System/Compression	MJPEG/YUY2
Video Format	<ul style="list-style-type: none"> YUY2: 640 x 480P@30fps (max.) MJPEG: 1920 x 1080P@30fps (max.)
USB Audio	Support
USB Video Communication Protocol	UVC 1.1
UVC PTZ	Support

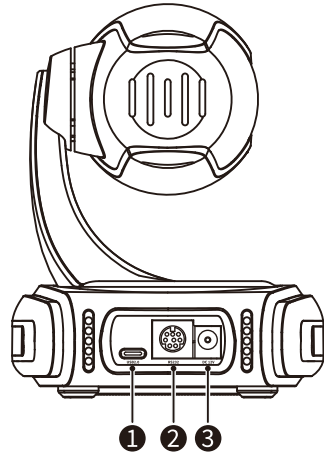
Interfaces	
USB Interface	1 x USB2.0: Type-C
Audio Input	Built-in dual MIC
Communication Interface	1 x RS232: 8pin Min DIN, Max. Distance: 30m, Protocol: VISCA/Pelco-D/Pelco-P
Power Jack	JEITA type (DC 12V) /USB Type-C (USB 5V)

General Specifications	
Input Voltage	DC 12V/USB 5V
Input Current	12V 1.0A (max.)/5V 1.0A (max.)
Operating Temperature	0°C ~ 40°C
Storage Temperature	-40°C ~ 60°C
Power Consumption	12W (max.)
Dimension (mm)	107.9 x 114.3 x 136.5
Net Weight	About 0.5Kg



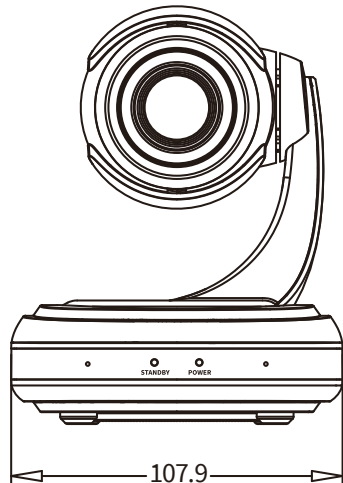
Product features and specifications are subject to change without notice.

