ZKTeco
F17 IP Access Controller

ZKTeco F17 IP Access Controller User Manual

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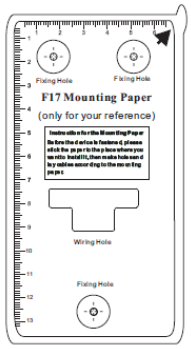
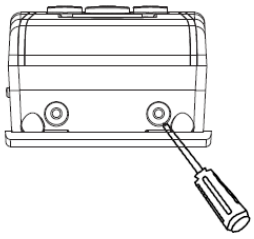
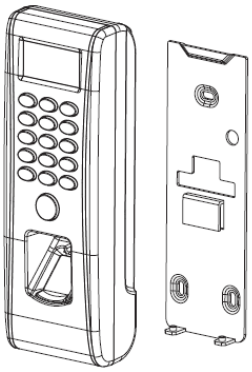
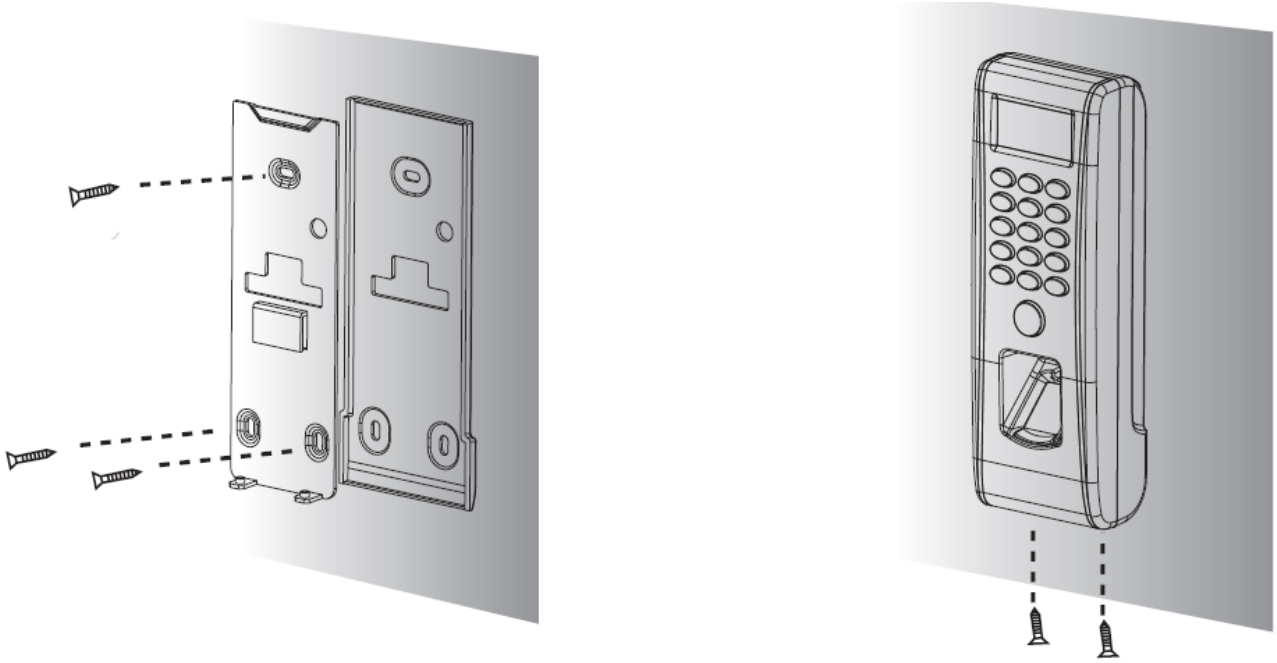
Equipment Installation







1. Post the mounting template on the wall.
2. Drill the holes according to the marks on the template (holes for screws and wiring).
3. Remove the screws on the bottom.
4. Take away the back plate. Off device.

