

# BIOCAM Series Product Installation Guide

Version: 1.0 Date:2014.3

## ⚠️ Precautions



**DO NOT connect cables when the power is on.**

**Working Conditions**

**Operating temperature:** 14 F---58F (10 °C ~50 °C). **Operating humidity:** 10% ~80%.

**Working Distances**

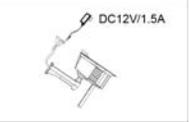
When communication distance exceeds 262 feet (80 m), please use relay device.

Note: Under the POE mode, if transmission distance is greater than 196 feet (60 m), please use a repeater.

- Keep the lens clean. If the lens is too dirty, use a soft cloth to clean the lens.
- Do not point the camera against an object emitting strong light for a long time.

Otherwise, the image sensor of the camera may malfunction, which leads to absence or distortion of images.

☺️ **Notes:** The product is applicable only to indoor installation. Do not install the device outdoors, otherwise, the warranty is void.



**Power Requirements**

The power must be **12V DC**, rated current  $\geq$  **1.5 Amp**.

- All uncovered cable should be less than .19 inches (5mm), to avoid device damage.

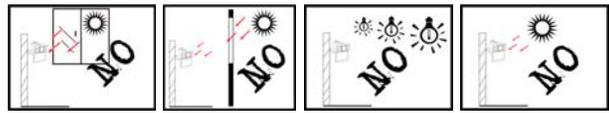
Recommended horizontal distance from the user to face recognition camera is about 9 feet (3 meters). (Applied to height range 5-6 feet (1.5~1.9m).)

**Recommended Conditions**

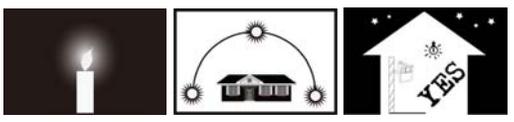
Install the device indoors at least 10 feet (3m) away from windows, and 6.5 feet (2m) away from light fixtures. Preferable light intensity should range between 0~800 LUX

**Facial Recognition Distances** Facial recognition can only take place in the specified ranges: left-to-right distance is about 1.15 feet (0.35 m), and the front-to-rear distance is about 3.2 feet (1 m). (For details, see **Appendix > Face Recognition Area**)

**Installation positions that affect the use of the device**



**Light sources in the installation environment that affect the use of the device**



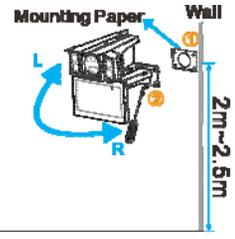
10Lux
1200+ Lux
50-800Lux

## Chapter 1: Installation

### 1. Install Device

#### • Wall Mounting

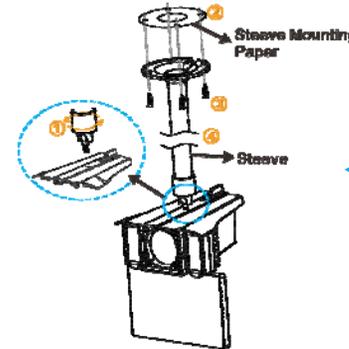
1. Attach the installation template to the wall where you want to mount the camera, and drill holes. (The Mounting Paper is 6-7 feet (2-2.5 meters) off the ground). See installation manual for more information.
2. Fix the camera on the wall using four screws. (The device can be rotated left to right so that screws can be conveniently fastened.)



#### • Top Mounting

1. Connect the steeve to the device
2. Attach the mounting paper onto the wall or ceiling where the device will be installed. Drill holes according to the marks on the mounting paper. See installation manual for more information.
3. Use screws to secure the steeve.
4. Adjust the length of the steeve to ensure that the **Face Recognition Camera** is at least 6-7 feet (2-2.5 m) off the ground.

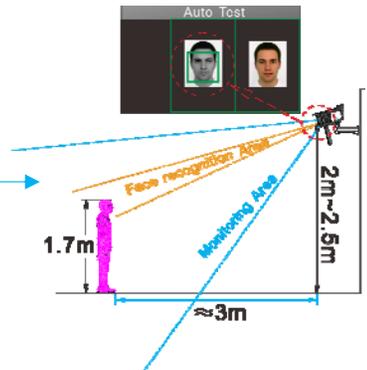
☺️ **Notes:** The steeve is not included. The device supports three types of steeves that are respectively 15 in-23in (40 cm to 60 cm), 23in-31in (60 cm to 80 cm), and 31in-47 in (80 cm to 120 cm).



