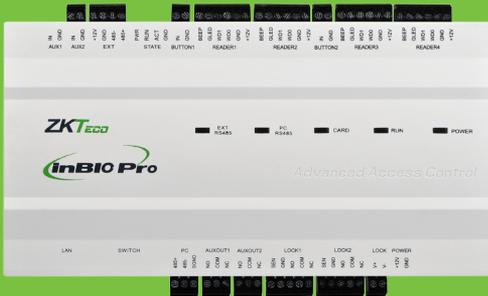


# Quick Start Guide



## *InBio Pro* + *ZKBioSecurity 3.0*

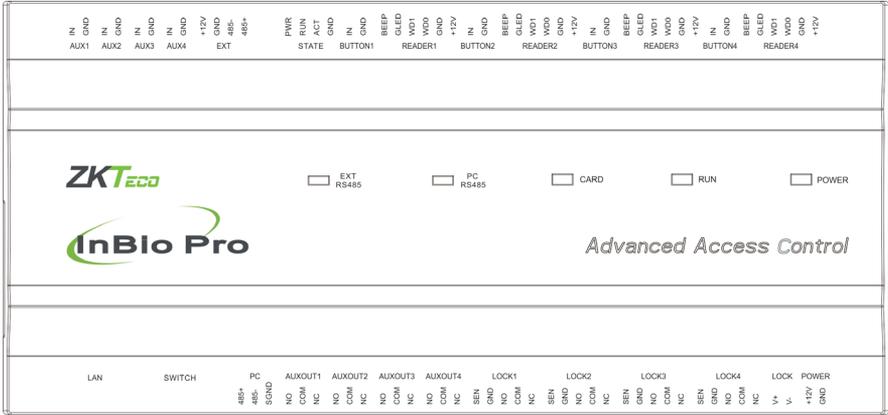
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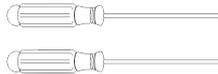


**ZKBioSecurity  
Software  
Installation and  
Setup starts at  
Page 25**

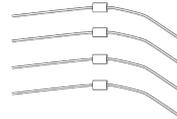
# What's in the Box



2 Screws & Anchors



2 Screwdrivers



4 Diodes

# Optional Accessories



Wiegand Card Reader



Prox Card



InBio Pro Cabinet



K1-1 Exit Button



ZK4500 Enrollment reader



CR10E Card Enroller



RS485 Fingerprint Reader

# 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.



# LED Indicators

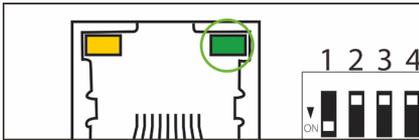


Figure 2

**LINK Solid Green LED** indicates TCP/IP communication is normal.

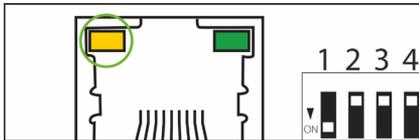


Figure 3

**Flashing (ACT) Yellow LED** indicates data communication is in progress.

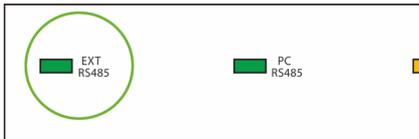


Figure 4

**EXT RS485 (TX/RX) Flashing Yellow & Green LED** indicates communication is in progress.



Figure 5

**Flashing (POWER) Red LED** indicates the panel is powered on.



Figure 6

**Flashing (RUN) Green LED** indicates that panel is in normal working state.

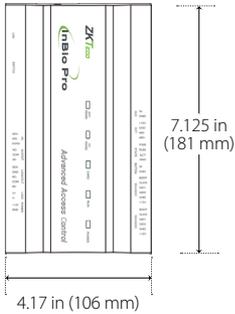


Figure 7

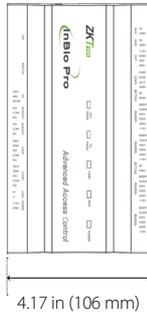
**Flashing (CARD) Yellow LED** indicates that the card is read by the panel.

# Product Dimension

## InBio160Pro



## InBio260Pro



## InBio460Pro

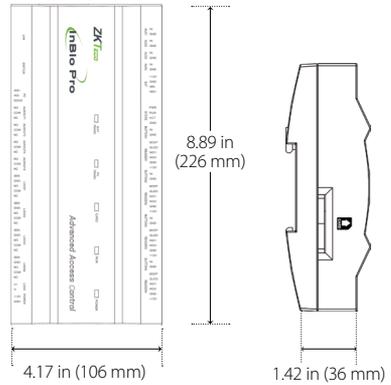


Figure 8

## InBio Pro- Metal Cabinet

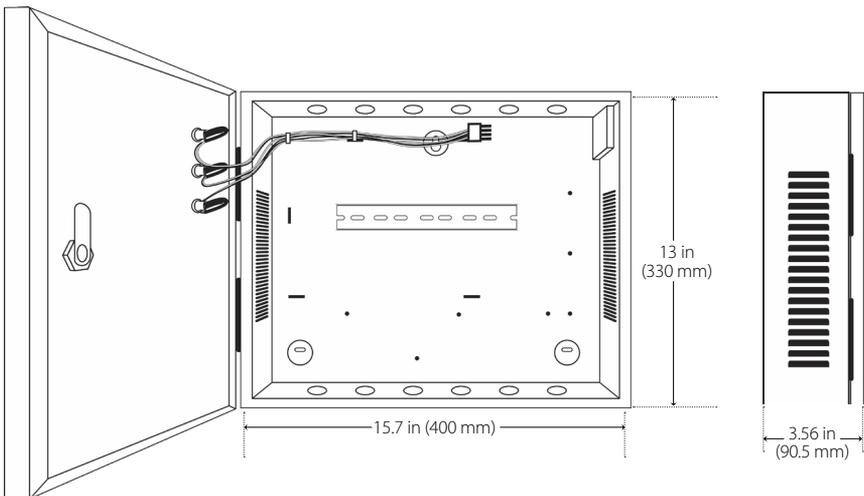
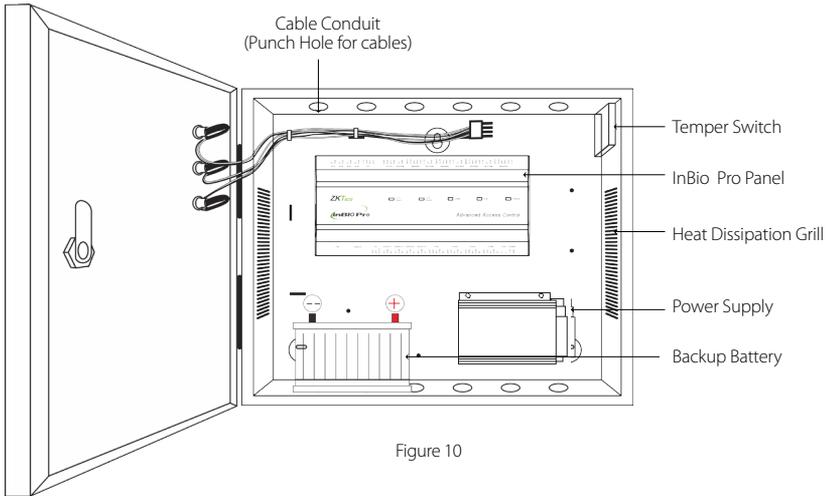


