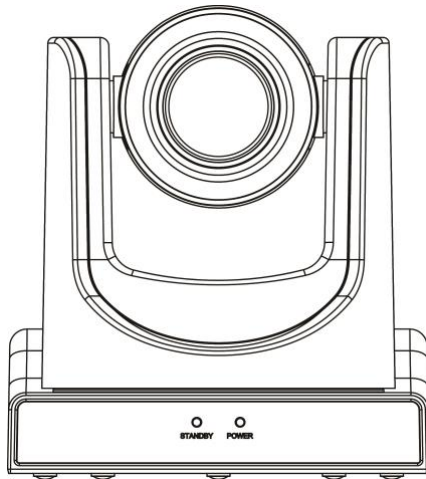


iCam P12U

USB Video Conference Camera

20x optical and 16x digital zoom

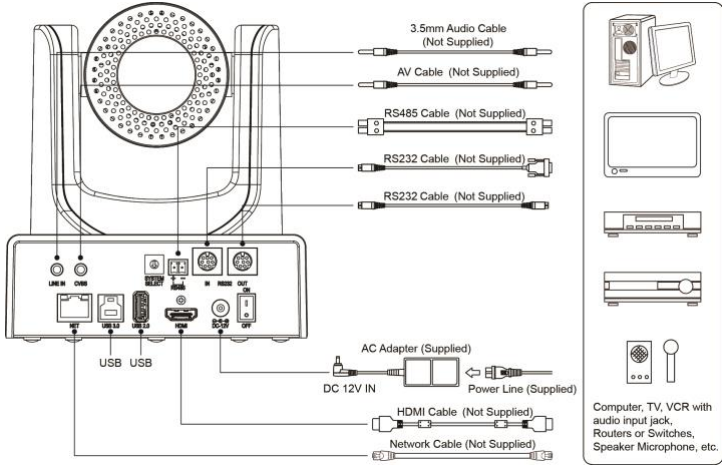


Datasheet

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1 Introduction

1) Please check connections are correct before starting.



- 2) Connect the power adapter to the power connector on the rear panel of the camera. The power indicator on the front panel of the camera is on.
- 3) After the camera is powered on, it starts to initialize, right up to the limit position, and then both horizontal and vertical go to the middle position, the motor stops running, and the initialization is completed.
(Note: If preset 0 is saved, PTZ will be move to preset 0)

2 About Product

2.1 Features

- **USB 3.0**

It supports USB 3.0 interface, can transfer uncompressed original video images, and is backward compatible with USB 2.0. It supports USB 3.0, HDMI, network three channels can be output at the same time.

- **1080P Full HD**

High-quality HD CMOS sensor with 2.07 million effective pixels for high-quality images up to 1920x1080.

- **Super High Frame Rate**

It supports output frame rate can reach 1080P@60fps.

- **20x Optical + 16x Digital Zoom**

It supports 20x optical and 16x digital zoom.

- **Low illumination**

The application of 2D and 3D noise reduction algorithm greatly reduces image noise. Even under the condition of ultra-low illumination, it still keep the picture clean and clear, and the SNR of image is as high as 55dB.

- **AAC Audio Encoding**

Support AAC audio encoding, better sound quality and smaller bandwidth consumption.

- **Remote Control**

Through the RS232 and RS485 serial ports, the camera can be controlled remotely.

2.2 Product Specification

Name	USB Video Conference Camera
Camera	
Video System	1080P/60, 1080P/50, 1080I/60, 1080I/50, 1080P/30, 1080P/25, 720P/60, 720P/50
Sensor	1/2.7 inch, CMOS, Effective Pixel: 2.07M
Scanning Mode	Progressive
Lens	20x, f5.5mm ~ 110mm, F1.6 ~ F3.5
Digital Zoom	16x
Minimum Illumination	0.5Lux @ (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
Signal Noise Ratio	≥55dB
Horizontal Angle of View	51.3° ~ 2.7°
Vertical Angle of View	29.7° ~ 1.5°
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
Number of Preset	255
Preset Accuracy	0.1°
IPC Video Features	
Video Compression	H.264/H.265/MJPEG
Video Stream	First Stream, Second Stream

First Stream Resolution	1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360
Second Stream Resolution	1280x720, 1024x576, 720x576 (50Hz support), 720x480 (60Hz support), 720x408, 640x360, 480x270, 320x240, 320x180
Video Bit Rate	32Kbps ~ 20480Kbps
Bit Rate Type	Variable Rate, Fixed Rate
Frame Rate	50Hz: 1fps ~ 25fps, 60Hz: 1fps ~ 30fps
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps
Protocols	TCP/IP, HTTP, RTSP, RTMP, ONVIF, DHCP, Multicast, etc.

