

RECONFIGURING THE TRANSMITTER (OPTIONAL)

The QT423 Configurator allows the operation of a QT412 range transmitter to be tailored to suit the requirements of a specific site. In particular it allows authorised engineers to:-

- Assign the level of call that will be triggered when the transmitter's A button is pressed (available levels include standard call, help required, emergency and attack)
- Assign the level of call that will be triggered when the transmitter's B button is pressed.
- Assign the level of call that will be triggered when the transmitter's 'pull clip' is activated.
- Set the transmitter's A & B buttons so they only trigger a call when both are pressed at the same time.
- Turn the transmitter's on-board 'confidence' beeper on or off.
- Turn the transmitter's radio action off (for button A, B and/or the transmitter's pull clip)
- Set the transmitter's transmission time to run continuously or to automatically switch off after a pre-determined time.
- Assign the transmitter an RF group ID address (1 to 16) to match the set up of any Quantec radio receivers on the system and to prevent the inadvertent triggering of any neighbouring receivers.
- Change the transmitter's mode of infrared transmission to 'pulsed' to suit Quantec infrared receivers manufactured before 1/10/99 (see BACKWARDS COMPATIBILITY ISSUES, below).

The QT423 Configurator comes with a programming CD (Windows 2000/XP compatible), a USB connection lead (to connect the configurator to a PC) and a lead for connecting the Configurator to a QT412 range transmitter for programming.

QT412RXA / QT412RXCA TECHNICAL SPECIFICATION (FACTORY DEFAULTS)

Typical radio frequency (RF868.3MHz - this product is license exempt as per EN 300 220)
 RF Range 60 metres*
 Infrared 940nm modulated @ 38Khz
 Infrared Range 10 metres line of sight*
 Default transmission times on activation (autostop) IR = 45 seconds; RF = 30**
 Weight 70 grams
 Dimensions (main body) WxHxD 45mm x 115mm x 25mm
 Pull clip actuation force 1.5kg / 15 Newtons
 Battery Rechargeable NiMH (not user serviceable)

* dependent on receiver, physical conditions and environmental factors.

** In accordance with European regulatory standards.

BACKWARDS COMPATIBILITY ISSUES

IN ITS SUPPLIED STATE, THIS TRANSMITTER IS NOT COMPATIBLE WITH QUANTEC INFRARED CALL POINTS OR CEILING RECEIVERS MANUFACTURED BEFORE 1/10/99. IF YOU WISH TO USE THIS TRANSMITTER TO TRIGGER SUCH DEVICES, IT MUST BE RECONFIGURED BY AN ENGINEER TO TRANSMIT A DIFFERENT TYPE OF INFRARED SIGNAL USING A QT423 CONFIGURATOR.

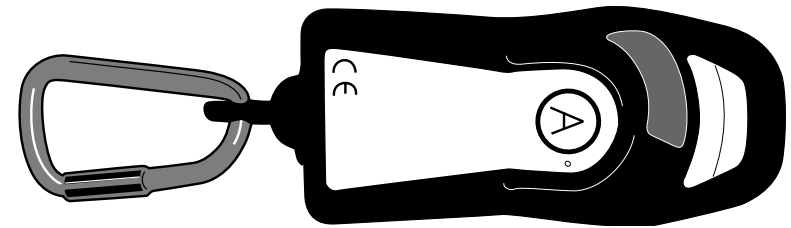
THIS TRANSMITTER IS NOT COMPATIBLE WITH OLD STYLE QT322RX (SPE0441/000) RADIO RECEIVERS. IF YOU WISH TO USE THIS TRANSMITTER ON SITES USING THESE RADIO RECEIVERS YOU MUST FIRST UPGRADE THE SYSTEM TO INCLUDE OUR NEW QT422RX RADIO RECEIVERS. FOR FURTHER ADVICE PLEASE CONTACT YOUR DISTRIBUTOR.

Errors and omissions excepted. These instructions are general and cannot be considered to cover every aspect of infrared/radio transmitter use. No responsibility can be accepted by the manufacturer or distributors of this equipment for any misinterpretation of an instruction or guidance note or for the compliance of the system as a whole. The manufacturer of this equipment operates a policy of continuous improvement and reserves the right to alter product specifications at its discretion and without prior notice.



