

INSTALLATION GUIDE



SPECIFICATIONS

Performance Level for Access Control

This product complies with the following UL 294, 7th edition Access Control Performance Levels:

Feature	Level
Standby Power	IV Prox
Endurance	I Bluetooth
Line Security	I
Destructive Attack	I

See the UL listed access control unit controller installation instructions for reader compatibility.

Environmental

Operating Temperature	-31°F to +151°F (-35°C to +66°C)
Humidity	86 ±3°F (85 ±5% at 30 ±2°C)
Ingress Protection	IP65 (not evaluated by UL)
Positioning	Suitable for OUTDOOR use.

Electrical

Power supply Power is to be provided by a UL 294 Listed, low-voltage Class 2 Limited Power Supply or controller, capable of 4 hours standby.

Voltage +5Vdc to +16Vdc

Current maximum average measured at 10Vdc

Model	Normal Standby mA	Operating mA
RX190B	30	65
RX1K90B	50	110
RX290B	30	65
RX390B	30	65
RX3K90B	50	110
RX490B	30	65

Data Voltage Rest >4Vdc / Active <1Vdc

Data Output Wiegand, Open Supervised Device Protocol (OSDP), OSDP Secure Channel (SC), F/2F

Indication 1 RGB LED
(+ RGB LED keypad to RX1K90B & RX3K90B)

Sounder Integral speaker

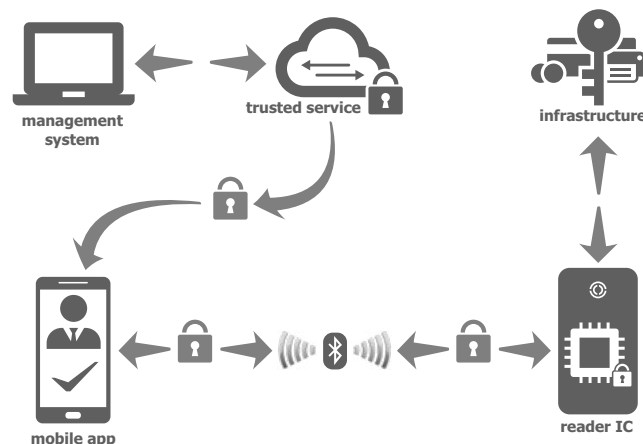
tm-readers.com +44 (0) 1495 751 992
Specifications subject to change without notice.

LEGIC Connect® Security Platform

Bluetooth® 4.2 for use with:

- LEGIC Connect® API for:
- iOS version 10.0 and later
- Android OS version 6.0 and greater

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Dimensions

Model	Size - millimetres (inches)
RX190B	87 x 87 x 21 (3.4 x 3.4 x 0.8)
RX1K90B	87 x 87 x 21 (3.4 x 3.4 x 0.8)
RX290B	144 x 54 x 21 (5.7 x 2.1 x 0.8)
RX390B	120 x 76 x 21 (4.7 x 3.0 x 0.8)
RX3K90B	120 x 76 x 21 (4.7 x 3.0 x 0.8)
RX490B	96 x 52 x 21 (3.8 x 2.1 x 0.8)

Wiring

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction.

Cable length Up to 492 feet (150m) from controller.

Recommended for Wiring

Cable type BELDEN 953x (or equivalent UL listed) for Wiegand and (S)/F/2F, BELDEN 9502 (or equivalent UL listed) for RS-485.

Minimum wire size Not less than 24 AWG.

Shielding Connect the reader's ground wire to cable shielding and connect shield wires at the microcontroller.

All cables and wiring must be UL listed and suitable for use.

Installation

Installation of readers should be carried out by a suitably qualified engineer.

Readers are certified to be installed up to a height of 2 metres (approximately 79 inches).

It is recommended to install readers at a height of between: 1.2 metres - 1.5 metres (approximately 47 inches - 59 inches).