### 2. Adjusting the Camera

After successful installation of the device, adjust the camera to the best angle to implement face recognition and video surveillance. Detailed adjustment methods are as follows:

- (1) Press the **[F8]** key on the Remote Control and the **Auto Test** interface appears.
- (2) Designate a person, about 5 ½ feet tall, to stand at a spot with a 9 ft. horizontal distance to the Face Recognition Camera.
- (3) Rotate the device up, down, left, and right to ensure that the facial image is displayed inside the green box on the **Auto Test** interface (as shown in the figure on the right). Adjust the camera to the best angle.



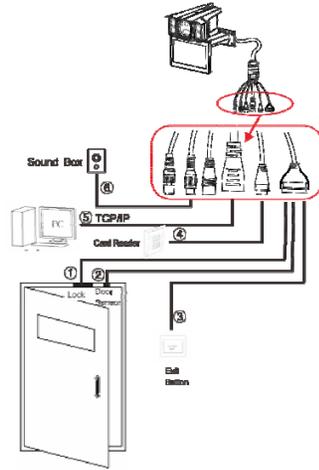
#### 📌 Notes:

- (1) In order to maintain the effects of the device and to prevent repeated adjustments to the device, connect the device *after* the camera angle is adjusted to the optimal position. (For details on how to connect cables, see **Chapter 2** and **3** in this guide.)
- (2) Users can adjust the human face parameters of the device according to the actual installation scenario and requirements. These parameters include the 1:1 matching threshold, 1: N matching threshold, exposure, and quality. For details about how to set these parameters, see the *BIOCAM Series Product User Manual* in the CR-ROM that is delivered with the device.

## Chapter 2: Connection Diagrams

### Access Control Capabilities:

- When a registered person is verified, the device will output a signal to open the door.
- Can connect a **Door Sensor**.
- Can connect an external **Exit Button**. This makes it convenient to open the door from the inside.
- Can connect an external **Card Reader**.
- Use the ZKIVision Client software to manage multiple devices via TCP/IP to network with PC.
- Can connect a **Sound Box** for voice play.



## Chapter 3: Connections

### 1. Terminal connections

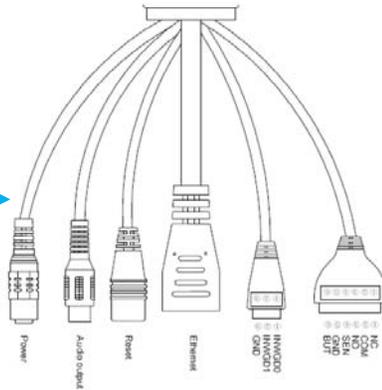
**Power interface:** Connected to the standard power adapter. Do not use other power supplies, otherwise, the device may be damaged.

**Network interface:** It is a 10/100M self-sensing Ethernet interface, through which the device can be connected to various network devices, such as switches, routers, or hubs.

**Audio output:** Connects with external play devices (such as a Sound Box) to realize broadcast function.

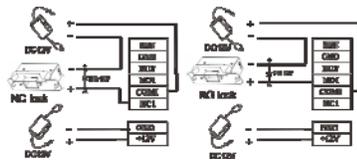
**Reset button:** Press this button for 5 seconds.

When it has been powered on for 40 seconds, the camera will recover to default configuration.



### 2. Connecting to NC/NO Locks

The device can connect with **NC** or **NO** lock by connecting to the corresponding terminal. Lock is open when power is on, and closed when power is off. Please use **NO** terminal. Lock is closed when power on, and open when shut down. Please use **NC** terminal. (Note: Device and Lock do not share power supply.)

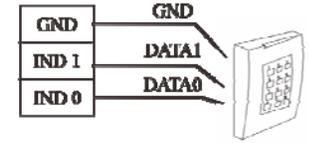


## 3. Wiegand Input

The device has Wiegand input function, and can connect to an external card reader. Device and card reader can be installed respectively inside and outside of the door. Control the lock together, or control entrance and exit.

(1) The distance between device and access controller or card reader should not be over 295 feet (90 m). If a longer distance is needed or there is an obstruction, please use Wiegand signal delay.)

(2) To ensure the stability of the Wiegand signal, the device must share the GND with controller or Wiegand reader.



## Chapter 4: PC Software Connections

The device has two types of communication methods to communicate with PC software.

### ① Connection between device and PC via twisted pair cable.



### ② LAN Connection



1. Connect the device to network and power it on.
2. Change the IP address for PC to make sure the PC and the device's IP address are in the same network.
3. Run the browser. Enter the device's IP address (for example, <http://192.168.1.88>) in the address bar, and press Enter key to enter the Login interface.
4. Enter the User Name and Password and click [Login] button to enter the Preview interface, then play the real-time videos collected by the camera.



