

Quick Start Guide



inPulse & inPulse+
+
ZKBioSecurity 3.0

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ZKBioSecurity 3.0

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**ZKBioSecurity
Software
Installation and
Setup starts at
Page 20**

Safety Precautions

The following precautions are to keep users safe and prevent any damage. Please read carefully before installation.



Do not install the device in a place subject to direct sunlight, humidity, dust or soot.



Do not place a magnet near the product. Magnetic objects such as magnets, CRTs, TVs, monitors or speakers may damage the device.



Do not place the device next to heating equipment.



Be careful not to let liquid like water, drinks or chemicals leak inside the device.



Do not let children touch the device without supervision.



Do not drop or damage the device.



Do not disassemble, repair or alter the device.



Do not use the device for any other purpose than specified.



Clean the device often to remove dust on it. In cleaning, do not splash water on the device but clean it with a smooth cloth or towel.

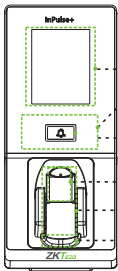
Contact your supplier in case of a problem.

Device Overview

★ Not all products have fingerprint and finger vein functions.

inPulse+

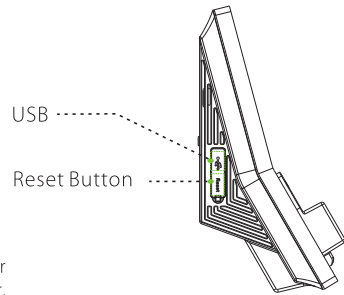
Front View



- Touch Screen
- Door Bell
- Card Reader Area
- Fingerprint Reader
- Finger Vein Reader
- Finger Vein Sensor

During registration, after finger touches the sensor, device begins collecting and verifying fingerprint and finger vein.

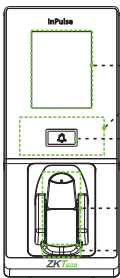
Left Side View



- USB
- Reset Button

inPulse

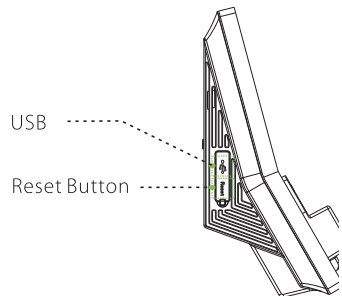
Front View



- Touch Screen
- Door Bell
- Card Reader Area
- Finger Vein Reader
- Finger Vein Sensor

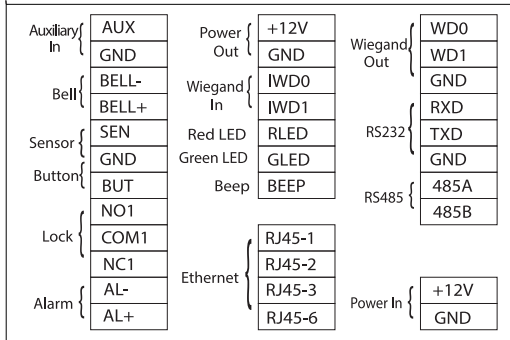
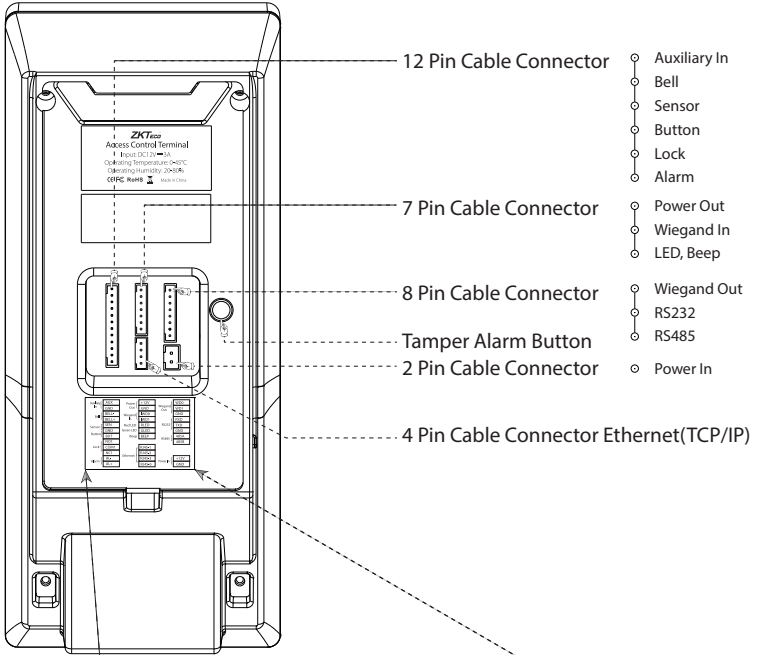
During registration, after finger touches the sensor, device begins collecting and verifying finger vein.

Left Side View



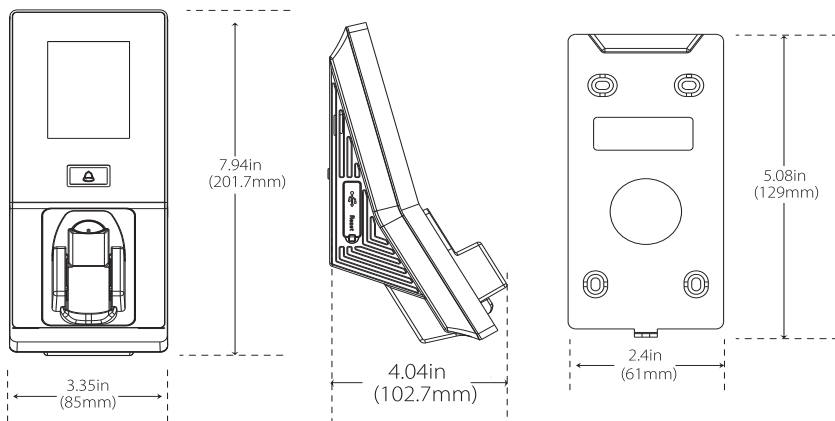
- USB
- Reset Button

Device Overview

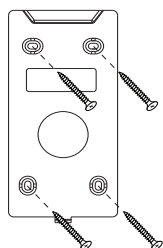


Product Dimensions & Installation

Product Dimensions

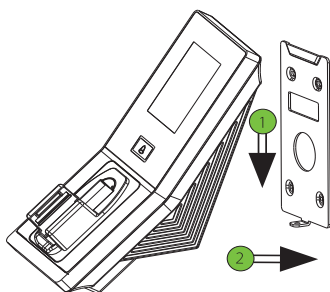


Mounting the Device on the Wall

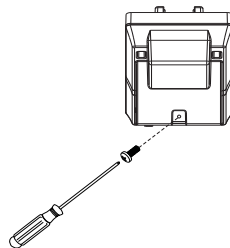


- 1 Fix the back plate onto the wall using wall mounting screws.

Note: We recommend drilling the mounting plate screws into solid wood (i.e. stud/beam). If a stud/beam cannot be found, use supplied drywall plastic anchors.



