

User Manual

Notus

Date: September 2020

Doc Version: 1.1

English

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



For further details, please visit our Company's website
www.zkteco.com.

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The product will be updated from time to time without prior notice. The latest operation procedures and relevant documents are available on <http://www.zkteco.com>

If there is any issue related to the product, please contact us.

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To know more about our global branches, visit www.zkteco.com.

About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

About the Manual

This manual introduces the operations of Notus Product.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

Document Conventions

Conventions used in this manual are listed below:

GUI Conventions

For Device	
Convention	Description
< >	Button or key names for devices. For example, press <OK>
[]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window
/	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].

Symbols

Convention	Description
	This implies about the notice or pays attention to, in the manual
	The general information which helps in performing the operations faster
	The information which is significant
	Care taken to avoid danger or mistakes
	The statement or event that warns of something or that serves as a cautionary example.

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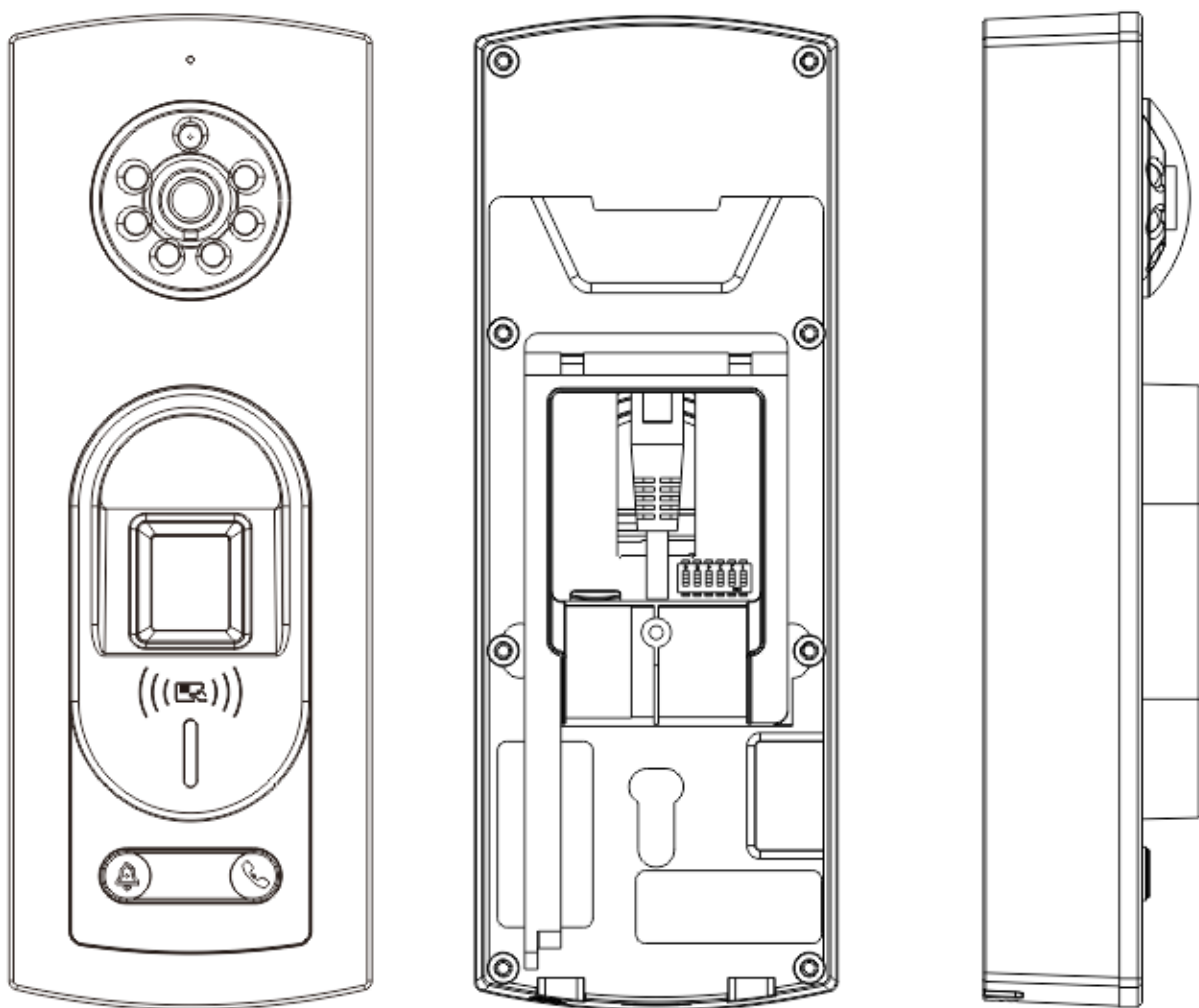
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1 Overview

Notus is a Fingerprint access control terminal with HD camera (2 MP/1080p), support video intercom function. The app ZKView support Two-way audio and one-way video communication. Remote Unlock with a Password, Captures and Video Recordings.