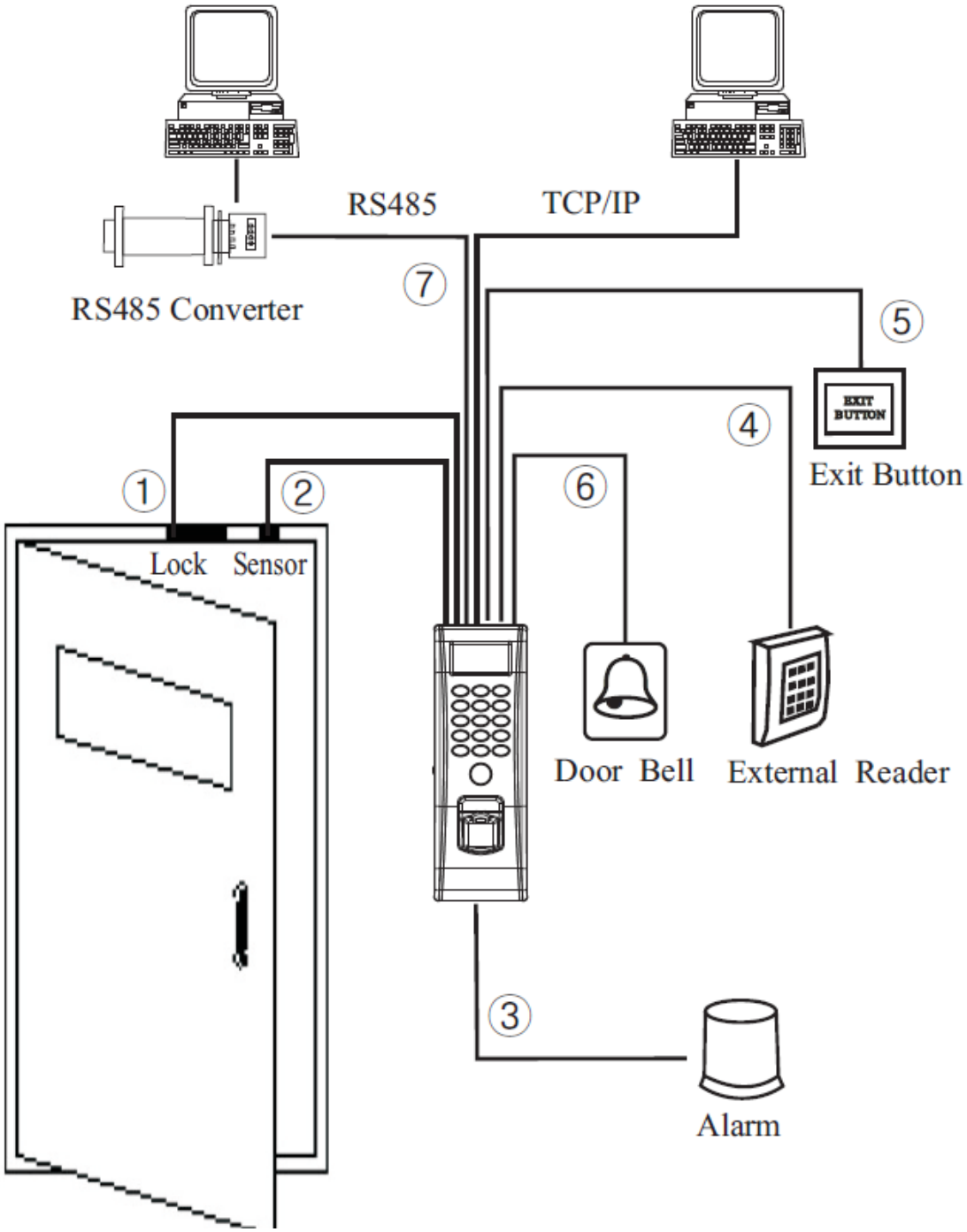


5. Fix the plastic pad and the back plate on the wall according to the mounting paper.
6. Tighten the screws on the bottom, fix the device to the back plate.