Figure 9

# Installation of Panel & Cabinet



## Step 1

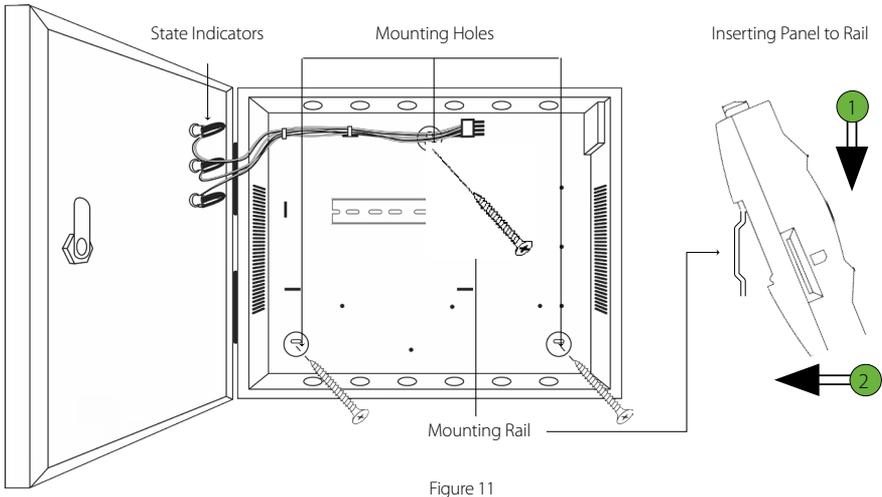
Pass the cable through holes

## Step 2

Mount the Metal Cabinet

## Step 3

Insert the InBio Pro Panel as it shown



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



# Power Wiring Diagram

## Without Backup Battery

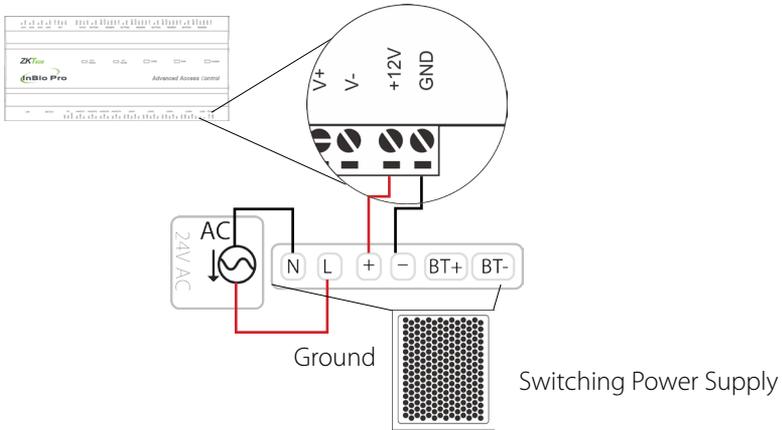


Figure 13

## With Backup Battery

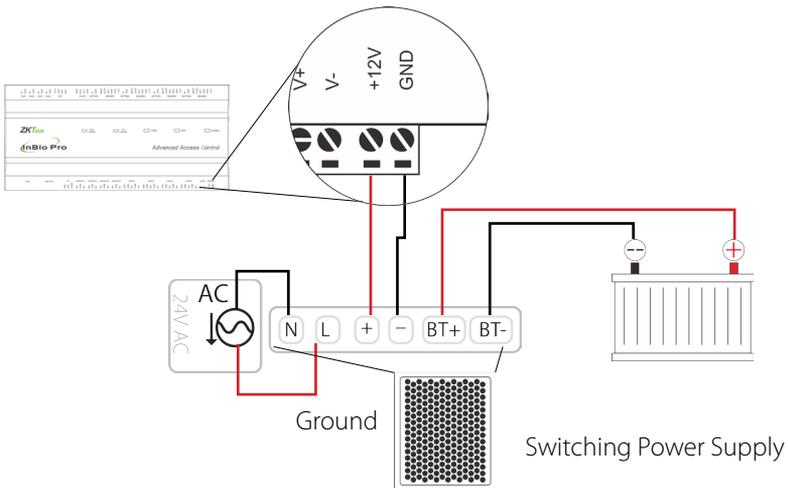


Figure 14

# RS485 Fingerprint Reader Connection

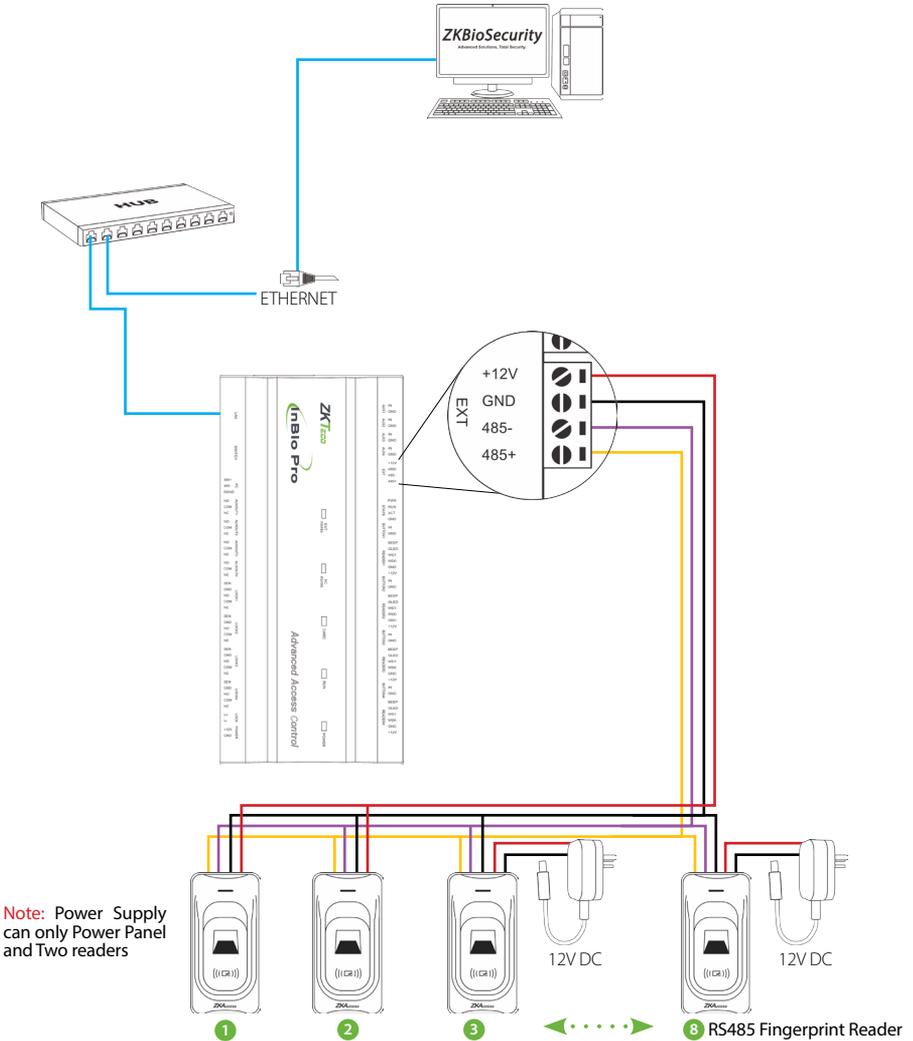
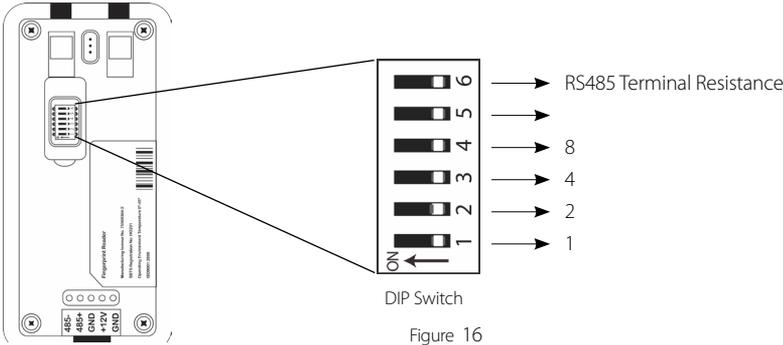


Figure 15

# DIP Switch Setting for RS485 Reader



Address	Switch Settings	Address	Switch Settings
1		5	
2		6	
3		7	
4		8	

## Important Notes

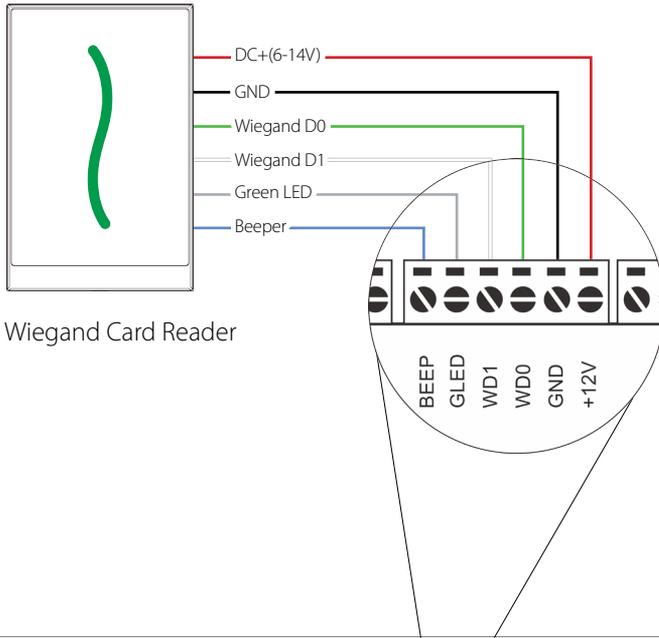
- There are six DIP switches on the back of RS485 fingerprint reader, Switches 1-4 is for RS485 address, switch 5 is reserved, switch 6 is at the End-Of-Line for reducing noise on long RS485 cable.
- Set the odd number for IN reader, and the even number for OUT reader (for eg. For two readers for one door- the RS485 address 1 is for IN reader, RS485 address 2 is for OUT reader)
- If RS485 fingerprint reader is powered from InBio460Pro panel, the length of wire should be less than 100 meters or 330 ft.
- The External RS485 interface can supply maximum 500mA current, The RS485 fingerprint reader's start-up current is 240mA. So InBio460Pro only can power two RS485 fingerprint readers.
- If the cable length is more than 200 meters or 600 ft, the number 6 switch should be ON as below:



← Distance: More than 200 meters →



# Wiegand Connection



Wiegand Card Reader

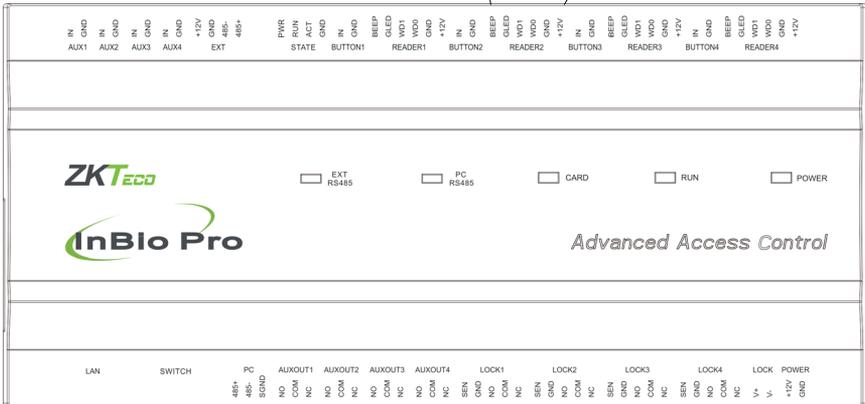


Figure 17

# REX Connections

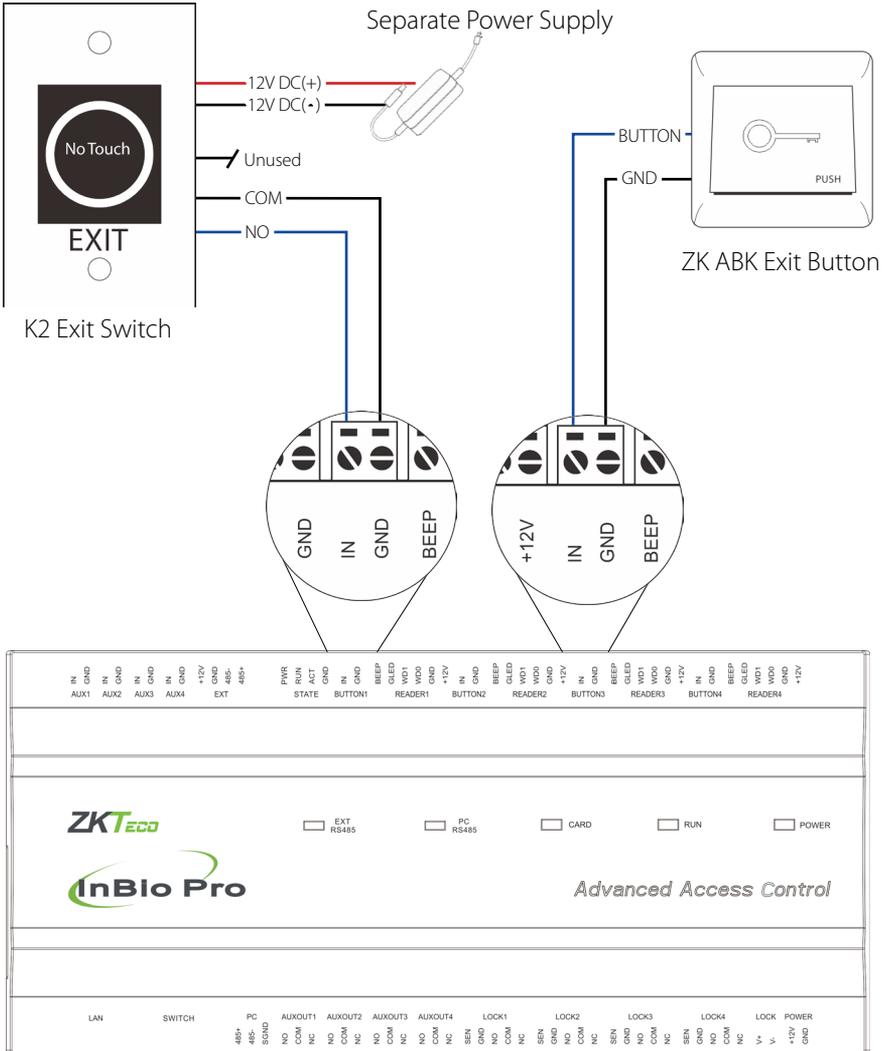


Figure 18

# Lock Connection

## Connecting a Lock with External Power Supply (Dry Contact)

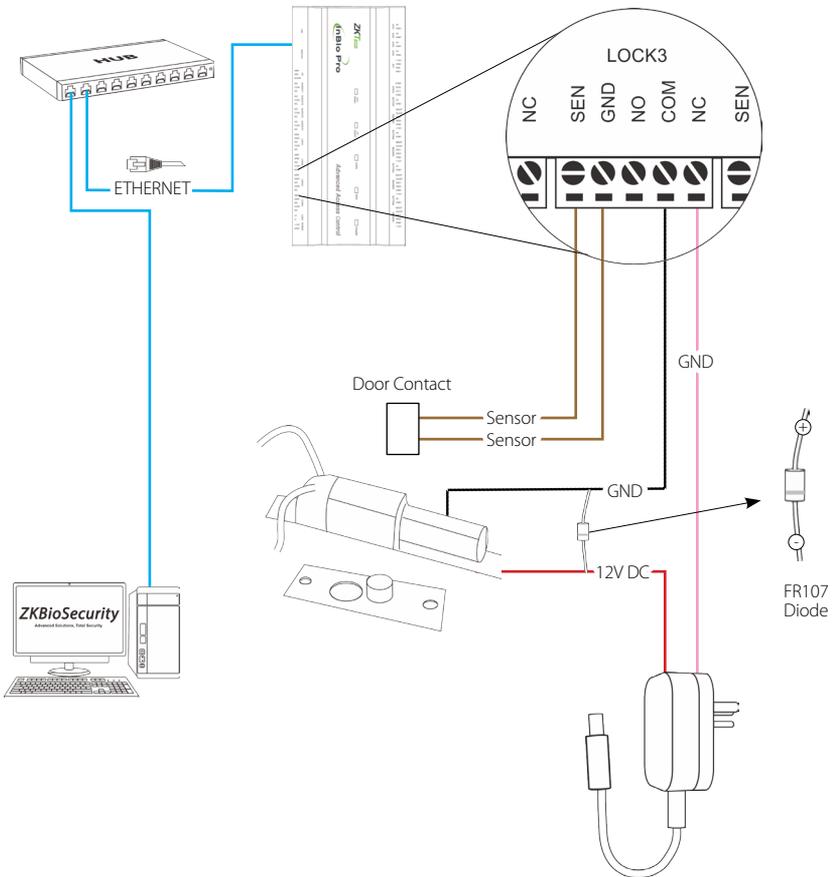


Figure 19

# Lock Connection

## Switching Dry Contact to Wet Contact

### Important Notes:

The factory default jumper setting is set as dry mode. If you want to power the lock from the panel, you must take the following steps:

1. Take apart the cover of InBio460Pro. Push the tab inward (see figure 21).
2. Select the appropriate lock relay and find its jumpers.
3. Take off the jumpers and change  to .
4. Connect the lock as show in the diagram, (see figure 23 and 24).