1.1 Appearance

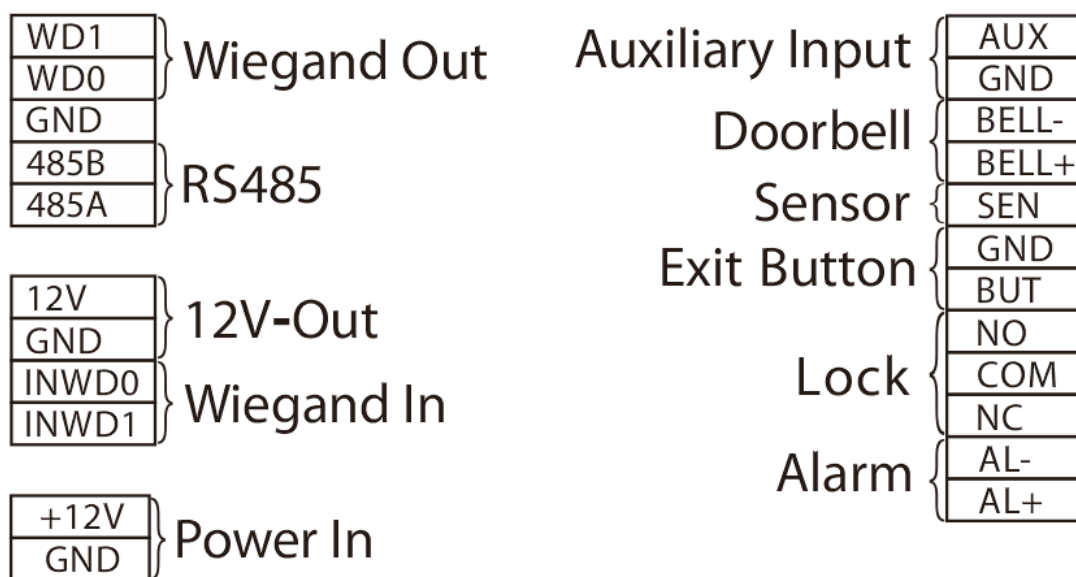
Front and Rear View



1.2 System Specifications

Category	Feature	Description
Credentials	Biometrics	Fingerprint
	Card	ID, Mifare/HID (optional)
Environment	Operating Temperature	-20°C to 50°C (-4°F to 122°F)
	Operating Humidity	20% to 80% RH
Connectivity	Wi-Fi	Supported
Capacity	Maximum Transaction Records	200,000
	Maximum no. of Users (1: N)	5,000
	Maximum no of Cards	5,000
Power	-	12V, 3A

1.3 Product PIN Diagram

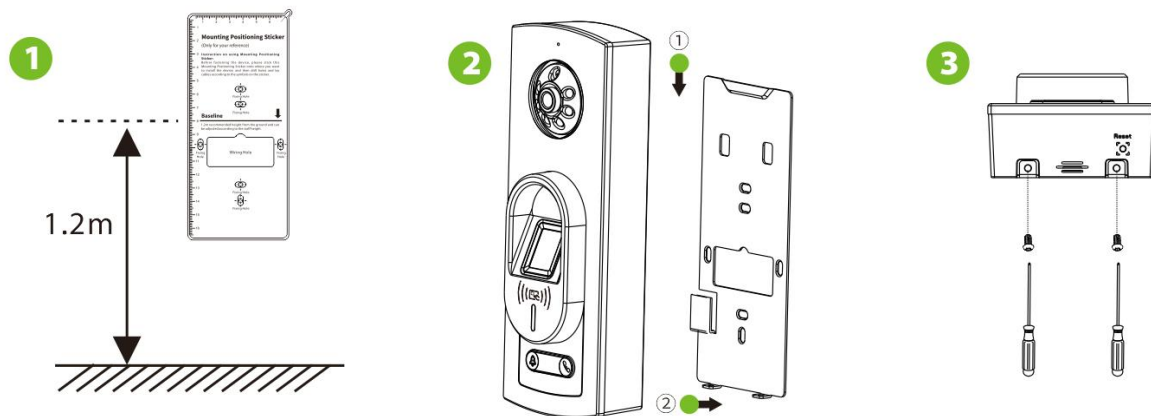


1.4 Installation Set-up

1.4.1 Installation Site

This product is suitable for a semi-outdoor environment. Please install it in an environment without direct sunlight exposure, also avoid installing near glass doors and windows.

1.4.2 Installation Steps



Step 1: Attach the mounting template sticker to the wall, and drill holes according to the mounting paper. Fix the backplate on the wall using the wall mounting screws.

Step 2: Attach the device to the backplate.

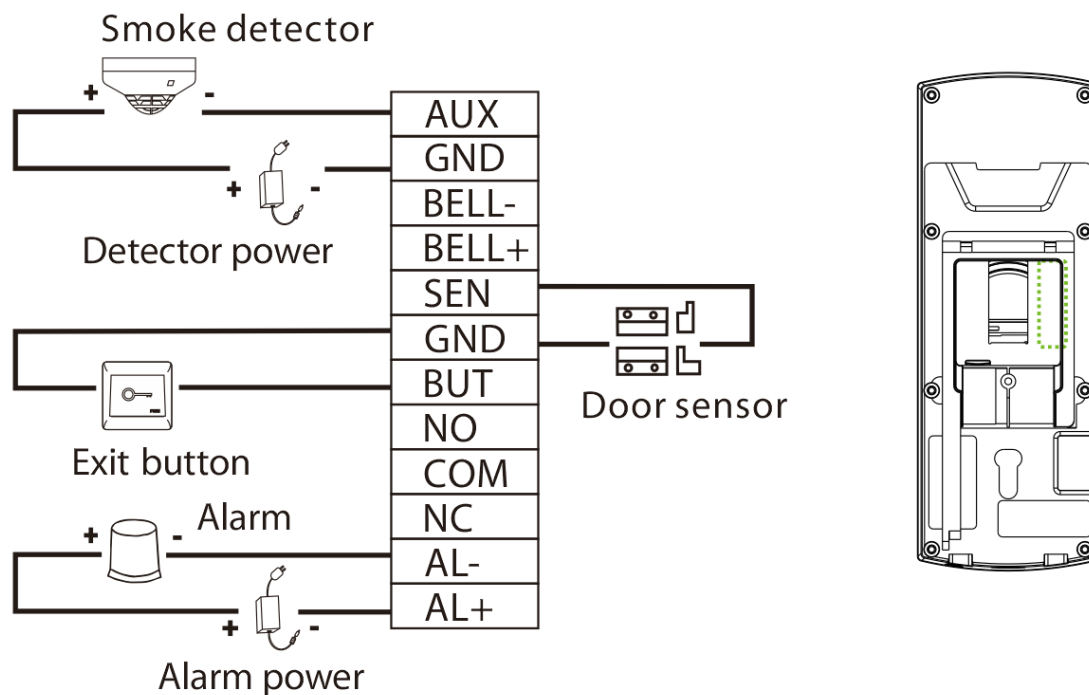
Step 3: Fasten the device to the backplate with two security screws.