Structure and Function

Access Control System Function

1. If a registered user is verified, the device will export the signal to unlock the door.

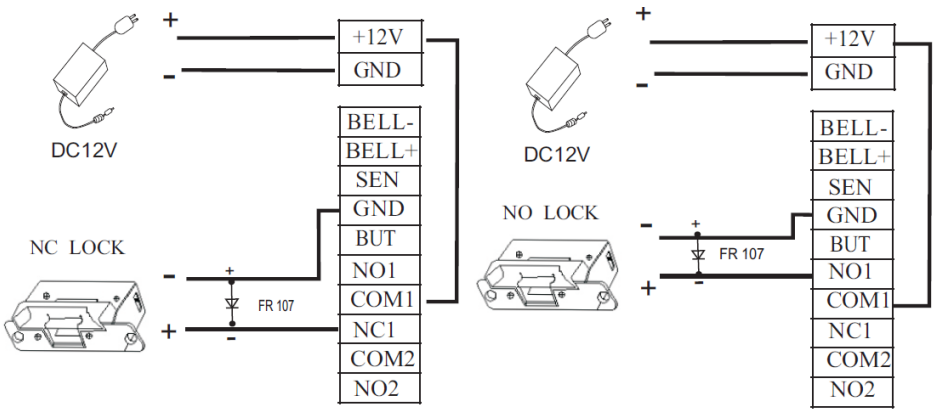


2. The door sensor will detect the on-off state If the door is unexpected opened or improperly closed, the alarm signal (digital value) will be triggered.
3. If only the device is being illegally removed, the device will export an alarm signal.
4. An external card reader is supported.
5. An external exit button is supported; it is convenient to open the door inside.
6. The external doorbell is supported.
7. Supports RS485, TCP/IP modes to connect with a PC. One PC can manage multiple devices.

Warning: Do not operate with the power on

Lock Connection

1. Share power with the lock:

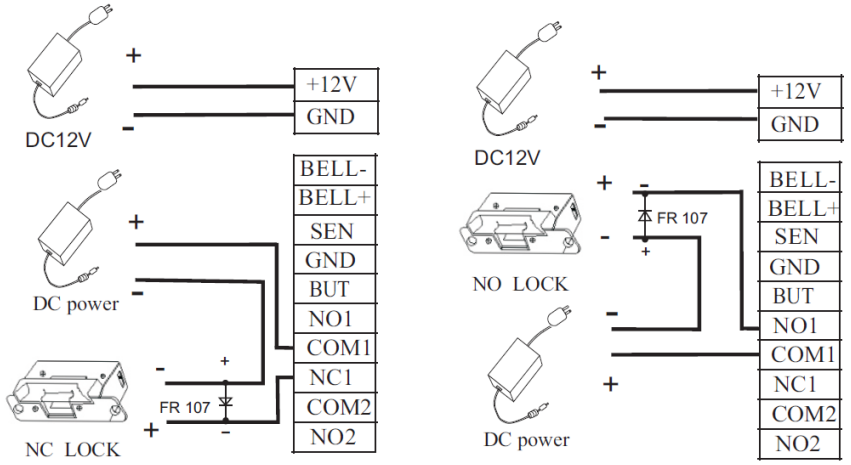


Device share power with the lock:

A. ULOCK=12V, I-ILOCK>1A…… ①

B. The lock is near to the device.

2. Does not share power with the lock:



Device does not share power with the lock:

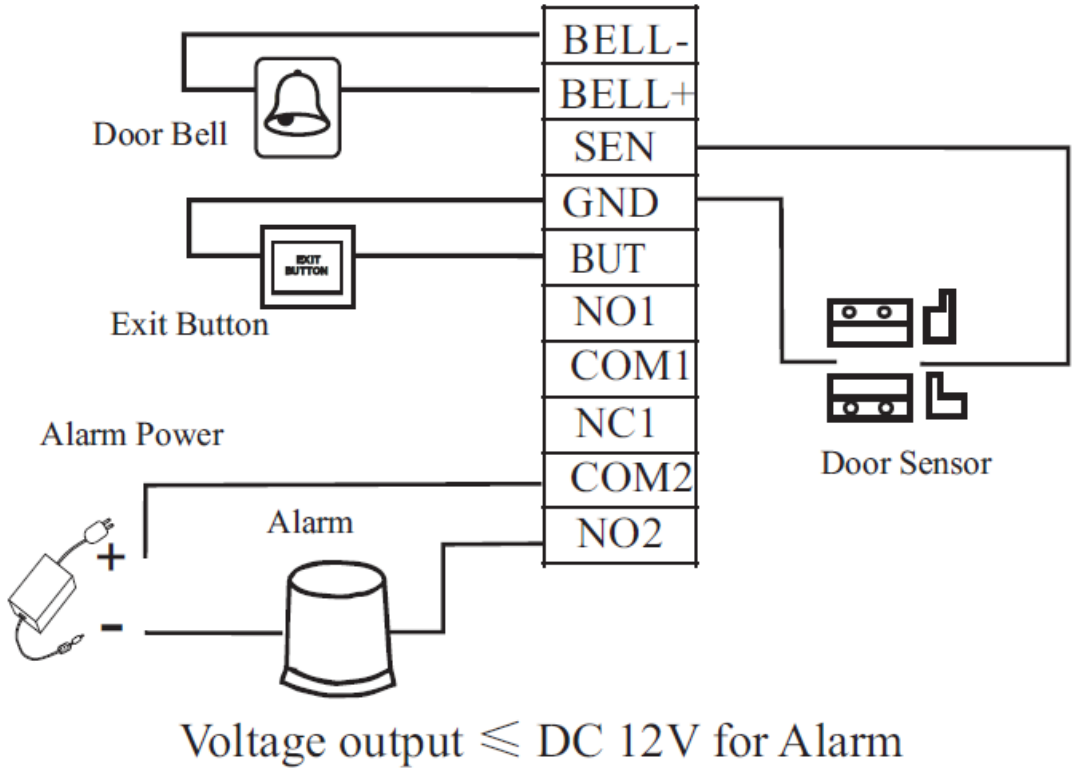
A. ULOCK=12V I-ILOCK≤1A;

B. ULOCK≠12V;

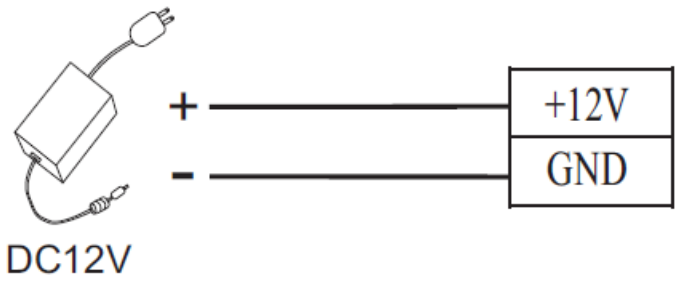
C. The lock is far apart from the device.

1. The system supports NO LOCK and NC LOCK. For example, the NO LOCK (normally open at power on) is connected with the NO and COM terminals, and the NC LOCK is connected with the ‘N’ aandCOM terminals.
2. When the Electrical Lock is connected to the Access Control System, you need to parallel one FR107 diode (equipped in the package) to prevent the self-inductance EMF affect the system, do not reverse the polarities.

