

1. General Description

The AY-Q12 Prox Reader is a weather-resistant and vandal-resistant RFID proximity card reader, to be installed for use with access control systems.



2. Technical Specifications

2.1. Electrical Characteristics

Power supply: Linear type recommended

Operating Voltage Range: 5-16 VDC

Tamper Output: Open collector, active low, max. sink current is 16 mA

RF modulation: ASK

Output modulation: 26-bit Wiegand

Maximum Input Current Standby - 35 mA; Read - 100 mA

Regulatory Approvals: USA UL294 & FCC Part 15B; Europe CE Listed

2.2. Environmental Characteristics

Operating Temperature: -31°C to +63°C (-25°F to +145°F)

Operating Humidity: 0% to 95% non-condensing

Usage: Indoor and outdoor use

Card read distance: 55 mm (2"); measured using Rosslare Proximity Card (P/N AT-11/14) or equivalent. Range also depends on electrical environment and/or proximity to metal.

2.3. Physical Characteristics

Dimensions: 120 mm (L) x 76 mm (W) x 27 mm (D) (4.72" x 3" x 1")

Maximum cable distance to Controller: 150 meters (500 ft.)

3. Installation Instructions

The guide contains instructions for:

- Mounting the Reader
- Wiring the Reader to the Controller
- Testing the Reader

3.1. Mounting the Reader

- 1) Determine an appropriate mounting position for the Reader.
- 2) Peel off the back of the self-stick mounting label template included with the unit, and place at the desired mounting position.
- 3) Using the template as a guide, drill two holes (hole size is indicated on the mounting template) for mounting the Reader to the surface. Drill a 10 mm (7/16") hole for the cable. If mounting on metal, place a grommet around the edge of the hole.
- 4) Remove the case screw, and slide the rear case away from the front case (see **Figure 1**).
- 5) Drill holes into the back of the rear metal case according to how you want to mount the Reader (see **Figure 1**).
- 6) Attach the Reader to the Controller.
- 7) Screw the Reader rear case to its mounting location, and return the front case onto the mounted rear case.
- 8) Secure the front cover by using the supplied security screw in the controller accessories kit. Use the provided L-shaped tool to tighten the screw.

Note: Use card readers with a Listed access control unit whose power supply is UL Listed Class 2 or equivalent.

US Gang Box

There are two hole indicators on the back of the metal cover specifically for the US Gang Box. (Shown marked as A)

4 Screw Custom

There are four indicators on the back. (Shown marked as B)

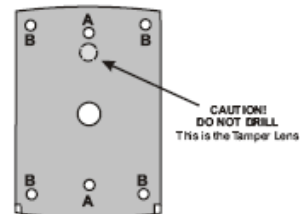


Figure 1: US Gang Box

3.2. Wiring the Reader to the Controller

The Prox Reader is supplied with an 18-inch pigtail, having a 6-conductor cable.

- 1) Prepare the Reader cable by cutting the cable jacket back 11/4 inches, and strip the wires 1/2 inch.
- 2) Prepare the Controller cable by cutting the cable jacket back 11/4 inches, and strip the wires 1/2 inch.
- 3) Splice the Reader pigtail wires to the corresponding Controller wires and cover each connection (see **Figure 2**).
- 4) If the tamper output is being utilized, connect the purple wire to the correct input on the Controller.
- 5) Trim and cover all conductors that are not used.

COLOR	WIEGAND OUTPUT
Red	DC+Input
Black	Ground
White	Data 1
Green	Data 0
Brown	LED Control
Purple	Tamper

Figure 2: Wiring Reader to Controller

Cable Notes

- The individual wires coming out of the Reader are color-coded according to the recommended Wiegand standard.
- When using a separate power supply for the Reader, this supply and the Controller power supply must have a common ground.
- The cable shield wire on the Reader should be attached to an Earth ground (best) or signal ground connection at the panel or power supply end of the cable. This configuration is best for

shielding the Reader cable from external interference.