1.5 Connection Procedure

1.5.1 Connection of Auxiliary Devices and Buttons

- Connect the **Exit Button** to the **GND** and **BUT** terminals.
- Connect the **Door Sensor** to the **SEN** and **GND** terminals.
- Connect the **Alarm** to the **AL +** and **AL-** terminals.
- Connect the **Auxiliary Device** to the **GND** and **AUX** terminals.

The illustration is given below.

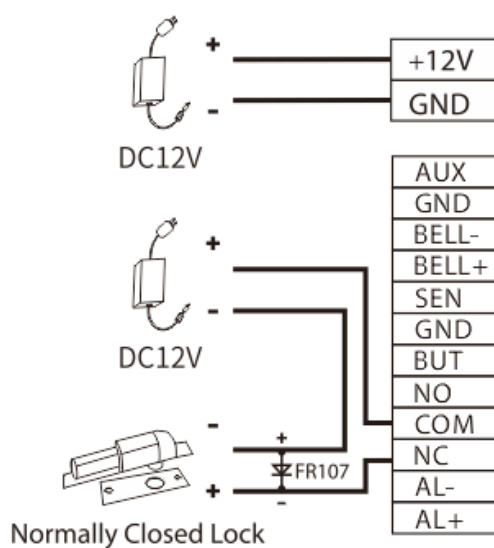


1.5.2 Lock Relay Connection

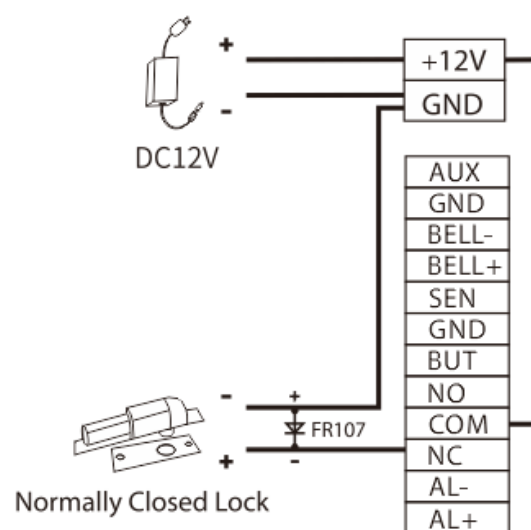
The device supports normally opened and normally closed conditions.

- The Normally Opened Lock (normally opened at power on) is connected with 'NO1' and 'COM' terminals, and the Normally Closed Lock (normally closed at power on) is connected with 'NC1' and 'COM' terminals.

