

Installation Instructions

Model Series AY-H14/J14/K14/L14/M14

The AY-X14 Series Prox Readers are RFID proximity card reader to be installed for use with access control systems.



AY-H14 AY-J14 AY-K14 AY-L14 AY-M14

These Installation Instructions contain the following information:

- * Mounting Instructions
- * Wiring Instructions
- * Operation Instructions

MOUNTING INSTRUCTION

Figure 1 shows the front view of the Prox Readers. When mounting, the snap-off cover must be removed to access the screw holes.



SNAP ON/OFF TOP COVER:
Remove to reveal screw holes for mounting.

Figure 1

Mount the Reader with the appropriate screws (not supplied) as indicated on the template

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.
4. Drill a 7/16" (10mm) hole for the cable. If mounting on metal, place a grommet or electrical tape around the edge of the hole.
5. Route the interface cable from the Reader to the Controller. A linear type power supply is recommended.

NOTE: The Prox Reader can also be mounted using strong epoxy glue. After application, the Reader should be firmly held in place until the glue dries.

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.

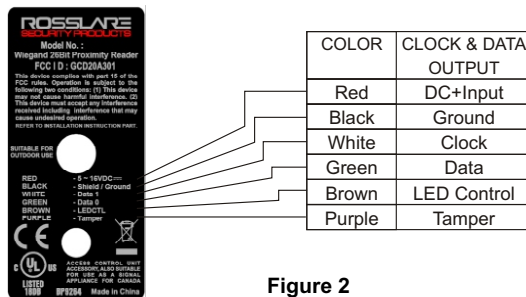


Figure 2

Cable Notes:

1. The individual wires coming out of the reader are color coded according to the recommended Clock/Data 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 one time. 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 Readers.

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.

Model Number	Output Format	Read Range (Max.) *
AY-H14	Clock/Data	12 cm
AY-J14	Clock/Data	10 cm
AY-K14	Clock/Data	8 cm
AY-L14	Clock/Data	12 cm
AY-M14	Clock/Data	10 cm

Table 1

* Measured using RossLare Proximity Card (P/N AT-R11, AT-T11) or equivalent. Range also depends on electrical environment and/or proximity to metal.

SPECIFICATIONS

Electrical Characteristics:		
Power Supply Type	Linear type recommended	
Operating Voltage Range	5 - 16 VDC	
Maximum Input Current	AY-K14	Standby : 35 mA
	AY-J14	Read : 50 mA
Maximum Input Current	AY-H14	Standby : 35 mA
	AY-L14	Read : 100 mA
	AY-M14	Read : 100 mA
Tamper Output	Open collector, active low,	
Maximum Cable Distance to Controller	max. sink current is 16 mA 150 meters (500 ft.)	
RF Modulation	ASK	
Card Read Distance:	See Table 1	
Regulatory Approvals:	USA : UL 294 & FCC Part 15B	
	Europe : CE Listed	
Operating Temp. Range:	-31°C to 63°C (25°F to 145°F)	
Operating Humidity:	0 to 95% (non condensing)	
Dimensions (mm):		
AY-H14	109.91 x 74.91 x 15.00	
AY-J14	119.95 x 41.95 x 14.00	
AY-K14	79.91 x 39.91 x 12.80	
AY-L14	144.91 x 42.91 x 20.00	
AY-M14	88.91 x 88.91 x 15.00	

Suitable for outdoor use

