

R Series Reader

User Manual

1. Introduction

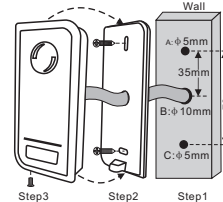
The R Series readers are advanced 125 KHz & 13.56 MHz technology proximity readers, with built-in Light Dependent Resistor (LDR) sensor for anti-tamper, it is an ideal choice for high-security applications. They are attractively designed with a thin profile and modern appearance, four models (R11, R12, R14 and R15) available.

2. Specifications

Model	R11	R12	R14	R15
Operation Voltage	9-24V DC			
Standby Current	≤25mA			
Frequency	125KHz and 13.56MHz			
Card Type	125KHz - EM & HID Card/Fobs 13.56Mhz - Mifare Card (ISO 14443A Compatible)			
Read Range	Up to 2.8 inches (7cm)			
Output Format	26 bits Wiegand (default) 26-37 bits available upon request			
Operating Temperature	-40 °C~60 °C (-40 °F~140 °F)			
Operating Humidity	10% to 95% RH			
Color	Black (White optional)			
Index of Protection	IP66			
Dimension(H x W x T)	103x48x20 mm	103x48x20 mm	120x48x20 mm	120x76x20 mm
Net Weight	100g	100g	120g	150g
Shipment Weight	150g	150g	170g	200g

3. Installation

- Drill 2 holes (A, C) on the wall for the screws and one hole for the cable
- Knock the rubber bungs to the holes (A, C)
- Fix the back cover on the wall with 2 screws
- Thread the cable though the cable hole (B)
- Attach the unit to the back cover



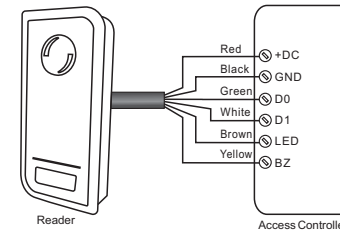
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Wiring

Color	Function	Notes
Red	Power	+DC (9-24V DC)
Black	GND	Ground
Green	D0	Data 0
White	D1	Data 1
Brown	LED	Green LED Light Control
Yellow	Buzzer	Buzzer Control

(Remarks: Brown and Yellow wires are optional connections)

Connection Diagram



4. Functions Table Sheet

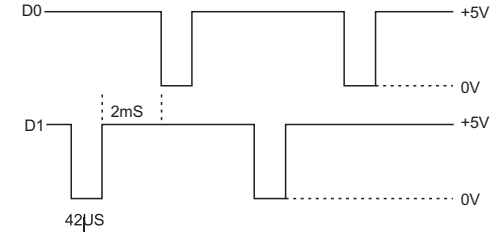
Read Card	The LED light will turn into Green, and the buzzer sounds a beep, at the meantime, the reader outputs the Wiegand signal
External LED Control	When the input voltage for LED is low, the LED will turn into Green
External Buzzer Control	When the input voltage for Buzzer is low, the Buzzer will sounds
Wiegand Data Output	Wiegand 26-37 bits range available for R Series readers, factory default setting is Wiegand 26 bits. HID card can output Wiegand 26-37 bits automatically, EM and Mifare cards are forced to output based on the reader setting

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5. Data Signal

Description	R Series Reader Typical Time
Pulse Width Time	42 μS
Pulse Interval Time	2 mS

The above table shows the wave form of pulse width time (the duration of a pulse) and pulse interval time (the time between pulses) of the Wiegand data output from the readers. (Example 1010)



Packing List

Name	Quantity
Reader	1
Manual	1
Screw Driver	1
Wall Fixing Plugs	2
Self Tapping Screws	2

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