1) Device not sharing power with the lock

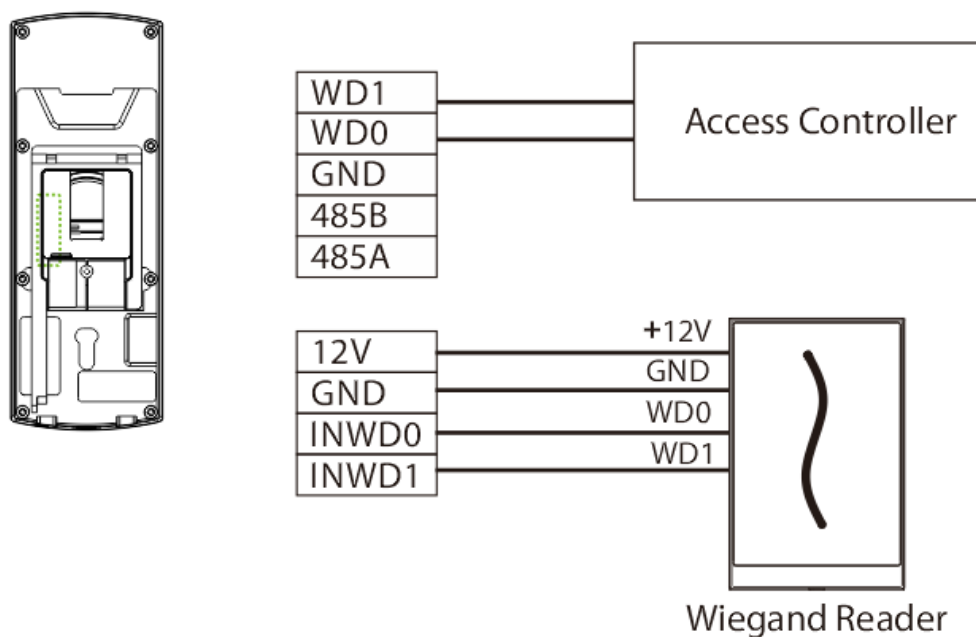


2) Device sharing power with the lock

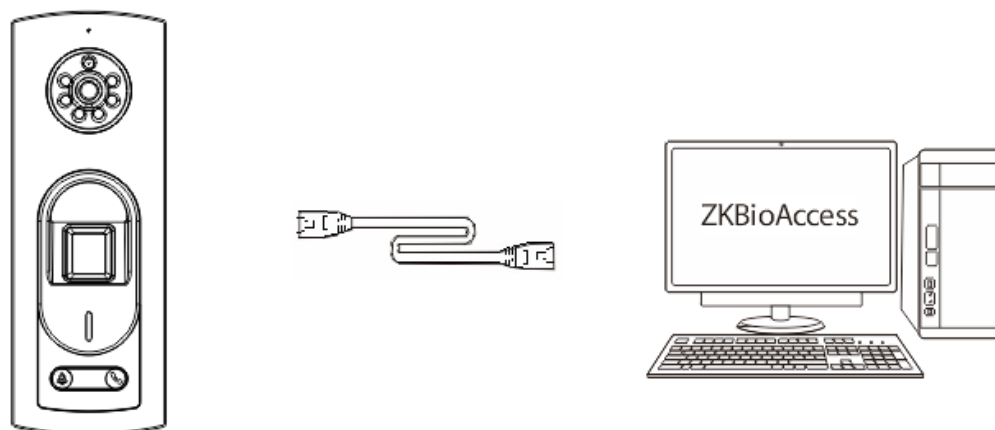


1.5.3 Weigand Reader Connection

Connect the **IWD0**, **IWD1**, **GND**, + **12V** terminals to the Weigand Reader.

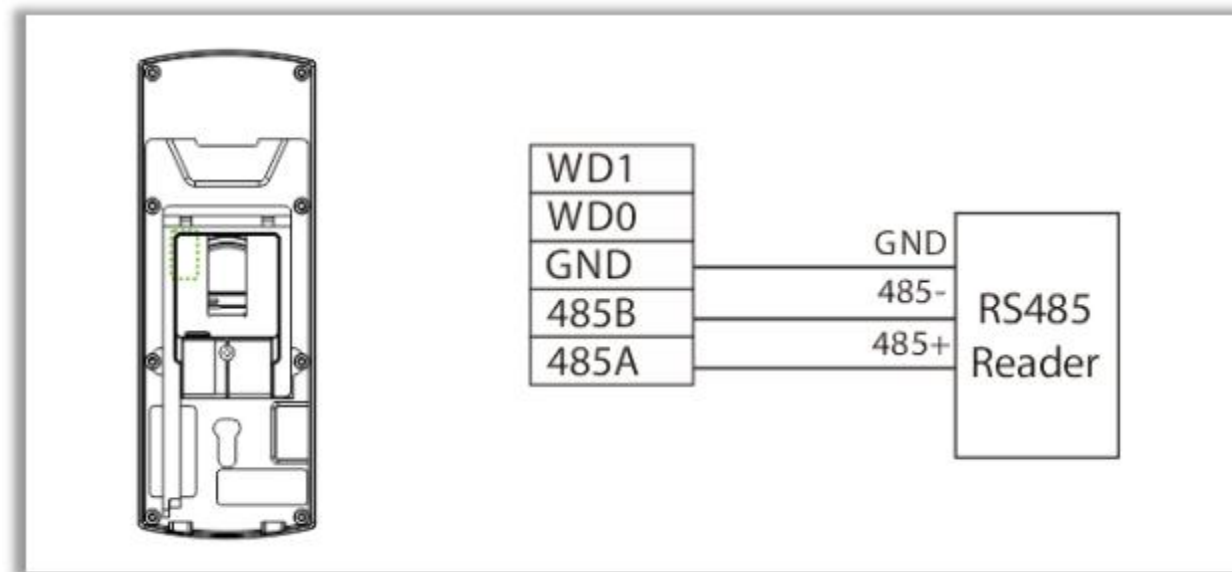


1.5.4 Ethernet Connection

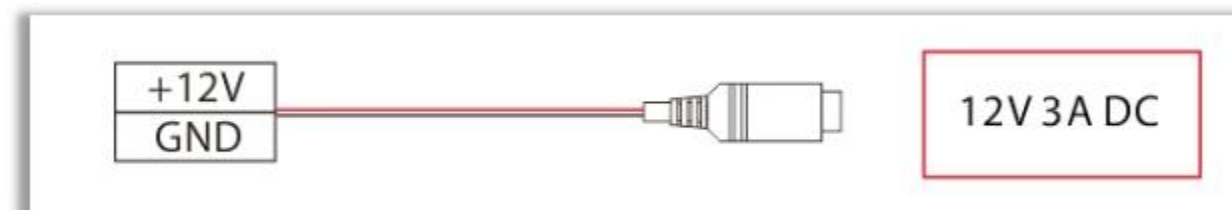


Note: In LAN, IP addresses of the Server (PC) and the device must be in the same network segment when connecting to ZKBioAccess software.

1.5.5 RS485 Connection



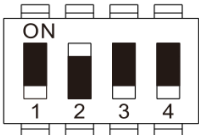
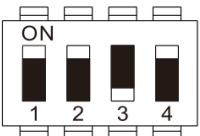
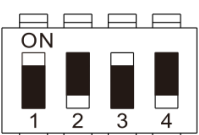
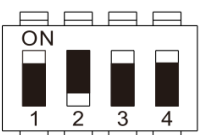
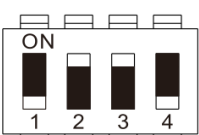
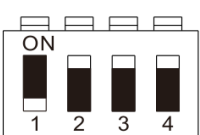
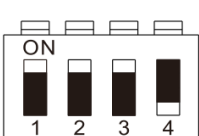
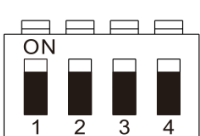
1.5.6 Power



1.5.7 DIP Switch Settings

The Control panel adopts a rotary DIP switch. The numbers 1 to 4 of the DIP switch are set as the device number for RS485 communication. The code is binary, and the numbering starts from left to right. When the switch is set upwards (ON) position, it indicates 1 (ON); when the switch is set downwards (OFF), it means 0 (OFF). For example, to set a device number as $15=1+2+4+8$, which corresponds to the binary code 1111, move the numbers 1, 2, 3, and 4 to ON position.