USB Features

Operate System	Windows 7, Windows 8, Windows 10, Windows Vista, Mac OS X, Linux, Android
Color System / Compression	MJPEG/YUY2/H.264
Video Format	<ul style="list-style-type: none"> USB3.0: 1080P/60, 1080P/50, 1080P/30, 1080P/25, 720P/60, 720P/50, 720P/30, 720P/25 USB2.0: 960x540P/30, 960x540P/25, 640x360P/60, 640x360P/50
USB Video Communication Protocol	UVC 1.0
UVC PTZ	Support

Input/Output Interface

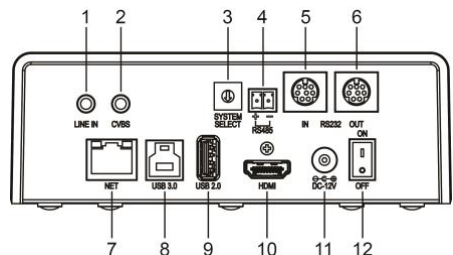
Audio Interface	1 x LINE IN: 3.5mm Audio Interface
CVBS Interface	1 x CVBS: 3.5mm RCA jack, 1Vp-p, 75Ω
Communication Interface	1 x RS-485: 2pin phoenix port, Max Distance: 1200m, Protocol: VISCA / Pelco-D / Pelco-P

	1 x RS232 IN: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA / Pelco-D / Pelco-P
	1 x RS-232 OUT: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA network use only
Network Interface	1 x RJ45: 10/100M Adaptive Ethernet Ports
USB Interface	1 x USB 3.0: Type B female jack
	1 x USB2.0: Type A jack
HDMI Interface	1 x HDMI: Version 1.3
Power Jack	JEITA type (DC IN 12V)

Physical Parameter

Input Voltage	DC 12V
Current Consumption	1.0A (Max)
Operating Temperature	-10°C ~ 40°C
Storage Temperature	-40°C ~ 60°C
Power Consumption	12W (Max)
MTBF	>30000h
Size	145.9 x 151.8 x 162.1mm
Net Weight	1.48Kg

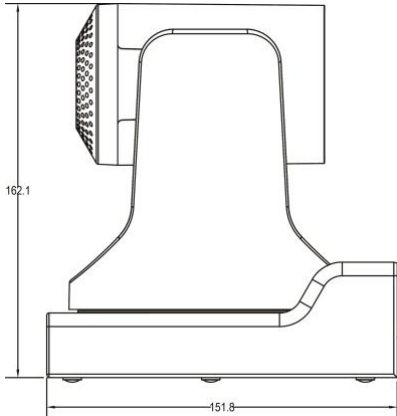
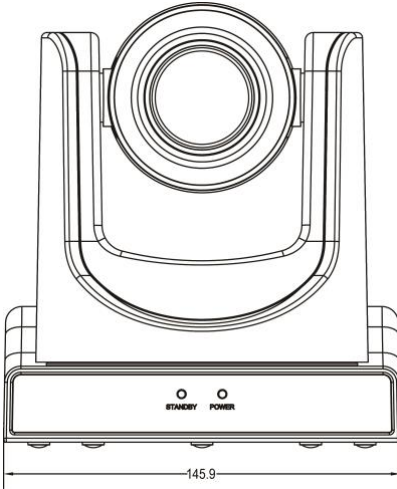
2.3 Interfaces and Buttons