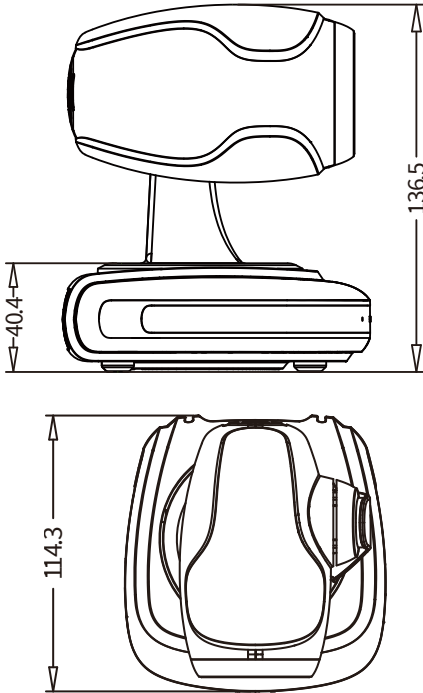
4.3 Interfaces and Buttons



No.	Interface
1	USB2.0 Interface
2	RS232 Interface
3	DC 12V Interface

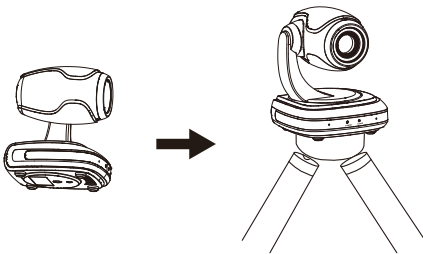
4.4 Dimension





4.5 Installation

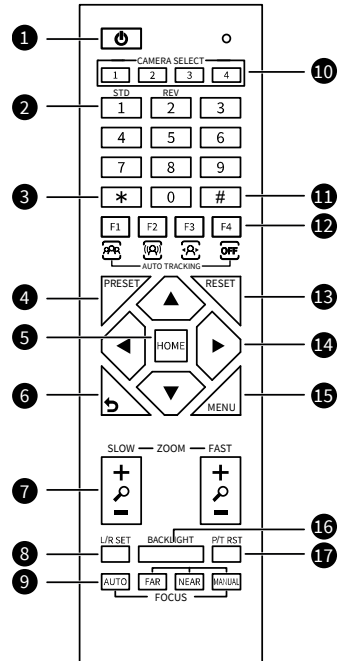
This camera can be placed on horizontal desktop or installed on the tripod as below:



Note

The installation diagram is for reference only. The brackets and screws are not standard. For packing accessories, please refer to the actual product.

4.6 Remote Control



Key Description

1. (Standby) Key

Press to enter standby mode

2. Number Keys

To set preset or call preset

3. * Key

Use with other keys

4. PRESET Key

Set preset: [PRESET] + Number key (0-9)

5. HOME Key

Confirm selection or press to turn PTZ back to the middle position

6. (Return) Key

Press to return to the previous menu

7. ZOOM Keys

- SLOW: Zoom In [+] or Zoom Out [-] slowly
- FAST: Zoom In [+] or Zoom Out [-] fast

8. L/R SET Key

- Standard: Simultaneously press L/R SET + 1
- Reverse: Simultaneously press L/R SET + 2

9. FOCUS Keys

Auto/Manual/Far-end/Near-end focus

10. CAMERA SELECT Keys

Press to select and control the camera

11. # Key

Use with other keys

12. IR Remote Control Keys

[*] + [#] + [F1]: Address 1

[*] + [#] + [F2]: Address 2

[*] + [#] + [F3]: Address 3

[*] + [#] + [F4]: Address 4

13. RESET Key

Clear the preset position: [RESET] + Number key (0-9)

14. PTZ Control Keys

PTZ moved according to the arrow indicates

15. MENU Key

Enter or exit OSD menu

16. BACKLIGHT Key

Backlight ON/OFF: Press repeatedly to enable or disable the backlight compensation

NOTE:

- Effective only in auto exposure mode
- If there is a light behind the subject, the subject will become dark, press the backlight key to enable the backlight compensation. Press again to disable this function

17. P/T RST (PTZ Reset) Key

Press to preset Pan/Tilt self-test

Shortcut Set

F1: Open Auto Framing mode

F3: Open AI Tracking mode

F4: Close Auto Framing or AI Tracking mode

[*] + [#] + [1]: OSD menu default English

[*] + [#] + [3]: OSD menu default Chinese

[*] + [#] + [6]: Quickly recover the default

[*] + [#] + [8]: Check the camera version

[*] + [#] + [9]: Quickly set up inversion

5 GUI Settings

5.1 MENU

Press [MENU] key to display the main menu on the screen. Use the arrow key to move the cursor to desired item and press the [HOME] key to confirm to enter the corresponding sub-menu.

MENU	
►	Exposure
	Color
	Image
	P/T/Z
	Noise Reduction
	Setup
	Communication Setup
	Information
	Restore Default
	[HOME] Enter
	[MENU] Exit

5.2 EXPOSURE

When in main menu page, move the cursor to [Exposure] and press [HOME] key to confirm to enter the Exposure page as below.

EXPOSURE		
►	Mode	Auto
	ExpCompMode	On
	ExpComp	0
	Gain Limit	2
	Meter	Average
	Backlight	Off
	DRC	1
	Anti-Flicker	Off
▲▼	Select Item	
◀▶	Change Value	
	[MENU] Exit	

Mode: Auto, Manual, SAE.

ExpCompMode (Exposure Compensation Mode): On, Off (Effective only in Auto mode).

