

FCC STATEMENT

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. 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.

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

IC STATEMENT

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Keypad & Proximity Reader Installation Manual

Operating current	160mA (max)	Maximum cable length	150m
Operating temperature	-30°C~70 °C	Number pad format	4 bits burst by default

Parts

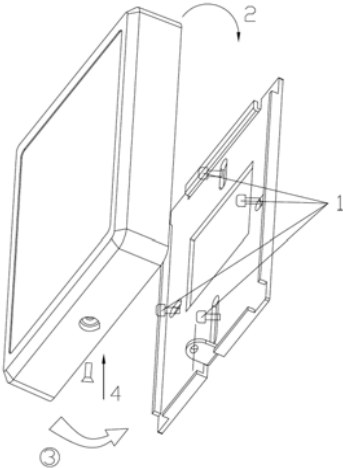
- 1 - reader
- 1 - Installation manual

Required Tools

- Up to 9 wire splices (pigtail)
- Cable, 5-9 conductor (Wiegand or RS232), 24 AWG shielded (pigtail)
- Linear DC power supply
- Gang box (optional)
- Security tool for anti tamper screw

Mounting

1. Fasten the metal base plate to the wall with two or four screws to the wall or gang box (optional) ① (gang box not included).
2. Clip the top edge of the cover ②, followed by the bottom edge of the reader ③.
3. Secure the reader to the base plate by fastening the security screw at the base of the reader ④. Installation is completed.

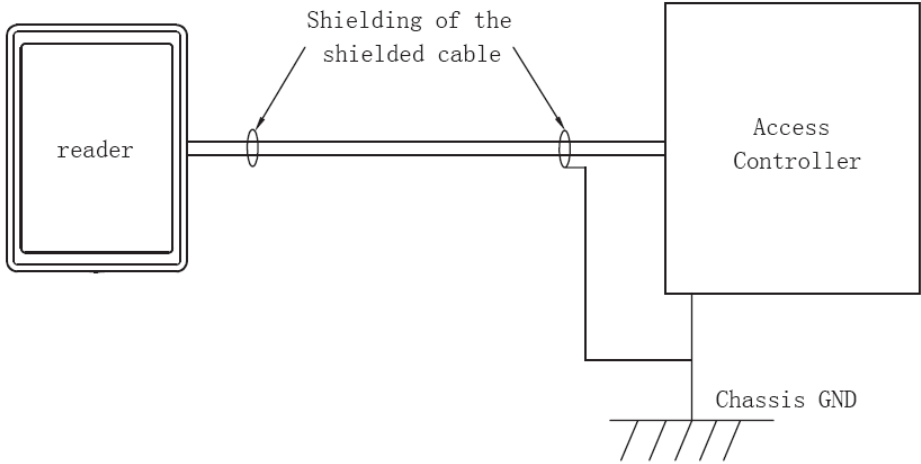


Specifications

Input voltage (Reader end)	DC10V~15V	Average read range	> 6cm
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Recommendations

1. Linear DC Power Supply
2. 22AWG shielded cable; “One-point” ground recommended (refer to diagram)



Wiring

Color	Label	Description
Red	+12VDC	Power Supply to 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

Keypad & Proximity Reader Installation Manual

Brown	Buzzer	Buzzer input, active low
Grey	Tamper	Tamper output (open collector, Active low, max 100mA)

Purple	Doorbell	Door bell output (open collector, +5Vdc output ≤ 5mA)
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Power & Testing

- When reader is powered up, the blue LED will light up. The orange LED will flicker for 5 seconds. The reader will beep once for 1 second and the reader is in Ready mode.
- Present the card. The orange LED will flicker once; the back lit will light for 5 seconds; buzzer will beep once.
- For keypad readers, the back light and the keypad numeral will light when the keypad is pressed; the buzzer will beep once

Using the Configuration Card (For keypad readers only)