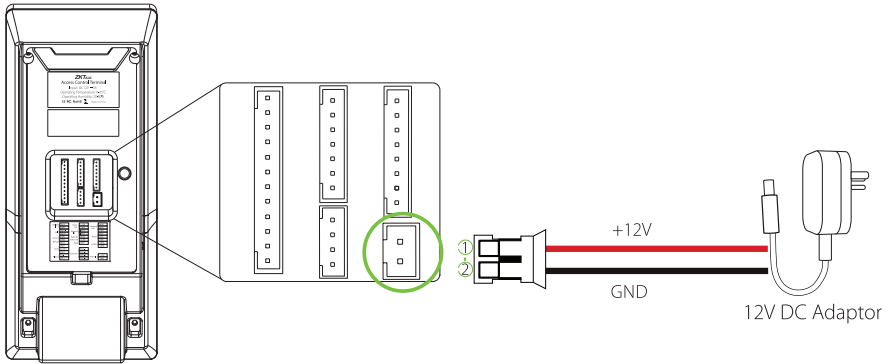
- 2 Insert the device to back plate.



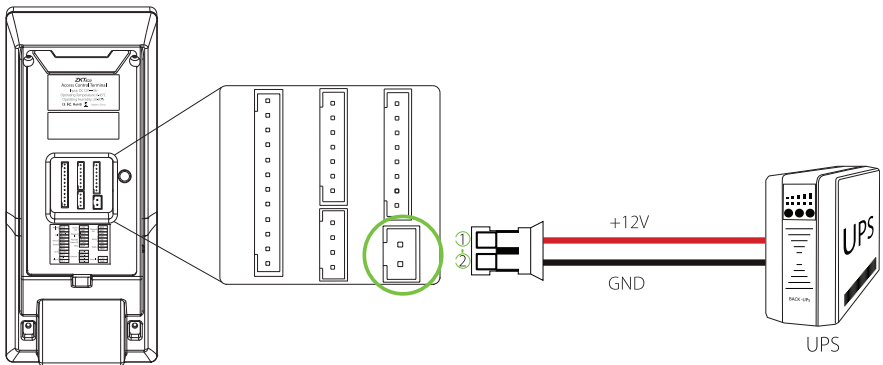
- 3 Use security screws to fasten the device to back plate.

Power Connection

Without UPS



With UPS (Optional)

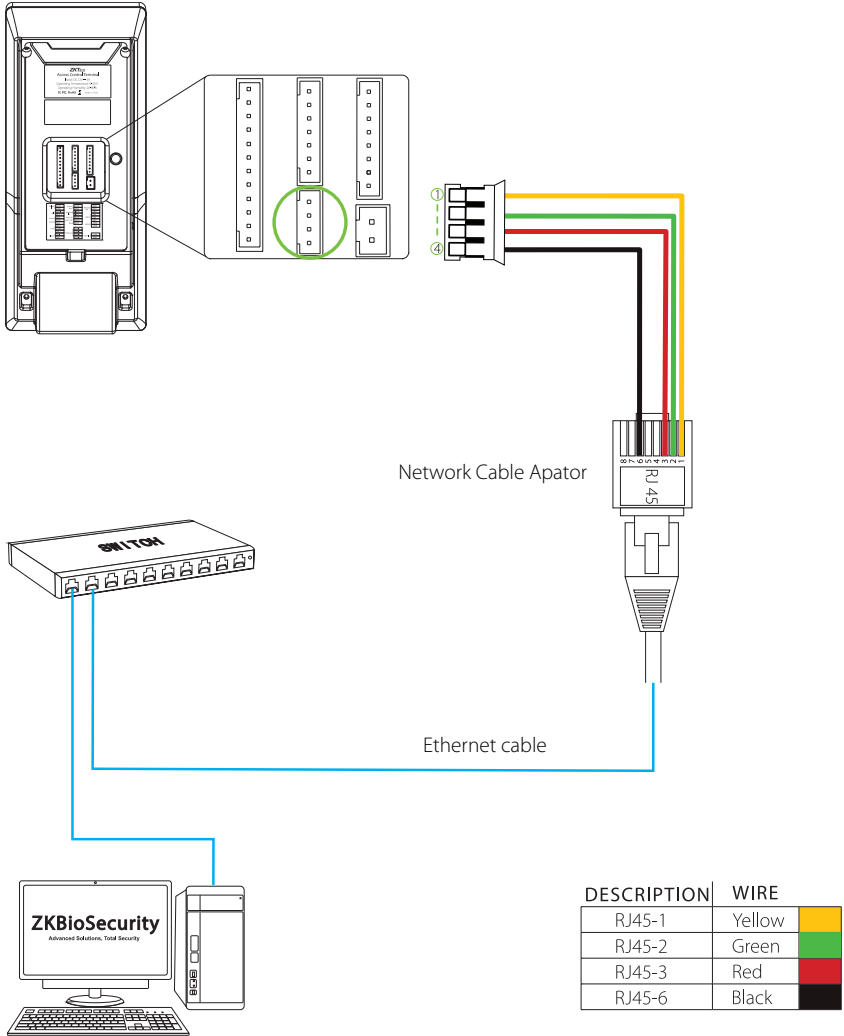


Recommended Power Supply

- $12V \pm 10\%$, at least 500mA
- To share the power with other devices, use a power supply with higher current ratings.

Ethernet Connection

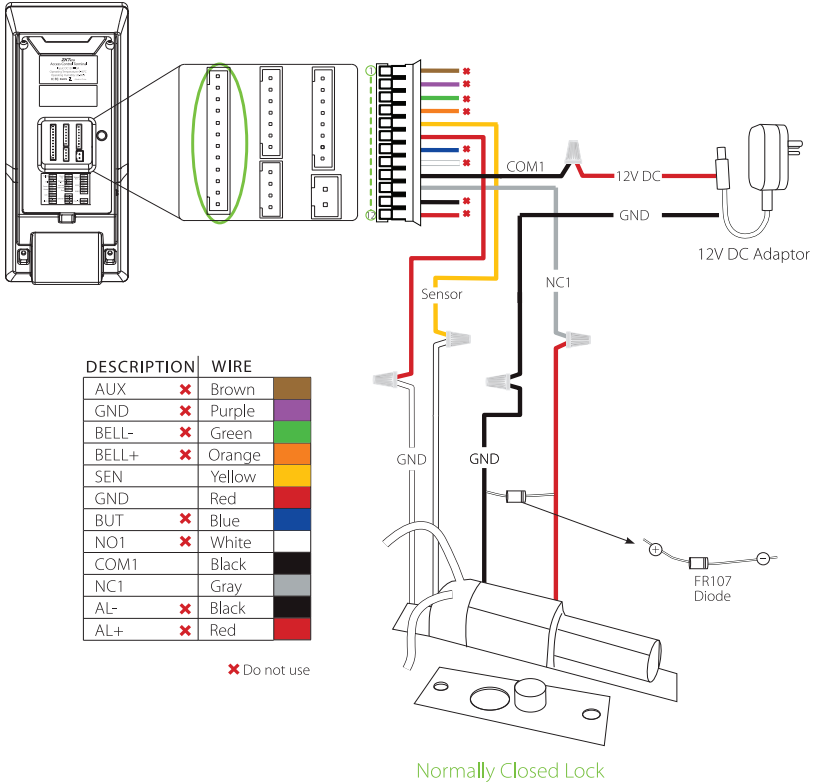
LAN Connection



Note: The device can be connected to PC directly by Ethernet cable.

