HHTX MK1

Handheld UHF Radio Alerting System

Installation & User Manual

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PREFACE

Important Installation Information

It is the purchasers' responsibility to determine the suitability of this equipment and its derivatives for any given application, Scope cannot give specific advice in this manual, as each use will require independent evaluation.

Scope has, wherever possible, employed extra safeguards to monitor the system's performance. Certain system installations, operational requirements or budgets may, however, limit the effectiveness of these safeguards. Again, the suitability of the system for any given application must therefore be decided by the installer and their customer, relative to the application and risk.

Good working practice dictates that a suitable system installation log must be generated, together with a record of the dates when the system has been manually checked, (with the aid of signal strength meters etc.) enabling the system performance to be compared with the original installation data.

For UK equipment, Scope has no control of the use and application of the frequencies issued by the Radiocommunications Agency. Some equipment that is licensed may have greater protection than other equipment which is operated on a WT Act License Exempt basis.

The supply of this equipment is governed by our standard terms and conditions of sale, which can be found on the reverse of all order acknowledgements*, proforma invoices*, delivery notes, price lists and invoices. Alternatively, these can be provided on request.

* Faxed proforma invoices and quotations refer to "conditions available upon request".

Important Safety Information

Scope products are designed to operate safely when installed and used according to general safety practices. The following requirements should be observed at all times.

Do NOT subject this equipment to:
Mechanical shock
Excessive humidity or moisture
Extremes of temperature
Corrosive liquids

This equipment is designed for indoor use, unless expressly stated otherwise, and must not be used in classified Hazardous Areas, including areas containing explosive or flammable vapours, unless express authorisation has been given in writing by the manufacturer. If in doubt, consult your local product dealer for further information.

Do not obstruct any slots or openings in the product. These are provided for ventilation to ensure reliable operation of the product and to protect it from overheating.

Only use a damp cloth for cleaning (not liquid or aerosol based cleaners), and ensure that any power is removed from the unit prior to beginning the cleaning operation.

Removal of covers from the equipment must only be undertaken by authorised service personnel, who must ensure that power is isolated prior to removal.

Preface

Battery Charging

The Nickel Metal Hydride batteries fitted in Scope portable transmitters are optimised for safety and performance and are NOT accessible or replaceable by the user. Where it is suspected that the batteries are faulty or if they refuse to maintain a charge, the equipment must be returned to Scope for servicing and battery replacement. The transmitter unit must only be re-charged using the charger receptacle and AC adaptor provided by Scope. Use of other adaptors or chargers will invalidate all warranties and may result in damage to the equipment and/or injury to the user. In all such cases, Scope expressly excludes any liability for any damage or injury, howsoever caused.

No User Serviceable Parts

Alteration or modification to any part of this equipment, without the prior written consent of the manufacturer, Scope, will invalidate all Approvals and Warranties attaching to the equipment. Further liability for the operation of the equipment, under the applicable law, will pass to the user, who will absolve the manufacturer of any further responsibility for it's correct operation and use.

Liability

Scope does not accept liability for any damage or injury, howsoever caused as the result of misuse of this equipment. It is the responsibility of the user to ensure that the equipment is operated in the manner for which it was intended and that it is the correct item of equipment for the required task.

Warranty

This product is warranted as free from defects of workmanship and materials for a period of one year from the original purchase date. During this time, if there is a defect or malfunction of this product, Scope will, with proof of purchase, repair or replace at it's discretion any defective parts, free of charge. This does not include where the adjustments, parts and repair are necessary due to circumstances beyond the control of Scope, including but not limited to fire or other casualty, accident, neglect, abuse, abnormal use or battery leakage damage.

WARNING ! No User Serviceable Parts
Celui-ci ne contient aucune piece pouvant etre reparee par l'utilisateur

Caution ! Risk of electric shock, do not open.
Attention ! Risque de choc electrique, ne pas ouvrir.