QT412RXA / QT412RXCA

RECHARGEABLE DUAL-ACTION INFRARED / RADIO TRANSMITTER



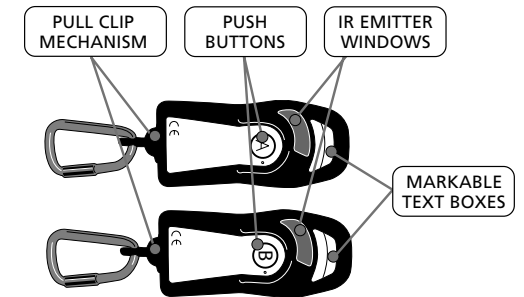
READ ALL OF THESE INSTRUCTIONS BEFORE USING THIS TRANSMITTER

IF YOU INTEND TO USE THIS TRANSMITTER WITH AN 800 SERIES CALL SYSTEM, REFER TO THE SEPARATE INSTRUCTION BOOKLET, DOCUMENT NO. DNU4120002.

Quantec's QT412 transmitters have a typical infrared transmitting range of 10m (line of sight) and a typical radio transmitting range of around 60m, dependent on physical conditions and environmental factors.

Each transmitter has two infrared emitter windows (one on each side to maximise performance), two buttons (A & B) and a retained 'pull clip'.

Depending on the model purchased, pressing its buttons or activating its 'pull clip' will generate the following levels of call on compatible Quantec infrared call points, infrared ceiling receivers and/or radio receivers.



Model No.	Button A	Button B	'Pull Clip'
QT412RXA	Attack Call	Attack Call	Attack Call
QT412RXCA	Standard Call	Standard Call	Attack Call

Note that different levels of call can be generated if required. However, to do this the transmitter must be reconfigured by an experienced engineer using a QT423 Configurator (see page 4 for details). Note that these instructions explain how to use standard factory-supplied QT412RXA and QT412RXCA transmitters only.



IMPORTANT:

- The transmitter must be charged for a period of 14 hours before it is first used - see **RECHARGING THE TRANSMITTER**, page 3, for details.
- If using the transmitter with an existing Quantec system please refer to **BACKWARDS COMPATIBILITY ISSUES**, page 4.

OVERVIEW & OPERATION

This transmitter allows you to take advantage of Quantec's optional staff attack facility. Primarily designed to help protect staff against verbal and physical abuse from disturbed patients, intruders and/or aggressive visitors. It works as follows.

- Designated staff attach the transmitter to their uniforms using the Karabiner clip supplied.

- In the event of an attack, they activate the transmitter by releasing its retained pull clip (QT412RXA and QT412RXCA models) or by pressing and holding one of its buttons (QT412RXA models only). This will fill the area with infrared (IR) and radio frequency (RF) signals - see illustrations, right.

- Upon activation, the transmitter sounds a short 'confidence' beep and its LEDs illuminate green for approximately half a second to confirm that an attack call is being transmitted. Note that a different sequence of beeps and LED indication indicates that the transmitter needs recharging - see **BATTERY STATUS**, page 3 for further details.

- The IR and RF signals generated by the transmitter are picked up by any Quantec infrared call points, infrared ceiling receivers and/or radio receivers within its range (as fitted) which instantly inform Quantec that an attack is taking place.

- An urgent, piercing alarm is sounded throughout the building (as programmed) and the exact location of the attack is indicated at all relevant displays to facilitate the quick response of security staff.

Note that in addition to being able to generate an attack call via its retained pull clip, the QT412RXCA transmitter will generate a standard call when either of its two buttons are pressed. Standard calls are transmitted to compatible IR and RF receivers in exactly the same way as attack calls and are reported around the Quantec system as programmed.

For security reasons attack calls can only be reset by entering a special code at the Quantec Controller or a Display with controls. Refer to the Quantec Programming Manual for details.

IR / RF TRANSMISSION TIMES

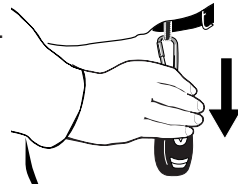
Calls triggered from either of the transmitter's buttons will transmit for a maximum of 45 seconds (IR) and 30 seconds (RF) whilst pressed and for 2-3 seconds after release.

