IMPROX MA

ImproX (MA) 125 kHz Micro Antenna Reader
INSTALLATION MANUAL

SPECIFICATIONS

Working Environment .... Designed to work in an indoor or outdoor environment similar to IP53. The ImproX MA 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 MA Antenna Reader housed in a Dark Grey, ABS Plastic housing. The ImproX MA consists of a Front Cover and a Backing Plate (the Backing Plate is attached with a Self-tapping Screw (M2 x 6 mm)).

- Four Brass Wood Screws (3.5 mm x 25 mm).

- Four Wall Plugs (7 mm).

- 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 3-pair twisted cable. The cross-sectional area of the cable must not be less than 0.2 mm^2 (0.0003 in^2).

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 MA

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

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

Secure the ImproX MA to the mounting surface, using four suitable screws and wall plugs (supplied), nuts and bolts, rivets or double-sided adhesive tape.

Blank Space

Connecting the ImproX MA

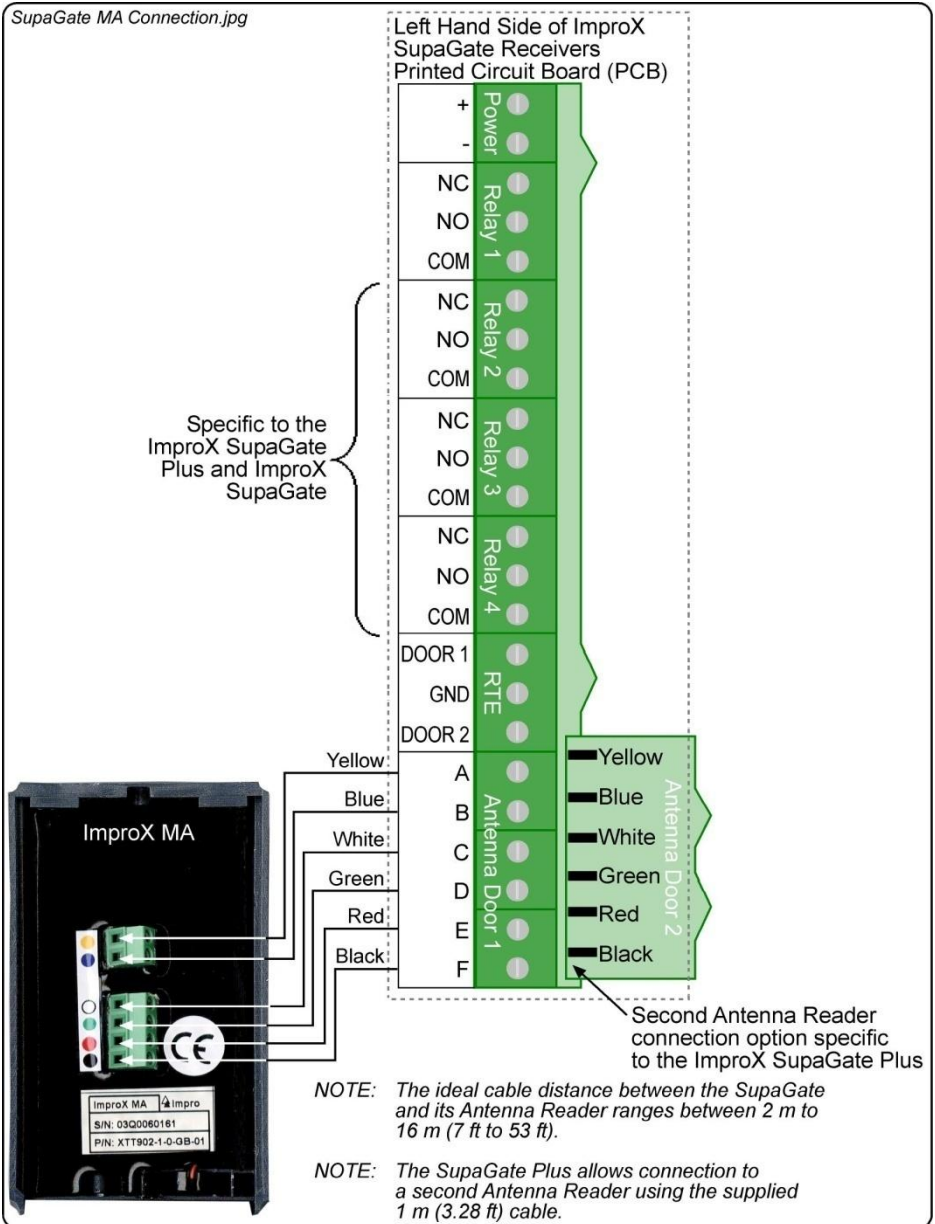Figure 1 to Figure 4 show detailed connection diagrams for the ImproX MA.

