

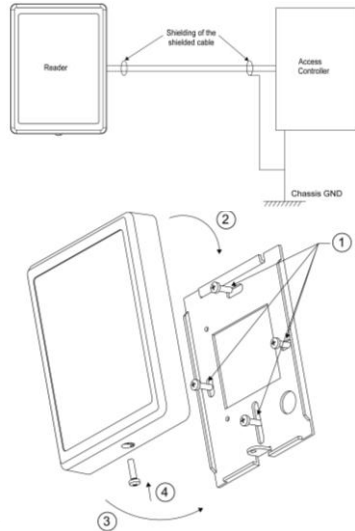
# Magic Series Flush Mount Wiegand Reader Installation Manual

## Specification

<b>Input voltage (at reader end)</b>	DC9V~15V	<b>Typical read range</b>	2~5cm
<b>Operating current</b>	160mA (max)	<b>Maximum cable length</b>	150m
<b>Operating temperature</b>	-30°C~70°C	<b>Keypad format</b>	4 bits burst by default

## Recommendation

- Use a linear DC power supply.
- Use 22AWG shielded cable. A “one-point” ground (as shown in the diagram) is essential.



## Mounting

1. Install the metal plate on the wall.  
Use two or four screws, depending on the gang box used.
2. Clip the cover to the upper edge.
3. Push in the bottom.
4. Tighten the secure, non-dropout screw, located underneath the reader, to fix the reader and the back plate.

## Power up sequences

1. Power up the reader. The green LED flickers for 5s, then the reader beeps once. 2s later, the reader will beep once again. The reader is now in Ready mode.
2. Present a card. When the card is read, the blue LED flickers once, the buzzer beeps once, and the card data is transmitted to the controller.  
The backlight will either remain on, flash, or change to green or red, depending on the wiring of the green and red LEDs.
3. Present a mobile phone. The yellow and red LEDs come on. When the mobile phone is read, the blue LED flickers once, the buzzer beeps once, and the card data is transmitted to the controller.
4. Press a keypad key. The backlight under the key flashes once and the buzzer beeps once. The number being pressed is burst out by default (4 bits burst).

## Wiring

Color	Description
Red	Power supply to the reader
Black	Signal GND
Green	Wiegand output data, D0
White	Wiegand output data, D1
Yellow	Red LED control, active low
Blue	Green LED control, active low
Brown	Buzzer input, active low
Orange	Tamper output (open collector, active low, max 100mA)
Purple	Doorbell output (open collector, +5VDC output ≤ 5mA)

## Troubleshooting

Problem	Solution
No response on power up	<ul style="list-style-type: none"> <li>• Disconnect the power and confirm that the power supply cable is correctly connected (see “Wiring” section).</li> <li>• Check the input voltage is sufficient (see “Specification” section).</li> </ul>
Reader automatically restarts after powering up	<ul style="list-style-type: none"> <li>• Check the input voltage is sufficient (see “Specification” section).</li> </ul>
Cannot read card number correctly	<ul style="list-style-type: none"> <li>• Check that the format setting on the controller is the same as the card format. Use an approved card (with known format and facility code) to test.</li> <li>• Check that the shield cable is correctly connected to Chassis GND at <i>one</i> point only.</li> </ul>
Reader beeps but no card data is transmitted	<ul style="list-style-type: none"> <li>• Check if D0 and D1 are correctly connected (see “Wiring” section).</li> <li>• Check that the input voltage at the card reader end is correct (see “Specifications” section).</li> </ul>
No beep after card is read	<ul style="list-style-type: none"> <li>• Check that the buzzer cable is correctly connected (see “Wiring” section).</li> </ul>
Backlight error	<ul style="list-style-type: none"> <li>• Check that the LED cable is correctly connected (see “Wiring” section).</li> <li>• Use the Default Configuration Card to reset it.</li> </ul>
Keypad does not respond	<ul style="list-style-type: none"> <li>• Power off reader for 5 seconds, then power on again.</li> </ul>



### Declaration of Conformity

Hereby, Smarfid declares that this equipment type is in compliance with the following EU Directives for CE marking:

- Directive 2014/30/EU (Electromagnetic Compatibility Directive)
- Directive 2014/35/EU (Low Voltage Directive)
- Directive 2014/53/EU (Radio Equipment Directive)
- Directive 2011/65/EU (Restriction of the use of certain hazardous substances Directive)

The full text of the EU declaration of conformity is available at: <http://www.smarfid.com/uploads/2019/07/311632549269.png>



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