



IMPROX RA

ImproX (RA) 125 kHz Rod Antenna Reader INSTALLATION MANUAL

SPECIFICATIONS

Working Environment	Designed to work in harsh (industrial) indoor or outdoor environments similar to IP66. The ImproX RA is, therefore, sealed (potted) against water.
Buzzer	
Volume and Tone	Single tone, 4-step adjustable volume.
Status Indicators	
Status LED	Bi-coloured Red or Green.

INSTALLATION INFORMATION

Accessories

Find the following when unpacking the Antenna Reader:

- An ImproX RA Antenna Reader housed in PVC sheathing. The ImproX RA includes 8 m (26 ft) of 4-core cable.
- A Piezo-electric, External Drive Buzzer.
- A Bi-colour Red or Green, White Diffused Lens, Hi-bright, 5 mm, 2-Terminal LED.
- An extra Serial Number Label.

General

Remember the following when installing the Antenna Reader:

Maximum Data Communications Distance

The ideal cable distance between the Terminal, Controller or Receiver and its Antenna Reader ranges between 2 m to 16 m (7 ft to 53 ft). Achieve this by using a good quality shielded multi-strand 1-pair twisted cable. The cross-sectional area of the cable must not be less than 0.2 mm^2 (0.0003 in²).

Cable Specifications

The cable specifications should be similar to the following:

Conductor Resistance:	< 2 ohms.
Capacitance, Core to Earth:	< 160 pF/m.
Capacitance, Core to Core:	< 100 pF/m.

Distance between Antenna Readers from the SAME Terminal, Controller or Receiver

To avoid mutual interference, install the Antenna Readers no closer than 150 mm (6 in) apart.

Distance between Antenna Readers from DIFFERENT Terminals, Controllers or Receivers

To avoid mutual interference, install the Antenna Readers no closer than 500 mm (20 in) apart.

Mounting the ImproX RA

CAUTION: Make certain that you mount the Antenna Reader on a vibration-free surface.

Select the mounting position of the ImproX RA, considering accessibility, routing of wires and visibility of the externally visible LED.

Secure the ImproX RA in the mounting surface, using a suitable filling agent.

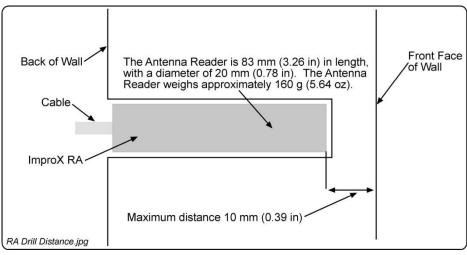


Figure 1: Mounting the ImproX RA

Blank Space

access control • w w w , i m p r o , n e t • access control

Connecting the ImproX RA

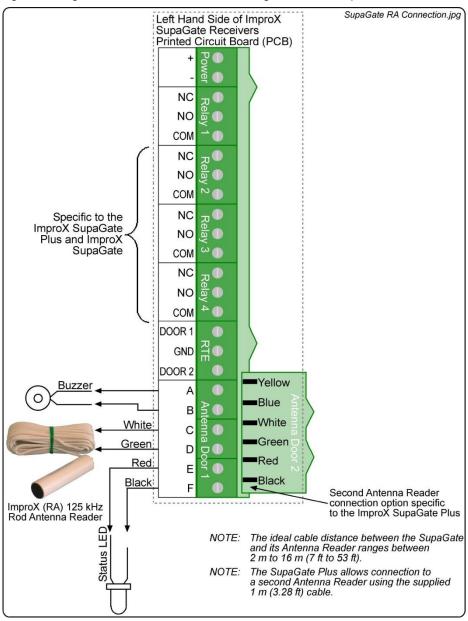


Figure 2 to Figure 5 show detailed connection diagrams for the ImproX RA.



