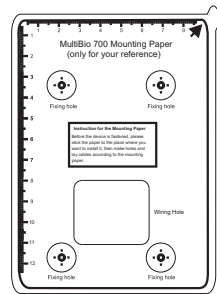


# MultiBio 700 Installation Guide

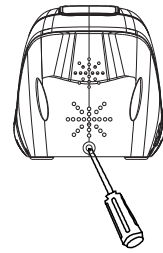
Version: V1.2 Date: Jan. 2015

 Warning: No operating with power on

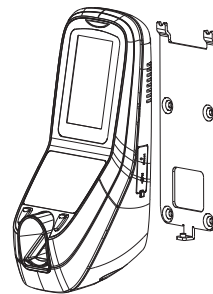
## 1. Equipment Installation



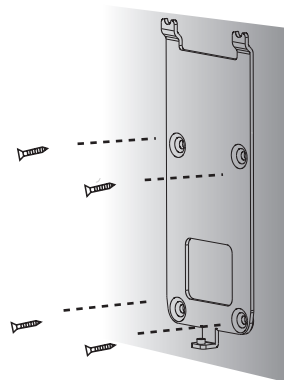
(1) Post the mounting template on the wall. Drill the holes according to the marks on the template (holes for screw and wiring).



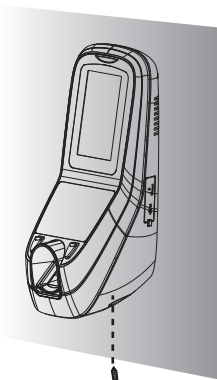
(2) Remove the screw on the bottom of device.



(3) Take away the back plate.

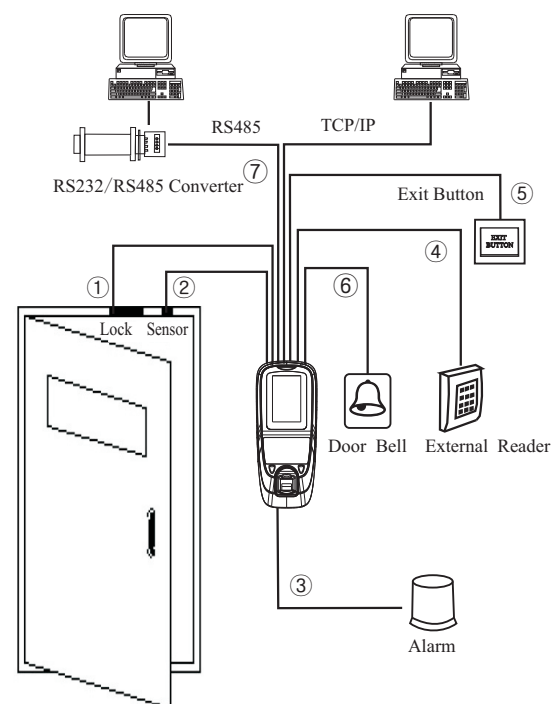


(4) Fix the back plate on the wall according to the mounting paper.



(5) Fix the device to the back plate.

