



# Impro (QT) QUAD TRANSMITTER

Product specification

CATALOGUE

The Impro (QT) Quad Transmitter is a 4-channel, hand-held, 433.92 MHz transmitter as well as a passive key ring Transponder Tag.

The Transmitter is designed for use with the Impro Quad Receiver and with the Impro range of access control products.

Each of the four Push-buttons is used to transmit a different channel identification code, together with the Transmitter's ID, to the Receiver.

The Impro (QR) Quad Receiver receives the data transmitted by the Quad Transmitter. The Receiver then outputs the RF Tag ID and button data to for decoding by any connected IXP220 Controller, IXP20 Controller, Impro (iTRT) Intelligent Twin Remote Terminal, Impro (MfT) Multi-function Terminal or Impro (TA) Time Attendance Terminal.

For entry-level installations, the Quad Receiver is connected via S-Bus to the UniScan (1 relay activated by any one of the four buttons) or FlexiScan Controller (four relays mapped to the buttons on the Quad Transmitter).

The Quad Transmitter can also work as a passive, read only, 125 kHz Tag for use with the Impro range of Readers. In this application, the Push-buttons are not used.

An internal 3 V CR2032 lithium coin cell Battery powers the Transmitter.



## Key Features

- Dynamic Code Transmission Technology
- Small and rounded, gentle on your pockets
- Operates from its own power source (an internal 3 V CR2032 lithium coin cell Battery)
- Transmits its own identity and each Push-button has a code identity
- The Receiver interfaces to access control systems, for example, IXP20, IXP220 or IXP300 and IXP400.
- Operates four separate devices, for example, opening a gate
- Button Mapping:
  - When used with the Impro Quad Receiver and a single Impro (iTRT) Intelligent Twin Remote Terminal (XRT910-0-0-GB-XX, XRT920-0-0-GB-XX, IPS920-0-0-GB-XX or IPS921-0-0-GB-XX), two Push-buttons on the Impro (QT) Quad Transmitter are mapped. Use all four of the Impro (QT) Quad Transmitters Push-buttons, by connecting two Impro (iTRT) Intelligent Twin Remote Terminals (XRT910-0-0-GB-XX, XRT920-0-0-GB-XX, IPS920-0-0-GB-XX or IPS921-0-0-GB-XX), to the Impro Quad Receiver. Refer to the Installation Manual for more information on this feature.
  - With the Quad Receiver connected to FlexiScan Controller, the four buttons are each mapped to a corresponding relay.
  - With the Quad Receiver connected to a UniScan Controller, all four buttons are mapped to a single relay.
- Maximum reliable UHF transmitter range is between 20 and 50 m (22 and 55 yd), this is increased to between 50 and 100 m (55 and 109 yd) when used in direct line of sight with the Impro Quad Receiver (HRF900-0-1-GB-XX, HRF901-0-1-GB-XX)
- RF passive range of 12mm to 50mm (0.5in to 2in)

### Impro (QT) Quad Transmitter

XQT904-1-1-GB-XX    TRK900-1-1-GB-XX    TRK901-0-1-GB-XX

## Environmental Specifications

Operating Temperature	:	-15°C to +70°C (+5°F to +158°F)
Storage Temperature	:	-40°C to +80°C (-40°F to +176°F)
Humidity Range	:	0 to 95% relative humidity at +40°C (+104°F) non-condensing

### Approvals

CE Approval	:	EN 300 220-2, EN 301 489-1 and EN 301 489-3
FCC Approval	:	Pending
Dust & Splash Resistance	:	Designed to work in an indoor or outdoor environment similar to IP55. The Impro QT is, therefore, sealed against water
Drop Endurance	:	2 m (7 ft) drop (in packaging)

## Warranty Details

This product conforms to our Warranty details on [www.impro.net](http://www.impro.net)

## Physical Specifications

Length	:	60 mm (2.4 in)
Width	:	40 mm (1.57 in)
Height	:	15 mm (0.59 in)
Approximate Weight	:	20.6 g (0.73 oz)
Housing Material	:	Polycarbonate plastic
Housing Colour	:	Black, translucent
Push-button Material	:	Laripur plastic
Push-button Colour	:	Smokey Grey

## Electrical Specifications

### Power Source

Internal Battery	:	3.0 V, 220 mAh, CR2032 lithium coin cell
Battery Life	:	2 years or 50 000 button presses

### Radio Transmitter

Frequency	:	433.92 MHz
Modulation	:	OOK (XQT904 Only)
(default settings)	:	FSK (TRK900 and TRK901)
Power	:	< 1mW
Maximum Range	:	20 to 50 m (22 to 55 yd) Reliably, 50 to 100 m (55 to 109 yd) Direct line of sight, when used with the Impro Quad Receiver HRR900-0-1-GB-XX (Built-in Antenna) Greater ranges are possible when the Impro Quad Receiver HRR901-0-1-GB-XX is installed with a suitable external antenna

### RF Passive Tag

Frequency	:	125 kHz
Maximum Range	:	25 to 50 mm (1 to 2 in) when used with the Impro (SCR) Scan Keypad Reader SPK920-1-0-GB-XX

## User Interfaces

Power LED	:	A steady Red LED. Switches ON while any one of the Push-buttons is pressed
Push-buttons	:	Four ribbed Push-buttons

## Related Information

For extra information relating to this product refer to:

- Impro QT Instructions for Use (TQT300-0-0-GB-XX)

