

**MODEL NUMBER:** XTT905-1-0-GB-XX

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# IMPROX KMA

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## ImproX (KMA) 125 kHz Mullion Keypad Antenna Reader INSTALLATION MANUAL

### SPECIFICATIONS

<b>Working Environment</b> .....	Designed to work in an indoor or protected outdoor environment similar to IP42. The ImproX KMA is, therefore, not sealed against water.
<b>Buzzer</b>	
Volume and Tone.....	Single tone, 4-step adjustable volume.
<b>Keypad</b>	
Keys .....	12 Numeric keys and 1 Bell Button.
<b>Status Indicators</b>	
Status LED.....	Bi-coloured Red or Green.

### INSTALLATION INFORMATION

#### Accessories

Find the following when unpacking the Antenna Reader:

- An ImproX KMA Antenna Reader housed in a Black, ABS Plastic housing. The ImproX KMA consists of a Front Cover and a Mounting Bracket (the Mounting Bracket is attached with a Self-tapping Screw (M2 x 6 mm)).
- Two Counter-sunk Self-tapping Screws (M2 x 6 mm).
- Two Counter-sunk Self-tapping Screws (2.9 mm x 25 mm).
- Two Wall Plugs (5 mm).
- An extra Serial Number Label.

## General

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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<sup>2</sup> (0.0003 in<sup>2</sup>).

### 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 KMA

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

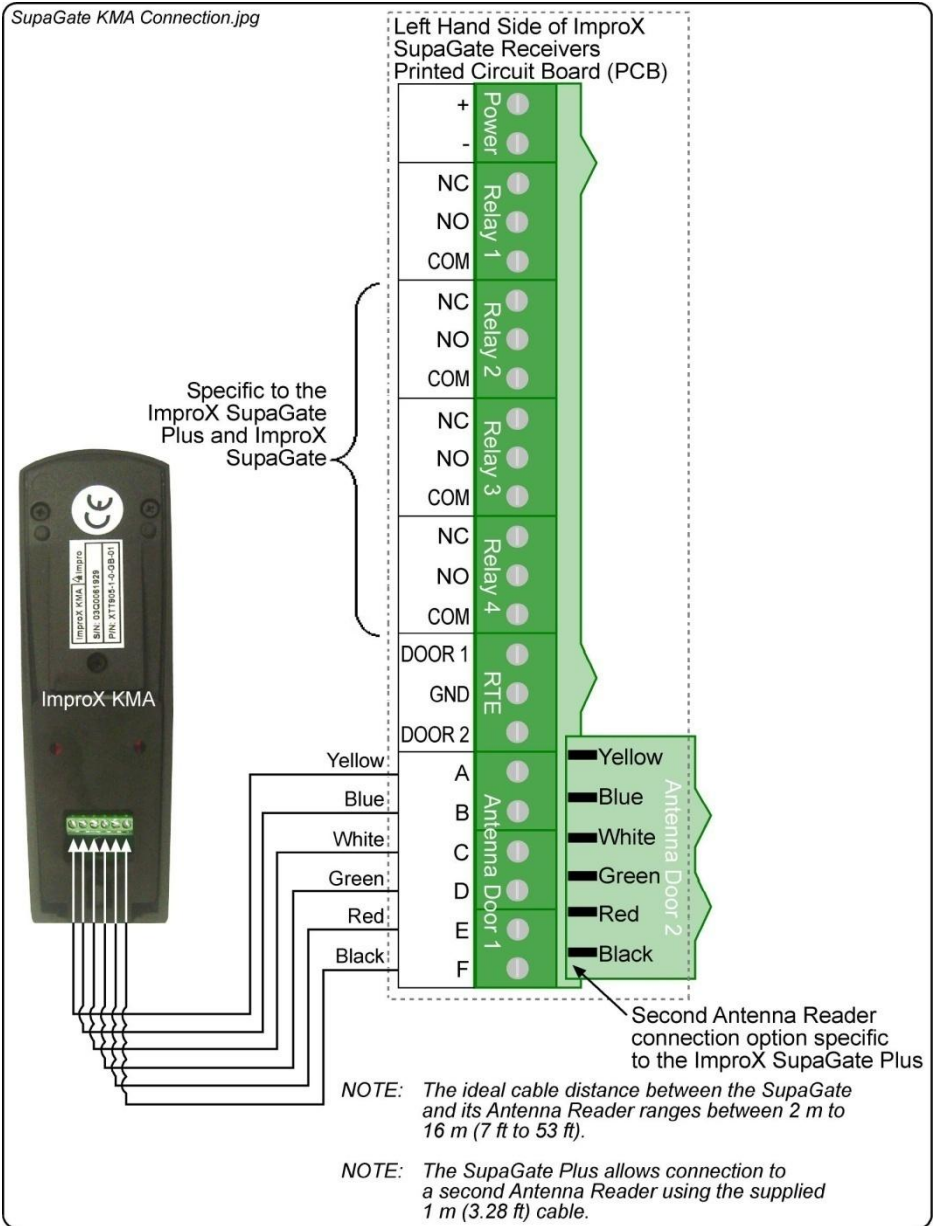
Select the mounting position of the ImproX KMA, considering accessibility, routing of wires and visibility of the externally visible LED.