Lock Relay Connection

Device Not Sharing Power with the Lock



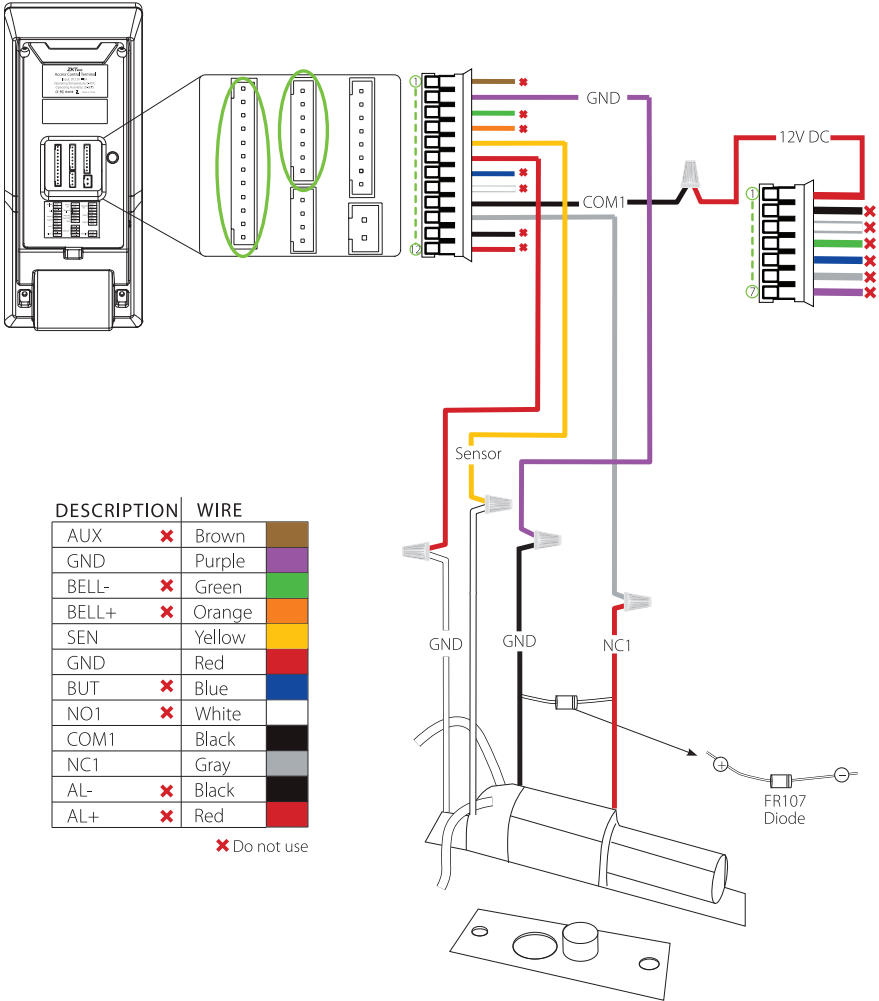
Notes:

1. The system supports **NO LOCK** and **NC LOCK**. For example the **NO LOCK** (normally opened at power on) is connected with 'NO1' and 'COM1' terminals, and the **NC LOCK** (normally closed at power on) is connected with 'NC1' and 'COM1' terminals.
2. When electrical lock is connected to the Access Control System, you must parallel one FR107 diode (equipped in the package) to prevent the self-inductance EMF from affecting the system.

⚠ Do not reverse the polarities.