485 Address	Switch Setting	485 Address	Switch Setting
0		8	
1		9	

2		10	
3		11	
4		12	
5		13	
6		14	
7		15	

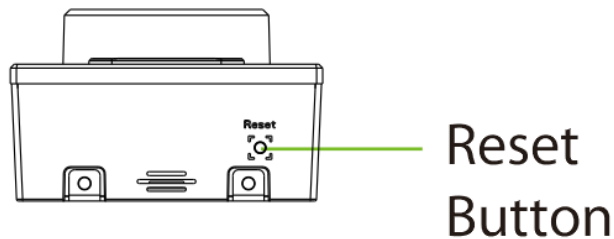
As an All-in-One device, you can connect to an external RS485 reader. When it is used as an RS485 reader, it needs to be used with a 6-bit DIP switch. The first to fourth ports are used to set the RS485 address, port 5 is used to switch modes, port 6 is to set the state of terminal resistor.

Switch Modes	Port	Switch	Setting
All-in-one & Wiegand reader	5		ON
RS485 Reader	5		OFF

Terminal Resistor	6		ON
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1.6 Restore to Factory Settings

There is a reset button at the bottom of the device. Press it and hold for 5 seconds, the device will restore to factory settings (Note: The user data will not be deleted).

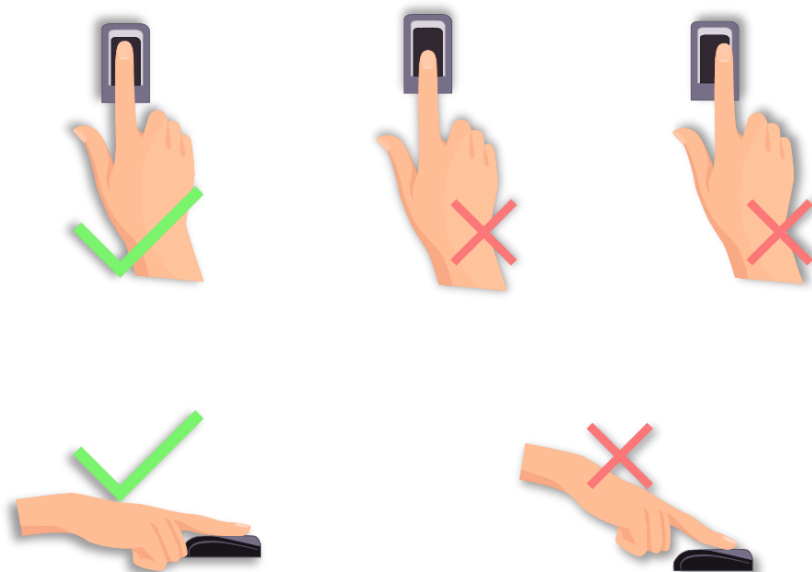


2 Instructions to use

2.1 Finger Positioning

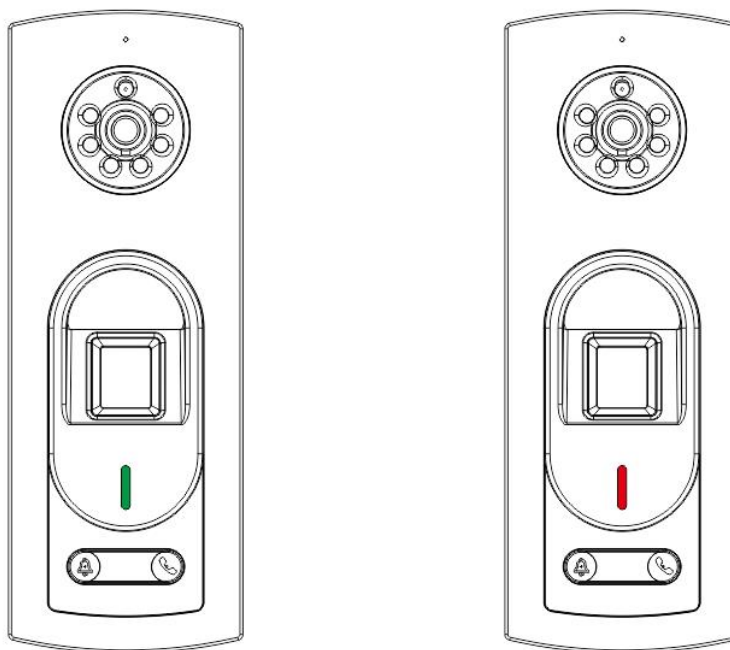
Recommended fingers: Using Index, Middle, or Ring finger is recommended. Avoid using the Thumb or Little finger, as they are difficult to accurately press onto the fingerprint reader.

Press your finger firmly onto the fingerprint reader. Ensure that the center of your finger is aligned with the fingerprint reader.



Note: Please press your finger properly onto the fingerprint reader for registration and identification. Our company will assume no liability for recognition issues that may result from incorrect usage of the product. We reserve the right of final interpretation and modification concerning this point.