SupaGate MA Connection.jpg

Left Hand Side of ImproX
SupaGate Receivers
Printed Circuit Board (PCB)

Power: + / -

Relay 1: NC / NO / COM

Relay 2: NC / NO / COM

Relay 3: NC / NO / COM

Relay 4: NC / NO / COM

Specific to the
ImproX SupaGate
Plus and ImproX
SupaGate

RTE: DOOR 1 / GND / DOOR 2

Antenna Door 1:
Yellow — A
Blue — B
White — C
Green — D
Red — E
Black — F

Antenna Door 2:
Yellow
Blue
White
Green
Red
Black

Second Antenna Reader
connection option specific
to the ImproX SupaGate Plus

ImproX MA

ImproX MA impro
S/N: 03Q0060161
P/N: XTT902-1-0-GB-01

NOTE: The ideal cable distance between the SupaGate
         and its Antenna Reader ranges between 2 m to
         16 m (7 ft to 53 ft).

NOTE: The SupaGate Plus allows connection to
         a second Antenna Reader using the supplied
         1 m (3.28 ft) cable.

Figure 1: ImproX MA Connected to the SupaGate Receiver

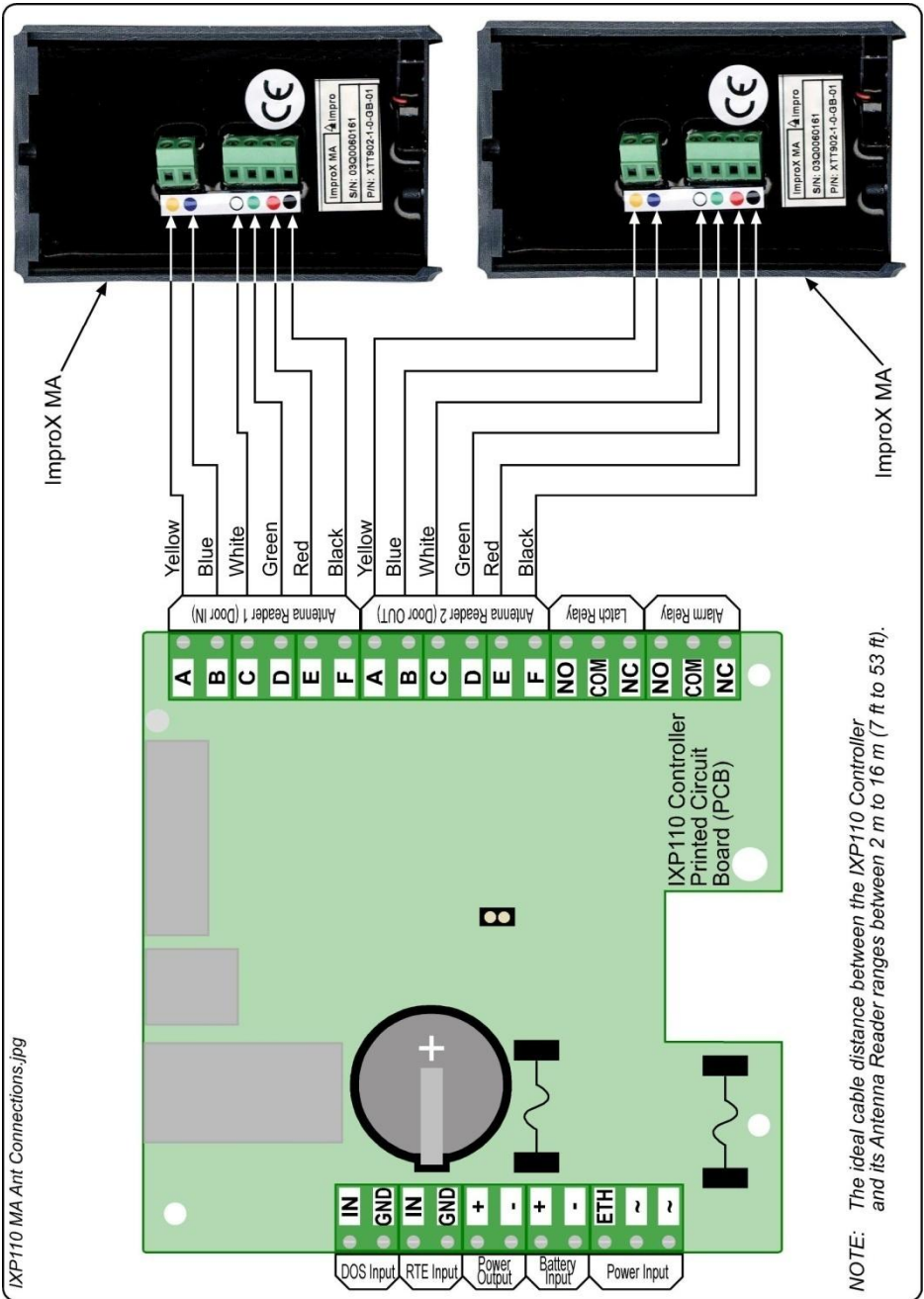**Figure 2: ImproX MA Connected to the IXP110 Controller**
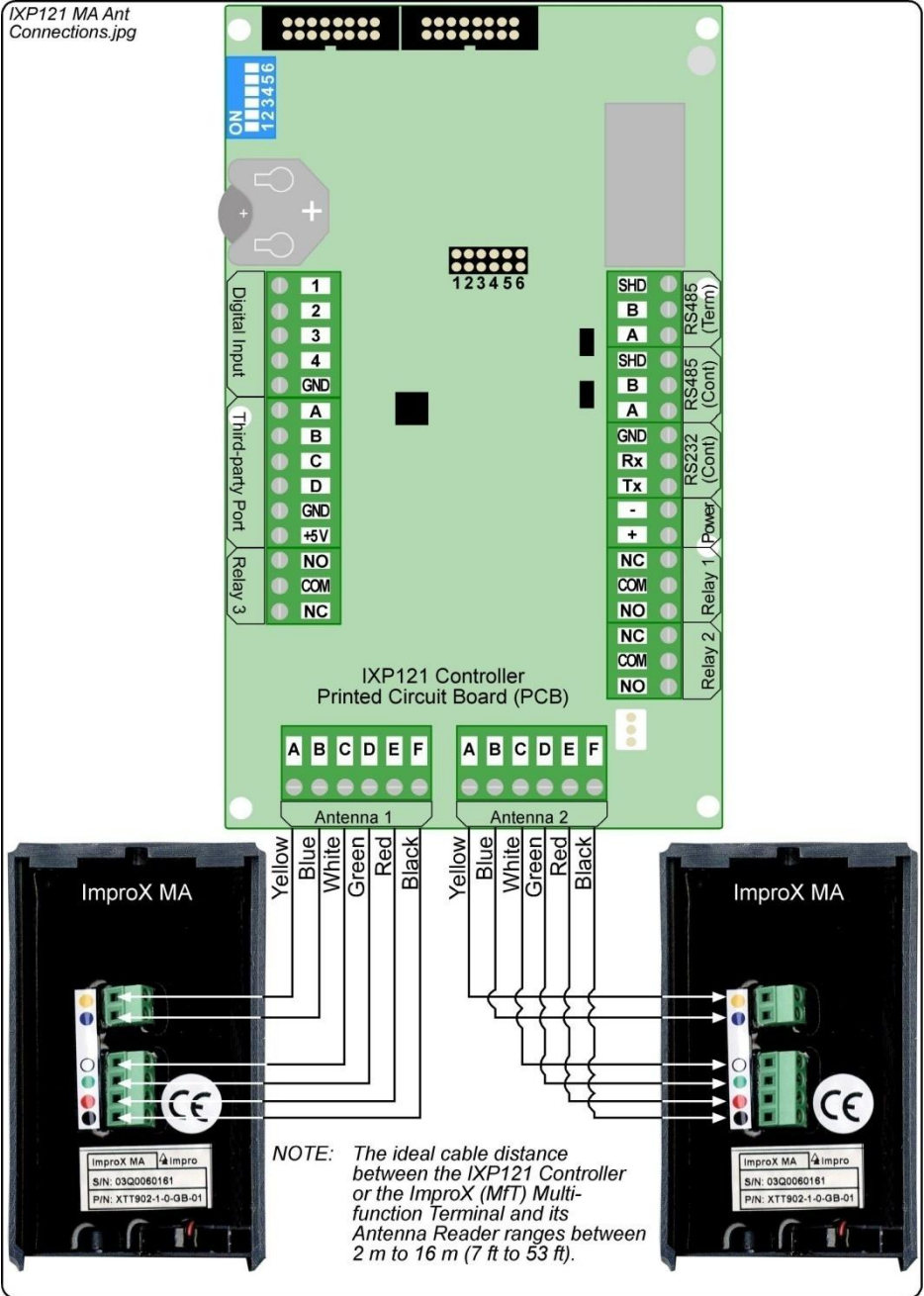
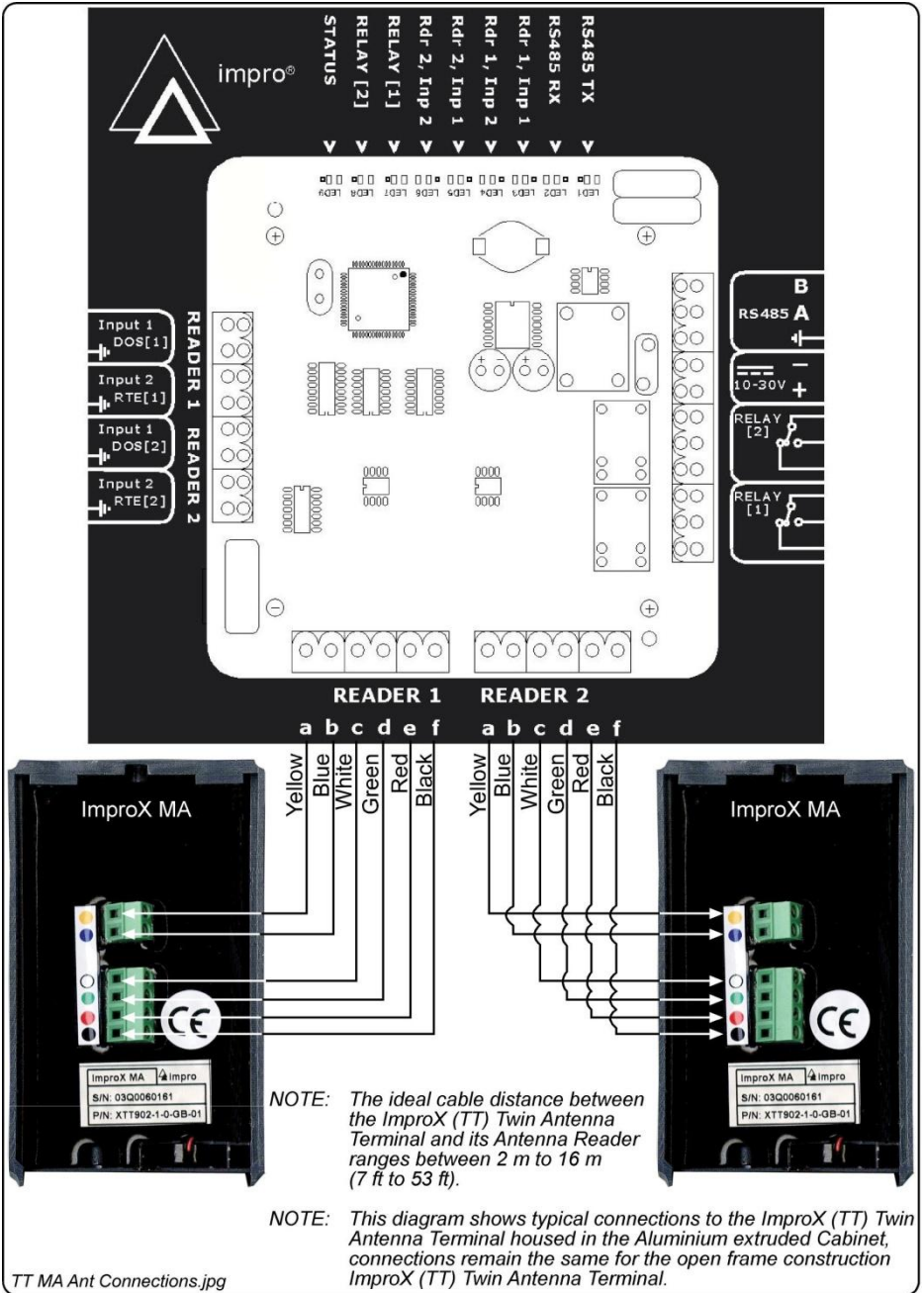**Figure 3: ImproX MA Connected to the IXP121 Controller and ImproX MfT**

NOTE: The ideal cable distance between the IXP121 Controller or the ImproX (MfT) Multi-function Terminal and its Antenna Reader ranges between 2 m to 16 m (7 ft to 53 ft).

Figure 4: ImproX MA Connected to the ImproX TT

NOTE: The ideal cable distance between the ImproX (TT) Twin Antenna Terminal and its Antenna Reader ranges between 2 m to 16 m (7 ft to 53 ft).

NOTE: This diagram shows typical connections to the ImproX (TT) Twin Antenna Terminal housed in the Aluminium extruded Cabinet, connections remain the same for the open frame construction ImproX (TT) Twin Antenna Terminal.

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 (MA) 125 kHz Micro Antenna Reader, XTT902-1-0-GB-01. (The last two digits of the Impro stock code indicate the issue status of the product).			
XTT302-0-0-GB-08	Issue 09	Jan 2008	ImproX MA\English Manuals\LATEST ISSUE \ImprXMA-insm-en-09.docx