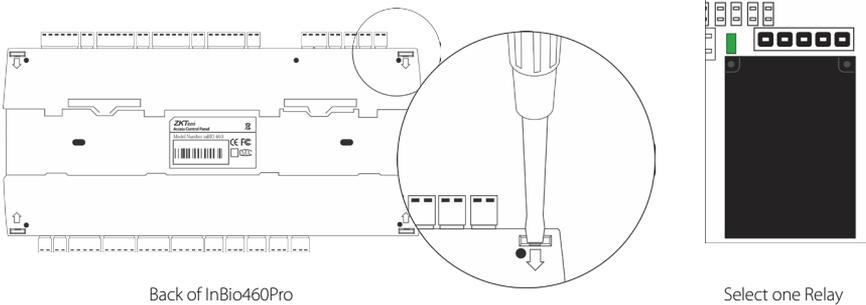


Figure 20

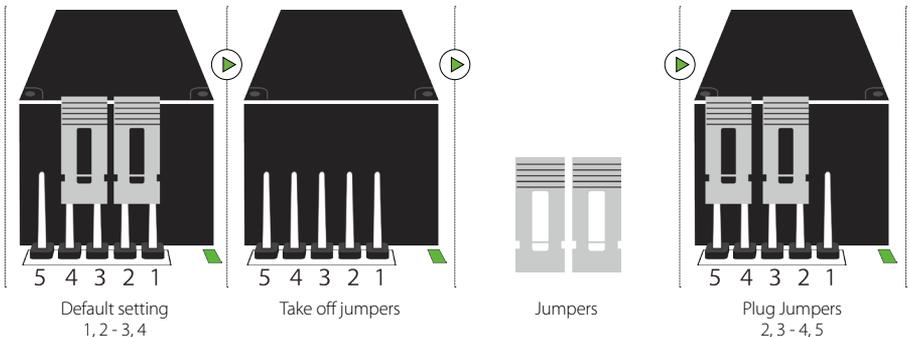


Figure 21

# Lock Connection

## Normally Open Lock Powered From Lock Terminal (Wet Contact)

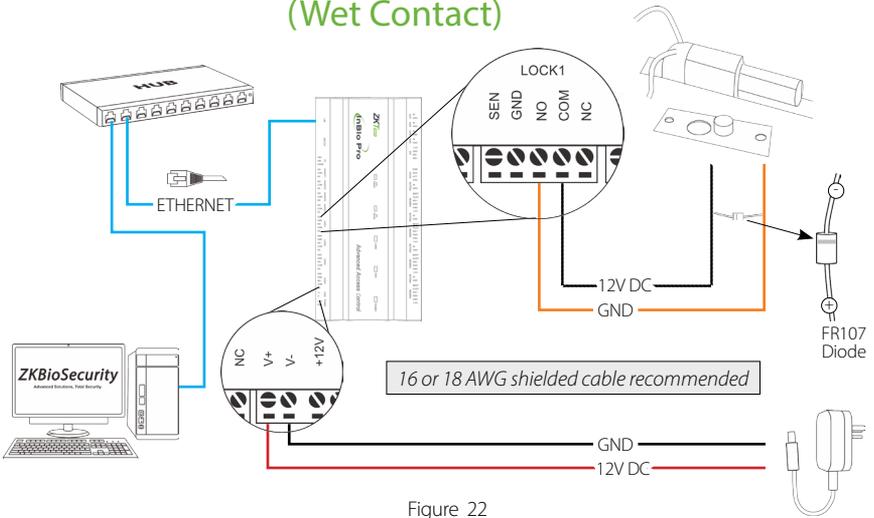


Figure 22

## Normally Closed Lock Powered From Lock Terminal (Wet Contact)

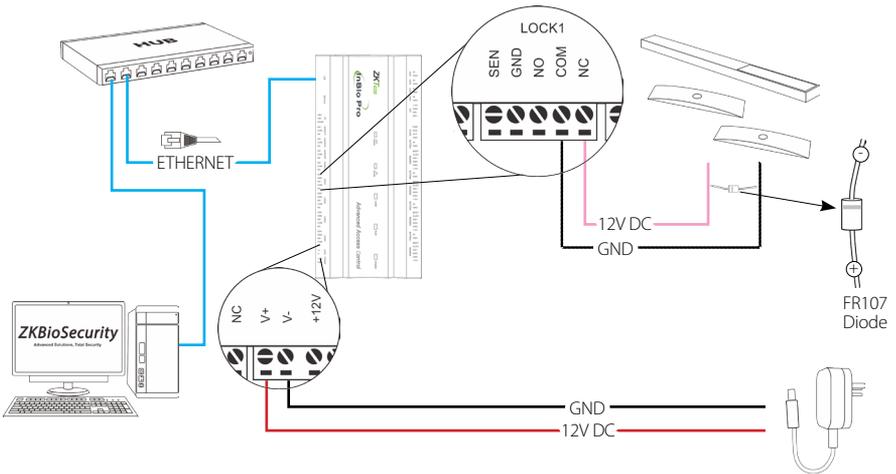


Figure 23

# Aux. I/O Connection

## Aux. Input Connection

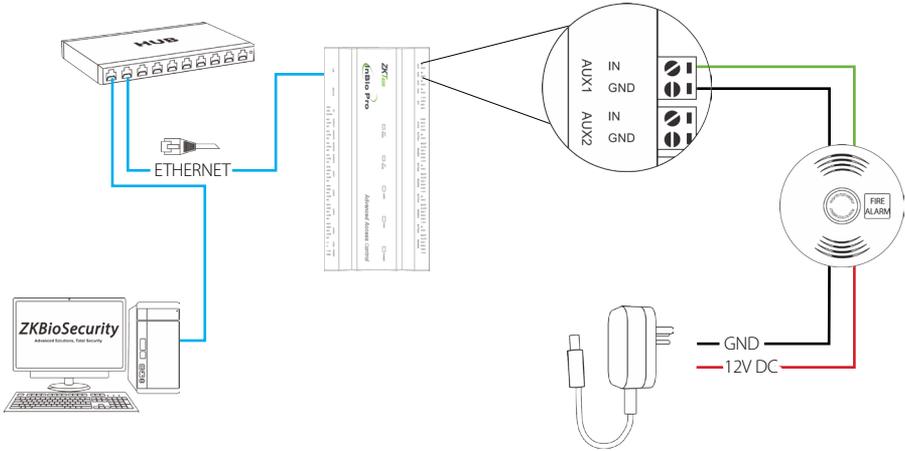


Figure 24

## Aux. Output Connection

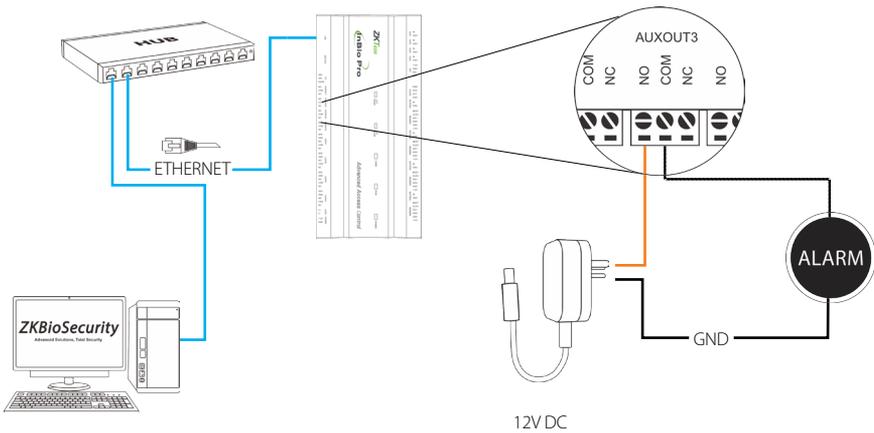


Figure 25

# Ethernet Connection

## LAN Connection

### Important Notes:

1. Both 10Base-T and 100Base-T are supported
2. This cable distance must be less than 330 ft. (100m)
3. For cable length of more than 330 ft. (100m). use network switch to amplify the signal.

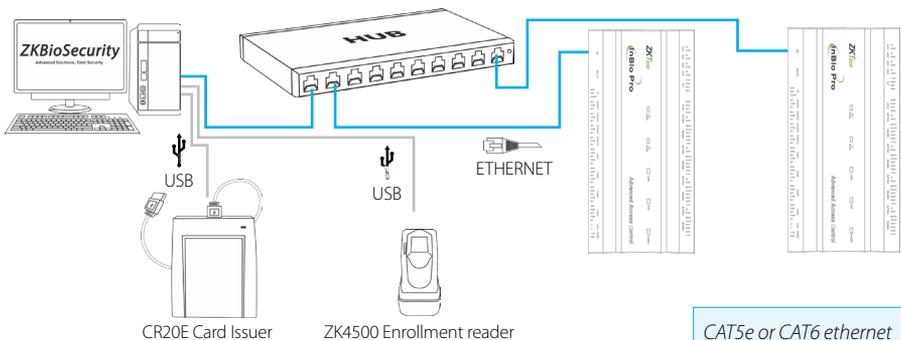


Figure 26

## Direct Connection

To connect InBio Pro Panel with a PC directly, connect both devices with a straight network cable. As the InBio Pro Panel supports auto MDI/MDIX, it is not necessary to use a crossover type cable.