3.3. Testing the Reader

The Reader should be tested after wiring it to a power supply and to the Controller.

- 1) Power up the Reader.

The LED and beeper activate three times, an indication that the Reader is working properly.

- 2) Present the appropriate type of proximity card to the Reader.

The LED momentarily flashes green and a short beep is emitted. This indicates that the Prox Reader read the card properly.

- 3) After the Controller processes the card data, the Controller turns the LED green. Refer to the Controller description of the LED operation if the Reader LED is controlled by the Controller.

4. Limited Warranty

ROSSLARE ENTERPRISES LIMITED S (Rosslare) FIVE YEAR LIMITED WARRANTY is applicable worldwide. This warranty supersedes any other warranty. Rosslare's FIVE YEAR LIMITED WARRANTY is subject to the following conditions:

Warranty

Warranty of Rosslare's products extends to the original purchaser (Customer) of the Rosslare product and is not transferable.

Products Covered By This Warranty and Duration

ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARIES (ROSSLARE) warrants that the Ay-Q12 Prox Reader is free from defects in materials and assembly in the course of normal use and service. The warranty period commences with the date of shipment to the original purchaser and extends for a period of 5 years (60 months).

Warranty Remedy Coverage

In the event of a breach of warranty, ROSSLARE will credit Customer with the price of the Product paid by Customer, provided that the warranty claim is delivered to ROSSLARE by the Customer during the warranty period in accordance with the terms of this warranty. Unless otherwise requested by ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARIES representative, return of the failed product(s) is not immediately required.

If ROSSLARE has not contacted the Customer within a sixty (60) day holding period following the delivery of the warranty claim, Customer will not be required to return the failed product(s). All returned Product(s), as may be requested at ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARY'S sole discretion, shall become the property of ROSSLARE ENTERPRISES LTD. AND / OR SUBSIDIARIES.

To exercise the warranty, the user must contact Rosslare Enterprises Ltd. to obtain an RMA number after which, the product must be returned to the Manufacturer freight prepaid and insured.

In the event ROSSLARE chooses to perform a product evaluation within the sixty (60) day holding period and no defect is found, a minimum US\$ 50.00 or equivalent charge will be applied to each Product for labor required in the evaluation.

Rosslare will repair or replace, at its discretion, any product that under normal conditions of use and service proves to be defective in material or workmanship. No charge will be applied for labor or parts with respect to defects covered by this warranty, provided that the work is done by Rosslare or a Rosslare authorized service center.

Exclusions and Limitations

ROSSLARE shall not be responsible or liable for any damage or loss resulting from the operation or performance of any Product or any systems in which a

Product is incorporated. This warranty shall not extend to any ancillary equipment not furnished by ROSSLARE, which is attached to or used in conjunction with a Product, nor to any Product that is used with any ancillary equipment, which is not furnished by ROSSLARE.

This warranty does not cover expenses incurred in the transportation, freight cost to the repair center, removal or reinstallation of the product, whether or not proven defective.

Specifically excluded from this warranty are any failures resulting from Customer's improper testing, operation, installation, or damage resulting from use of the Product in other than its normal and customary manner, or any maintenance, modification, alteration, or adjustment or any type of abuse, neglect, accident, misuse, improper operation, normal wear, defects or damage due to lightning or other electrical discharge. This warranty does not cover repair or replacement where normal use has exhausted the life of a part or instrument, or any modification, abuse of, or tampering with the Product, if Product disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection and testing to verify any warranty claim.

ROSSLARE does not warrant the installation, maintenance, or service of the Product. Service life of the product is dependent upon the care it receives and the conditions under which it has to operate.

In no event shall Rosslare be liable for incidental or consequential damages.

Limited Warranty Terms

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THIS WARRANTY SHALL BECOME NULL AND VOID IN THE EVENT OF A VIOLATION OF THE PROVISIONS OF THIS LIMITED WARRANTY.

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