

# RDR-4, RDR-4B, RDM-4

External Proximity Readers



## Installation Instructions

### 1. INTRODUCTION

The RDM-4 (mullion type), RDR-4 and RDR-4B are external proximity readers, compatible with the AXS-100 access control system.

The system is designed to limit access to restricted areas, while permitting authorized people to enter.

It is recommended to install the readers on a wall outside the protected area, and the AXS-100 control unit inside the protected area.

Proximity access cards or tags are used as keys to open doors. When presented to an RDR-4, RDR-4B or RDM-4, the access card emits a coded RF signal that is read by the proximity reader. The reader then forwards this signal to the AXS-100 control unit.

The control unit verifies that the card is valid and decides whether it should energize an output relay that releases the lock. All activity involving the proximity readers is recorded and logged by the AXS-100.

For information about the AXS-100 system, refer to the AXS-100 user's guide and installation instructions.

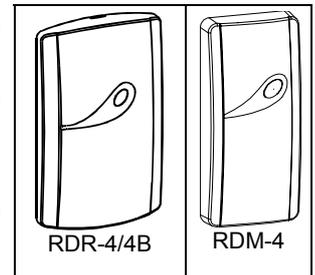


Figure 1. External View

### 2. SPECIFICATIONS

**Tag reading range:**

**RDM-4:** 40 - 80 mm (1 - 3 in.)

**RDR-4, RDR-4B:** 50 - 100 mm (2 - 4 in.)

**Frequency:** 125 kHz

**Indicators:** Tri-color LED (green, red, amber)

**External Buzzer current (RDR-4B only):** 50mA max

**Operating temperature:** -20°C to 50°C (-4°F to 122°F)

**Dimensions (L x W x D):**

**RDR-4, RDR-4B:** 116 x 70 x 16.8 mm (4 - 1/2 x 2 - 3/8 x 5/8 in.)

**RDM-4:** 94 x 43 x 16 mm (3.7 x 1.7 x 0.6 in.)

**Cable (to AXS-100 control unit) maximum length:** 100 m (320 ft)

**Minimum distance between readers:** 60 cm (2 ft.)

**Environmental Protection (Solids, Liquids, Impact):** IP677

**Weight:**

**RDR-4, RDR-4B:** 121.5 g (4.3 oz)

**RDM-4:** 90 g (3.17 oz)

**Color:** Dark gray (option white)

### 3. MOUNTING

Mount the proximity reader outside the door on the wall or door frame. The RDR-4, RDR-4B and RDM-4 come with a 1m (3 ft) cable.

**To mount the proximity reader:**

- A. Insert a screwdriver into the recess at the bottom of the case, and separate the cover from the reader.
- B. Place the base on the installation surface, mark two screw holes, drill the holes, and insert plastic anchors, if necessary.
- C. Fasten the base to the mounting surface, using two screws.
- D. Replace the reader's cover, ensuring that the cover is aligned with the reader. This enables the LED to be visible, (see Figures 2 and 3).

**Note:** When installing more than one RDR-4, RDR-4B or RDM-4, the distance between the readers should be at least 60 cm (2 ft.), to ensure proper operation.

**Note:** Do not install the RDR-4, RDR-4B or RDM-4 on a metal surface or a metal door frame, since this decreases the read range significantly. If you have to install the reader on a metal surface, use a spacer so that the reader will be at least 1 cm (3/8 in.) away from the metal. You may use the RDR/RDM-BACK which is an optionally available spacer made specifically for this purpose.