Other Parts Connection



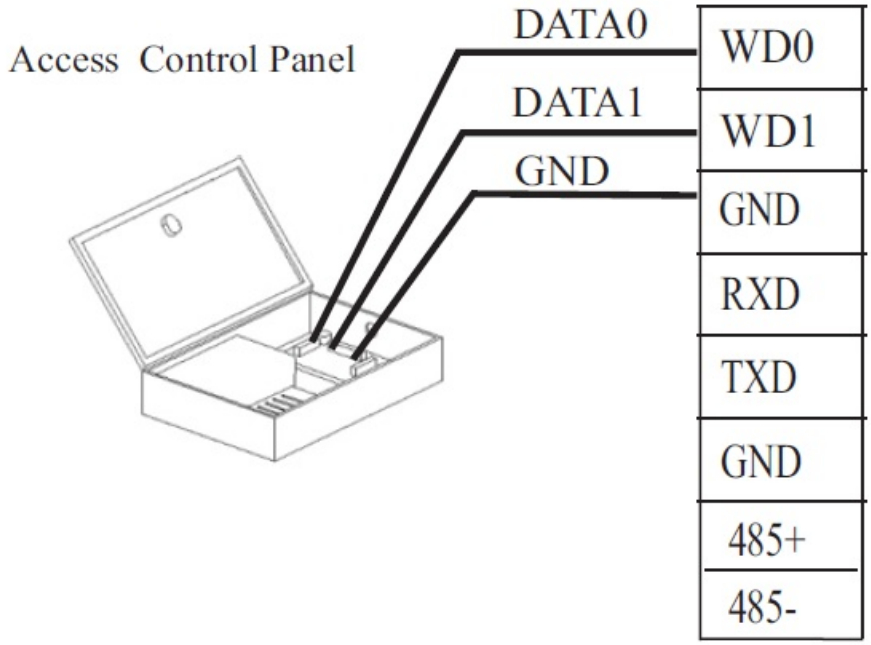
Power Connection



Input DC 12V, 500mA (50mA standby)
The positive is connected with '+12V', negative is connected with 'GND' (do not reverse the polarities).

Voltage output ≤ DC 12V for Alarm
I': device output current, 'ULOCK': lock voltage, 'ILOCK': lock current

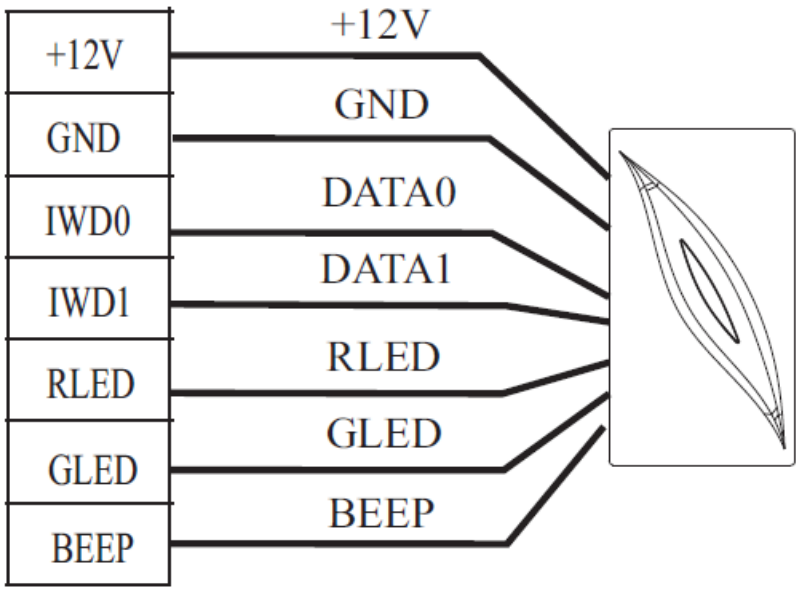
Wiegand Output



The device supports standard Wiegand 26 output, so you can connect it with most of the access control devices by now.