Alteration or modification to any part of this equipment, without the prior written consent of the manufacturer, will invalidate all manufacturer approvals and warranties. No adjustments can be undertaken except by qualified and licensed persons as authorised by Scope.

WARNING ! SAFETY

The AC adaptor provided with this equipment must only be used with an Approved mains cord set rated at 5A minimum which is fitted with an integral three prong, grounded mains plug and a moulded IEC320 style socket. The cord set must only be plugged into a grounded, fused outlet rated 5A minimum.

This product complies with the essential requirements of the R&TTE Directive 1999/5/EC, the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Copies of the Declaration of Conformity covering this product can be obtained from Scope at: Quantum House, Steamer Quay, Totnes TQ9 5AL United Kingdom.

System Overview

The Scope HHTX is a portable UHF transmitter used to signal various types of emergency alert to both fixed base station equipment and portable receivers.

Applications include straightforward security/panic alarm by simple button press; "lone worker" and "man down" alerter , where a motion sensor is utilised to signal a pre-programmed level of inactivity; and "snatch" alarm, whereby a lanyard is attached between the wearer and the transmitter, removal of which will trigger a continuous alarm transmission.

Modes of operation are selectable using two top plate buttons and a display, which also indicates battery charge and alarm status.

The transmitter is provided with an intelligent "fast" charger receptacle, facilitating full charge of the nickel metal hydride cells in less than 1 hour (typically 40 minutes), together with an ac adaptor, real leather carry case for the transmitter, and lanyard "snatch" line.

Package Contents:

Scope HHTX Transmitter unit, with stud mounted aerial (fitted)
Leather carry case
AC Adaptor (output: 5V dc @ 2A)
Desktop Charger base unit
Snatch Lanyard

Getting Started

Remove the components from their packaging and check that all items are present.

Locate the AC adaptor and insert the power jack into the socket at the rear of the charger base unit. Fit the mains lead supplied between the adaptor and a 230V mains outlet. The green power light on the charger base should now be lit and the red status light should flash.

Place the transmitter unit into the charger base, checking that the silver contacts on the side of the unit face the same way as the silver contacts in the charger base.

The display on the top face of the transmitter will light and the words "FAST CHRG" will be displayed. "FAST" will flash on/off, indicating that rapid charging is in progress. The red light on the charger base will be lit continuously during the charging process.

When full charge is achieved, the red light on the charger base will flash and the transmitter display will blank.

Note: where cells are completely discharged, the unit should be placed in the charger and the uppermost side-mounted blue button (A) pressed and held until the display lights (usually a few seconds). Normal charging will then resume. If the display blanks when the button is released, press and hold the button for a further few seconds until normal charging resumes.

Precaution: to minimise any potential for malfunctioning of the unit due to static electricity, users should avoid touching the charger contacts and aerial mount collar. It is therefore recommended that the unit is placed in it's carry case immediately after charging.

Operation

Switching the Unit ON/OFF

To switch ON, press and release the uppermost side-mounted blue button (A). The display will activate and show the mode number and battery status.
To switch OFF, press and hold the decrement programming button (top face, lower left of the display) until the counter decrements to one, continue to hold and the display will then blank, disconnecting the power.

Modes Of Operation

The transmitter has three manual call types selectable from two blue buttons (A & B) located on the side of the unit, and a further two emergency alarms which consist of a “snatch” lanyard and a motion detector. Whilst the manual button-initiated alarms are always active, both the lanyard and the motion detector can be enabled or disabled by selection of the relevant mode on the unit’s display.

The display will indicate which mode is active at any time, and the mode can be changed by using the increment/decrement programming keys located on the top side of the unit (next to the display). The keys must be pressed and held for several seconds between each change, this is to prevent accidentally changing the active mode.

Mode 1 – Manual Alarms Only

The uppermost side-mounted blue button (A) will send a zone 1 alarm when pressed and held for a predefined period of time. The lower side-mounted blue button (B) sends a Cancel or Reset call. Pressing both buttons together (A+B) and holding them for the trigger period will send a zone 3 call.