2.2 Verification Modes



2.2.1 Fingerprint Verification

The device supports 1:N Fingerprint Verification. It compares the fingerprint that is being pressed onto the fingerprint reader with all of the fingerprint templates stored in the device. The device's indicator light will turn green after successful verification, and red if it is not verified successfully.

The device opens the fingerprint authentication mode when a user presses his/her finger onto the fingerprint scanner.

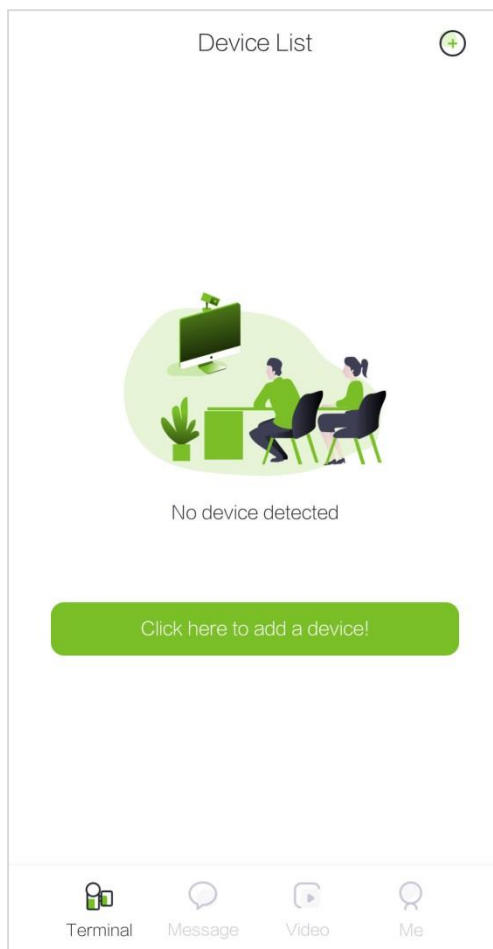
Please press your finger properly on the fingerprint scanner. For details, please click [here](#).

2.2.2 Card Verification

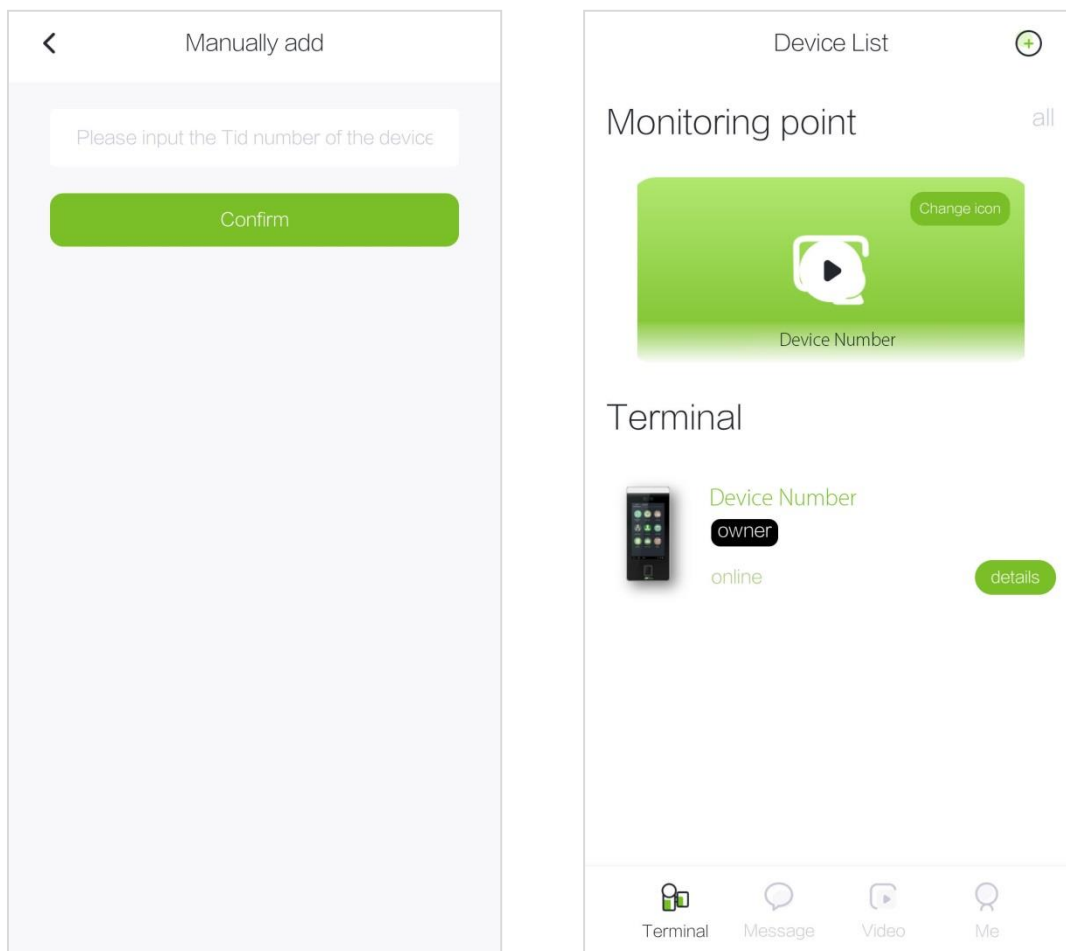
The device supports 1:N Card Verification. The device compares the card number which is swiped in the card detection area with all the card number data registered in the device. The device's indicator light will turn green after successful verification, and red if it is not verified successfully.