## 2. Structure and Function

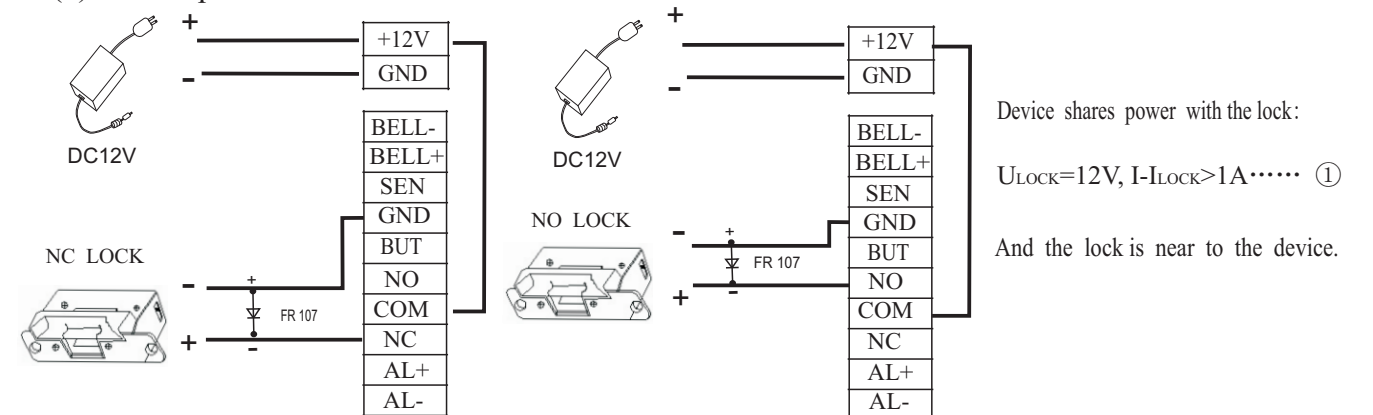


### Access Control System Function

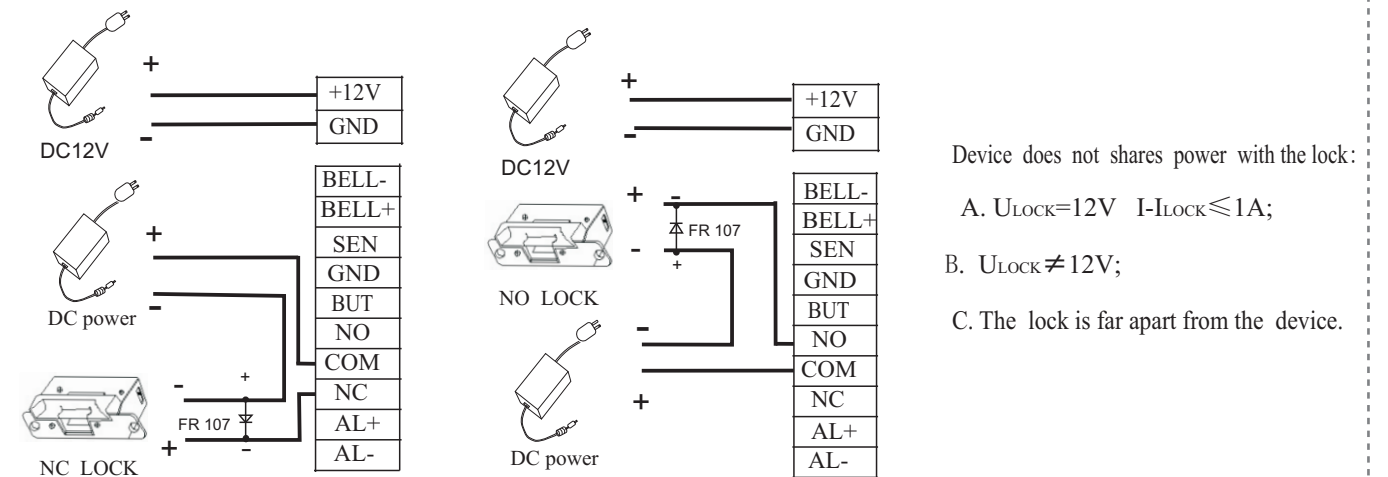
- If a registered user verified, the device will export the signal to unlock the door.
- Door sensor will detect the on-off state. If the door is unexpected opened or improperly closed, the alarm signal (digital value) will be triggered.
- As the device is removed illegally, it will output an alarm signal.
- External card reader is supported.
- External exit button is supported, it is convenient to open the door inside.
- External door bell is supported.
- Supports RS485, TCP/IP modes to connect with PC. One PC can manage multiple devices.

