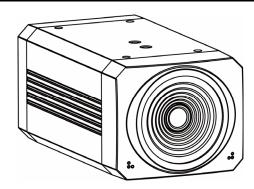
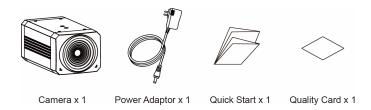
# HD Color Box Camera Quick Start

## 1 Appearance and Interface



## **2** Packing List



## **3** Safety Precautions

### **Electrical Safety**

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

### Transport Carefully

Prevent heavy damage, severe vibration or damage caused by immersion.

## Power Polarity

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



## Careful Installation

This product should be placed on the smooth desktop. Do not tilt mounting the product. Do not use strong force to damage the camera.

## 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.

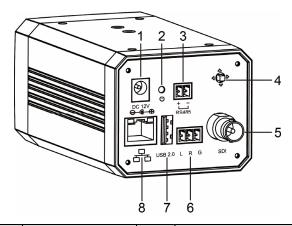
## **4** Product Features

### 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.

### Intelligent Teaching Tracking

Built-in leading image recognition and tracking algorithm, you can achieve smooth and natural tracking without any auxiliary positioning camera or tracking host. Support teacher tracking mode and student tracking mode.



| No. | Name             | No. | Name              |  |
|-----|------------------|-----|-------------------|--|
| 1   | DC 12V Interface |     | SDI Interface     |  |
| 2   | Power Indicator  | 6   | LINE IN Interface |  |
| 3   | RS485 Interface  | 7   | USB 2.0 Interface |  |
| 4   | Menu Button      | 8   | Network Interface |  |

#### AF Lens

Full custom auto focus without distortion lens, wide angle field of view up to 42°/84°/120°, small lens, wide vision. At the same time it supports EPTZ. (120° lens not support AF).

### 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.

### PoE

Support PoE power supply, and control, power supply, video and audio can be completed with only one network cable.

### **Local Storage**

Local storage, local recording of U disk can be realized without NVR.

## **5** Product Specifications

| Name                       | HD Color Box Camera                          |  |  |
|----------------------------|--|--|--|
| Camera                     |  |  |  |
| Sensor                     | 1/2.5", CMOS, Effective Pixel: 8.51M         |  |  |
| Scanning Mode              | Progressive                                  |  |  |
| Lens Mount                 | M12  |  |  |
| Lens 1 (teacher)           | Focus: f=8.2mm, FOV: 42°                     |  |  |
| Lens 2 (student)           | Focus: f=3.5mm, FOV: 84°                     |  |  |
| Lens 3                     | Focus: f=2.8mm, FOV: 120°                    |  |  |
| Auto Focus                 | Support (120° Lens not support)              |  |  |
| Minimal<br>Illumination    | 0.5 Lux @ (F1.8, AGC ON)                     |  |  |
| Shutter                    | 1/30s ~ 1/10000s                             |  |  |
| White Balance              | Auto, Indoor, Outdoor, One Push, Manual, VAR |  |  |
| Digital Noise<br>Reduction | 2D, 3D digital noise reduction               |  |  |
| Backlight<br>Compensation  | Support                                      |  |  |
| EPTZ                       | Support                                      |  |  |