3 Connect to ZKView APP

After downloading and installing the ZKView APP on your phone, create a User account initially with your Email ID. After creating the User account, log in to the App, and click  to manually add the device. The process is as follows:



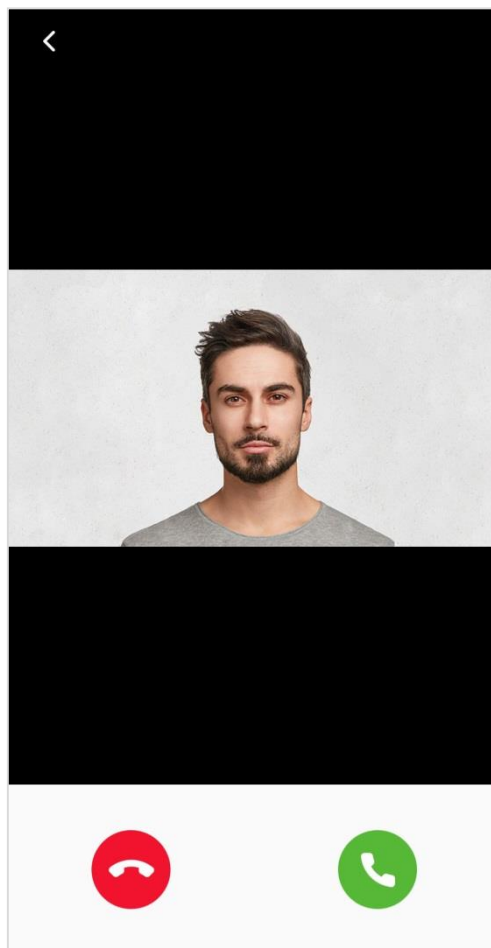
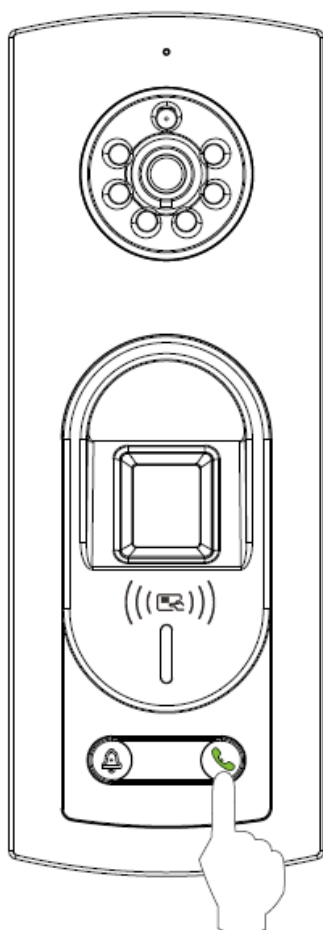
Add the device by manually entering the TID number. After the addition is successful, the device is displayed on the **Terminal** page.

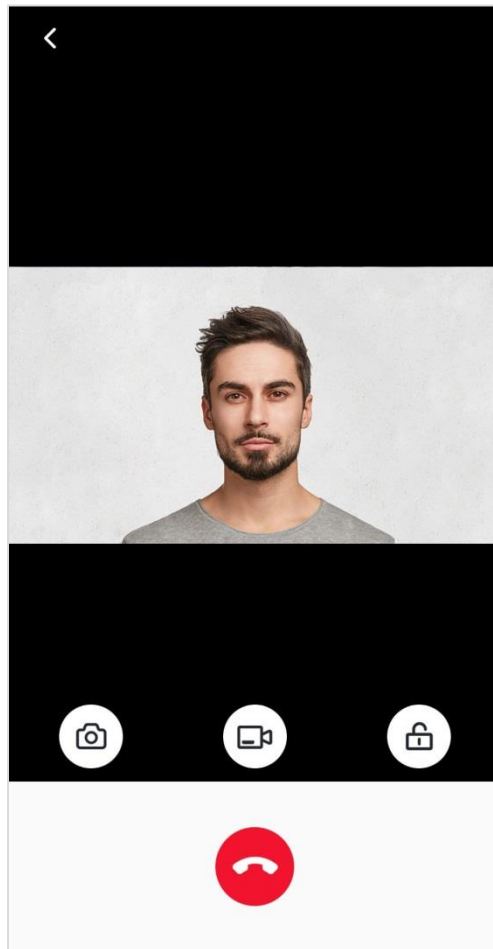


Note: The TID number is given at the back cover of the device.

4 Video Door Phone Connection

The visitor clicks the **Call key** on the device to make a call and the phone will ring. The user can choose to accept or reject the call. If the user accepts the call, it will open the video calling interface.





Once the call is accepted, the user can perform the following functions:

Click the  icon to take a screenshot during the call, click the  icon to record the video call, and click the  icon to unlock the door. The recorded data will be saved in the **local storage**.

Note: For other specific operations, please refer the *ZKView APP User Manual*.

5 ZKBioAccess Configuration

Add Device to the Software

1. Click **Access Control > Device > Search Device**, to open the Search interface.
2. Click **Search**, and it will prompt [**Searching.....**] while searching the connected Access Controllers.
3. After searching, the list and total number of Access Controllers will be displayed.