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

Blank Space

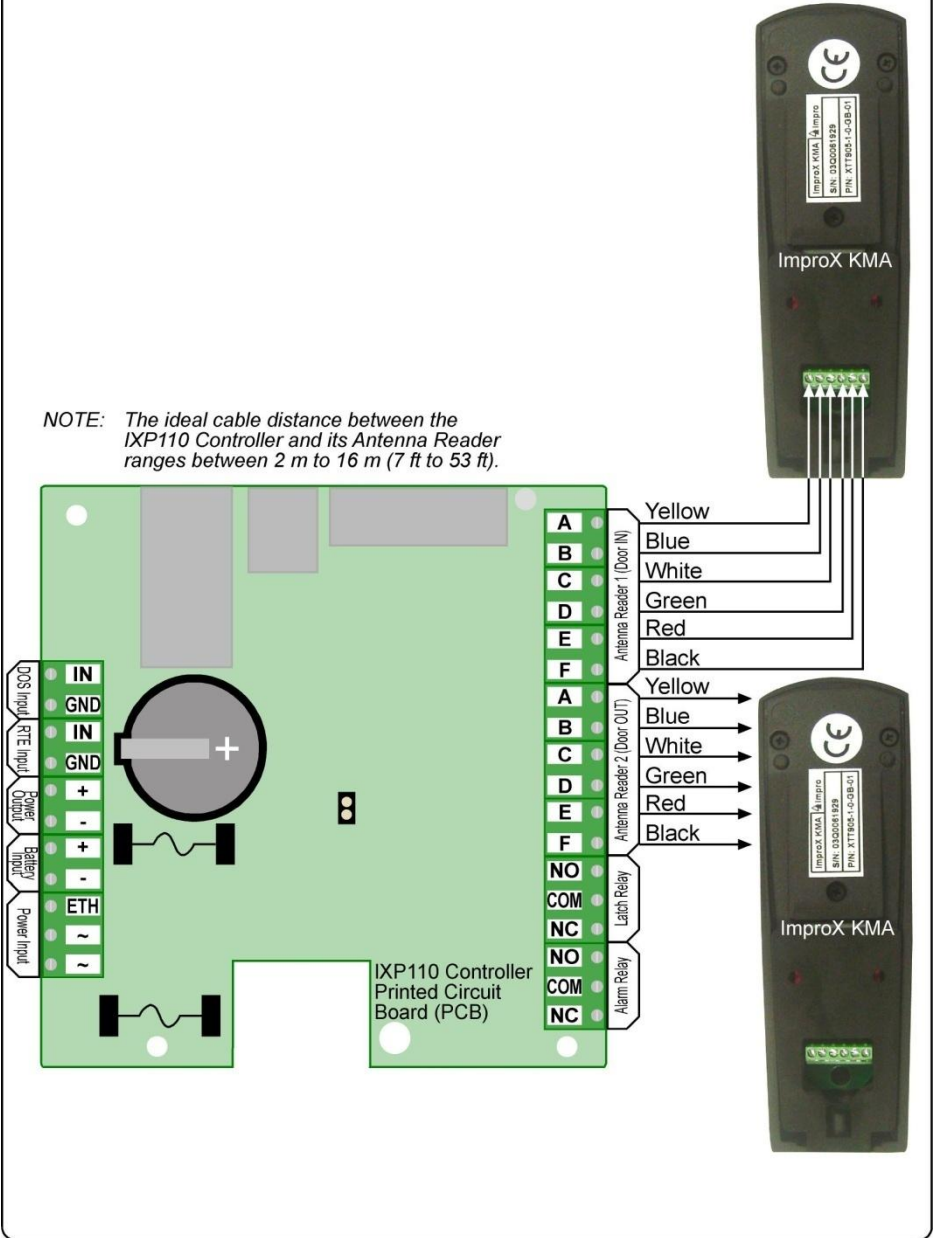
# Connecting the ImproX KMA

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

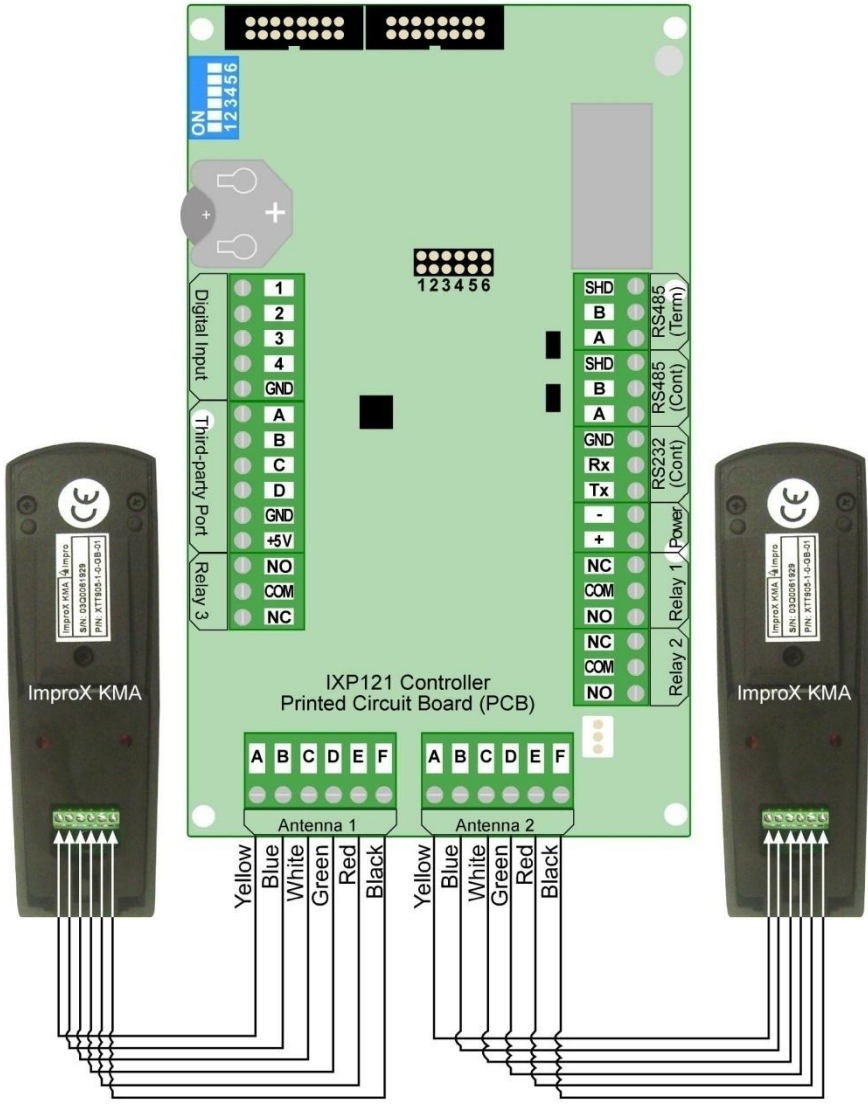


**Figure 1: ImproX KMA Connected to the SupaGate Receiver**

**NOTE:** The ideal cable distance between the IXP110 Controller and its Antenna Reader ranges between 2 m to 16 m (7 ft to 53 ft).

