IMPROX KHR

ImproX (KHR) Harsh Environment Keypad Remote Reader INSTALLATION MANUAL

SPECIFICATIONS

Working Environment	Designed to work in an indoor or outdoor environment similar to IP53. The ImproX KHR is, therefore, sealed (potted) against water.	
Input Voltage...............................	5 V DC, polarity sensitive.	
Power Requirements	**Current (mA)**	**Power (W)**
Input Voltage 5 V DC, Indicators ON	100	0.50
Frequency	125 kHz.	
Buzzer		
Volume and Tone...................	Single tone, 4-step adjustable volume.	
Keypad		
Keys	12 Alphanumeric keys.	
Status Indicator		
Status LED.............................	Bi-coloured Red or Green (externally visible).	

INSTALLATION INFORMATION

Accessories

Find the following when unpacking the Remote Reader:

- An ImproX KHR Remote Reader housed in a Zinc alloy die-cast housing. The ImproX KHR consists of a Front Cover and a Backing Plate (the Backing Plate is attached with a Hexagonal Screw (M3 x 8 mm)).

- An Allen Key (2 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 Remote Reader:

Maximum Data Communications Distance

The distance between the Remote Reader and the ImproX DT, ImproX MfT, ImproX PT, ImproX TA or the IXP121 Controller can be extended to a maximum of 10 m (33 ft) using a good quality shielded multi-strand 2-pair twisted cable. The individual conductor cross-sectional area of the cable must not be less than 0.2 mm^2 (0.0003 in^2).

Distance between Remote Readers from DIFFERENT Terminals or Controllers

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

Mounting the ImproX KHR

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

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

Secure the ImproX KHR 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 KHR

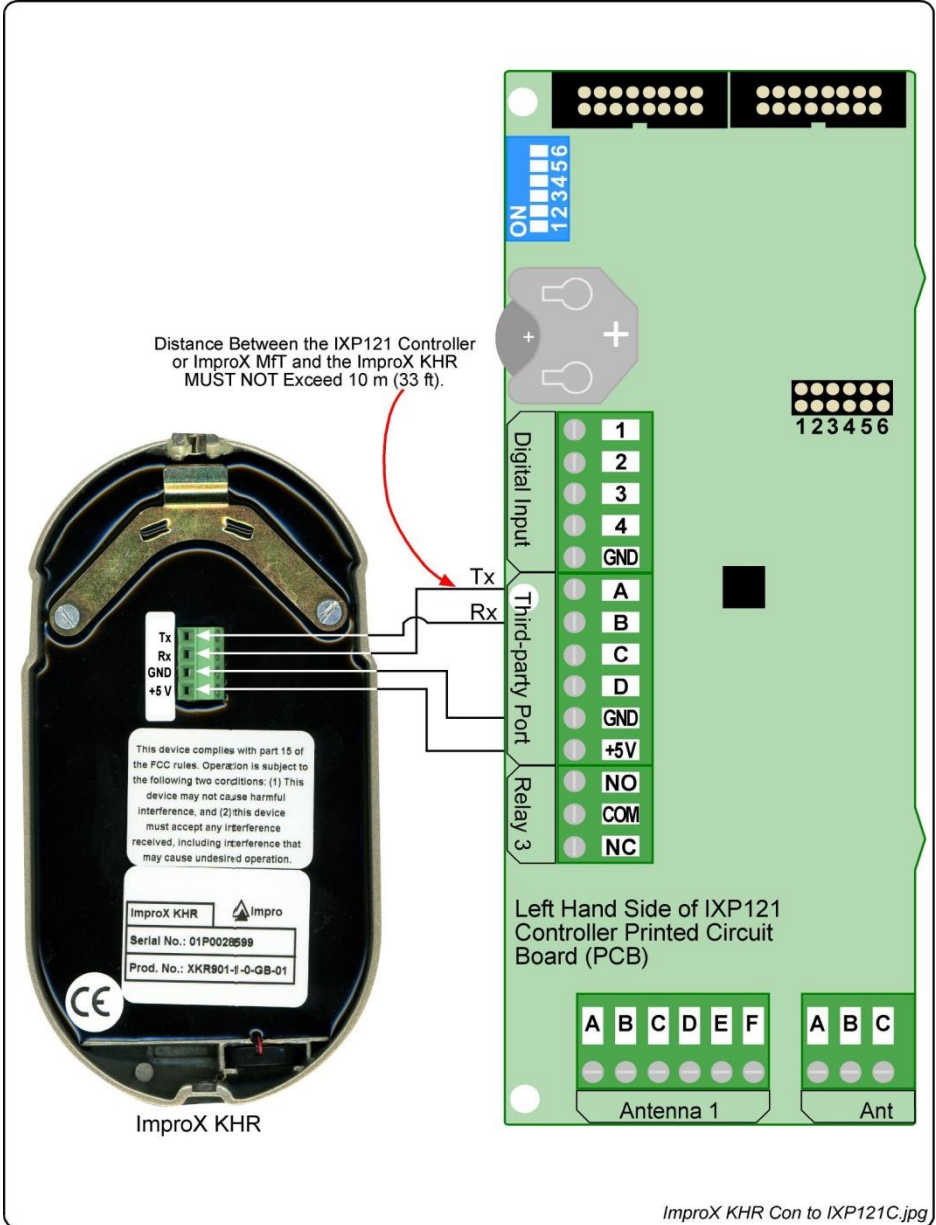Figure 1 to Figure 3 shows detailed connection diagrams for the ImproX KHR.

