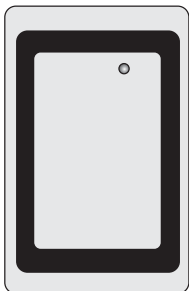# Rosslare

Installation Instructions

Model Series AY-Q12

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

These Installation Instructions contain the following information:

* Mounting Instructions
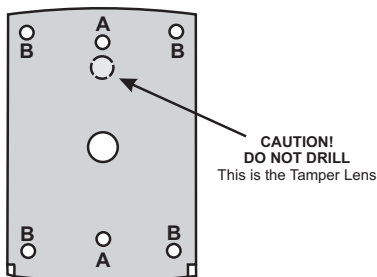* Wiring Instructions
* Operation Instructions

MOUNTING INSTRUCTION

To mount the Reader, perform the following:

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 mounting template) for mounting the Reader to the surface. Drill a 7/16" (10mm) 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 diagram below)
5. Drill holes into the back of the rear metal case according to how you want to mount the reader. (See Diagram below)
6. Attach the reader to the controller.
7. Screw the readers 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 controllers accessories kit. An L-Shaped tool is provided for use when tightening the security screw.

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)

CAUTION!
DO NOT DRILL
This is the Tamper Lens

Card Readers are to be used with control panels whose power supply is UL Listed Class 2 or equivalent.

WIRING INSTRUCTION

The Prox Reader is supplied with an 18-inch pigtail, having a 6-conductor cable. To connect the Reader to the Controller, perform the following steps:

1. Prepare the Reader cable by cutting the cable jacket back $1^{1}/4$ inches and strip the wires $1/2$ inch.
2. Prepare the Controller cable by cutting the cable jacket back $1^{1}/4$ 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.

Figure 2 below shows how you should wire the Reader to the Controller.

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

Figure 2

Cable Notes:
1. The individual wires coming out of the reader are color coded according to the recommended Wiegand standard.
2. When using a separate power supply for the Reader, this supply and the Controller's power supply must have a common ground.
3. 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.

OPERATION INSTRUCTION

The Reader should be tested after wiring it to a power supply and the Controller. Do this by performing the following steps:

1. Power up the Reader. The LED and Beeper will activate three times. This indicates that the Reader is working properly.

2. Present the appropriate type of proximity card to the Reader. The LED will momentarily flash green and a short beep will be emitted. This indicates that the card was read properly by the Prox Reader..

3. After the card data is processed by the Controller, the Controller can then turn the LED green. Refer to the Controller description of the LED operation if the Reader LED is controlled by the Controller.

SPECIFICATIONS

Power Supply Type	Linear type recommended
Operating Voltage Range	5 - 16 VDC
Maximum Input Current	Standby : 35 mA Read : 100 mA
Tamper Output	Open collector, active low, max. sink current is 16 mA
Maximum Cable Distance to Controller	150 meters (500 ft.)
RF Modulation	ASK
Output Modulation	26-Bit Wiegand
*Card Read Distance:	2" (55mm)
Regulatory Approvals:	USA : UL 294 & FCC Part 15B
	Europe : CE Listed
Operating Temp. Range:	-31ºC to 63ºC (-25ºF to 145ºF)
Operating Humidity:	0 to 95% (non condensing)
Dimensions:	4.72" (120mm) L x 3" (76mm) W x 1" (27mm) D

* Measured using Rosslare Proximity Card (P/N AT-11/14) or equivalent. Range also depends on electrical environment and/or proximity to metal.

Suitable for outdoor use   UL File Number: BP9264