Search Device

Search No device found? [Download Search Tools to Local Disk](#)

Total Progress

100%

 Searched devices count:1

IP Address Device Type Serial Number

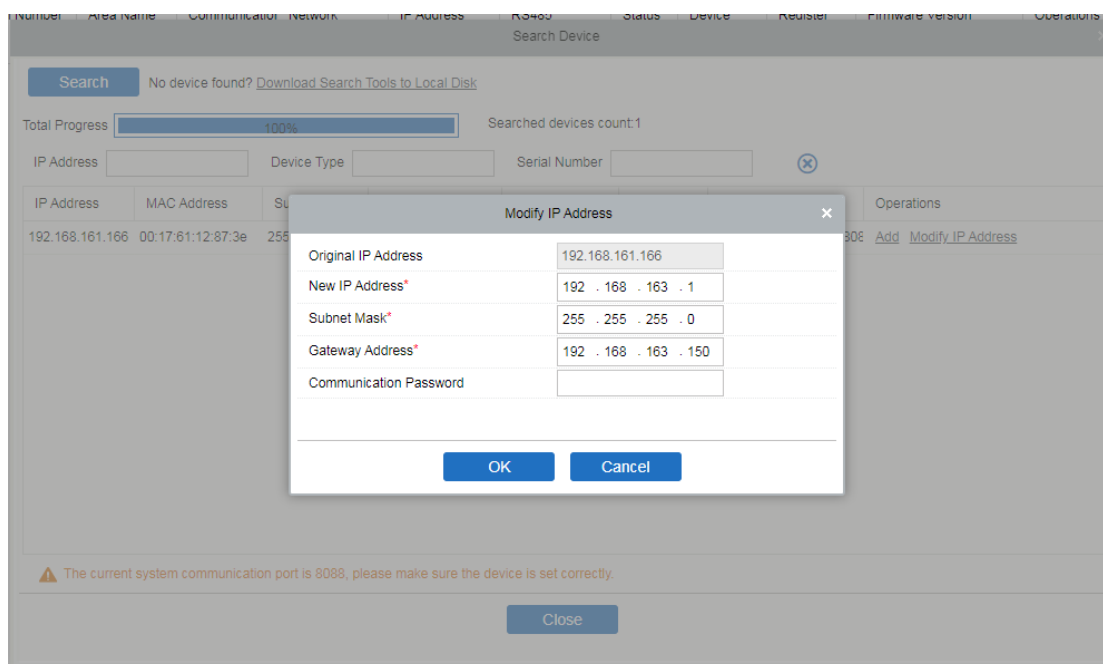
IP Address	MAC Address	Subnet Mask	Gateway Address	Serial Number	Device Type	Set Server	Operations
192.168.161.166	00:17:61:12:87:3e	255.255.255.0	192.168.161.1	5782202100005	Notus	http://192.168.163.62:808	Add Modify IP Address

⚠ The current system communication port is 8088, please make sure the device is set correctly.

Close

4. Click **Modify IP Address** to set the new IP address.

Note: The IP Address should be able to communicate with the ZKBioAccess server, so it is preferable to connect in the same network segment).



- Click **OK** to complete the process of adding the device.

Add Persons to the Software

- Click **Personnel > Person > New**.

- Enter the required details of the user. After entering all the details, click **OK** to save the user.

Note: For other specific operations, please refer the *ZKBioAccess User Manual*.

Statement on the Right to Privacy

Dear Customers,

Thank you for choosing this hybrid biometric recognition product, which was designed and manufactured by ZKTeco. As a world-renowned provider of core biometric recognition technologies, we are constantly developing and researching new products, and strive to follow the privacy laws of each country in which our products are sold.

We Declare That:

1. All of our civilian fingerprint recognition devices capture only characteristics, not fingerprint images, and do not involve privacy protection.
2. None of the fingerprint characteristics that we capture can be used to reconstruct an image of the original fingerprint, and do not involve privacy protection.
3. As the provider of this device, we will assume no direct or indirect responsibility for any consequences that may result from your use of this device.
4. If you would like to dispute human rights or privacy issues concerning your use of our product, please directly contact your dealer.

Our other law-enforcement fingerprint devices or development tools can capture the original images of citizen's fingerprints. As to whether or not this constitutes an infringement of your rights, please contact your Government or the final supplier of the device. As the manufacturer of the device, we will assume no legal liability.

Note:

The Chinese law includes the following provisions on the personal freedom of its citizens:

1. There shall be no illegal arrest, detention, search, or infringement of persons;
2. Personal dignity is related to personal freedom and shall not be infringed upon;
3. A citizen's house may not be infringed upon;
4. A citizen's right to communication and the confidentiality of that communication is protected by the law.

As a final point, we would like to further emphasize that biometric recognition is an advanced technology that will be certainly used in E-commerce, banking, insurance, judicial, and other sectors in the future. Every year the world is subjected to major losses due to the insecure nature of passwords. The Biometric products serve to protect your identity in high-security environments.

Eco-friendly Operation



The product's "eco-friendly operational period" refers to the time period during which this product will not discharge any toxic or hazardous substances when used in accordance with the prerequisites in this manual.

The eco-friendly operational period specified for this product does not include batteries or other components that are easily worn down and must be periodically replaced. The battery's eco-friendly operational period is 5 years.

Hazardous or Toxic substances and their quantities

Component Name	Hazardous/Toxic Substance/Element					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr6+)	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Chip Resistor	×	○	○	○	○	○
Chip Capacitor	×	○	○	○	○	○
Chip Inductor	×	○	○	○	○	○
Diode	×	○	○	○	○	○
ESD component	×	○	○	○	○	○
Buzzer	×	○	○	○	○	○
Adapter	×	○	○	○	○	○
Screws	○	○	○	×	○	○

○ indicates that the total amount of toxic content in all the homogeneous materials is below the limit as specified in SJ/T 11363—2006.

× indicates that the total amount of toxic content in all the homogeneous materials exceeds the limit as specified in SJ/T 11363—2006.

Note: 80% of this product's components are manufactured using non-toxic and eco-friendly materials. The components which contain toxins or harmful elements are included due to the current economic or technical limitations which prevent their replacement with non-toxic materials or elements.

FCC Warning

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body

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