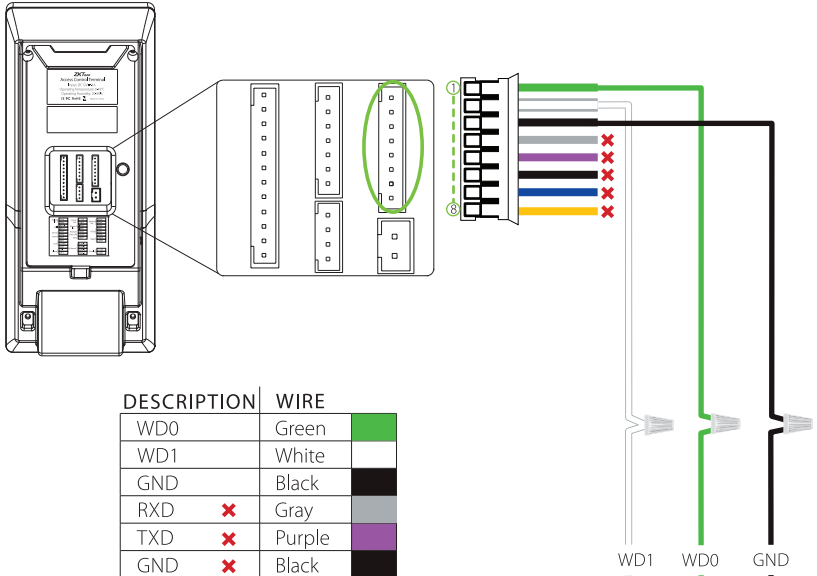
Lock Relay Connection

Device Sharing Power with the Lock



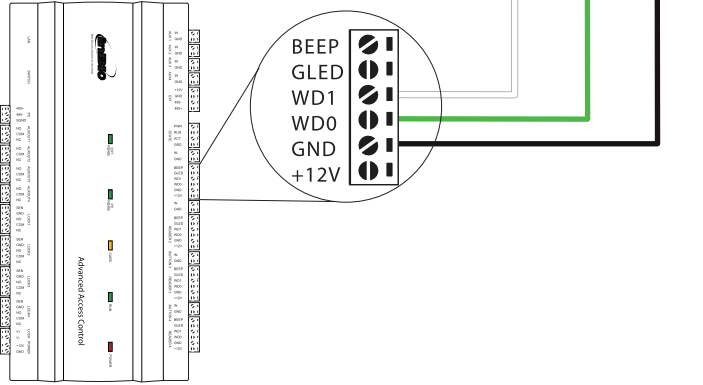
Normally Closed Lock

Wiegand Output Connection

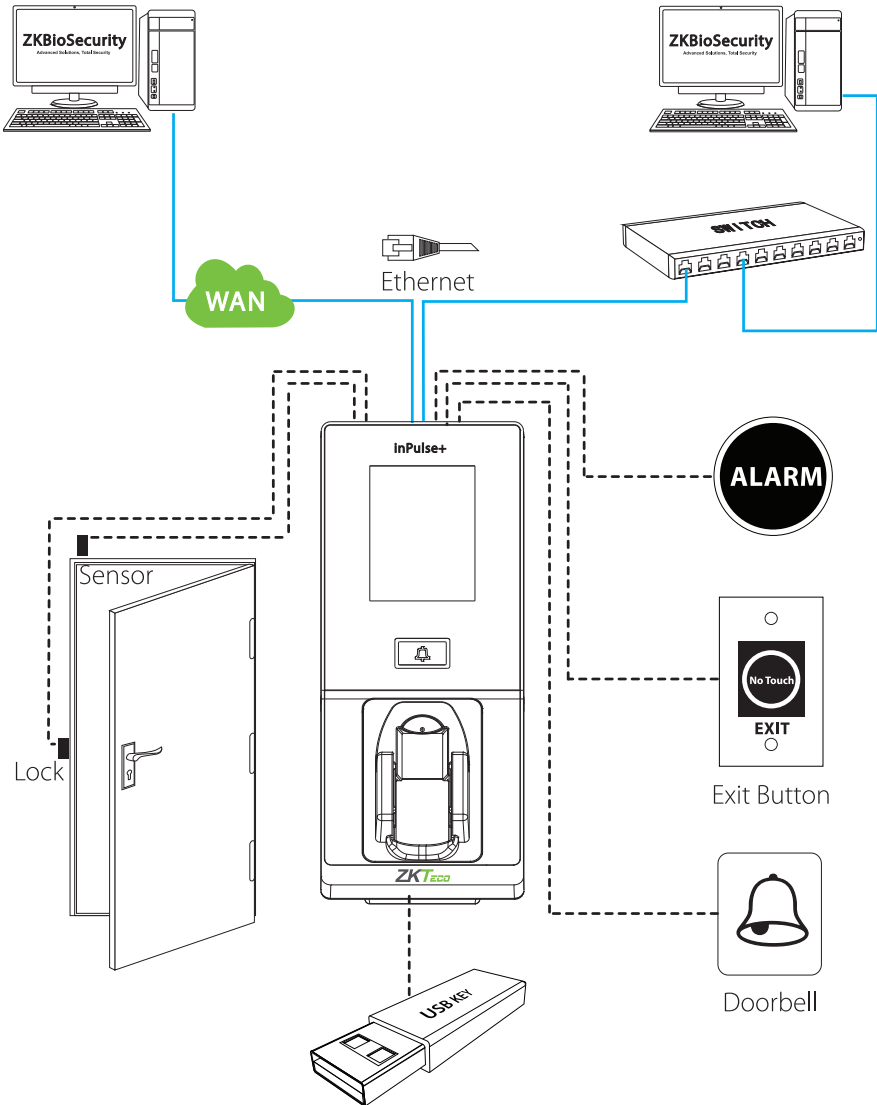


DESCRIPTION	WIRE	
WD0	Green	
WD1	White	
GND	Black	
RXD	Gray	
TXD	Purple	
GND	Black	
485A	Blue	
485B	Yellow	

Do not use

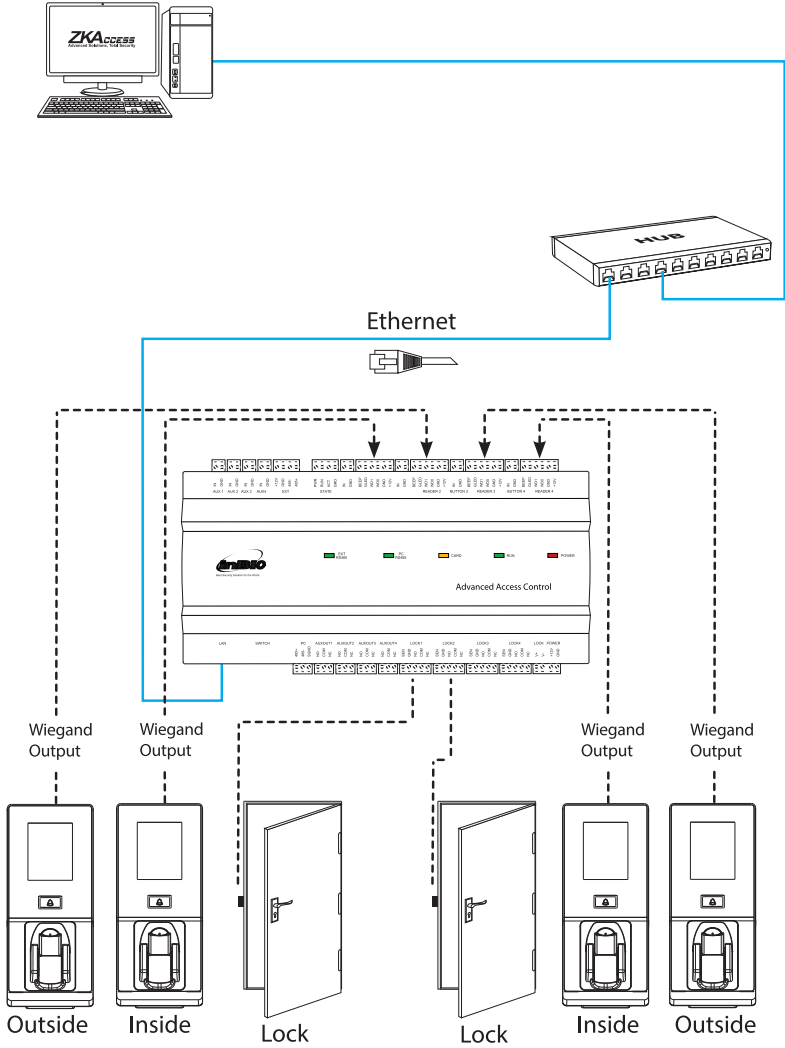


Standalone Installation

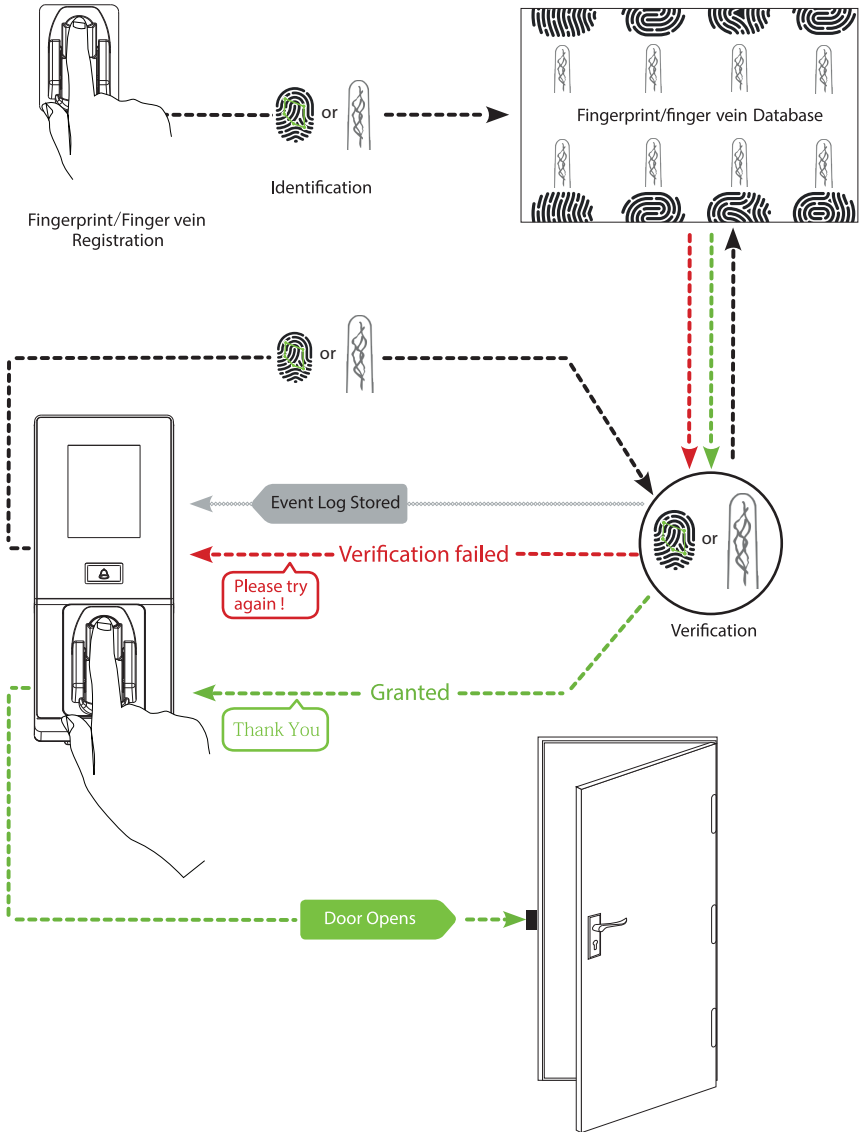


Third Party Controller

Wiegand Output Connection



How does inPulse/inPulse+ works

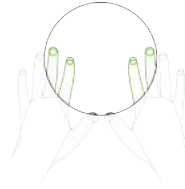


Registration and Verification

Note: During finger vein registration process, fingerprint of the selected finger is also registered

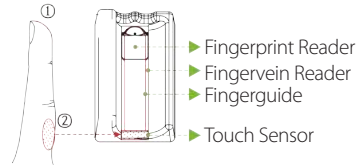
Select a finger to enroll

- It is recommended to use an index finger or a middle finger.
- Thumb, ring or little finger are relatively difficult to place in the correct position.



