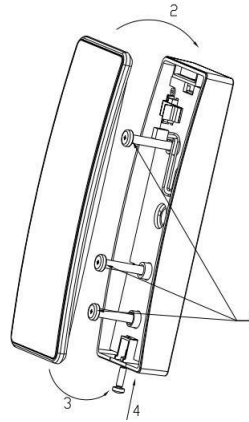


**Mounting:**

1. Install the back plate on the wall as shown in the side diagram (1).
2. The cover shall clip on the upper edge (2) the push in the bottom part as show in diagram (3).
3. Tighten the non-dropout screw, which located underneath of the reader to fix the reader and the back plate (4), installation is completed.



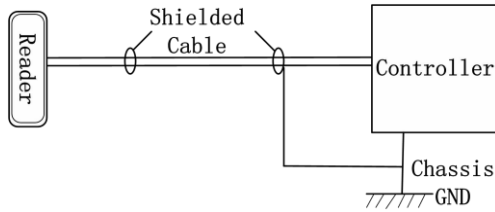
**Note: Please pay attention to the two sets of cables between the panel and the motherboard. If need to disconnect, please pay attention to the buckle on the cable terminal, do not pull vigorously.**

**Specification:**

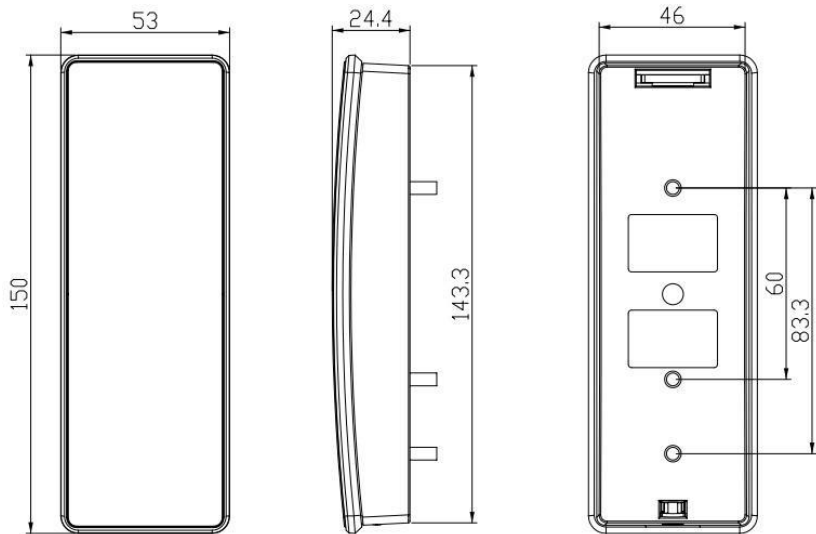
Input Voltage (DC)	12V	Operating Current	150mA
Operating Temperature	-30-75°C	Typical	>2cm
Operating Humidity	10-90(%)	Cable Length	<150m

**Recommendation:**

1. Linear DC Power Supply.
  2. 22AWG shielded cable.
- It's required to do "one-point" ground.  
(As shown in the diagram)



**Physical Dimension (mm) :**



**Power up Sequences:**

1. When power on starts the card reader, the green backlight flashes for 5 seconds, accompanied by the buzzer "drip" to indicate that the reader enters the working condition.
2. Swipe card, blue LED light flashing once, buzzer beep once.
3. When use bluetooth, yellow LED of reader lights up, pink LED lights up once, and buzzer beeps once.
4. The data is transmitted to the controller during the swipe, and the backlight status (original state, flashing, or green or red) depends on the different LED inputs.

**Wiring:**

Color	Label	Description
Red	+12V dc	Power Supply to the reader
Black	GND	Signal GND
Green	Data0	Wiegand Output data, D0
White	Data1	Wiegand Output data, D1
Yellow	RED LED	RED LED control, active low.
Blue	Green LED	Green LED control, active low
Brown	Buzzer	Buzzer input, active low
Orange	Tamper	Tamper output (open collector, Active low, max 100mA)
Purple	Doorbell	Door bell output (open collector, +5Vdc output ≤ 5mA)

**Troubleshooting:**

Trouble List	Solution
No Response when Power Up	Disconnect the power and confirm that the power supply cable is correctly connected (See "Wiring" above). Check the input voltage is sufficient (See "Specifications" above).
Auto Restart	Check the input voltage is sufficient (See "Specifications" above).
Cannot read card number correctly	Check the format setting on the controller if it is the same as the card format. Use approved card (known format and Facility Code) to test. Check if the shield cable is correctly connected to Chassis Ground at ONE point
Reader beeps but No card data info	Check if data 0 & data 1 cable is correctly connected (See "Wiring" above). Check the input voltage at the card reader end is correct (See "Specifications" above).
Buzzer error	Check if the buzzer cable is correctly connected (See "Wiring" above).
Back Lit Error	Check the LED cable is correctly connected (See "Wiring" above).
Keypad	Power off reader for 5 seconds and power on again

## FCC Statement

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

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.

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