## 3. Lock Connection

(1) Shares power with the lock:



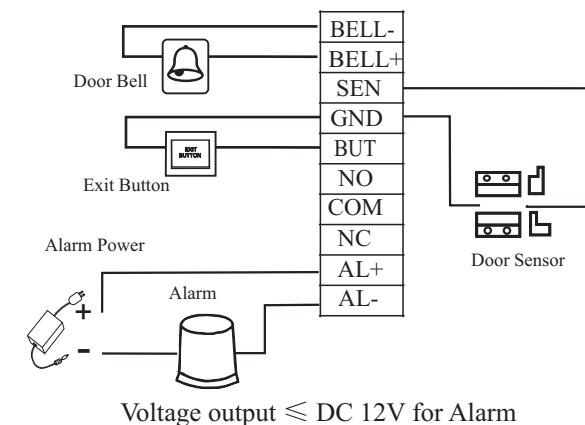
(2) Does not share power with the lock:



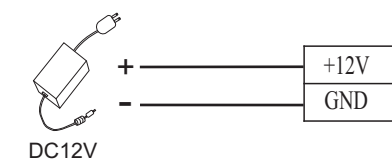
- The system supports NO LOCK and NC LOCK. For example the NO LOCK (normally open at power on) is connected with 'NO' terminal, and the NC LOCK is connected with 'NC' terminal.
- When the Electrical Lock is connected to the Access Control System, you need to parallel one FR107 diode (equipped in the package) to prevent the self-inductance EMF affecting the system, **do not reverse the polarities**.

## 4. Connected with other parts:

## 5. Connected with Power:



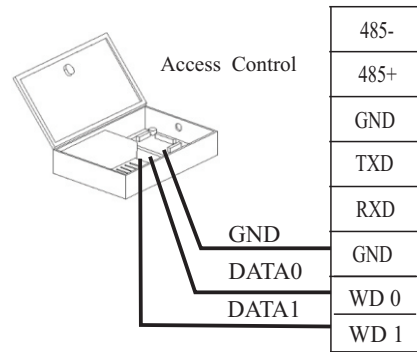
Input DC 12V, 500mA (50mA standby)  
 Positive is connected with '+12V', negative is connected with 'GND' (**do not reverse the polarities**).



$\textcircled{1}$ : 'I': device output current, ' $U_{LOCK}$ ': lock voltage, ' $I_{LOCK}$ ': lock current

## 6. Wiegand Output

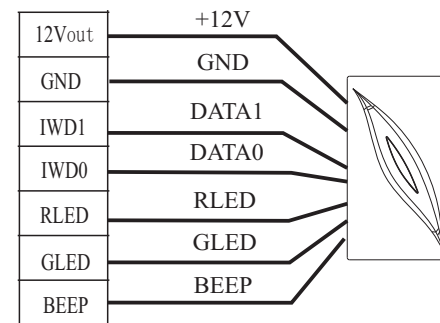
The device supports standard Wiegand 26 output, as a reader device it has a very good compatibility.



- (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 of Wiegand signal, connect the device and the Access Control or Card Reader in same 'GND' in any case.

## 7. 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.

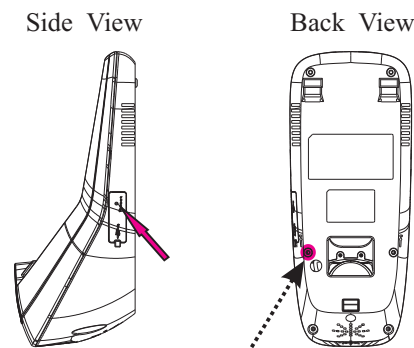


## 8. Other Functions

### (1) Manual Reset:

If the device does not work properly because of misoperation or other abnormality, you can use '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).



Reset Button

Tamper Switch

### (2) Tamper Switch

When the device is being dismantled, it will send an alarm signal through the terminal.

## 9. Communication

There are three modes that the PC software communicate and exchange information with the device: RS232, RS485 and TCP/IP, and the last two mode support remote control.