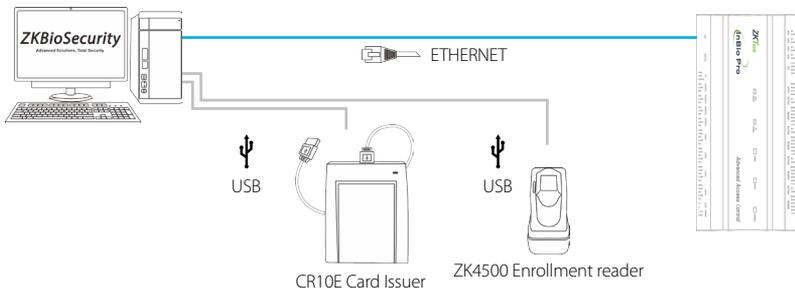


Figure 27

# Restore Factory Setting

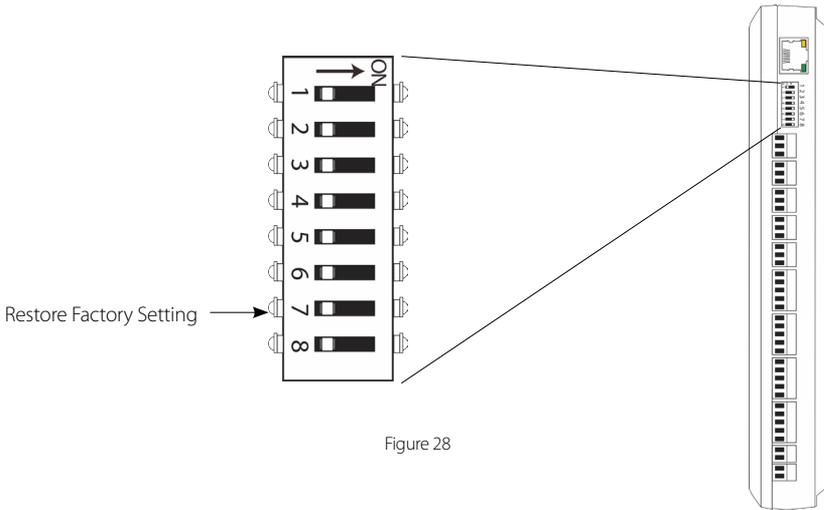
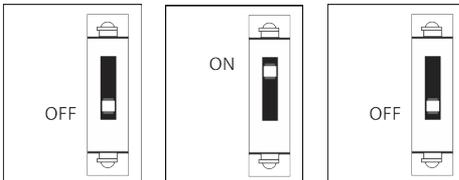


Figure 28

## Restore factory setting

1. If you forget the IP address of the InBio Pro panel or the device does not work normally, you can use the number 7 DIP switch to restore InBio Pro Panel to factory default settings. The parameters which gets reset are device IP address, communication password, gateway, and subnet mask.
2. The switch is OFF by default. When it is moved up and down for three times within 10 seconds and finally returned to OFF position, the factory settings will be restored after the access control panel is restarted.



To reset factory settings  
Turn #7 switch ON and OFF

**Repeat process 3 times**

Figure 29

# Installation Diagram

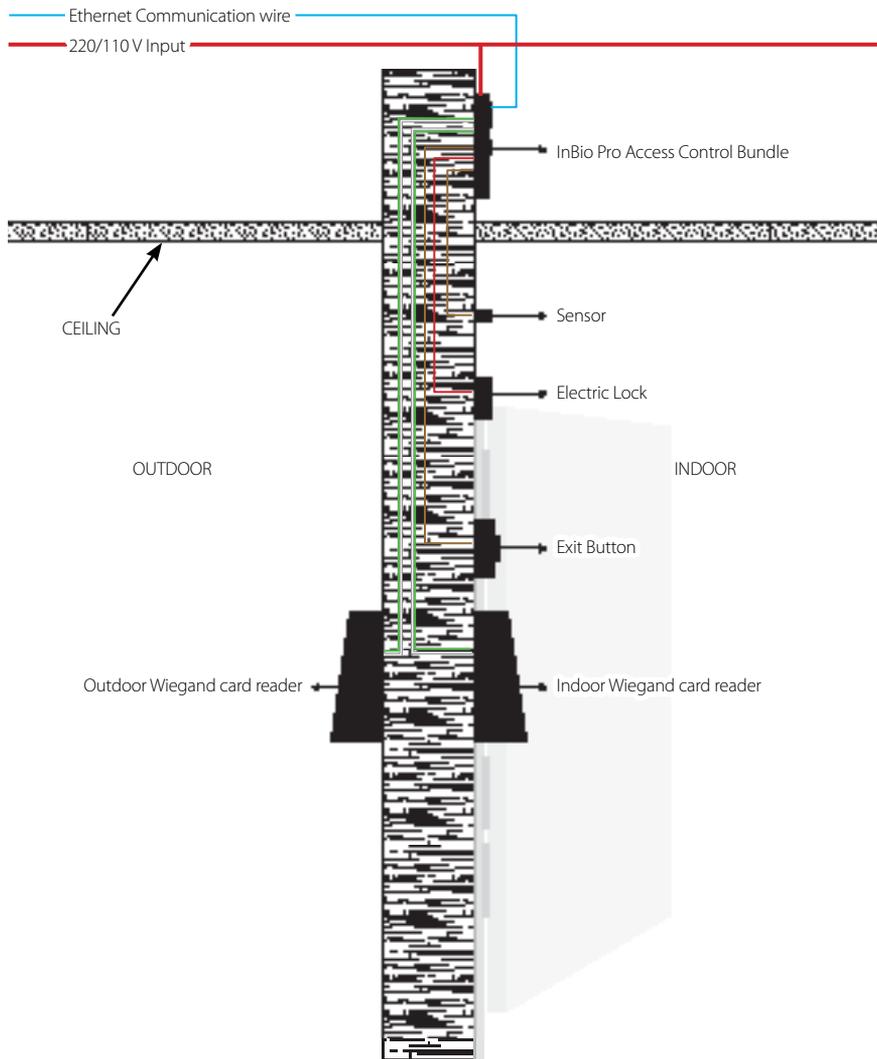


Figure 30

# Troubleshooting

## 1. How to switch four doors one way to two doors two way?

- › Connect four readers from reader 1 to reader 4.
- › Connect two door locks, one connected to LOCK1, another connected to LOCK3.
- › In the software configure reader 1-Indoor, and reader 2-Outdoor.

**Note:** Please note that below option is only available in software version 3.0.3.1 or above.

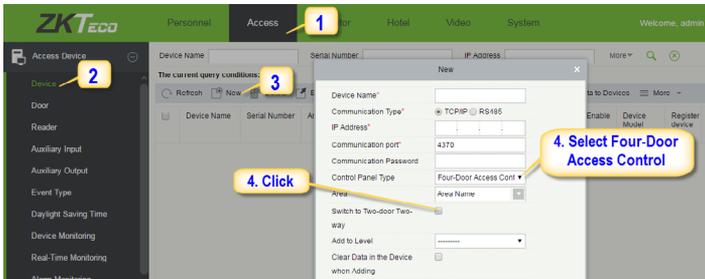


Figure 31

## 2. Can we integrate IP Camera and NVR?

- › Currently ZKBioSecurity software supports ZKVision, GT/PT Series, Hikvision, Dahua, and other cameras supporting Onvif protocol and NVR.
- › You can associate a camera to the reader and setup a linkage for the same.

## 3. What does it mean when I get a “Wiegand Format Error”?

- › Your WD0 and WD1 wiring is reversed.

## 4. How do I connect a third-party reader or a stand-alone reader to a InBio Pro panel?

- › Connect the Wiegand output to the WD0 and WD1 of the stand-alone readers on the panel's reader port.

*Note: The board can only supply 12 VDC, 2A power so an external power supply may be required.*

## 5. What kind of wire is recommended for the panel?

- › 16 or 18 AWG twisted shielded wire is recommended.

## 6. What is the default IP of the panel?

- › 192.168.1.201

## 7. How long is the device under warranty?

- › 2 Years from original purchase date, replacement/repair of hardware under ZK standard warranty requires an evaluation of the failed system by a ZK Technical Support specialist, and the issuance of a Technical Support RMA number.