Calls triggered via the transmitter's pull-clip will transmit for a maximum of 45 seconds (IR) and 30 seconds (RF) and for 2-3 seconds after the pull-clip has been returned to its retained position.

The transmitter will sound a short confidence beep once every 3 seconds throughout its IR/RF transmission period and its LEDs will flash green.

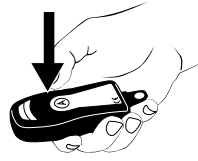
When the transmission period is complete, the transmitter will sound three quick beeps and its LEDs will flash red three times in quick succession to confirm it has returned to its normal state.

Please note you will be unable to make a new attack call until the transmitter's pull clip has been returned to its retained position (the transmitter's button operation will be unaffected).



PULL THE TRANSMITTER DOWN SHARPLY UNTIL ITS PULL CLIP RELEASES AND LET GO!

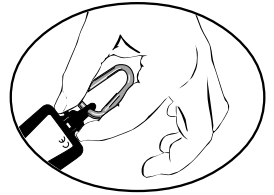
PRESS AND HOLD BUTTONS A OR B UNTIL YOU ARE CONFIDENT A CALL HAS BEEN REGISTERED



TAKE CARE NOT TO OBSTRUCT THE TRANSMITTER'S TWO INFRARED EMITTER WINDOWS WHEN MAKING A CALL

RESETTING THE TRANSMITTER'S PULL CLIP

To return the transmitter's pull-clip to its retained position, gently push its two outer prongs inwards until the mechanism snaps back into place, as shown in the diagram, right.



OVERVIEW & OPERATION

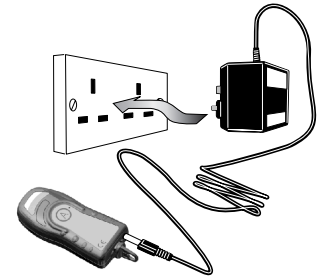
Feedback on the condition of the transmitter's battery is provided every time it is activated.

- When fully charged, a short 'confidence' beeper sounds and the transmitter's LEDs illuminate green for approximately half a second.
- When running low, two beeps sound in quick succession and the transmitter's LEDs flash green twice. Although the transmitter will still work in this state, it must be recharged as described below at your earliest convenience.
- When critically low, three fast beeps sound and the transmitter's LEDs flash red. When in this state, the transmitter will be unable to transmit IR and RF calls and should be recharged immediately.

RECHARGING THE TRANSMITTER

The transmitter must be charged using a QT424/1 single way charger or a QT424/10 ten way charging unit for a period of 14 hours before it is first used. It should then be regularly recharged (typically once a month, or more if usage demands it). Do not use any other type of charging unit as this could damage the transmitter and void its warranty.

To charge the transmitter using the QT424/1 charger, simply connect the charger to a standard 13A mains socket and to the 1.3mm socket located next to the transmitter's pull-clip as shown (right). To charge using the QT424/10 charger, please refer to the separate instructions supplied with the charger.



Whilst charging, the transmitter's two LEDs will illuminate red. Note that a charging cycle typically takes 14 hours and that when fully charged, the transmitter's LEDs will flash red. Always test the transmitter before using it.

The transmitter's battery is rechargeable (NiMHHydride). If left for extended periods or after periods of heavy usage without recharge, the battery may run flat. If this happens charge the unit immediately for the full recharge period (approx.14 hours) to completely recharge the battery. Please note that the battery is not a user serviceable part and must be returned to your Distributor for repair or replacement. The battery needs replacement when it fails to hold charge or the unit runs flat quickly after light usage and a full charge. Under normal conditions the unit will be fit for in excess of 500 charge/discharge cycles, before requiring battery replacement.

TESTING THE TRANSMITTER

A Quantec infrared test receiver, the QT302RT, is available to verify the correct infrared operation of all QT412 range transmitters and we recommend at least one is used per system. Please be aware when testing the transmitter's infrared operation that any radio receivers within its range may trigger at the same time.



WARNING: This transmitter should be regarded as a piece of life safety equipment. If not sufficiently charged and regularly tested, the safety of those on site could be compromised. Ensure systems are in place to guarantee the correct functionality of the transmitter at all times.