## Ordering Information

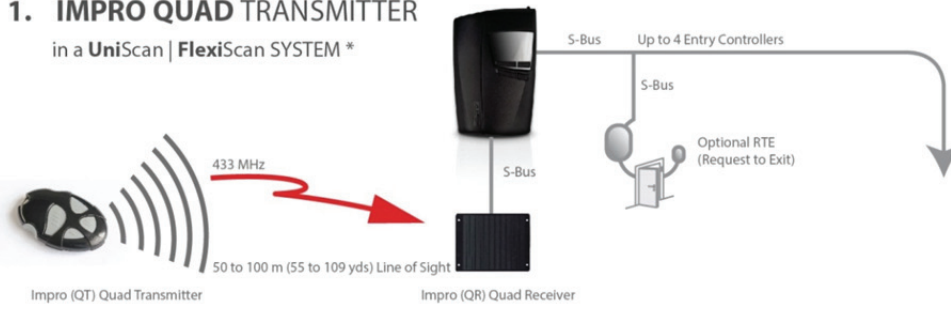
Order the Impro (QT) Quad Transmitter using the following Part Numbers:

- XQT904-1-1-GB-XX: OOK\*/FSK Modulation, RF Passive Tag
- TRK900-1-1-GB-XX: FSK\*/OOK Modulation, RF Passive Tag
- TRK901-0-1-GB-XX: FSK\*/OOK Modulation

\*The DEFAULT modulation setting for each model is listed first.

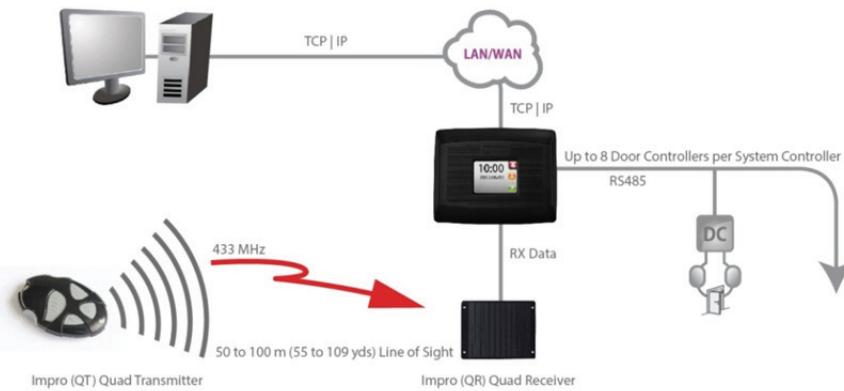
### 1. IMPRO QUAD TRANSMITTER

in a UniScan | FlexiScan SYSTEM \*



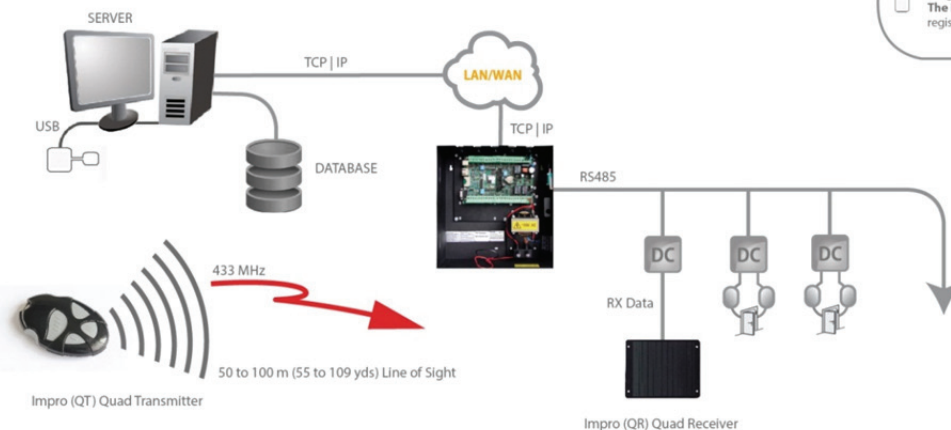
### 2. IMPRO QUAD TRANSMITTER

in an IXP20 SYSTEM \*\*



### 3. IMPRO QUAD TRANSMITTER

in an IXP220 OR IMPRONET SYSTEM



#### KEY for diagram

**System Controllers - selection**  
The Impro (QT) Quad Transmitter can be used within the UniScan | FlexiScan, IXP20, IXP220 & Impronet Systems.  
\* Diagram shows the "entry level" UniScan|FlexiScan System.  
\*\* Diagram shows the Web Interface IXP20 Controller (ISC920).  
\*\*\* This scenario applies to the IXP220 Controller.

**DC Door Controllers - selection**  
In an IXP20 System, the Impro Quad Transmitter (via a Quad Receiver) is compatible with the following Door Controller:  
- Impro ITRT  
In an IXP220 or Impronet System, the Impro Quad Transmitter (via a Quad Receiver) is compatible with the following Door Controllers:  
- Impro ITRT  
- Impro TA

**Door Reader - selection**  
The Impro (QT) Quad Transmitter's internal passive tag can be read by Readers suited to the System that is in use.  
**UniScan | FlexiScan Systems:**  
- Impro (SKR) Scan Keypad Reader  
**UIX20, IXP20 and Impronet Systems:**  
- 125kHz Antenna Readers  
- Biometric Readers  
- MIFARE multi-mode Readers (13.56 MHz)  
- Wiegand Readers  
- Vehicle Entry Long Range Readers  
- Extended Range Readers  
- InfraRed Readers  
- Dropbox Visitor Tag Readers  
- Time and Attendance Readers

**Tag Registration Reader**  
The Passive Tags inside the Quad Transmitters are registered on a 125 kHz Tag Registration Reader

Figure 1: Impro (QR) Quad Transmitter Usage - System Overview

This Product Specification Catalogue applies to the Impro (QT) Quad Transmitter Models:  
TQT900-1-1-GB-XX, TQT901-0-1-GB-XX, XQT904-1-1-GB-02  
(The last two digits of the Impro stock code point to the issue status of the document or product).

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