Mode 2 – Manual Alarms And Active Lanyard

The pin in the base of the unit is intended to be connected to a lanyard attached to the wearer. If the transmitter is pulled away from the wearer an automatic Zone 4 alarm is immediately sent. This will continue until the pin is replaced – a cancel will not silence this alarm, only replacing the pin can achieve that.

Mode 3 – All Alarms Active

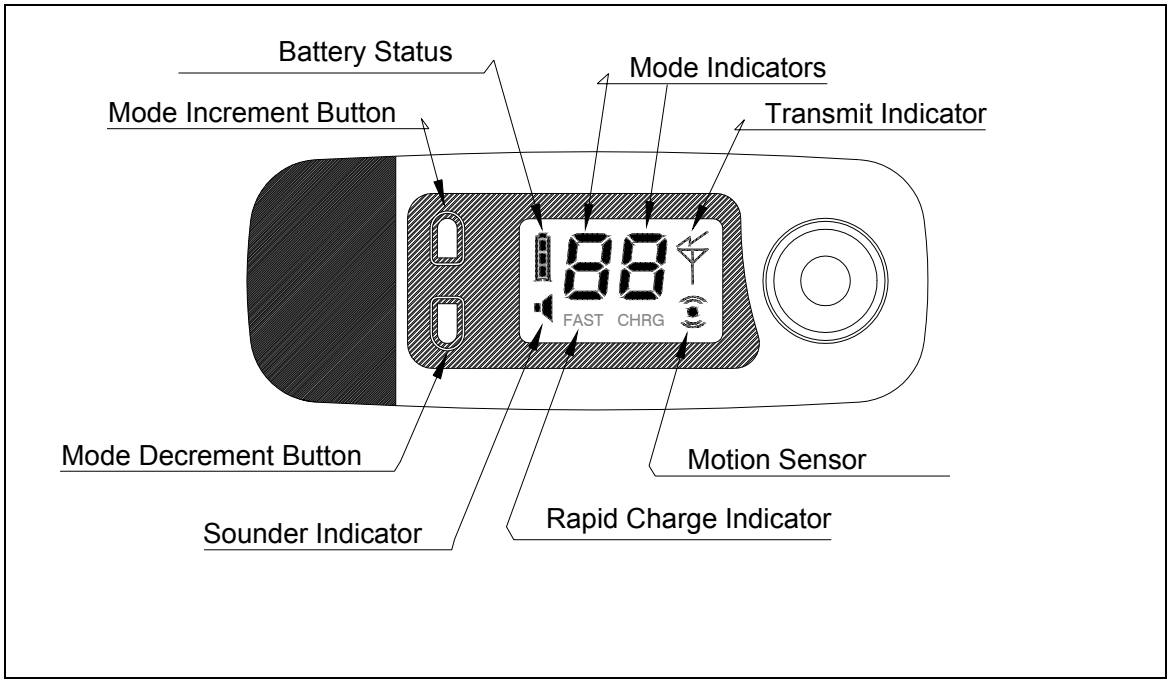
This mode enables all functions, manual alarms, Lanyard and motion detector. The motion detector has two time periods over which any motion detected will reset the timers. If the unit detects no motion for 20 seconds it will pulse a sounder for 10 seconds as a warning before transmitting a Zone 4 alarm. Any movement detected during these warning periods will reset the timers.

The motion detector is most sensitive with the unit vertical, and much less sensitive as the unit is rotated to the horizontal plane. It is intended that the user should wear the unit on a belt or sash as near to vertical as possible.