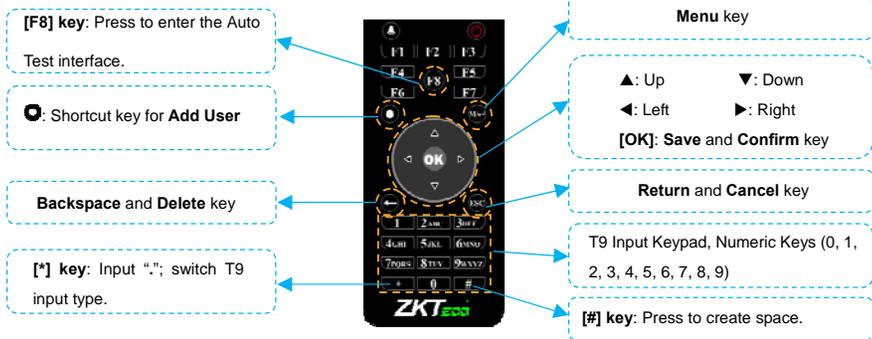
### Notes:

(1) If a browser to access the device is used for the first time, download and install the ActiveX plugin (**ActiveXPlugin.ocx**). Enter the device's IP address in the Address Bar and press Enter key, then the ActiveX download window will popup. Follow instructions displayed on the ActiveX download window to download/install the ActiveX. For details about how to use a browser for video surveillance, see the Web Server User Manual, which is available on the disk delivered with the device.

(2) Configure the IP address before installing the device. For more information, please see the **BIOCAM Series Product User Manual** on the disk delivered with the device.



## 1. Instruction for Remote Control



**Notes:** If the device is in an inactive state, you can press any key on the **Remote Control** to wake up the device.

## 2. Add User

Press **OK** key on the **Remote Control** to enter the **Add user** interface, shown as **Figure 1**:

**Face:** Enroll a user's face.

**User ID:** Enter a user ID. 1 to 9 digit user IDs are supported by default.

**ID card:** Enroll a user card.

**Role:** Set the rights of a user. A user is set to **(Ordinary) User** by default and can also be set to **Administrator**. **Ordinary Users** are only granted the rights of facial verification, while **Administrators** are granted the access to the main menu for various operations.

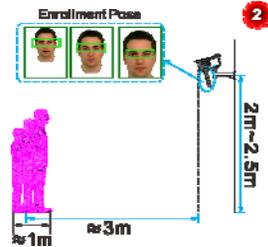


### Enrolling Face

(1) On the **Add User** interface, press **[OK]** key to enter the **Face enrollment** interface.

(2) Follow the prompt on the device's screen. Focus eyes in box, shown as **Figure 2**. During face registration, you need to move from back to front to adjust the position of eyes. Display the face in the center of screen as much as is possible.

(3) If your facial image is enrolled successfully, the system will display a prompt message and automatically return to the **Add User** interface.



### Enrolling/Registering the Card

(1) On the **Add User** interface, press **[▼]** key on the **Remote Control** to move the cursor on the **Card** button, and then press **[OK]** key to access the **Enroll Card** interface.

(2) The **[Punch Card!]** interface pops out as shown in **Figure 3**. Swipe your ID card properly in the swiping area.

(3) If the card passes the verification, the device displays a message "Read Successfully! Card No.: \*\*\*\*\*", as shown in **Figure 4**, and returns to the **Add User** interface.



## 3. Verification Modes

### 1: N Facial Verification/Recognition

(1) Compare the faces properly. (Same as Enrolling Face.) Place the face in the area where the camera can capture images, and the device will automatically offer face verification.

(2) The program displays the current image collected by the camera. If the verification is successful, an interface, as shown in **Figure 5**, will display.

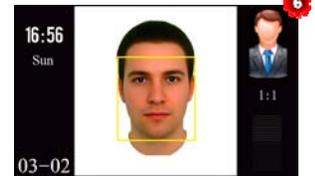


### 1: 1 Facial Verification/Recognition

(1) Insert a registered ID card on the card reader in the correct way.

(2) After card authentication is accepted, the system enters the 1:1 face image authentication mode. At this time, the face image on the interface is highlighted and a prompt "1:1" is displayed, as shown in **Figure 6**.

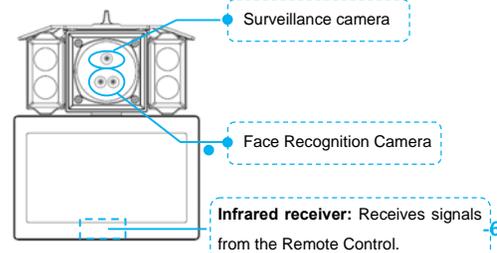
(3) Compare the faces properly. The program displays the current image collected by the camera, as shown in **Figure 5**.



**Tips:** For details about how to use the device, see the **BIOCAM Series Product User Manual**, which is available on the disk delivered with the device.

## 4. Product Appearance and Face Recognition Area

### Product Appearance



### Face Recognition Area