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Bluetooth® enabled readers

RX190B

13.56MHz
LEGIC Connect® BLE (2.4GHz)
Wiegand and OSDP outputs



RX1K90B

13.56MHz
LEGIC Connect® BLE (2.4GHz)
Wiegand and OSDP outputs



RX290B

13.56MHz
LEGIC Connect® BLE (2.4GHz)
Wiegand and OSDP outputs



RX390B

13.56MHz
LEGIC Connect® BLE (2.4GHz)
Wiegand and OSDP outputs



RX3K90B

13.56MHz
LEGIC Connect® BLE (2.4GHz)
Wiegand and OSDP outputs



RX490B






13.56MHz
LEGIC Connect® BLE (2.4GHz)
Wiegand and OSDP outputs



Please turn over for fixing guide and wiring connections

The illustrations and notes below are provided as a general guidance for mounting, fixing and connecting the RX series of RFID readers.

Always consult your installer and the manufacturer's details of your door controller when configuring your access security system.

1	2	3	4	5	6																														
<p>OUT-OF-THE-BOX ... pull bottom edge of reader module away from the backplate, and lift up.</p> 	<p>Mount the reader backplate to a flat surface using suitable hardware having a diameter no greater than 4mm (0.15inch).</p>  <p>NOTE: Ensure you orientate the backplate correctly.</p>	<p>Make terminal block connections in accordance with the pin-out wiring diagram shown below.</p> <p>To avoid damaging the screw heads, use a 2.5mm flat head screwdriver only.</p> <table border="1"> <tr> <td>1</td> <td>• 0V</td> <td>Supply voltage ground</td> </tr> <tr> <td>2</td> <td>• +Vdc</td> <td>Supply voltage (+5Vdc to +16Vdc)</td> </tr> <tr> <td>3</td> <td>• DATA1/CLK</td> <td>Wiegand or Clock & Data output</td> </tr> <tr> <td>4</td> <td>• DATA0/DAT</td> <td>Wiegand or Clock & Data output</td> </tr> <tr> <td>5</td> <td>• GREEN</td> <td>Green LED control input</td> </tr> <tr> <td>6</td> <td>• RED</td> <td>Red LED control input</td> </tr> <tr> <td>7</td> <td>• BUZZER</td> <td>Buzzer control input</td> </tr> <tr> <td>8</td> <td>• TMPR/CP</td> <td>Tamper or Card Present output</td> </tr> <tr> <td>9</td> <td>• RS485 -</td> <td>RS485 Bus</td> </tr> <tr> <td>10</td> <td>• RS485 +</td> <td>RS485 Bus</td> </tr> </table>	1	• 0V	Supply voltage ground	2	• +Vdc	Supply voltage (+5Vdc to +16Vdc)	3	• DATA1/CLK	Wiegand or Clock & Data output	4	• DATA0/DAT	Wiegand or Clock & Data output	5	• GREEN	Green LED control input	6	• RED	Red LED control input	7	• BUZZER	Buzzer control input	8	• TMPR/CP	Tamper or Card Present output	9	• RS485 -	RS485 Bus	10	• RS485 +	RS485 Bus	<p>Position the reader module, ensuring the top-edge fixing lugs engage correctly with the recesses located at the top of the backplate.</p> 	<p>Swing the bottom edge of the module down and forward until you feel the unit click shut.</p> 	<p>Secure the reader module to the backplate using the M3x10mm screw supplied.</p>  <p>If required, you may use an M3x10mm security screw (not supplied).</p>
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FC
UT-J-PRX60BLE
IC: 21820-PRX60BLE

These devices comply 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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

This device complies with Industry Canada's licence-exempt RSSs.

Operation is subject to the following two conditions:

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

RoHS
compliant

Together with information provided by suppliers and subcontractors, these devices comply with the requirements and relevant provisions of:

EU Directive 2011/65/EC.

CE

These RFID proximity readers comply with the essential requirements and relevant provisions of:

EU Directive 2014/53/EC



This symbol on the product or on its packaging indicates that the product must not be disposed of with normal household waste. Instead, it is your responsibility to dispose of your waste equipment by arranging to return it to a designated collection point for the recycling of waste electrical and electronic equipment. By separating and recycling your waste equipment at the time of disposal you will help to conserve natural resources and ensure that the equipment is recycled in a manner that protects human health and the environment.

EU Directive 2012/19/EU

SECURITY
UL
LISTED
TYPE S
BP20790

This Installation Guide is available as a download
please scan the QR code.



RX
SERIES