### (1) RS232 Mode:

**Terminals:**

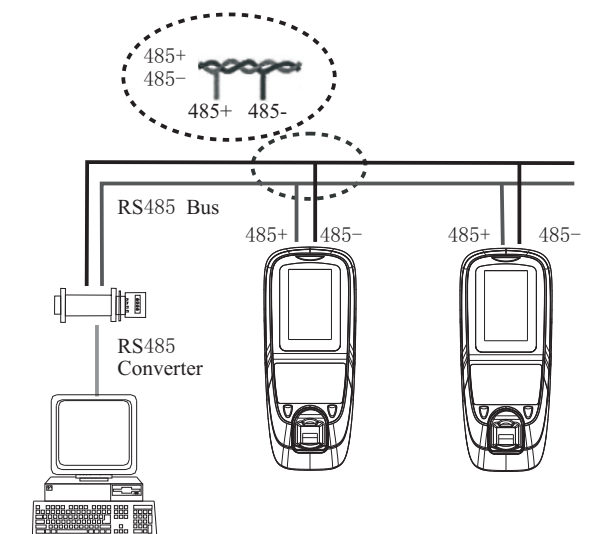
Terminals	PC Serial Ports
GND	Pin5-Gnd
RXD	Pin3-Txd
TXD	Pin2-Rxd

### (2) RS485 Mode:

Please use specified RS485 wire, RS485 active converter and bus-type wiring.

**Terminals:**

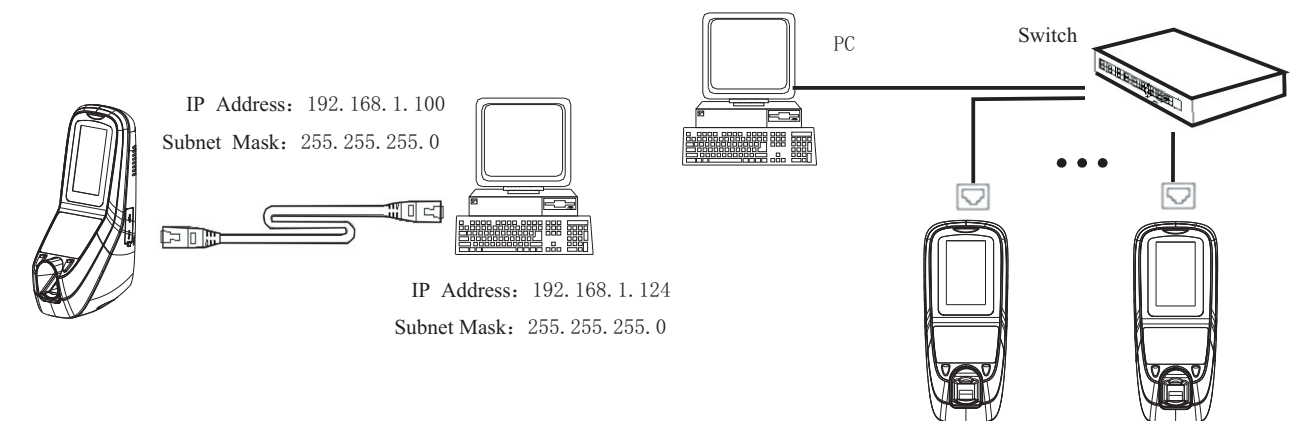
Terminals	PC Serial Ports
485+	RS485+
485-	RS485-



### (3) TCP/IP Mode:

(A) Crossover cable: The device and PC connected directly.

(B) Straight cable: The device and PC connected to LAN/WAN through switch/Lanswitch.



## 10. Cautions:

- (1) **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. Kindly reminds you that any hot-line work may damage the device, and it is not included in the warranty.
- (2) We recommend the 3A/12V DC Power supply. Please contact our technical staff for details.
- (3) **Please read the terminals description carefully and wiring by rule strictly.** Any damage caused by improper operations will not under warranty.
- (4) **Keep the exposed part of wire less than 5mm,** to avoid unexpected connection.
- (5) **Please connect the 'GND' before all the other wiring especially under the environment,** to prevent the overlarge instantaneous electrostatic to damage device.
- (6) Do not change the cable type because of long distance between the power and the device.
- (7) Please use specified RS485 wire, RS485 active converter and bus-type wiring.