# Electrical Specifications

	Minimum	Typical	Maximum	Notes
<b>WORKING POWER SUPPLY</b>				
Voltage (V) DC	9.6	12	14.4	Use regulated DC power adaptor only
Current (A)			5	
<b>ELECTRONIC LOCK RELAY OUTPUT</b>				
Switching voltage (V)			12V	Use regulated DC power adaptor only
Switching Current (A)			2	
Auxiliary relay output				
Switching voltage (V)			12V	Use regulated DC power adaptor only
Switching Current (A)			1.25	
<b>SWITCH AUX. INPUT</b>				
VIH (V)				
VIL (V)				
Pull-up resistance ( $\Omega$ )		4.7k		The input ports are pulled up with 4.7k resistors
<b>WIEGAND INPUT</b>				
Voltage (V)	10.8	12	13.5	
Current (mA)			500	
<b>ZK ELECTRIC LOCK</b>				
Voltage (V) DC	10.8	12	13.2	
Current (mA)			500	May vary as per models

# Specifications

**Note:** Please note that the below specifications are only applicable for ZMM220 InBio Pro panels.

GL Exclusive Feature	InBio-160 Pro	InBio-260 Pro	InBio-460 Pro
Number of doors controller	1 Door	2 Door	4 Door
Numbers of readers supported	4(2 RS-485 Reader, 2 26-bit Wiegand reader)	8(4 RS-485 Reader, 4 26-bit Wiegand reader)	12 (8 RS-485 Reader, 4 26-bit Wiegand reader)
Types of readers supported	26-bit Wiegand and RS485 FR Series Reader	26-bit Wiegand and RS485 FR Series Reader	26-bit Wiegand and RS485 FR Series Reader
Number of Inputs	3(Exit Device and Door Status, 1 AUX)	6( 2 Exit Device, 2 Door Status, 2 AUX)	12( 4 Exit Device, 4 Door Status, 4 AUX)
Number of Outputs	2 (1-Form C Relay for Lock and One Form C Relay for Aux Output)	4 (2-Form C Relay for Lock and 2-Form C Relay for Aux Output)	8 (4-Form C Relay or Lock and 4-Form C Relay for Aux Output)
Card holders Capacity	60,000	60,000	60,000
Fingerprint Capacity	20,000	20,000	20,000
Log Events Capacity	100,000	100,000	100,000
Communication	TCP/IP	TCP/IP	TCP/IP
Package Dimension	350(L)*90(H)*300(W) mm	350(L)*90(H)*300(W) mm	350(L)*90(H)*300(W) mm
Package Weight	3.6kg	3.6kg	3.7kg
CPU	32 bit 1.2GHz CPU	32 bit 1.2GHz CPU	32 bit 1.2GHz CPU
RAM	128MB	128MB	128MB
Flash Memory	256MB	256MB	256MB
Power	9.6V-14.4V DC	9.6V-14.4V DC	9.6V-14.4V DC
Operating Temp	0° to 45°C	0° to 45°C	0° to 45°C
Operating Humidity	20% to 80%	20% to 80%	20% to 80%



# ZKBioSecurity 3.0

It is recommended to install software version 3.0.3.0 or above

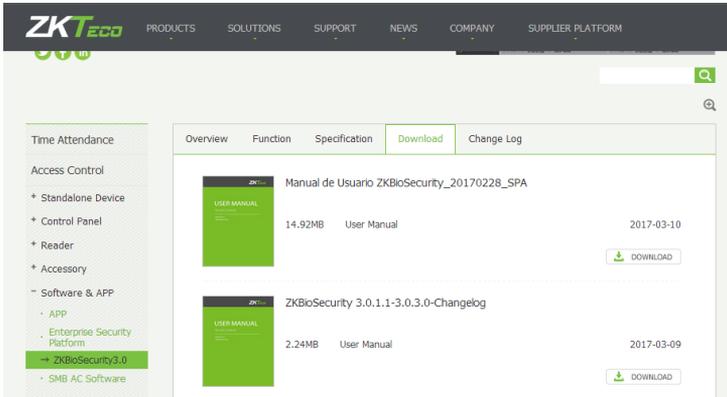


## Installation & Setup

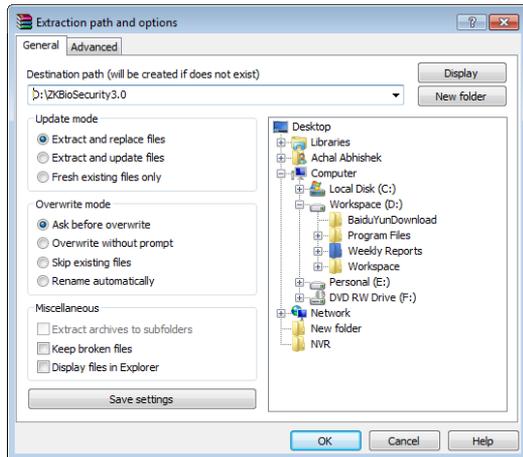
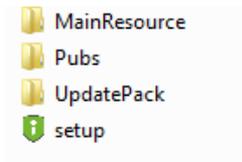
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# Downloading

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

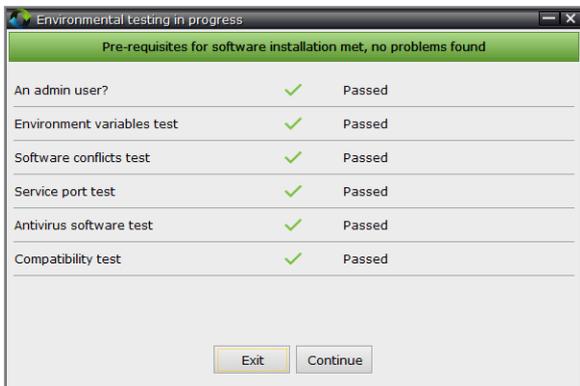


3. Once downloaded, extract the rar file to a new folder.
4. Click on setup to begin installation.



# Installation

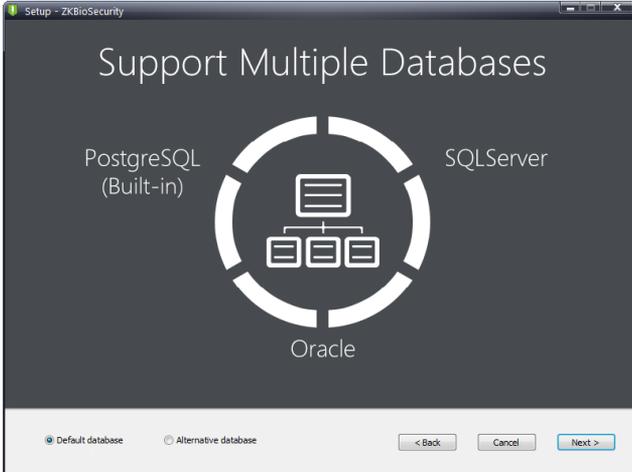
1. System will check the requirements to install the software. Click *Continue* if all tests are passed, else check the issues and re-test.



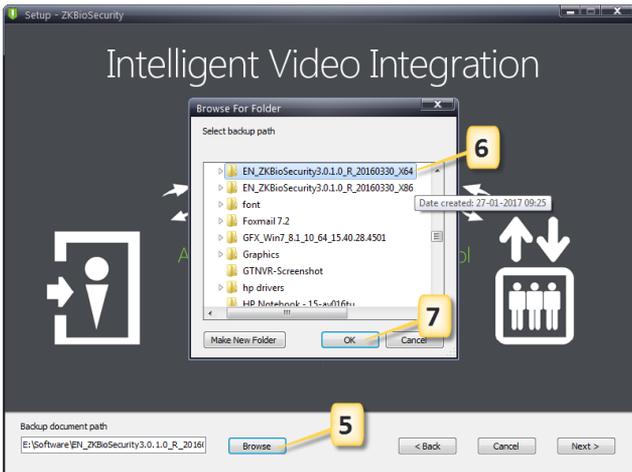
2. Add an open port (Default 8088) or ask a network administrator for an open port.
3. Click the check box to add firewall exception for this port.

# Installation

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

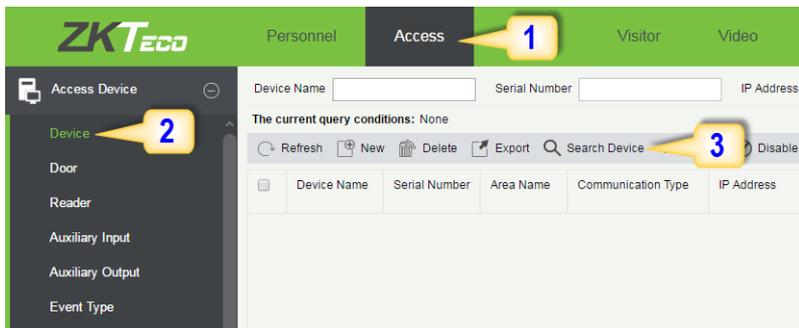


5. Click Browse and choose or create a folder to store your backup files.
6. Select/Create the required folder.
7. Click OK.

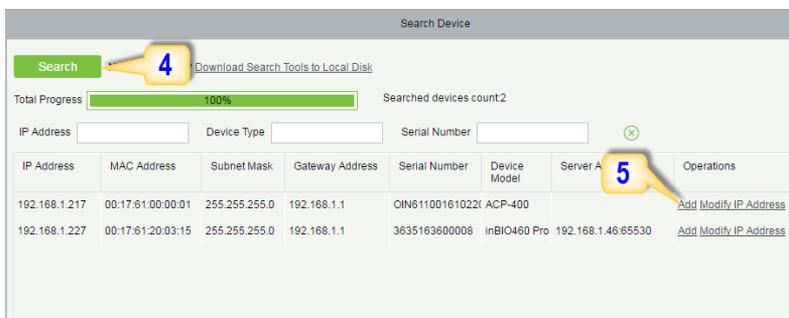


# Adding Device

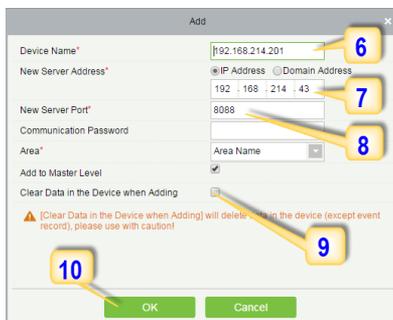
1. Click on *Access* to get below interface of Access Module of the software.