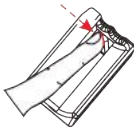
Fingerprint Placement Position

- In order to read your fingerprint and finger vein data touch the front side of finger vein reader with fingertip.
- The device starts collecting data once the finger root touches the finger vein reader



Verification Steps

1



Touch the front side of finger vein reader with fingertip, then press your finger upon the finger vein reader.

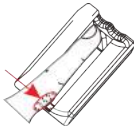


Place the finger according to the finger guide.

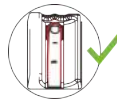


Finger-tip must touch the front of finger vein reader in order to properly collect fingerprint and finger vein images.

2

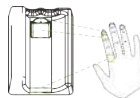


Touch the reader with finger root.



Improper positioning of finger will affect the proper collection of fingerprint and finger vein images.

3

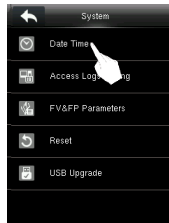



The device starts collecting data once the finger root touches the finger vein reader. Remove finger after “beep” sound.

Note: Maintain the natural hand gesture.
Do not bend your fingers.
Do not exert finger to press the reader

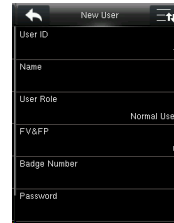
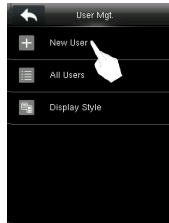
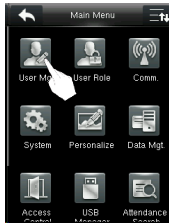
Device Operation


Date/Time Settings



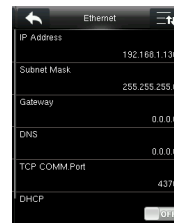
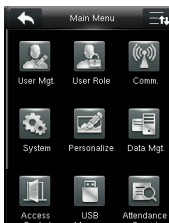
Press  icon to enter the Main Menu > System > Date Time to set date and time.

Adding User



Press  icon to enter the Main Menu > User Mgt. > New User to enter the New User adding interface. Settings include entering user ID, user role, choosing user role (Super Admin / Normal User), registering fingerprint & Fingervein★ / badge number★ / password, and setting access control role.

Ethernet Settings



Press  icon to enter the Main Menu > Comm. > Ethernet.

The parameters below are the system default values. Please adjust them according to the actual network.

IP Address: 192.168.1.201

Subnet Mask: 255.255.255.0

Gateway: 0.0.0.0

DNS: 0.0.0.0

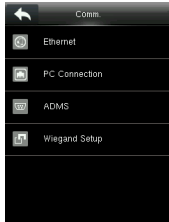
TCP COMM. Port: 4370

DHCP: Dynamic Host Configuration Protocol, which dynamically allocate IP addresses for clients via server. If DHCP is enabled, IP cannot be set manually.

Display in Status Bar: To set whether to display the network icon  on the status bar.

Device Operation

ADMS Settings



Press **☰** icon to enter the Main Menu > Comm. > ADMS, to set the parameters which are used for connecting with the ADMS server.

When the Webserver is connected successfully, the initial interface will display the logo.

Enable Domain Name: When this function is turned on, the domain name mode "http://..." will be used, such as http://www.XYZ.com. XYZ denotes the domain name when this mode is on; when this mode is off, enter the IP address format in XYZ.

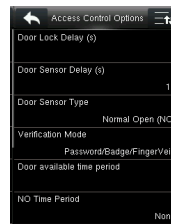
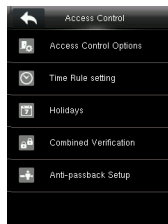
Server Address: Enter IP address of the ADMS server.

Server Port: Enter the port number used by the ADMS server.

Enable Proxy Server: Method of enabling proxy. To enable proxy, please set the IP address and port number of the proxy server. Entering proxy IP and server address will be the same.

Note: To connect the device to ZKBioSecurity software, Ethernet and ADMS options must be set correctly.

Access Control Settings



Press **☰** icon to enter the Main Menu, press **>** and **∨** to select Access Control.

To gain access, the registered user must meet the following conditions:

1. User's access time must fall within either user's personal time zone or group time zone.
2. User's group must be in the access combo (when there are other groups in the same access combo, verification of members of those groups are also required to unlock the door).

Access Control Options: To set parameters of the lock and other related devices.

Time Rule Setting: To set a maximum of 50 time rules. Each time rule consists of 10 spaces (7 spaces for one week and 3 holiday spaces), each space consists of 3 time periods.

Holidays: To set dates of holiday and the access control time zone for that holiday.

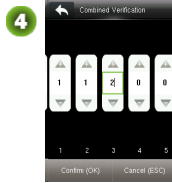
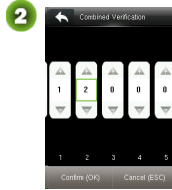
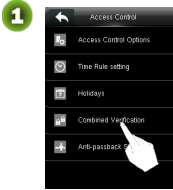
Combined Verification: To set access control combinations. A combination consists of a maximum of 5 access control groups.

Anti-Passback Setup: To prevent passing back which causes risks to security. Once this function is enabled, entry and exit records must be matched in order to open door. In Anti-Passback, Out Anti-Passback and In/Out Anti-Passback functions are available.

Device Operation

Access Control Combination Settings

E.g. : Add an access control combination which requires 2 person's verification from both Access Control Group 1 (set in User Management) and Access Control Group 2.



1. In “Combined Verification” List, click the desired combination to modify, and enter the interface (as shown in figure 1).

2. Click “+ / -” to change the number, and click “Confirm” to save and back to “Combined Verification” (as shown in figure 2).

Note:

- A. A single access control combination can consist of a maximum of 5 user groups (in order to open door, verification of all 5 users is required).
- B. If the combination is set as shown in figure 3, a user from access control group 2 must obtain verification of 2 users from access control group 1 in order to open door.
- C. Set all group number to zero to reset access control combination.

Troubleshooting

1. “Invalid time zone” is displayed after verification?
 - ⇒ Contact Administrator to check if the user has the privilege to gain access within that time zone.
2. Verification succeeds but the user cannot gain access?
 - ⇒ Check whether the user privilege is set correctly.
 - ⇒ Check whether the lock wiring is correct.
3. The Tamper Alarm rings?
 - ⇒ To cancel the triggered alarm mode, carefully check whether the device and back plate are securely connected to each other, and reinstall the device properly if necessary.