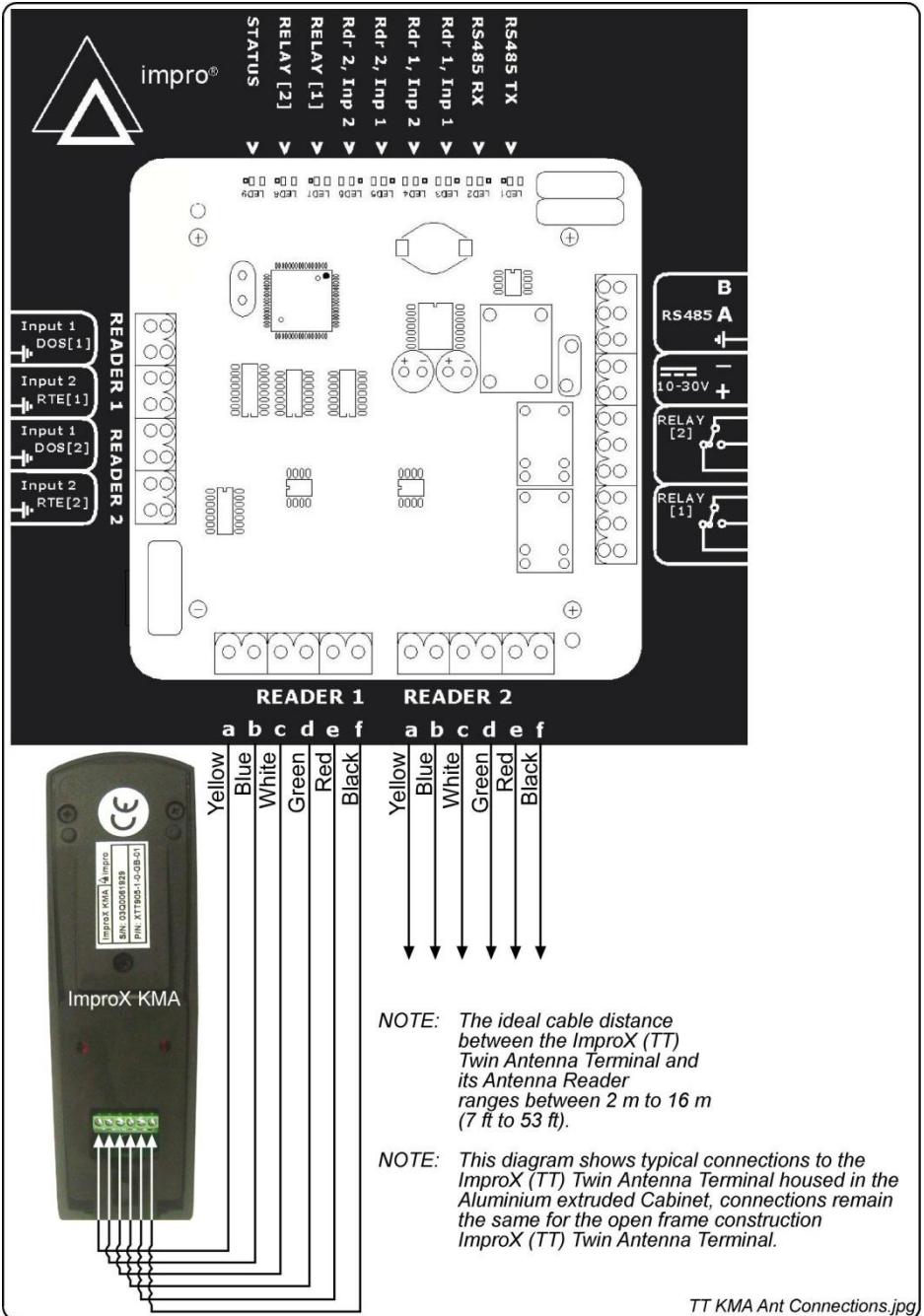


**Figure 2: ImproX KMA Connected to the IXP110 Controller**



**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 3: ImproX KMA Connected to the IXP121 Controller and ImproX Mft**



**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.

TT KMA Ant Connections.jpg

**Figure 4: ImproX KMA 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**

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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](http://www.impro.net).

### **USER NOTES**



This manual is applicable to the ImproX (KMA) 125 kHz Mullion Keypad Antenna Reader, XTT905-1-0-GB-01. (The last two digits of the Impro stock code indicate the issue status of the product).

XTT312-0-0-GB-08

Issue 09

Dec  
2007

ImproX KMA\English Manuals\LATEST ISSUE  
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