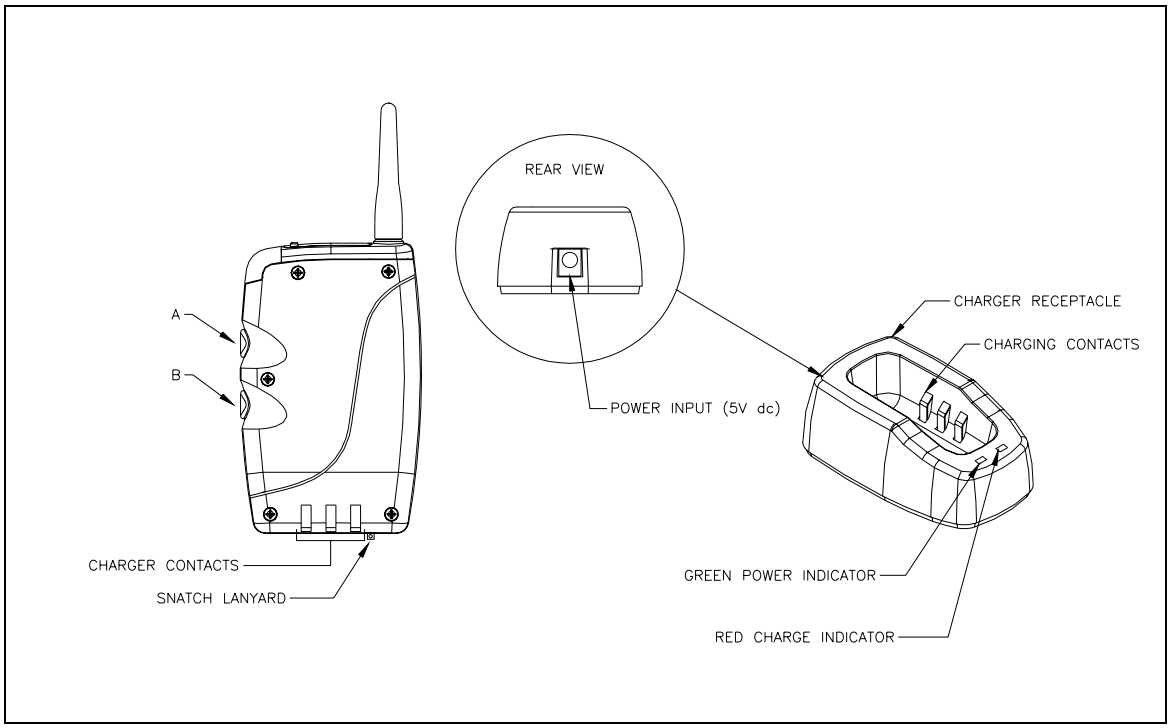
Test calls

The system will send periodic test-calls to the receiver, these are fixed at about an hour, but can be factory programmed for any period from 1 minute to 4.5 hours. If the receiver fails to receive a test call within the designated period it will report a failed test call. Each unit automatically logs itself onto the receiver when ANY type of call is received. It is advised that the unit is tested before use by sending one of the manual calls to the receiver, this ensures the unit is logged on successfully.

Transmitter Top Control Panel



Transmitter & Charger Details



Battery Life

The batteries are 1.6Ah Nickel Metal Hydride cells, and life expectancy is totally dependant upon the type of use to which the unit is put. Transmissions use by far the greatest power, but with test calls set at 1 hour the cells should last over two weeks between charges. Turning off the unit between use is recommended, but it should be noted that long periods of no use will still reduce the battery charge.

The battery indicator on the display will indicate the approximate capacity left in the cells. When the battery voltage falls below that required to run the transmitter, the unit will automatically switch itself off, since it cannot perform it's intended function without a transmitter. It will then need recharging before it can be used again.

Specification

Power:	2.4V (1.2V x 2) NiMh cells, sealed pack
System Power Consumption:	less than 2mA (standby), 180mA (transmit)
Transmitter:	
Power output:	500mW max
Frequency Range:	450-470 MHz
Channel Spacing:	12.5 KHz
TX Baud Rate:	1200
RF Standards applied:	ETS 300 220
Type Designation:	MOBILINK
Notified Body Ref. No:	0891
EMC Standards applied:	EN 301 489-1 V1.4.1
LVD Standards Applied	EN 60950: 2000

Scope's policy is one of continuous development and specifications are subject to change without notice