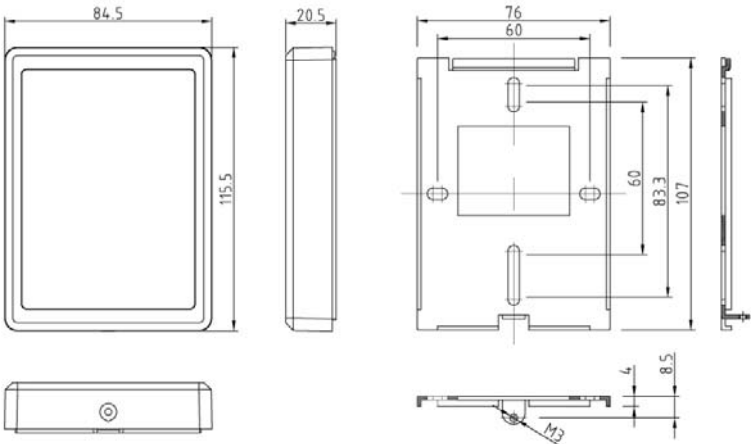
The default keypad format is "00". The Configuration Card is required when the default keypad format is not compatible with the controller.

- When reader is powered up, the blue LED will light up. The orange LED will flicker for 5 seconds.
- Present the Configuration Card for the required format. A 1-second beep indicates a successful attempt. The new keypad format is saved.

Configuration cards are available for:

- 4 bits ○ Apollo 6 bits
- 8 bits ○ 26 bits (Fixed Facility Code 190)

Physical Dimension



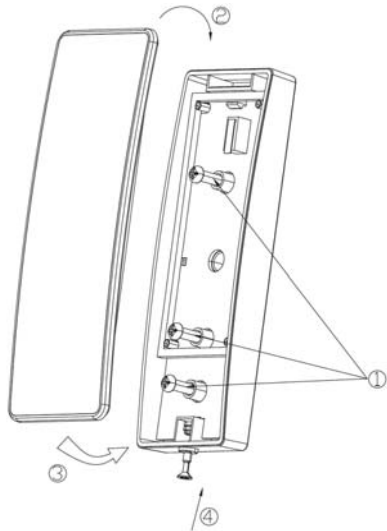
Troubleshooting

Symptom	Solution
No response when power up	<ul style="list-style-type: none"> ○ Disconnect the power and confirm that the power supply cable is correctly connected (Refer to Wiring table) ○ Check the input voltage is sufficient (Refer to Specifications table)
Auto restart	<ul style="list-style-type: none"> ○ Check the input voltage is sufficient (Refer to Specifications table)
Card number not read correctly	<ul style="list-style-type: none"> ○ Verify that the format setting on the controller is the same as the card format. Use approved card (known format and Facility Code) to test ○ Check that the shield cable is correctly connected to Chassis Ground at ONE point only
Reader beeps but no card data	<ul style="list-style-type: none"> ○ Check that Data 0 and Data 1 cable are correctly connected (Refer to Wiring table). ○ Check the input voltage at the card reader end is correct (Refer to Specifications table)
No buzzer sound	<ul style="list-style-type: none"> ○ Verify that the buzzer cable is correctly connected (Refer to Wiring table)
Back lit error	<ul style="list-style-type: none"> ○ Verify that the LED cable is correctly connected (Refer to Wiring table) ○ Use the default Configuration Card to reset to default setting

Low Frequency Mullion Mount Reader Installation Manual

Mounting:

1. Install the back plate on the wall as shown in the diagram below 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.

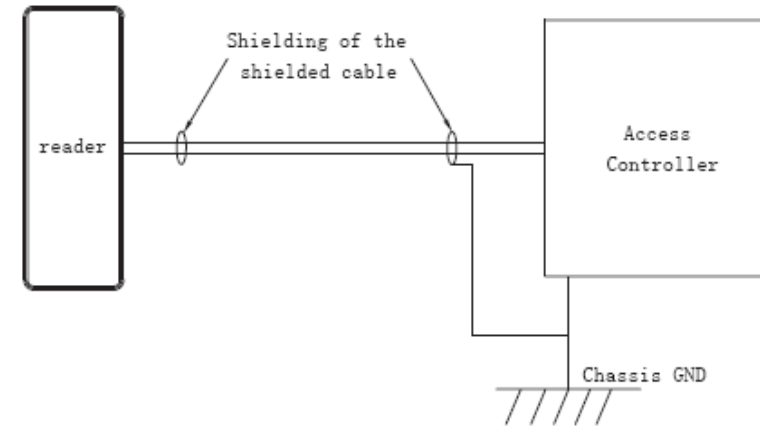


Specification:

Input Voltage (at Reader end)	DC9V~15V	Typical Read range	> 5cm
Operating Current	120mA (max)	Maximum Cable Length	150m
Operating Temperature	-30°C~70 °C		

Recommendation:

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



Wiring:

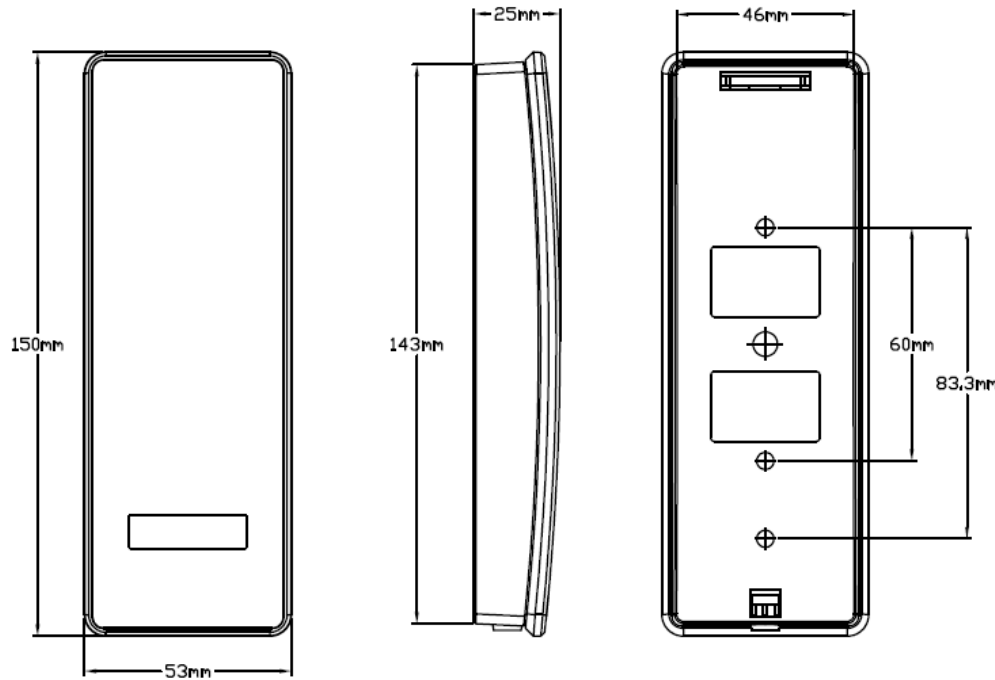
Color	Label	Description
Red	+12V dc	Power Supply to the reader
Black	GND	Signal GND
Green	RS232+/RS485+	RS232+/RS485+
White	RS232-/RS485-	RS232-/RS485-
Yellow	RED LED	RED LED control, active low.
Blue	Green LED	Green LED control, active low
Brown	Buzzer	Buzzer input, active low
Grey	Tamper	Tamper output (open collector, Active low, max 100mA)

Low Frequency Mullion Mount Reader Installation Manual

Power up Sequences:

1. When reader is powered up, the reader will flash in Green for 5 seconds . Then the Reader is ready.
2. Blue back lit stays on when the reader is ready.
3. When card is present and read by the reader, blue back lit will flash once; and buzzer will beep once as well. The card data will then transmit to the controller. After, weather the back lit of the reader will remain ON or Flash or change to Green or Red color, this shall depend on the Green and Red LED inputs.

Physical Dimension:



Troubleshooting:

Trouble List	Solution
No Response when Power Up	<ul style="list-style-type: none"> ● Discount 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	<ul style="list-style-type: none"> ● Check the input voltage is sufficient (See "Specifications" above).
Cannot read card number correctly	<ul style="list-style-type: none"> ● 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 Classis Ground at ONE point only.
Reader beeps but No card data info	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● Check if the buzzer cable is correctly connected (See "Wiring" above).
Back Lit Error	<ul style="list-style-type: none"> ● Check the Led cable is correctly connected (See "Wiring" above). ● Use Default Configuration Card to set it back to normal.