Wiegand Input

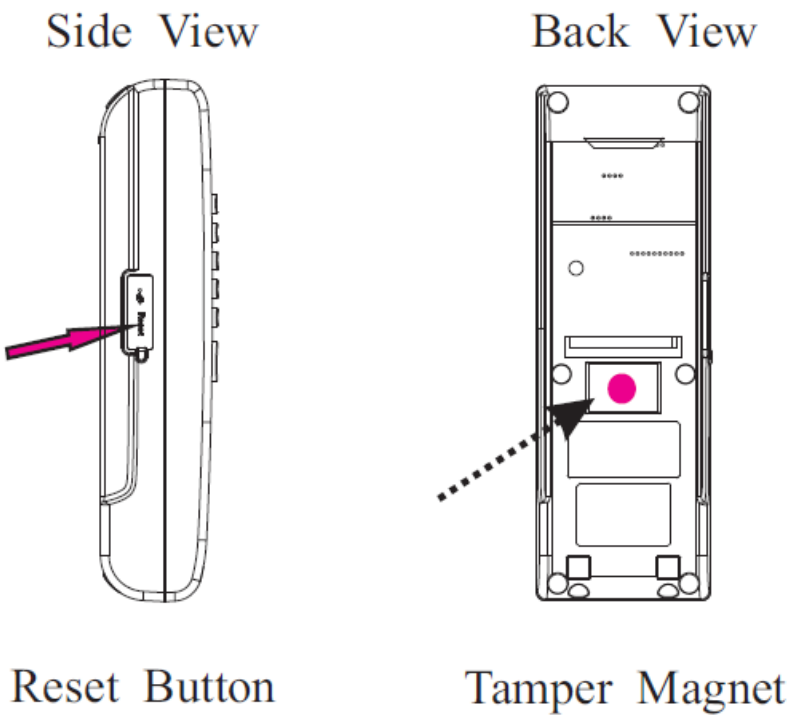
The device has the function of Wiegand signal input. It supports to connect with an independent card reader. They are installed each side of the door, to control the lock and access together.



1. Please keep the distance between the device and Access Control or Card Reader less than 90 meters(Please use Wiegand signal extender in long distance or interference environment).
2. To keep the stability ofthe Wiegand signal, connect the device and the Access Control or Card Reader in the same ‘GND’ in any case.

Other Functions

Manual Reset
If the device does not work properly because of misoperation or other abnormality, you can usethe ‘Reset’ function to restart it. Operation: Remove the black rubber cap, then stick the Reset button hole with a sharp tool (the tip diameter less than 2mm).



Tamper Function
In device installation, the user needs to put a magnet between the device and the back plate. If the device is being illegally moved, and the magnet is away from the device, it will trigger the alarm.

Communication

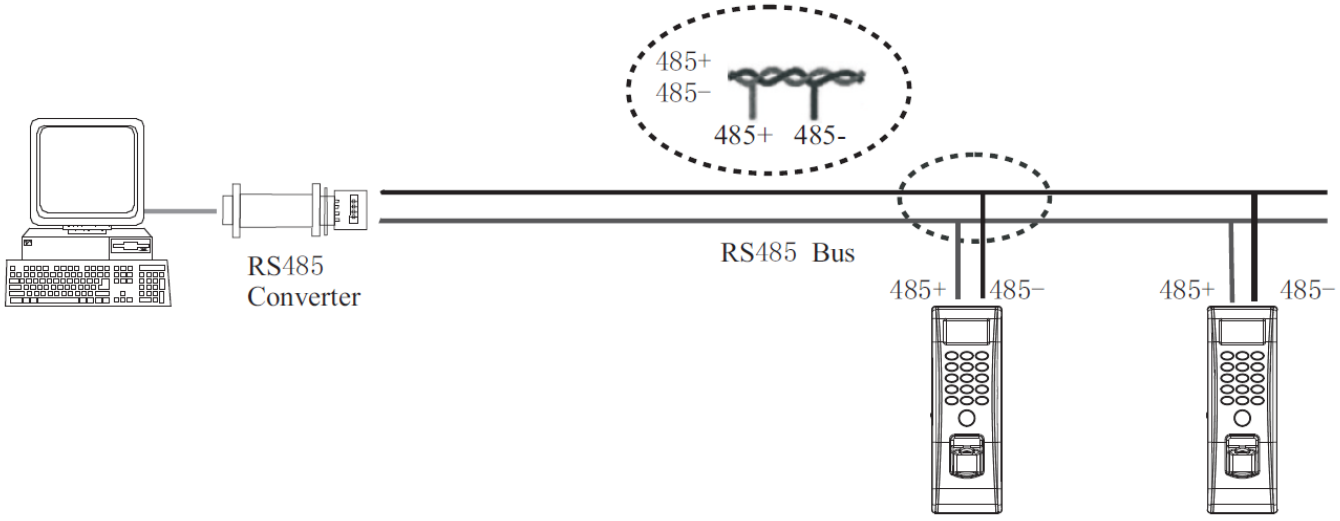
There are two modes that the PC software uses to communicate and exchange information with the device: RS485 and TCP/IP, and it supports remote control.