ZKBioSecurity 3.0

It is recommended to install software version 3.0.3.0 or above

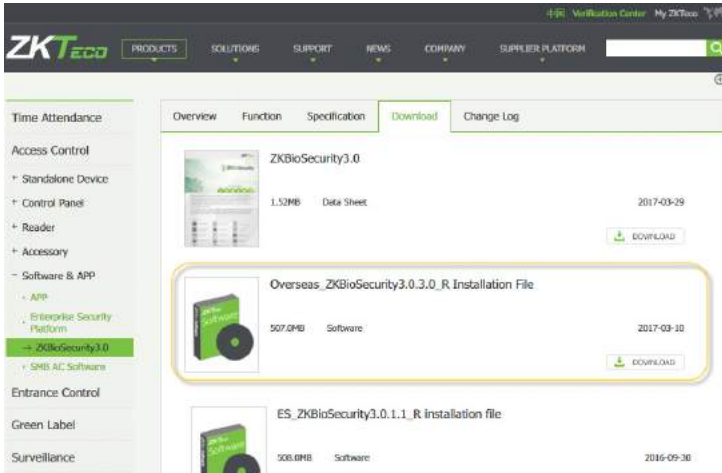


Installation & Setup

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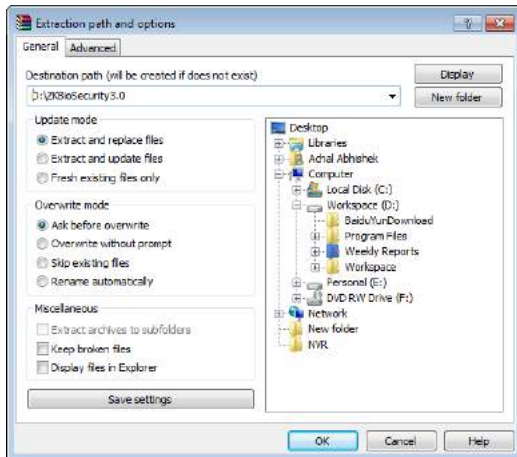
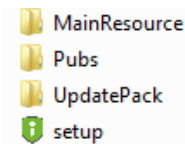
Downloading

1. Go to http://www.zkteco.com/product/ZKBioSecurity3.0_421.html
2. Download the latest software and related files as required.



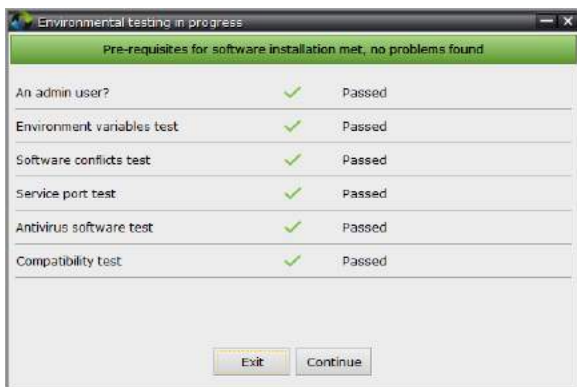
3. Once downloaded, extract the .rar file to a new folder.

4. Click on setup to begin installation.



Installation

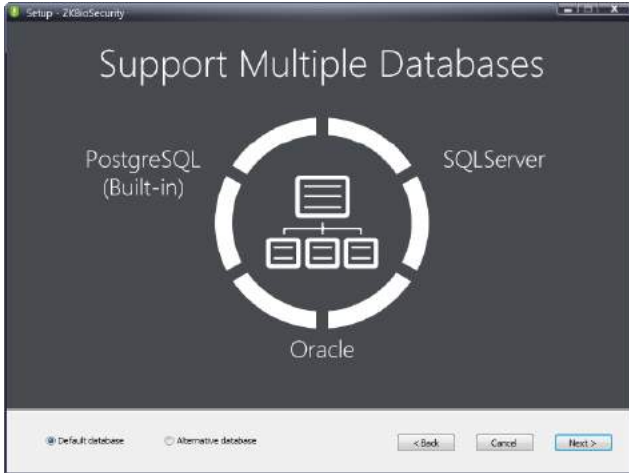
1. System will check the requirements to install the software. Click *Continue* if all tests are passed, else check the issues and re-test.



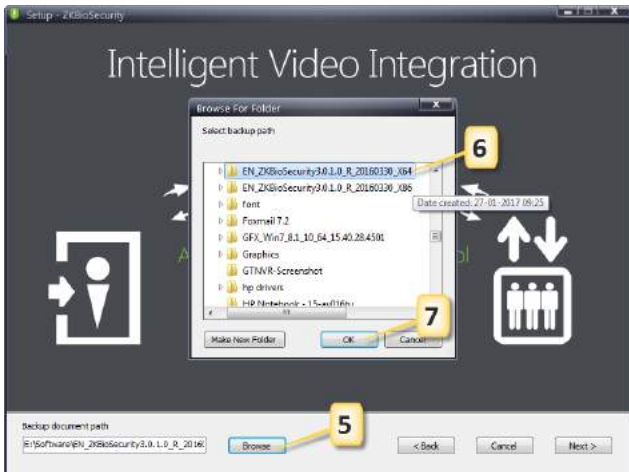
2. Add an open port (Default 8088) or ask a network administrator for an open port.
Note: Stalone device doesn't support https.
3. Click the check box to add firewall exception for this port.

Installation

4. Select the mode of database. The default will be PostgreSQL, if you want to select any other database, then select *Alternative database*.



5. Click Browse and choose or create a folder to store your backup files.
6. Select/Create the required folder.
7. Click OK.



Adding Device

1. Click on *Access* to get below interface of Access Module of the software.



2. Click on *Device*.
3. Click on *Search Device*.



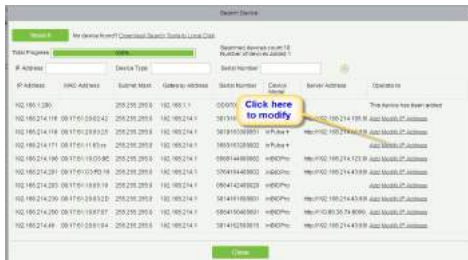
4. Click *Search* to search all the standalone devices on the network.
5. From the list, click *Add* to add the required device.



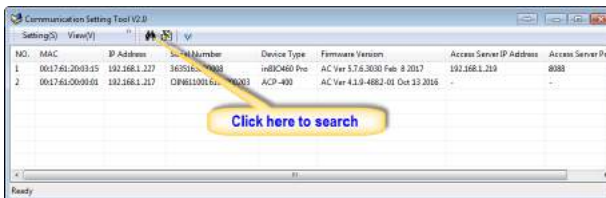
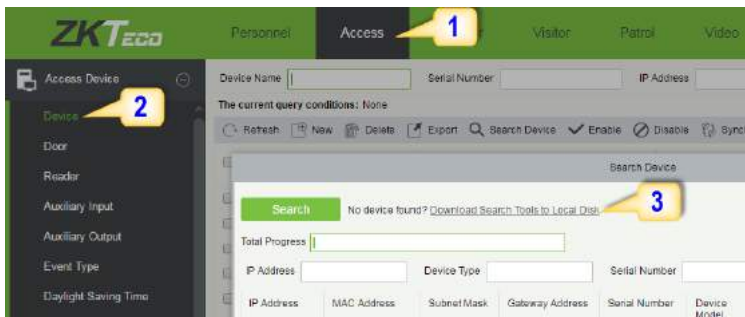
Adding Device

6. Enter a unique name.
7. Enter the IP address of current system (PC).
8. Enter the access point of system.
9. Click on this option, after adding device, the system will clear all data in the device (except the event logs).
10. Click OK to finish.

