# **RECONFIGURING THE TRANSMITTER (OPTIONAL)**

If required, the way the transmitter operates can be reconfigured by an experienced engineer using the QT423 Configurator and a compatible PC. In particular, this facility allows authorised engineers to:-

- Assign the level of call that will be triggered when the transmitter's A button is pressed to standard or emergency.
- Assign the level of call that will be triggered when the transmitter's B button is pressed to standard or emergency.
- Assign the level of call that will be triggered when the transmitter's 'pull clip' is activated to standard or emergency.
- 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.
- Set the transmitter's infrared transmission time to run continuously or to automatically switch off after a pre-determined time.

Each 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)

Infrared	. 940nm modulated @ 38Khz
Infrared Range	10 metres line of sight*
Default transmission times on activation (autostop)	
Weight	
Dimensions (main body) WxHxD	45mm x 115mm x 25mm
Pull clip actuation force	1.5kg / 15 Newtons
Battery Rechargeable	e NiMH (not user serviceable)

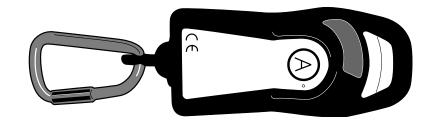
\* dependent on receiver, physical conditions and environmental factors.

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 INFRARED TRANSMITTER



#### **READ ALL OF THESE INSTRUCTIONS BEFORE USING THIS TRANSMITTER**

IF YOU INTEND TO USE THIS TRANSMITTER WITH A QUANTEC CALL SYSTEM, REFER TO THE SEPARATE INSTRUCTION BOOKLET, DOCUMENT NO. DNU4120001.

The QT412 range of 800 Series rechargeable infrared transmitters have a typical infrared transmitting range of 10 metres (line of sight) dependent on physical conditions and environmental factors.

PULL CLIP

MECHANISM

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 800 Series infrared call points or infrared ceiling receivers.

Model No. QT412RXA QT412RXCA Button A Emergency Call Standard Call

**Button B** Emergency Call Standard Call **'Pull Clip'** Emergency Call Emergency Call

IR EMITTER

WINDOWS

MARKABLE

TEXT BOXES

PUSH

BUTTONS

# **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.

# **OVERVIEW & OPERATION**

This transmitter allows you to remotely trigger an emergency call on an 800 Series Call System via a compatible infrared call point or ceiling receiver. Emergency calls generated in this way are typically used 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/emergency, 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 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 a 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.

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



PULL THE

TRANSMITTER

DOWN SHARPLY

UNTIL ITS PULL

**CLIP RELEASES** 

AND LET GO!

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

• The infrared signals generated by the transmitter are picked up by any 800 Series infrared call points and/or infrared ceiling receivers within its range (as fitted) which instantly inform the system that an attack/emergency is taking place.

• An alarm sounds throughout the building (as wired) and the relevant zone light illuminates at all relevant indicator panels to facilitate the quick response of security staff.

Note that in addition to being able to generate an emergency 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 infrared receivers in exactly the same way as emergency calls and are reported around the system's indicator panels as wired.

## **INFRARED TRANSMISSION TIMES**

Calls triggered from either of the transmitter's buttons will transmit for a maximum of 45 seconds 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 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 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 emergency call until the transmitter's pull clip has been returned to its retained position (the transmitter's button operation will be unaffected).

# 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 <u>must be</u> 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 (NiMHydride). 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**

An 800 Series infrared test receiver, the NC302RT, is available to verify the correct infrared operation of all QT412 range transmitters and we recommend at least one is used per system.



**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.