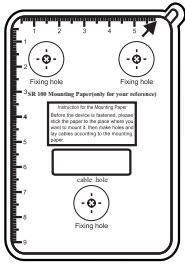# Installation Guide for SR100 Device
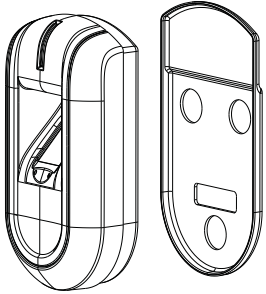
Version: 1.2
Date: December 2010

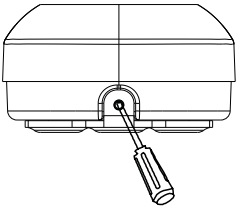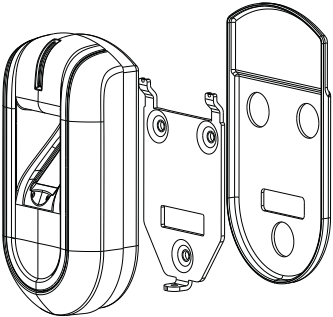⚠ Warning: Don't connect wires with power on!

I. Install Device

①Post the mounting template on the wall. Drill holes according to the marks on the template.(Holes for screw and wiring)
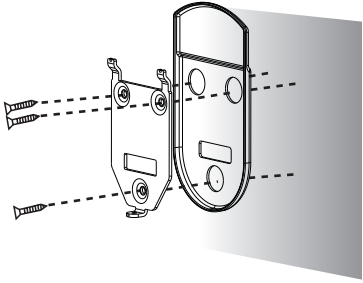
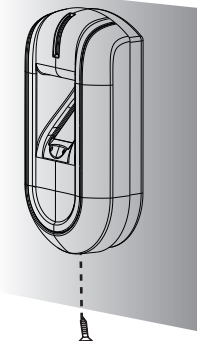②Take off the water-proof cushion

③ Take away the screw on the bottom of the device

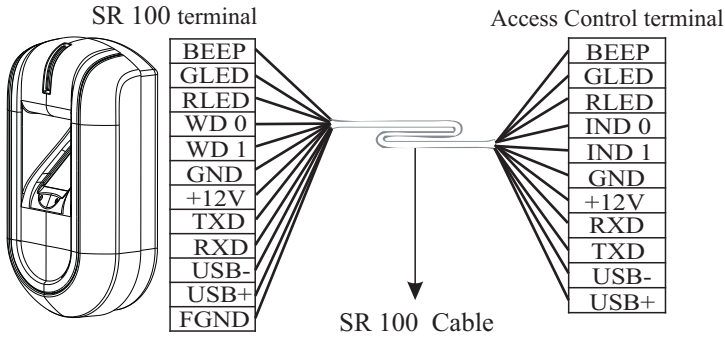④Release the mounting plate

⑤Fix the cushion and plate on the wall

⑥ Fix the device to the plate after all wiring completed

II. Work Principle

1.Connection with host machine

The device can only be used as reader. It cannot dispose the obtained information. Therefore, it needs connecting host machine to obtain fingerprint information and transmit it to host machine for disposal through USB. The host machine is specified access control terminal which you can consult the commercial representative, Before connection. please power off the device. Connection under power-on state may bring great damage to the device.

SR 100 terminal — BEEP GLED RLED WD 0 WD 1 GND +12V TXD RXD USB- USB+ FGND

Access Control terminal — BEEP GLED RLED IND 0 IND 1 GND +12V RXD TXD USB- USB+

SR 100 Cable

The terminal definition table of SR 100

Terminal Sequence	Terminal name	Function
1	BEEP	Signal input of buzzer
2	GLED	Signal input of green indicator
3	RLED	Signal input of red indicator
4	WD 0	Wiegand D0 output
5	WD 1	Wiegand D1 output
6	GND	GND
7	+12V	12V power input (positive pole)
8	TXD	RS 232 output
9	RXD	RS 232 input
10	USB-	USB communication-
11	USB+	USB communication+
12	FGND	Screened ground wire

The terminal definition table of the host machine

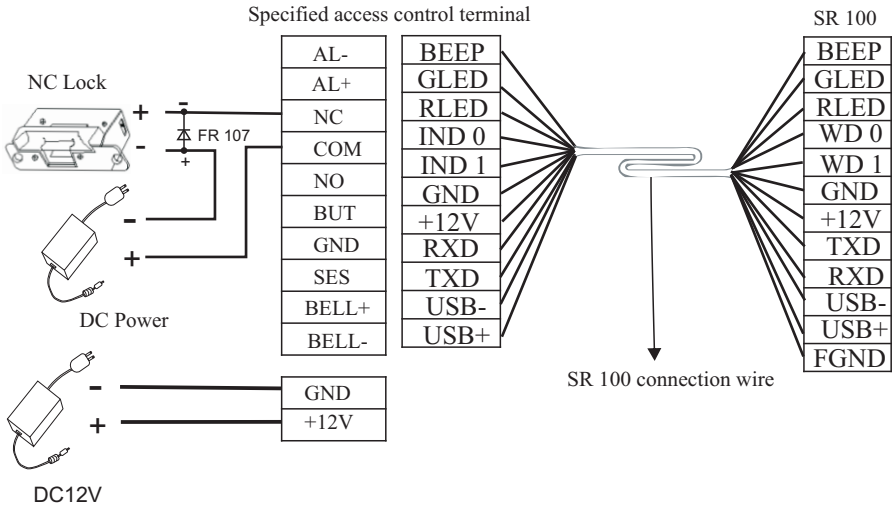| Terminal Sequence	Terminal name	Function
1	BEEP	Signal output of buzzer
2	GLED	Signal output of green indicator
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4	IND 0	Wiegand D0 input
5	IND 1	Wiegand D1 input
6	GND	GND
7	+12V	12V power output (positive pole)
8	RXD	RS 232 input
9	TXD	RS 232 output
10	USB-	USB communication-
11	USB+	USB communication+