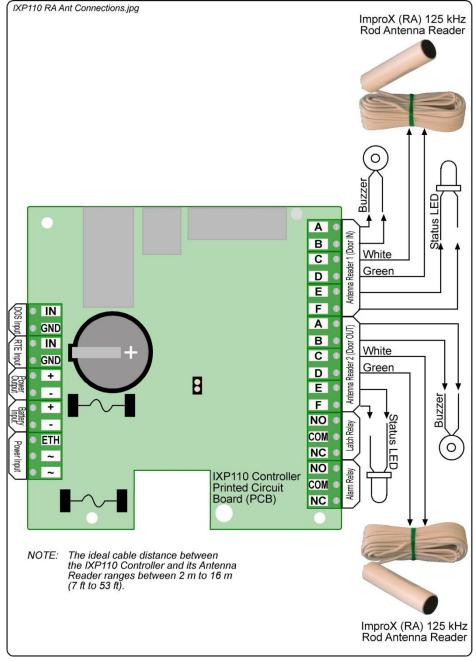


Figure 3: ImproX RA Connected to the IXP110 Controller

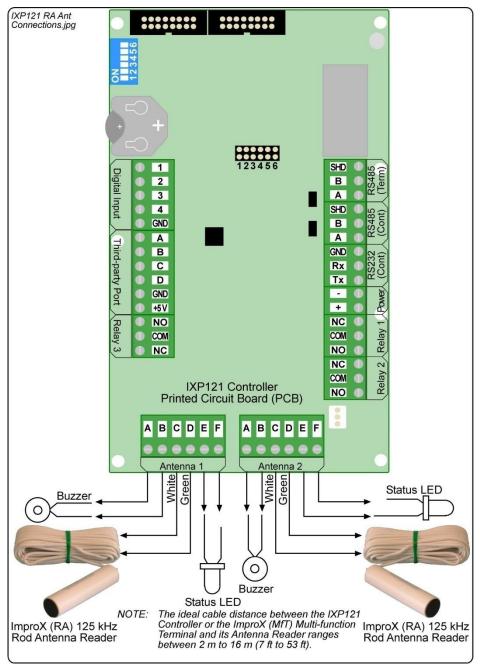


Figure 4: ImproX RA Connected to the IXP121 Controller and ImproX MfT

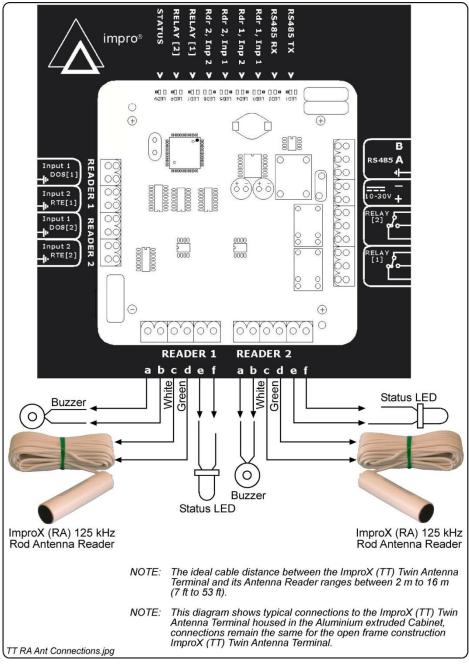


Figure 5: ImproX RA Connected to the ImproX TT

NOTE: On powering up, the Antenna Reader's Status LED will illuminate solid Red. The Antenna Reader will not read Tags until configured in the Software.

Serial Number Label

- 1. Once the Antenna Reader is installed, sketch a rough site plan.
- 2. Attach the Antenna Reader's loose Serial Number Label and the Controller, Terminal or Receiver's Fixed Address Label, to the sketched site plan in the position of the Antenna Reader.

The Antenna Reader does not have its own Fixed Address. When connected to a Controller, Terminal or Receiver the Antenna Reader is assigned one of the available Fixed Addresses.

The Serial Number Label identifies the type of Antenna Reader, and the Fixed Address Label (shipped with the Controller, Terminal or Receiver) identifies the Fixed Addresses. Both these labels should be attached to the site plan to assist in identifying the hardware once an Auto-ID is performed.

GUARANTEE OR WARRANTY

This product conforms to our Guarantee or Warranty details placed on our Web Site, to read further please go to www.impro.net.

USER NOTES

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This manual is applicable to the ImproX (RA) 125 kHz Rod Antenna Reader, XTT906-1-0-GB-00. (The last two digits of the Impro stock code indicate the issue status of the product).				
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