RS485 Mode

Terminals	PC Serial Ports
485+	RS485+
485–	RS485–

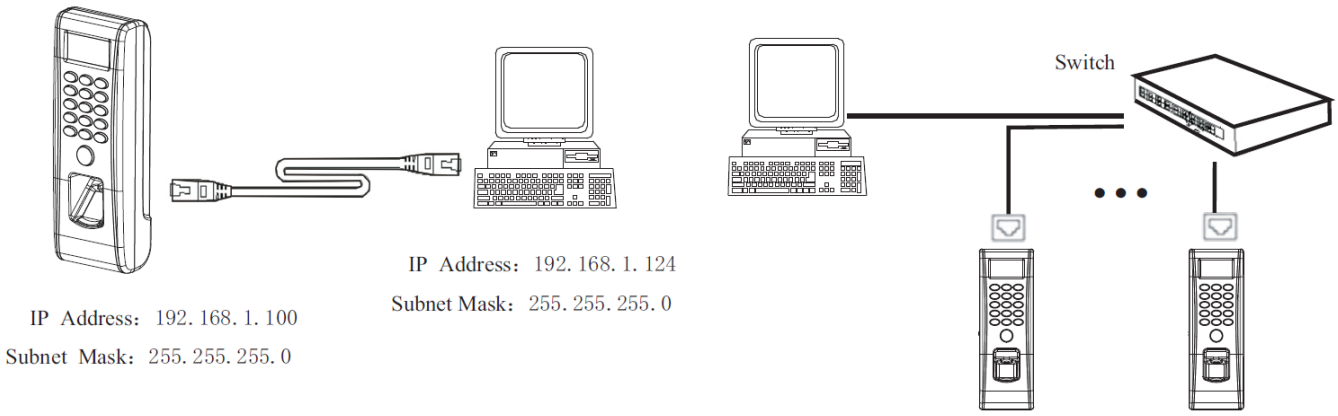
- Please use the specified RS485 wire, RS485 active converter, and bus-type wiring.
- Terminalsthe definition please refer to the right table.

Warning: Do not operate with the power on.



TCP/IP Mode

Two ways for TCP/IP connection.



- (A) Crossover cable: The device and PC are connected directly.
- (B) Straight cable: The device and PC are connected to LAN/WAN through a switch/Lanswitch.

Cautions

1. The power cable is connected after all the other wiring. If the device is working abnormally, please shut down the power first, then make the necessary check.
2. Kindly remind yourself that any hot-plugging may damage the device, and it is not included in the warranty.
3. We recommend the DC 3A/12V power supply. Please contact our technical staff for details.
4. Please read the cae terminal description and wiring by rule strictly. Any damage caused by improper operations will be out of the range of our guarantee.
5. Keep the exposed part of the wire less than 5mm to avoid an unexpected connection.
6. Please connect the ‘GND’ before all the other wiring ,especially in an environment with much electrostatic.
7. Do not change the cable type because of the long distance between the power source and the device.
8. Please use the specified RS485 wire, RS485 active converter, and bus-type wiring. If the communication wire is longer than 100 meters, it is needed to parallel a terminal resistance on the last device ofthe RS485 bus, and the value is about 120 ohm.

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References

- User Manual