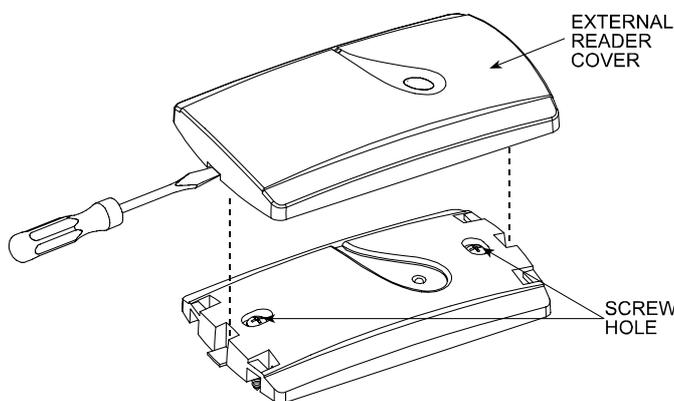


Figure 2. RDR-4, RDR-4B Mounting

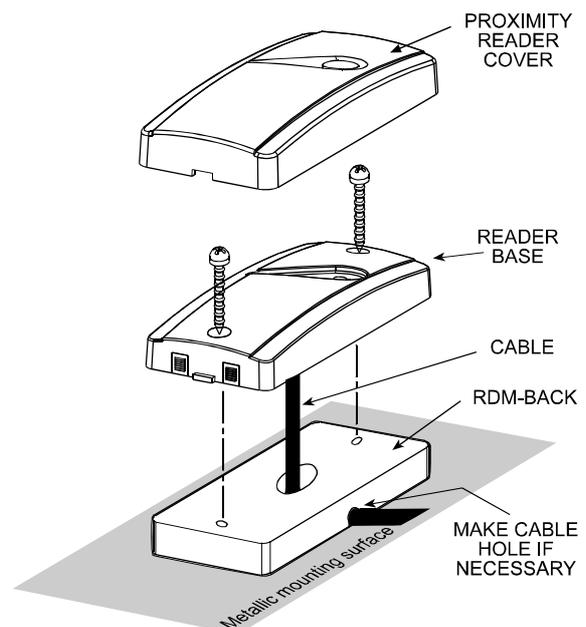


Figure 3. RDM-4 Mounting

## 4. WIRING

The standard cable is color-coded. Use a cable with the same colors to avoid mistakes in connection. Connect each proximity reader to the reader sections on the AXS-100 connector blocks.

### 4.1 Wiring the RDR-4

Each RDR-4 proximity reader is connected to the control unit via a four-wire cable. See Figure 4 for color-coding.

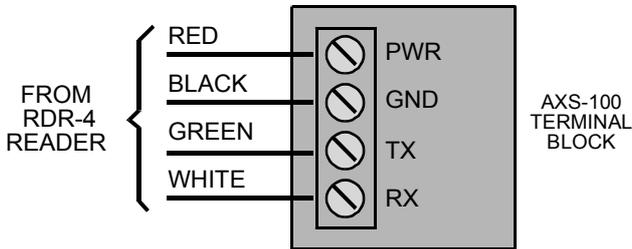


Figure 4. RDR 4 Color-Coding

### 4.2 Wiring the RDR-4B

The RDR-4B in conjunction with the AXS-100, facilitates a door ajar annunciation next to each door. The RDR-4B connects to the AXS-100 controller using the same four color wire as the RDR-4. The two extra wires (brown and blue) should be connected to a local 12V / 50mA buzzer as follows:

- Brown wire to buzzer +
- Blue wire to buzzer -

The output current is limited to 50mA. See Figure 5 for color coding.

For activating the output of RDR-4B refer to the AXS-100 User Guide section 5.2.3.

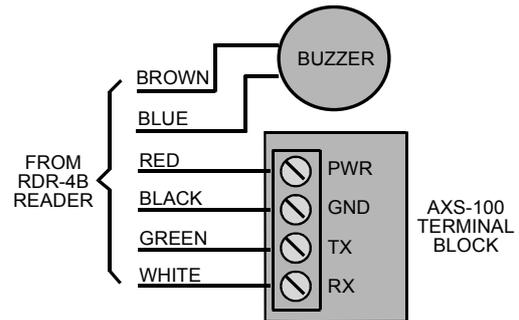


Figure 5. RDR-4B Color-Coding

### 4.3 Wiring the RDM-4

Each RDM-4 proximity reader is connected to the control unit via a four-wire cable. See Figure 6 for color-coding.

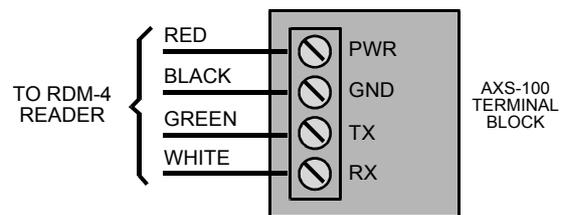


Figure 6. RDM-4 Color-Coding

This device complies with the essential requirements and provisions of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio and telecommunications terminal equipment.

## WARRANTY

Visonic Technologies Ltd. and/or its subsidiaries and its affiliates ("the Manufacturer") warrants its products hereinafter referred to as "the Product" or "Products" to be in conformance with its own plans and specifications and to be free of defects in materials and workmanship under normal use and service for a period of twelve months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period, at its option, to repair or replace the product or any part thereof. The Manufacturer shall not be responsible for dismantling and/or reinstallation charges. To exercise the warranty the product must be returned to the Manufacturer freight prepaid and insured.

**This warranty does not apply in the following cases:** improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the Manufacturer.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products.

The Manufacturer does not represent that its Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. User understands that a properly installed and maintained alarm may only reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result.

**The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function.** However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the Manufacturer's maximum liability shall not in any case exceed the purchase price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

**Warning:** The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his /her safety and the protection of his/her property.

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