ExpComp (Exposure Compensation Value): -7 ~ 7 (Effective only in ExpCompMode On).

Gain Limit: 0 ~ 15 (Effective in Auto, SAE mode).

Meter: Average, Center, Bottom, Top (Effective in Auto, SAE mode).

Backlight: On, Off (Effective only in Auto mode).

Anti-Flicker: Off, 50Hz, 60Hz (Effective only in Auto mode).

Shutter: 1/30, 1/60, 1/90, 1/100, 1/125, 1/200, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000 (Effective in Manual, SAE mode).

Gain: 0 ~ 7 (Effective only in Manual mode).

DRC: 0 ~ 8.

5.3 COLOR

When in main menu page, move the cursor to [Color] and press [HOME] key to confirm to enter the Color page as below.

COLOR		
▶	WB Mode	Auto
	AWB Sens	Middle
	RG Tuning	2
	BG Tuning	1
	Saturation	130%
	Hue	7
▲▼ Select Item		
◀▶ Change Value		
[MENU] Exit		

WB-Mode (White Balance Mode): Auto, Indoor, Outdoor, One Push, Manual, VAR.

AWB Sens (The White Balance Sensitivity): Low, Middle, High (Effective in Auto, One Push mode).

RG (Red Gain): 0~255 (Effective only in Manual mode).

BG (Blue Gain): 0~255 (Effective only in Manual mode).

RG Tuning (Red Gain Tuning): 0 ~ 10 (Effective in Auto, One Push, VAR mode).

BG Tuning (Blue Gain Tuning): 0 ~ 10 (Effective in Auto, One Push, VAR mode).

Saturation: 60% ~ 200%.

Hue: 0 ~ 14.

Color Temp: 2500K ~ 8000K (Effective only in VAR mode).

5.4 IMAGE

When in main menu page, move the cursor to [Image] and press [HOME] key to confirm to enter the Image page as below.

IMAGE		
▶	Luminance	6
	Contrast	7
	Sharpness	4
	B&W-Mode	Off
	Flip-H	Off
	Flip-V	Off
	Gamma	Default
	Image Style	Default
	LDC	Middle
▲▼ Select Item		
◀▶ Change Value		
[MENU] Exit		

Luminance: 0 ~ 14.

Contrast: 0 ~ 14.

Sharpness: Auto, 0 ~ 15.

B&W-Mode: On, Off.

Flip-H: On, Off.

Flip-V: On, Off.

Gamma: Ext, Default, 0.45, 0.5, 0.56, 0.63.

Image Style: Default, Norm, Clarity, Bright, Soft.

LDC: Off, Low, Middle, High.

5.5 P/T/Z

When in main menu page, move the cursor to [P/T/Z] and press [HOME] key to confirm to enter the P/T/Z page as below.

P/T/Z		
▶	TOF Focus	On
	D-Zoom Limit	Off
	AF-Sense	High
	AF-Zone	Front
	Speed By Zoom	On
	Display Info	On
	Call Preset Speed	18
	Pre Zoom Speed	5
▲▼ Select Item		
◀▶ Change Value		
[MENU] Exit		

TOF Focus: On, Off.

D-Zoom Limit: On, x2, x4, x8, x16.

AF-Sense: Low, Normal, High.

AF-Zone: Front, Top, Middle, Bottom.

SpeedByZoom: On, Off.

Display Info: On, Off.

Call Preset Speed: 1 ~ 24.

Pre Zoom Speed: 0 ~ 7.

5.6 NOISE REDUCTION

When in main menu page, move the cursor to [Noise Reduction] and press [HOME] key to confirm to enter the Noise Reduction page as below.

NOISE REDUCTION		
▶	2D NR	1
	3D NR	3
▲▼ Select Item		
◀▶ Change Value		
[MENU] Exit		

2D NR (2D Noise Reduction): Off, Auto, 1 ~ 5.