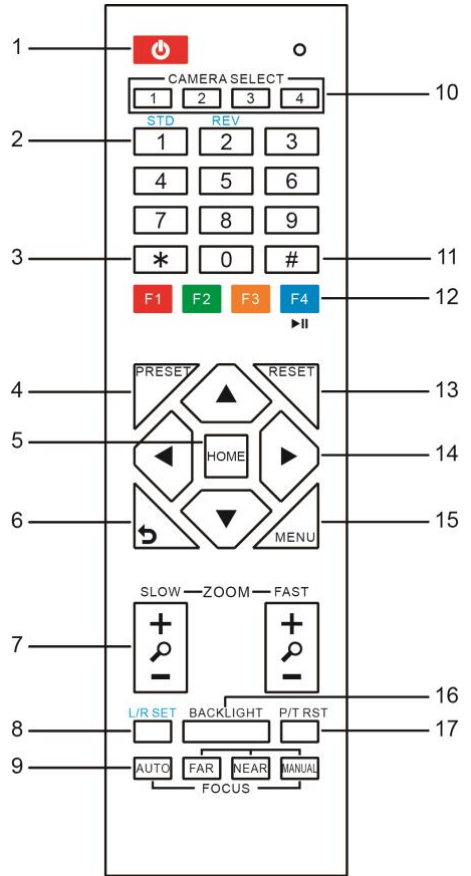
Item	Name
1	LINE IN Interface
2	CVBS Interface
3	System Select Switch
4	RS485 Interface
5	RS232 IN Interface

Item	Name
6	RS232 OUT Interface
7	Network Interface
8	USB 3.0 Interface
9	USB 2.0 Interface
10	HDMI Interface
11	DC 12V Interface
12	Power Switch

2.4 Dimension



2.5 Remote Control



Key Description

1. Standby Key

Press this button to enter standby mode. Press it again to enter normal mode.
Note: Power consumption in standby mode is approximately half of the normal mode

2. Number Key

To set preset or call preset.

3. *Key

Used with other buttons.

4. Preset Key

Set preset: Store a preset position.
[SET PRESET] + Numeric button (0-9):
Setting a corresponding numeric key preset position.

5. HOME Key

Confirm menu or the PTZ will back to the middle position after pressed it

6. Return Key

Return back the last level menu

7. Zoom Key

Slow Zoom: Zoom In [+] or Zoom Out [-] slowly

Fast Zoom: Zoom In [+] or Zoom Out [-] fast

8. Left/Right Setting Key

Press with 1 buttons and 2 buttons setting the direction of the Pan-Tilt.

- Simultaneously press L/R Set +1[STD]: set the Pan-Tilt turn the same direction as the L/R Set.
 - Simultaneously press L/R Set +2[REV]: set the Pan-Tilt turn the opposite direction as the L/R Set.
-

9. Focus Key

Used for focus adjustment.

Press [AUTO] adjust the focuses on the center of the object automatically. To adjust the focus manually.

Press [MANUAL] adjust the focus on the center of the object manual.

MANUAL button, and adjust it with [Far] (Focus on far object) and [NEAR] (Focus on near object).

10. Selection Key

Press the button corresponding to the camera you want to operate with the remote controller.

11. #Key

Used with other buttons.

12. IR Remote Control Key

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

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

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

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

13. Reset Key

Clear preset: Erase a preset position.

[CLEAR PRESET] + Numeric button (0-9)

Or: [*]+[#]+[CLEAR PRESET]: Erase all the preset individually.

14. PTZ Control Key

Press arrow buttons to perform panning and tilting. Press [HOME] button to face the camera back to front.

15. Menu Key

MENU: enter or exit OSD MENU.

16. Backlight Key

BLC ON/OFF: Press this button to enable the backlight compensation. Press it again to disable the backlight compensation.

NOTE:

- Effective only in auto exposure mode.
 - If a light behind the subject, the subject will become dark. In this case, press the backlight ON/OFF button. To cancel this function, press backlight ON/OFF button.
-

17. PTZ Reset Key

Preset Pan/Tilt self-test.

18. Image Freezing Function

Manually freeze: Open the freezing function after press the remote control [F4], display "Freeze" on the left upper corner character, after five seconds display disappear automatically. If you want to cancel the freeze, press [F4] key and then can return to normal, display "Unfreeze" on the left upper corner, after five seconds display disappear automatically.

Recalling the Preset image Freeze: By the OSD Menu Setting "Recalling the Preset image Freeze" function. After the function is opened, the screen will stay in before Recalling the Preset when Recalling the Preset, the screen can be switched to the preset position screen until the camera points to the preset position.

19. Shortcut Set

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

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

[*]+[#]+[4]: Default IP address

[*]+[#]+[5]: Save OSD

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

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

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