2. Verification Process

Press finger or flash card on the device. When the device gets the information, it will transmit the information to the host machine, which will verify fingerprints or card. Then corresponding prompt will be given and transmitted to the device.
①. blue light twinkle: normal standby state
②. green light on, and the buzzer "Dii…": success in card or fingerprint verification
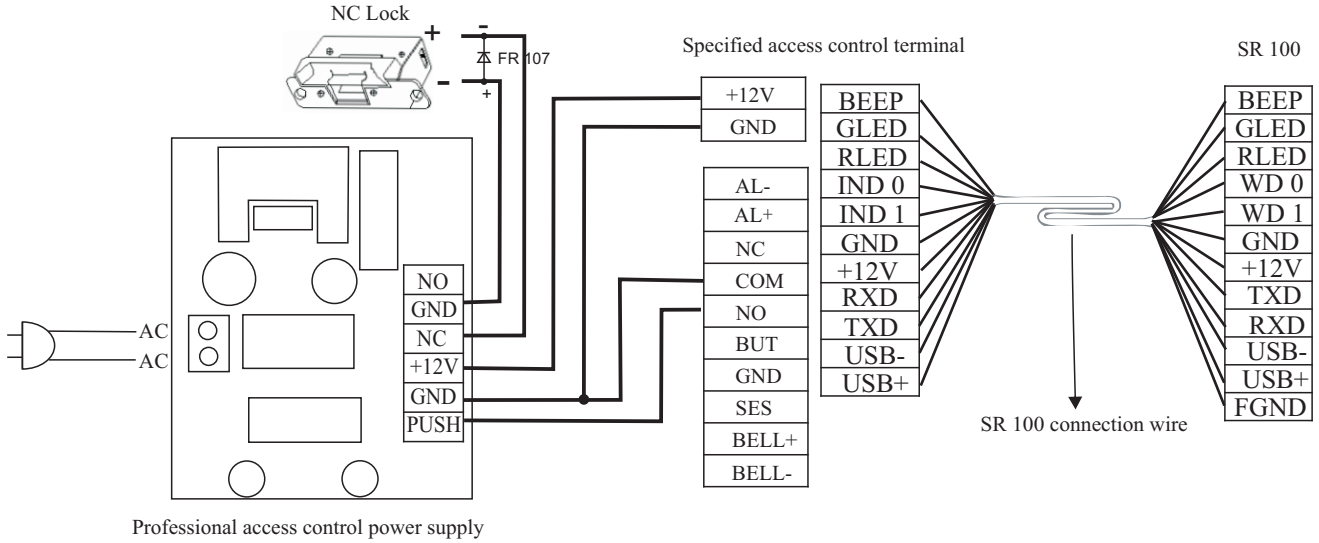③. red light on and the buzzer " Dii…Dii…" : failure in card or fingerprint verification

III. Notice

When host device, SR100 and EM lock are powered by a single switching power adaptor, the interference of EM lock to power supply may affect the stability of the whole system. Therefore, the below power supply method is advised:

①Supply power to specified terminals and lock separately, namely access control and lock use different power supplies. The recommended voltage of power supply to specified terminal is 12V, and the current is 1.5A at least; the power supply to lock should follow the lock instruction strictly. Wiring diagram is as follow (NC locks for example):

NC Lock · ZS FR 107 · DC Power · DC12V

Specified access control terminal — AL- AL+ NC COM NO BUT GND SES BELL+ BELL- / BEEP GLED RLED IND 0 IND 1 GND +12V RXD TXD USB- USB+

SR 100 — BEEP GLED RLED WD 0 WD 1 GND +12V TXD RXD USB- USB+ FGND

GND +12V

SR 100 connection wire

②Use professional access control power(the connection way of other access control power supplies refers to its own instruction) . to the access control system . Wiring diagram is as follow(NC locks for example):

NC Lock · ZS FR 107

Professional access control power supply

Specified access control terminal — AL- AL+ NC COM NO BUT GND SES BELL+ BELL- / BEEP GLED RLED IND 0 IND 1 GND +12V RXD TXD USB- USB+

SR 100 — BEEP GLED RLED WD 0 WD 1 GND +12V TXD RXD USB- USB+ FGND

+12V GND AL- AL+ NC COM NO NO GND NC +12V GND PUSH AC AC

SR 100 connection wire

When the Access Control System connected with Electric lock, to prevent the self-inductance EMF to affect the access control system, you need to parallel one FR107 diode (do not reverse the polarity) .
Please use the equipped diode in the package.

③Please use the SR100 connection wire we provided. Do not attempt to extend or shorten the wire, otherwise it will affect the wire shielding action, which will cause the device abnormal situation or other accidents. We will not be responsible for that. If you need other lengths of the wire, please contact the factory to order.

※ Remarks：
1. D card, Mifare card, HID card is optional   ；
2. If you have any other questions, you can consult our commercial representative or pre-sale technical assistance.