The default IP address may conflict with the device IP of other devices. In order to avoid that problem, modify the IP address as shown below:

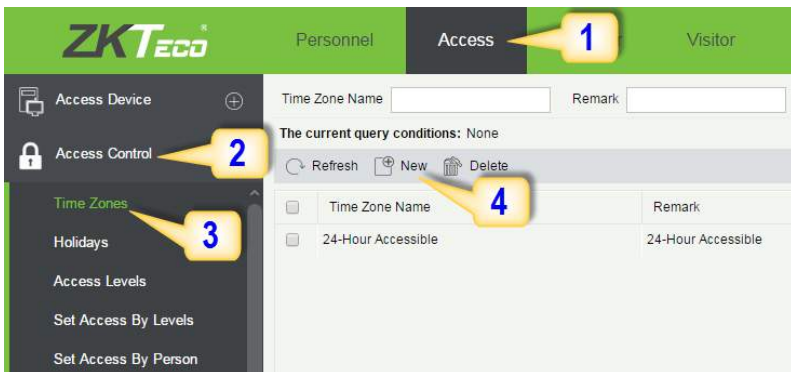


When the device is not in the same network with server, customers should download the tool and search the device as shown below:

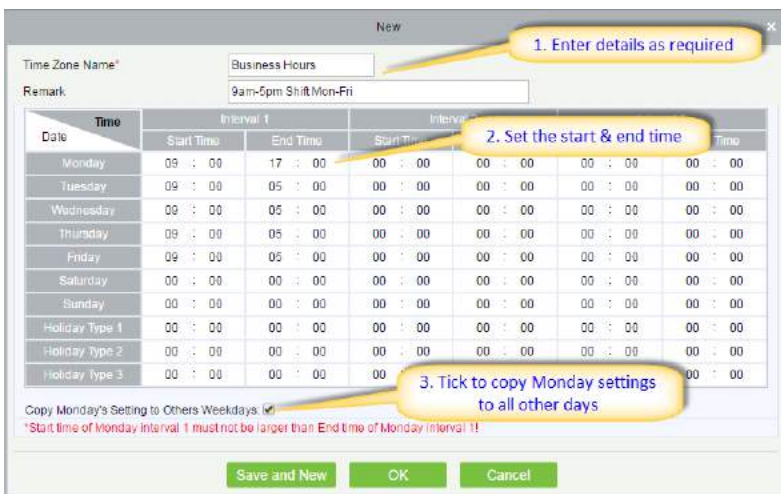


Creating a Time Zone

Click Access Control > Time Zones > Add to access the time zone.

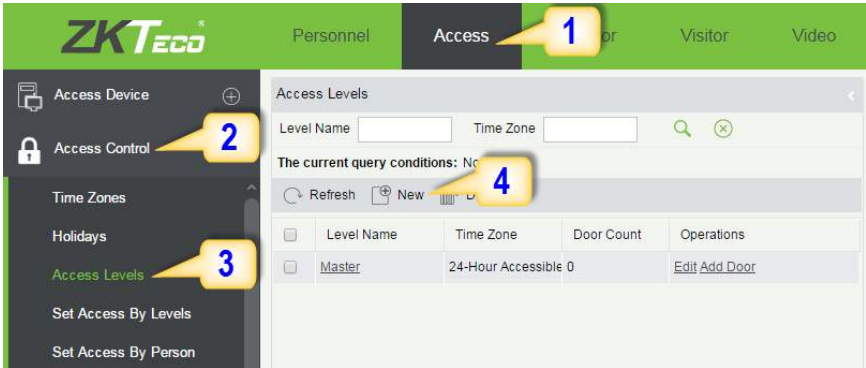


After setting the time zone, click *OK* to save, and the time zone will appear in the list.



Creating an Access Level

1. Click Access
2. Click Access Control
3. Click Access Levels
4. Click New.



5. Enter the details and click *OK*.
6. You need to add doors to the access levels.

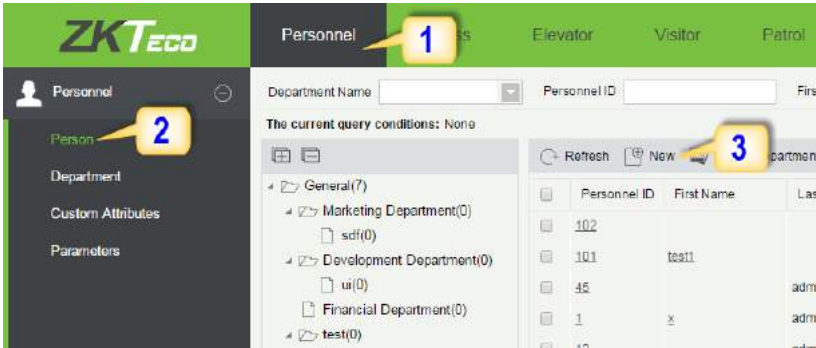


7. Select the required door(s).
8. Move the selected door(s).
9. Click *OK* to finish adding doors.



Enrolling Personnel

1. Click Personnel
2. Click Person
3. Click New to add personnel.



New

Personnel ID* Department* **A** **B**

First Name Last Name **C**

Gender Password

Social Security Number License Plate

Reservation Code Mobile Phone

Fingerprint **F**

Finger Vein Card Number **D**

E Master

Superuser

Device Operation Role

Delay Passage

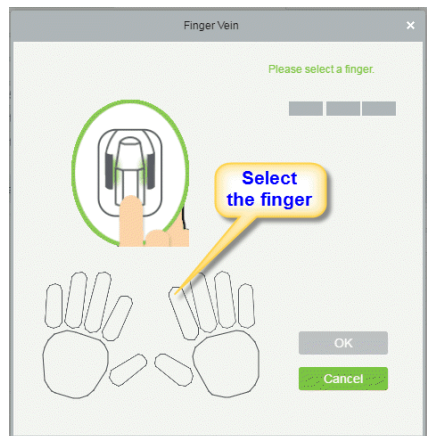
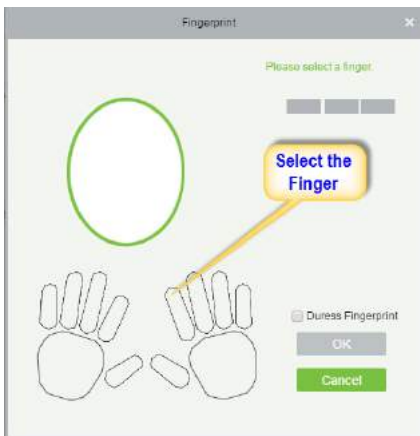
Disabled

Set Valid Time

A. Personnel ID: It must be a unique 9 characters length with the valid range of 1-79999999. It can be configured based on actual conditions. The Personnel No. contains only numbers by default but may also include letters after setting parameters.