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



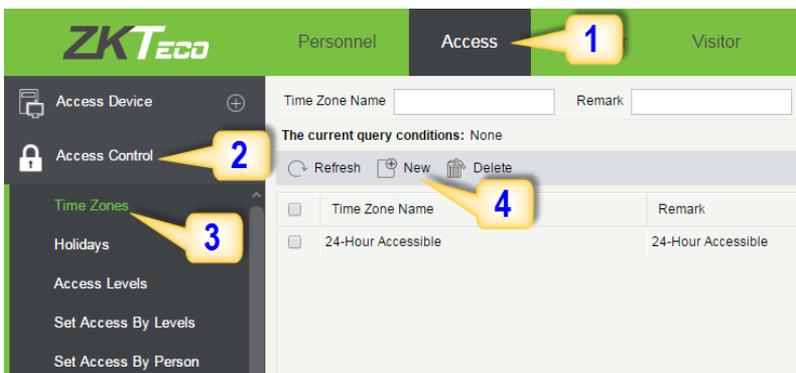
4. Click *Search* to search all the access controllers on the network.
5. From the list, click *Add* to add the required device.



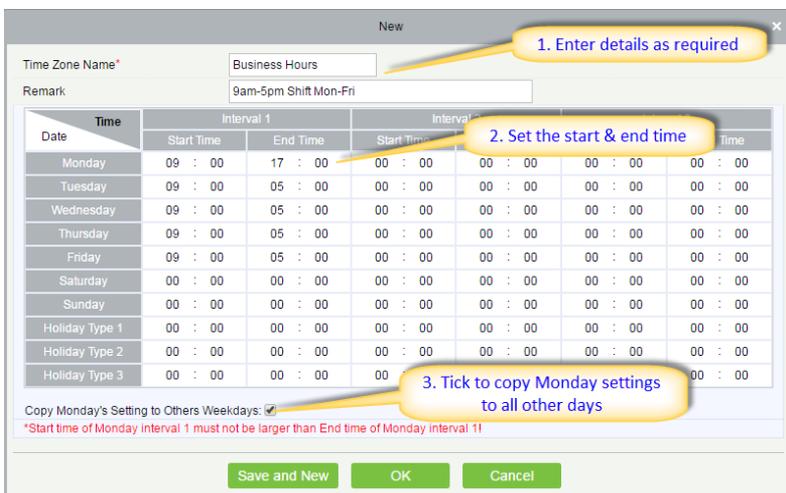


# Creating a Time Zone

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

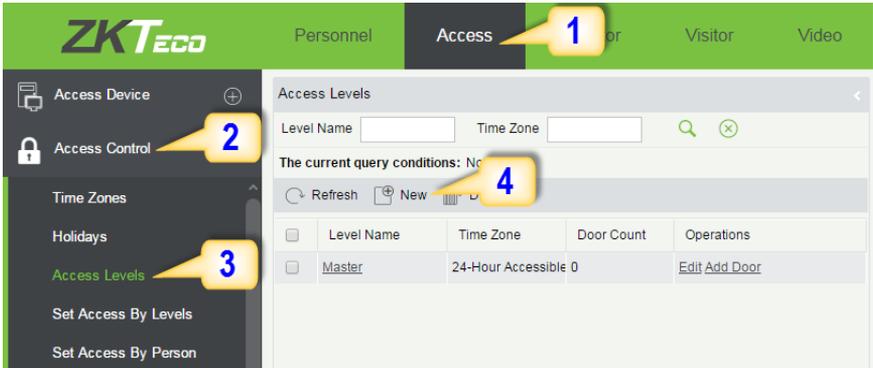


After setting the time zone, click *OK* to save, and the time zone will appear in the list.

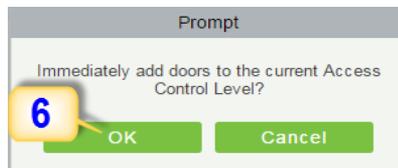
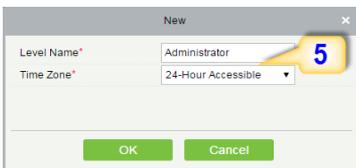


# Creating an Access Level

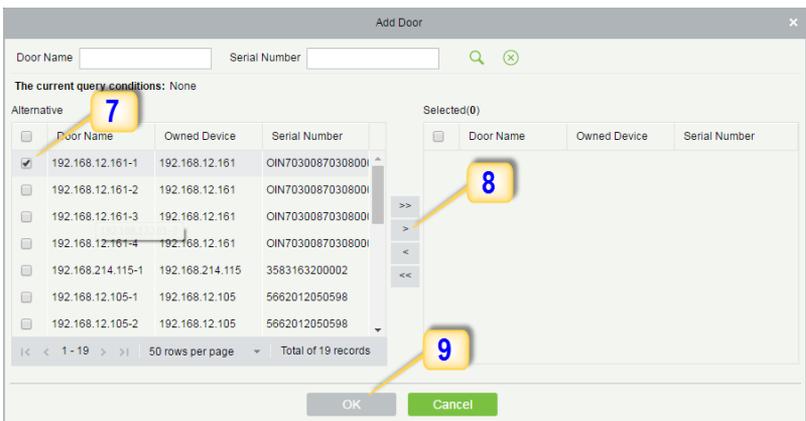
1. Click Access
2. Click Access Control
3. Click Access Levels
4. Click New.



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

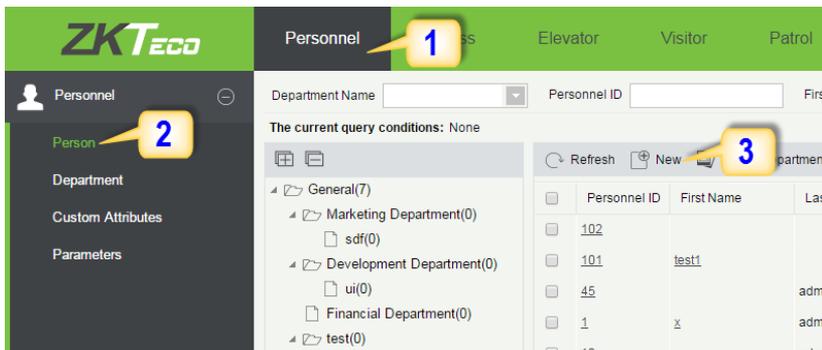


7. Select the required door(s).
8. Move the selected door(s).
9. Click *OK* to finish adding doors.



# Enrolling Personnel

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



The 'New' form contains the following fields and options:

- Personnel ID\***: 2 (Callout A)
- Department\***: Marketing Department (Callout B)
- First Name**: abc
- Last Name**: xyz (Callout C)
- Gender**: Male
- Password**: [Empty]
- Social Security Number**: [Empty]
- License Plate**: [Empty]
- Reservation Code**: 123456
- Mobile Phone**: 7154879887
- Birthdate**: [Empty]
- Fingerprint**: Register, Download, New (Callout F)
- Finger Vein**: Register, Download, New (Callout F)
- Card Number**: [Empty] (Callout D)
- Image**: [Placeholder] (Callout D)
- Access Control**: Levels Settings (Callout E)
  - Master
  - [Add](#), [Check All](#), [Clear All](#)
- Personnel Detail**:
  - Superuser**: No
  - Device Operation Role**: Ordinary User
  - Delay Passage**:
  - Disabled**:
  - Set Valid Time**:

Buttons at the bottom: Save and New, OK, Cancel.

**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

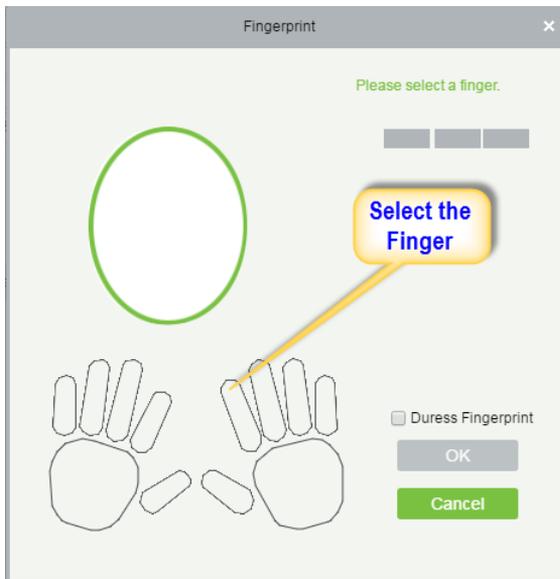
**B. Department:** Select from the pull-down menu and click *OK*. If the department was not set previously, you can only select the default [Company Name] department.