3D NR: (3D Noise Reduction): Off, Auto, 1 ~ 8.

5.7 SETUP

When in main menu page, move the cursor to [Setup] and press [HOME] key to confirm to enter the Setup page as below.

SETUP		
▶	Language	English
	UVC Setting	
	Track Debug	Off
▲▼ Select Item		
◀▶ Change Value		
[HOME] OK		
[MENU] Exit		

Language: English, Chinese.

UVC Setting: Press the HOME key on remote control to access the UVC setting page to select turn on/off H264 Enable, NV 12 Enable and Bulk Enable.

Track Debug: On, Off.

5.8 COMMUNICATION SETUP

When in main menu page, move the cursor to [Communication Setup] and press [HOME] key to confirm to enter the Communication setup page as below.

COMMUNICATION SETUP		
▶	Protocol	VISCA
	V_Address	1
	V_AddrFix	Off
	Net Mode	Serial
	Baudrate	9600
▲▼ Select Item		
◀▶ Change Value		
[MENU] Exit		

Protocol: VISCA, PELCO-D, PELCO-P.

V_Address: 1 ~ 7 (Effective only in VISCA protocol).

V_AddrFix: On, Off (When set to On, the 88 30 01 FF command does not work. Effective only in VISCA protocol).

P_D_Address: 0 ~ 254 (Effective only in PELCO-D protocol).

P_P_Address: 0 ~ 31 (Effective only in PELCO-P protocol).

Net Mode: Serial, Paral (Effective only in VISCA protocol).

Baudrate: 2400, 4800, 9600, 19200, 38400.

5.9 INFORMATION

When in main menu page, move the cursor to [Information] and press [HOME] key to confirm to check the product information.

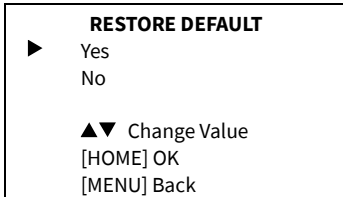
INFORMATION		
▶	Version	8.1.01
	Model	A9.V
	Date	2022-08-29
	AF Version	4.4.08
[HOME] OK		



The above information is only for reference, please refer to the real product for the actual specifications.

5.10 RESTORE DEFAULT

When in main menu page, move the cursor to [Restore Default] and press [HOME] key to confirm to enter the Restore Default page as below.



Restore: Yes, No.



Notice

When selected “Yes” and confirm with [HOME] key, all parameters will restore to default, include the IR Remote address and VISICA address.



Note

GUI menu and parameters are subject to change without notice.

6 Troubleshooting

Camera Restart Automatically or Cannot be Identified by the USB of Main Device

- Camera restart continually while powered by USB separately

Connect the camera to the USB3.0 interface of main device. If the fault persists, it needs to be powered with another power adapter.

- Camera restart automatically after operating PTZ or lens zooming while powered by USB separately

Connect the camera to the USB3.0 interface of main device. If the fault persists, it needs to be powered with another power adapter.

- Camera cannot be identified by the USB of main device

Use the supplied USB cable and connect the camera to the USB3.0 interface of main device. If the fault persists, it needs to be powered with another power adapter.

Image

- The monitor shows no image
 - 1) Ensure that the camera power supply is connected, the voltage is in normal, and the power indicator is always on.
 - 2) Turn off the power switch to check that the camera is self-testing.
 - 3) Ensure that the cable of video platform and TV in correct connection.
- Image jitters after the camera is properly connected
 - 1) Ensure that the camera installation position is stable.
 - 2) Check that any vibrating machinery or object near the camera.

Control

- Remote control does not work
 - 1) Check and replace with new batteries.
 - 2) Ensure that the camera working mode is correct.
 - 3) Ensure that the address key of remote control can match the camera.
- Serial port cannot control
 - 1) Ensure that the protocol, address and bit rate of the camera are consistent.
 - 2) Ensure that the control cable is properly connected.