Distance Between the IXP121 Controller or ImproX MfT and the ImproX KHR MUST NOT Exceed 10 m (33 ft).

Tx
Rx

Tx
Rx
GND
+5 V

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

ImproX KHR
Serial No.: 01P0028599
Prod. No.: XKR901-1-0-GB-01

ImproX KHR

Digital Input
1
2
3
4
GND

Third-party Port
A
B
C
D
GND
+5V

Relay 3
NO
COM
NC

Left Hand Side of IXP121 Controller Printed Circuit Board (PCB)

A B C D E F
Antenna 1

A B C
Ant

ImproX KHR Con to IXP121C.jpg

Figure 1: ImproX KHR Connected to the IXP121 Controller or ImproX MfT
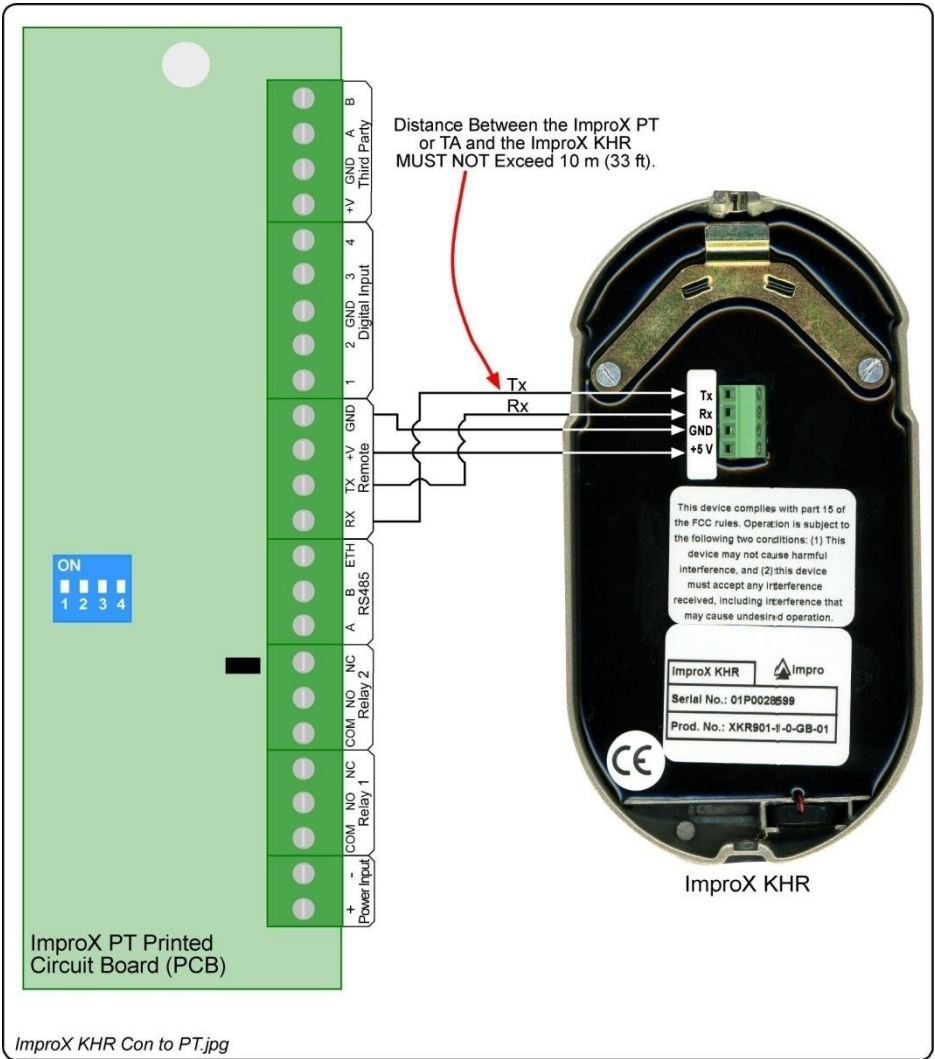
Figure 2: ImproX KHR Connected to the ImproX PT or ImproX TA
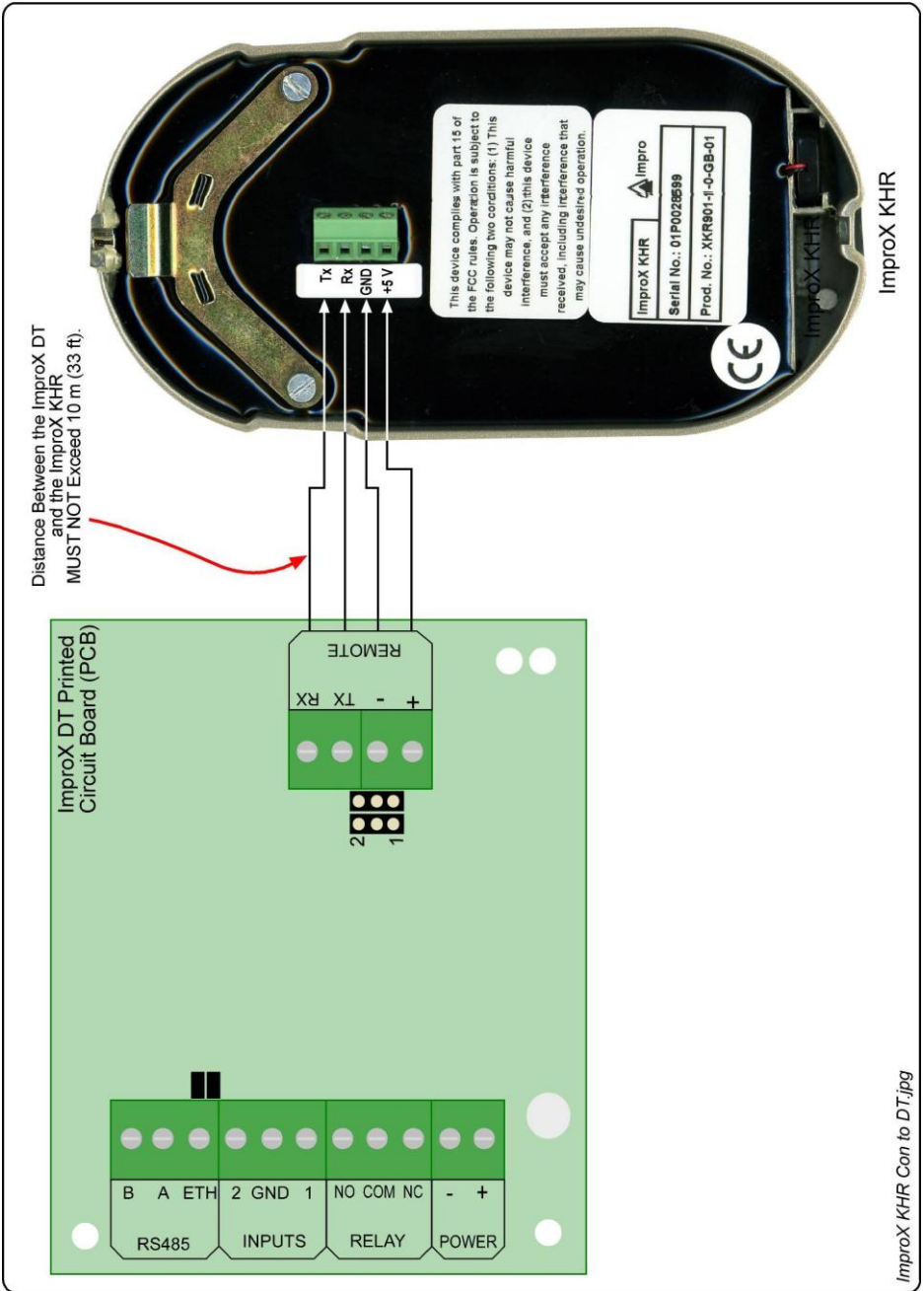
Blank Space

Figure 3: ImproX KHR Connected to the ImproX DT

NOTE: *On powering up, the Remote Readers Status LED will illuminate solid Red, and the Buzzer will beep twice.*

The ImproX KHR will not read Tags until configured in the Software. Details of these procedures are located in the IXP120, 200 or 300 and 400 Software Manuals.

Serial Number Label

Once the Remote Reader is installed, sketch a rough site plan. The loose Serial Number Label (packaged with the Remote Reader) should be used (paired) in conjunction with the ImproX DT, ImproX MfT, ImproX PT, ImproX TA or the IXP121 Controllers Fixed Address Label.

The Remote Reader does not have its own Fixed Address. When connected to an ImproX DT, ImproX MfT, ImproX PT, ImproX TA or the IXP121 Controller the Remote Reader is assigned one of the available Fixed Addresses.

The Serial Number Label identifies the type of Remote Reader, and the Fixed Address Label (shipped with the ImproX DT, ImproX MfT, ImproX PT, ImproX TA or the IXP121 Controller) 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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