**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.

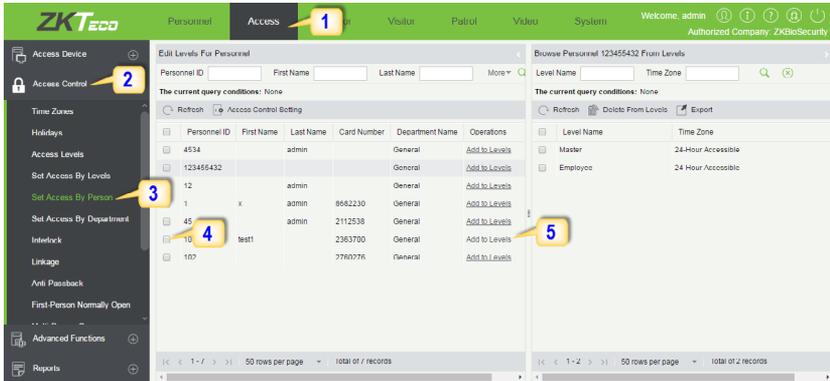
**F. Fingerprint:** Enroll the Personnel Fingerprint or Duress Fingerprint. Duress Fingerprint is to trigger the alarm and send the signal to the system in case of emergency.





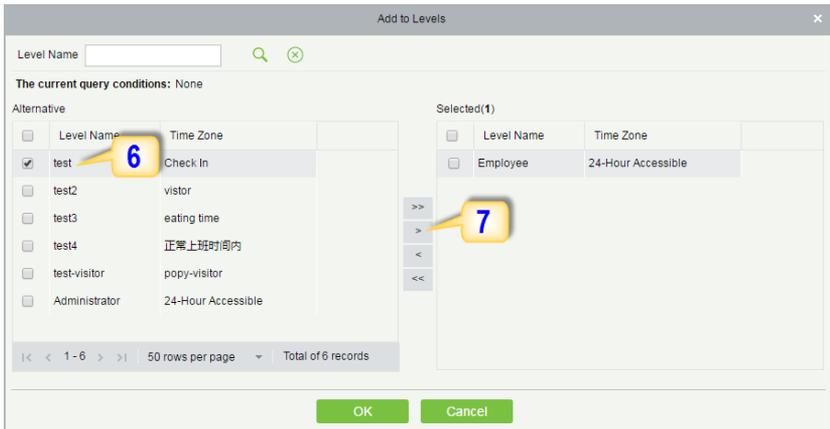
# Add & Delete Personnel to Access Level

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).

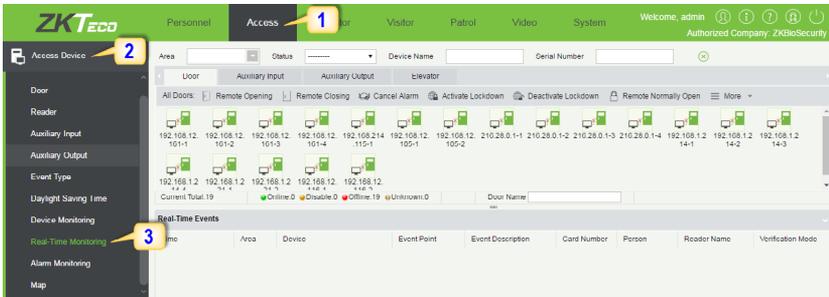
7. Click to move the selected level(s) to the right, and then click OK to complete adding. The added level(s) will appear in the list on to the right side.



# 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 controllers 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

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[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.

Time	Device Name	Fuelnt Point	Fuelnt Description	Media File	Personnel ID	First Name	Last Name	Card Number	Department Name
2017-04-20 17:22:44	192.168.12.116		Disconnected		102			2760276	General
2017-04-25 17:19:22	192.168.12.116	192.168.12.116-1	Normal Verify Open		101	test1		2363700	General
2017-04-25 17:16:21	192.168.12.116	192.168.12.116-1	Normal Verify Open		102			2760276	General
2017-04-25 17:16:30	192.168.12.116	192.168.12.116-1	Normal Verify Open		102			2760276	General
2017-04-25 17:14:16	192.168.12.116	192.168.12.116-1	Normal Verify Open		101	test1		2363700	General
2017-04-25 17:14:07	192.168.12.116	192.168.12.116-1	Normal Verify Open		102			2760276	General
2017-04-25 17:14:06	192.168.12.116	192.168.12.116-1	Normal Verify Open		101	test1		2363700	General
2017-04-25 17:13:59	192.168.12.116	192.168.12.116-1	Normal Verify Open		102			2760276	General
2017-04-25 17:13:59	192.168.12.116	192.168.12.116-1	Normal Verify Open		101	test1		2363700	General
2017-04-25 17:13:38	192.168.12.116	192.168.12.116-1	Normal Verify Open		101	test1		2363700	General
2017-04-25 17:13:24	192.168.12.116	192.168.12.116-1	Normal Verify Open		101	test1		2363700	General

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.

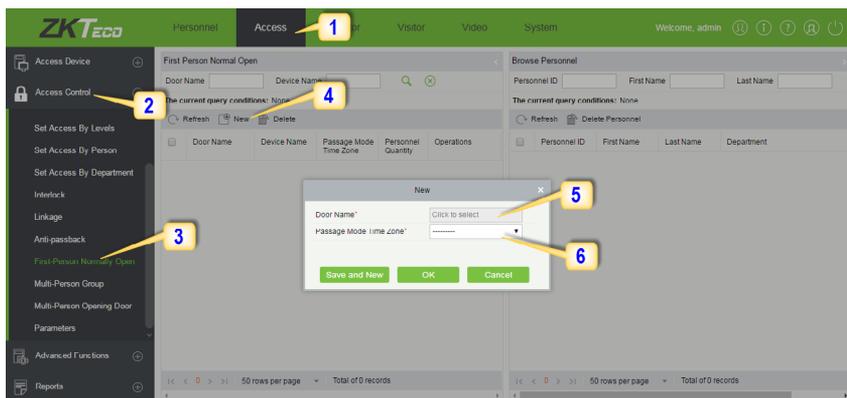
Personnel ID	First Name	Last Name	Department Name	Card Number	Ringing Template	Quantity	Status
102			General	2760276	0	0	Normal
101	test1		General	2363700	0	0	Normal
45	admin		General	2112538	0	0	Normal
1	x	admin	General	8682230	0	0	Normal
12	admin		General		0	0	Normal
4524	admin		General		0	0	Normal
12245432			General		0	0	Normal

# First-Person Normally Open

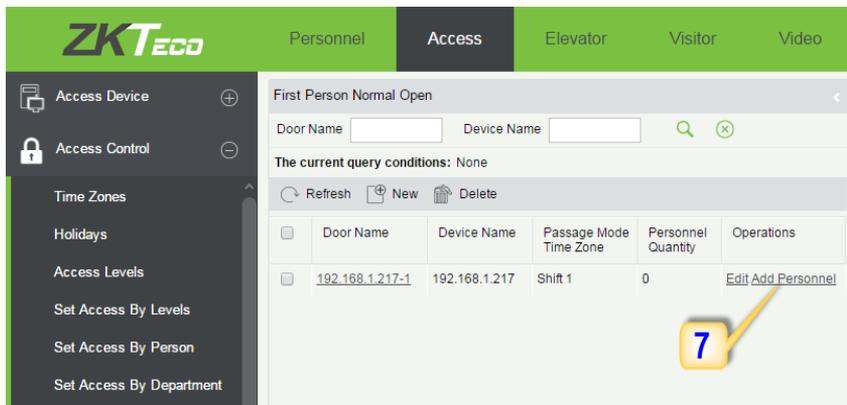
This feature will keep a door unlocked during a specified time zone. It will automatically unlock at the beginning of the time zone and will lock automatically at the end of the specified time zone.

The First Person Normally Open feature will keep a door unlocked during a specified time zone when triggered by specified personnel. After the specified personnel unlocks, this feature keeps the door unlocked till the end of the time zone and it will lock automatically at the end of the specified time zone.

Before using this function, create a new time zone with the hours you want the door to be unlocked.



1. Click Access
2. Click Access Control
3. Click First-Person Normally Open
4. Click New
5. Select the door
6. Select the Time Zone.
7. Add the specific person. Once this person checks in, this feature is activated.





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