| PoE   | Support  |  |  |  |  |
|---|--|--|--|--|--|
| Auto Tracking   | Teacher mode/Student mode  |  |  |  |  |
| Function  |  |  |  |  |  |
| Network Features  |  |  |  |  |  |
| Encode Protocol   | H.264/H.265/MJPEG  |  |  |  |  |
| Video Stream  | First/Second/Third/Four Stream   |  |  |  |  |
| First Stream  | 1920x1080, 1280x720, 1024x576, 960x540,  |  |  |  |  |
| Resolution  | 640x480, 640x360   |  |  |  |  |
| Second Stream   | 3840x2160, 1920x1080, 1280x720, 1024x576,  |  |  |  |  |
| Resolution  | 720x576 (50Hz support), 720x480 (60Hz support),  |  |  |  |  |
| -   | 720x408, 640x360, 480x270, 320x240, 320x180  |  |  |  |  |
| Third/Four Stream   | 1024x576, 960x540, 720x576 (50Hz support),   |  |  |  |  |
| Resolution  | 720x480 (60Hz support), 720x408, 640x360,  |  |  |  |  |
| Video Bit Rate  | 480x270, 320x240, 320x180  |  |  |  |  |
|   | 32Kbps ~ 102400Kbps  |  |  |  |  |
| Bit Rate Control  | Variable Rate, Fixed Rate  |  |  |  |  |
| Frame Rate  | 50Hz: 1fps ~ 25fps, 60Hz: 1fps ~ 30fps   |  |  |  |  |
| Audio   | AAC  |  |  |  |  |
| Compression   | 40//hma 04//hma 00//hma 400//hma   |  |  |  |  |
| Audio Bit Rate  | 48Kbps, 64Kbps, 96Kbps, 128Kbps  |  |  |  |  |
| Protocols TCP/IP, HTTP, RTSP, RTMP, ONVIF, DHCP   |  |  |  |  |  |
| Input/Output Interface  |  |  |  |  |  |
| р.ш. о съгращина  |  |  |  |  |  |
| Network Interface   | 1 x RJ45: 10/100/1000M Ethernet Interface<br>(Support PoE)   |  |  |  |  |
|   | 1 x RJ45: 10/100/1000M Ethernet Interface  |  |  |  |  |
| Network Interface Audio Interface   | 1 x RJ45: 10/100/1000M Ethernet Interface<br>(Support PoE)   |  |  |  |  |
| Network Interface   | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE) 1 x Line In: 3pin (Phoenix Interface)  |  |  |  |  |
| Network Interface Audio Interface   | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE) 1 x Line In: 3pin (Phoenix Interface) 1 x RS485: 2pin, Max Distance: 1200m,  |  |  |  |  |
| Network Interface Audio Interface Control Interface   | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE) 1 x Line In: 3pin (Phoenix Interface) 1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female   |  |  |  |  |
| Network Interface Audio Interface Control Interface Power Interface USB Interface   | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female   |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Parameter   | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)   |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Parameter  Input Voltage  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female   |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete  Input Voltage  Current  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)  0.5A   |  |  |  |  |
| Network Interface Audio Interface Control Interface Power Interface USB Interface Physical Parameter Input Voltage Current Consumption Operating Temperature  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)   |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Parameter Input Voltage  Current Consumption  Operating Temperature  Storage  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)  0.5A   |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete Input Voltage  Current Consumption  Operating Temperature  Storage Temperature   | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  T  DC 12V / PoE (IEEE802.3af)  0.5A  -10°C ~ 40°C  |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete  Input Voltage  Current  Consumption  Operating  Temperature  Storage  Temperature  Power                                | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  T  DC 12V / PoE (IEEE802.3af)  0.5A  -10°C ~ 40°C  |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete Input Voltage  Current Consumption  Operating Temperature  Storage Temperature  Power Consumption                        | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)  0.5A  -10°C ~ 40°C  -40°C ~ 60°C   |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete Input Voltage  Current Consumption  Operating Temperature  Storage Temperature  Power Consumption  Size                  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)  0.5A  -10°C ~ 40°C  -40°C ~ 60°C  6W  72mm x 60mm x 128mm (without bracket)            |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete  Input Voltage  Current  Consumption  Operating  Temperature  Storage  Temperature  Power  Consumption  Size  Net Weight | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  T  DC 12V / PoE (IEEE802.3af)  0.5A  -10°C ~ 40°C  -40°C ~ 60°C  6W  72mm x 60mm x 128mm (without bracket)  0.37Kg |  |  |  |  |
| Network Interface  Audio Interface  Control Interface  Power Interface  USB Interface  Physical Paramete Input Voltage  Current Consumption  Operating Temperature  Storage Temperature  Power Consumption  Size                  | 1 x RJ45: 10/100/1000M Ethernet Interface (Support PoE)  1 x Line In: 3pin (Phoenix Interface)  1 x RS485: 2pin, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P  DC 12V  1 x USB 2.0: Type A, female  DC 12V / PoE (IEEE802.3af)  0.5A  -10°C ~ 40°C  -40°C ~ 60°C  6W  72mm x 60mm x 128mm (without bracket)            |  |  |  |  |

## **6** Troubleshooting

### Image

Digital Zoom

8x

- The monitor shows no image
- 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 be installed, IP Camera will display normal image.

- Unable to access IP Camera through IE browser
- Test whether the PC to access the network 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.
- 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 camera default IP address: 192.168.100.88;

default user name: admin; default password: admin. (the teacher camera IP address: 192.168.100.82; the student camera IP address: 192.168.100.92)

#### Control

- 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.

## **7** Toxic and Harmful Substances

| Dark Name     | Toxic or harmful substances or elements |      |      |        |       |        |
|---------------|---|------|------|--------|-------|--------|
| Part Name     | (Pb)                                    | (Hg) | (Cd) | (CrVI) | (PBB) | (PBDE) |
| Metal         | х                                       | 0    | 0    | 0      | 0     | 0      |
| Plastic       | 0                                       | 0    | 0    | 0      | 0     | 0      |
| Glass         | х                                       | 0    | 0    | 0      | 0     | 0      |
| Circuit board | х                                       | 0    | 0    | 0      | 0     | 0      |
| Power         | х                                       | 0    | 0    | 0      | 0     | 0      |
| Attached      | х                                       | 0    | 0    | 0      | 0     | 0      |

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.

## **8** 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)