Enrolling Personnel

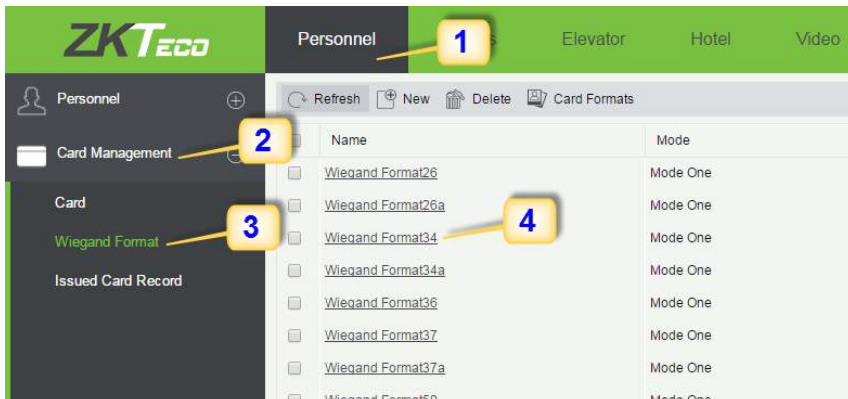
- B. Department:** Select from the pull-down menu and click *OK*. If the department was not set previously, you can only select the default [Company Name] department.
- C. Password:** Set personnel password. It only supports 6-digit passwords. If password exceeds the specified length, the system will truncate it automatically. It can't be same with duress or other passwords.
- D. Card Number:** You can add a card number through manual entry or a card issuer. For issuing through issuer, click on the card icon directly. For issuing card manually, you must enter both the card number and the site code, then the software converts the numbers to the card number for access control system verification.
- E. Access Control:** Here you will get all the access levels created by you and by default. Tick the required box.
- F. Fingerprint/Fingervein:** Enroll the Personnel Fingerprint/Fingervein or Duress Fingerprint. Duress Fingerprint is to trigger the alarm and send the signal to the system in case of emergency.



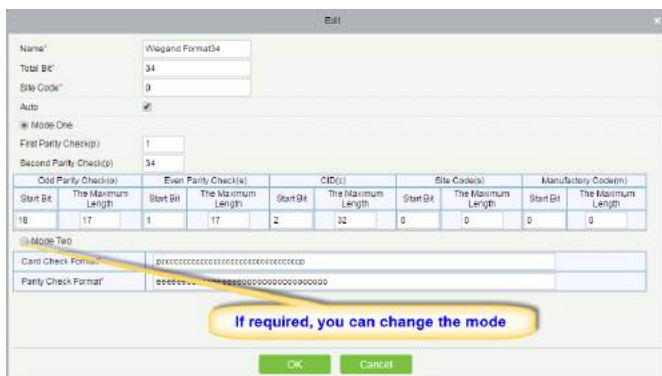
Wiegand Format

Wiegand Format is the card format that can be identified by Wiegand reader. The software is embedded with 10 Wiegand formats. You may set the Wiegand card format as required.

1. Click Personnel
2. Click Card Management
3. Click Wiegand Format.
4. Taking Wiegand Format34 as an example. Click to edit.



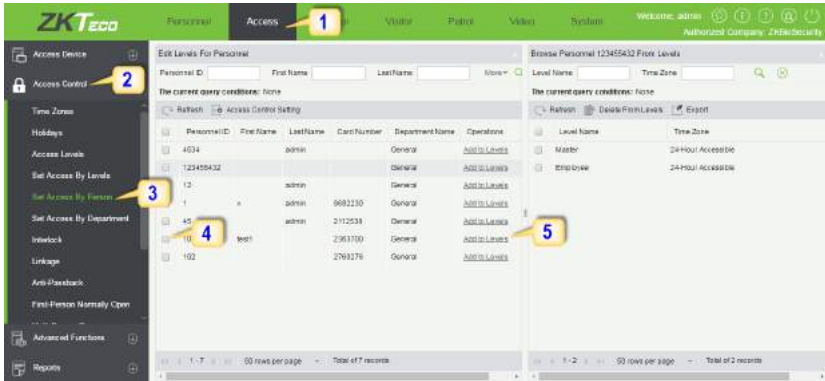
This software supports two modes for adding Wiegand Format, if mode 1 does not meet your setting requirement, switch to mode 2.



p indicates Parity Position, s indicates Site Code, c indicates Cardholder ID, f indicates Facility Code, m indicates Manufactory Code, e indicates Even Parity, O indicates Odd Parity, b indicates both odd check and even check, x indicates parity bits no check.

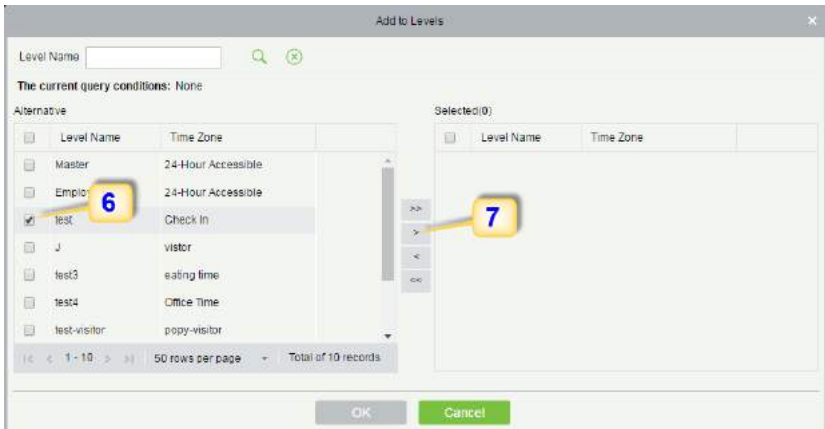
Add & Delete Personnel to Access Level

1. Click Access
2. Access Control
3. Set Access by Person
4. Click on the required employee
5. Click Add to Levels.



6. Select Level(s).

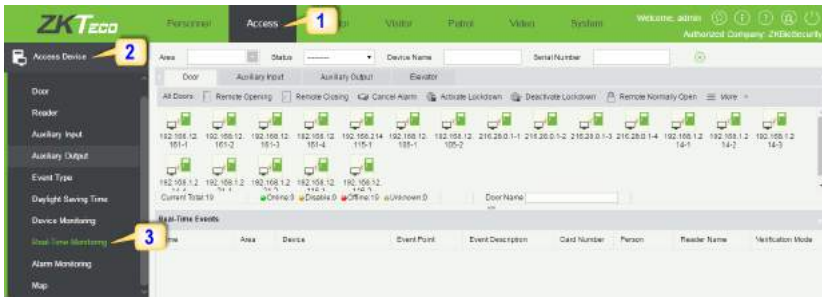
7. Click to move the selected level(s) to the right, and then click OK to complete adding. The added level(s) will appear in the list on to the right side.



Real-Time Monitoring

1. Click Access
2. Click Access Device
3. Click Real-Time Monitoring

Real-time monitor the status and real-time events of standalone in the system, including normal events and abnormal events (including alarm events) device transactions.



You can also filter by Area, device name, Serial number to check a specific device transactions or all at once.

Hover over a door icon to open pop up menu as shown below and click Remote Closing, Remote Opening, or Cancel Alarm and more.

Status

Device: 192.168.1.217
 Serial Number: OIN6110016102200203
 Number: 1
 Door Sensor: No Door Sensor
 Relay: Close
 Alarm: None

[Remote Opening](#)
[Remote Closing](#)
[Cancel Alarm](#)
[Remote Normally Open](#)
[Enable Intraday Passage Mode Time Zone](#)
[Disable Intraday Passage Mode Time Zone](#)
[Query the latest events from the door](#)

Exporting Reports

Access Module:

1. Click Access 2. Click Reports 3. Filter the data (time, Personnel ID, Device Name and more) if required and click on search 4. Click All transactions or as required.

5. Click on *Export* to get the list.

6. Click OK.

Personnel Module:

1. Click Personnel 2. Click Person 3. Filter the data (Department, Personnel ID, and more) if required and click on search 4. Click on Export to get the list.

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