

PMR DIGITAL HANDHELD PIW / LOCALIZATION/ TRACKING

IF-F3162DSPTIROC

Handheld VHF PIW ROC without keyboard Handheld VHF PIW ROC with keyboard

IF-F3162DTPTIROC

IF-F4162DSPTIROC

Handheld UHF PIW ROC without keyboar Handheld UHF PIW ROC with keyboard

IF-F4162DTPTIROC

4 equipments in one!

- Localization by active terminal (I-LOC)
- Tracking system: Electronic badge reader
- PIW (Protection of the Isolated Worker): Movement and/or immobility detection
- Transceiver: Audio and data ("texts")

These are designed for the users having localization requirements in closed places (buildings, warehouses, etc.) and for whom the traditional positioning systems by GPS are not adapted.

Localization by active beacon

The system is based on "active" beacons placed at strategic points of buildings and transmitting their identity periodically. A dedicated receptor, integrated in the handheld radio, receives the emissions of these terminals when the user of the handheld passes in the vicinity. The identity received by the radio, according to the chosen mode, is transmitted at every entry in the field of a new beacon, or at the time of an automatic (PIW) or manual alarm (refers to description overleaf).

Integrated tracking system: Badge reader

Reading of checkpoint by simple push of a button during the presentation of the badges. The identity of the badges are thus memorised in the handheld then it transmits the information automatically as soon as it is possible (free channel and radio cover). This memorization function thus authorises the installation of badges in the zones outside the cover (e.g. tunnel, parking, etc.).

✓ Simplified programming and maintenance

In case of modification of the round only the base radio or the PC must be programmed (addition or removal of badges)

✓ Time out "anti – double" and ACK function

In the case where the user, by mistake, presents the handheld in front of the same badge many times, the time out allows to memorise, transmit the identities of this checkpoint only once, and in a totally secure and impregnable manner thanks to the radio acknowledgement receipt (ACK).

PIW Functions and movement loss

Normally equipped with the latest generation of PIW module developed by the Research and Development Department of ICOM France, the handheld present the following characteristics:

✓ Manual or automatic alarm with accelerometer module

The automatic alarm goes off when the handheld is inclined or immobile.

A sound pre-alarm informs the user of the imminent starting of the urgency cycle (time out adaptable) The manual alarm is activated by simple push of a red button located on the top of the handheld.

✓ 5 modes of "security" functioning available

- Loss of verticality mode only (classic function dead man).

- Loss of movement mode only.
- Loss of movement or loss of verticality mode
- Loss of movement and loss of verticality mode (maximum security)
- Detection of movement mode (anti theft function)

✓ Programmable inclination angle to the nearest degree

The use of a 2-axis accelerometer allows a very fine inclination angle tuning (particularly between 30° and 90°).

✓ Unequalled sensitivity

The accelerometer module allows the detection of smallest movements even when the user is not moving (detection of body vibrations).







Icom France s.a.s.

4 cm (5.m.) (6 mo) 71585 8117 9117 (0) (# Handheld radio short antenna

(option) and keyboard. Existing without keyboard.





"Active" Beacons for localization -

✓ Conception for professional applications

• Beacons made according to the latest technology: RISC microprocessor with very low power consumption and new ISM band at 868MHz for a minimum interference with the handheld own emission.

• Self -powered: Independent power with 3.6V lithium battery avoiding the restrictions of cabling.

• Emission power approximately 10 mW: this allows a range of 20m indoors and more than 100m outdoors (adjustable).

• Greater autonomy: in the case of a transmission every 30 seconds, the typical average consumption is 150 μ W (50 μ A X 3.6V). This can be further reduced by increasing the transmission interval if the configuration of the place allows it.

With a transmission interval of 30 seconds, the beacons have autonomy of about 5 years.

✓ Secured system

• Automatic level information of "low battery"

To simplify the maintenance of the batteries and to secure the system, information is automatically sent to Cameleon Guard when the battery of a beacon weakens and must be changed. This information, which is contained in the beacon message, will be sent to the base by handheld. The system is thus very reliable as it is impossible to find one with inoperable beacons (in as much as there are handheld regularly circulating in the premises).

Unique identity of each beacon

Each beacon is unique and cannot be reproduced, assuring a perfect security of the system.

Custom setting

The emission interval of the beacon is easily programmable between the following values 0.3,1,3,10 seconds.

A CEC**, added to the identity, allows to totally secure the transmission and avoid "false receptions".

Reduce Instruction set Computer. **CRC means Cyclic Redundancy Code. The calculation of CRC allows the receptor of a message to verify that the data transmitted does not contain errors.

Equipment necessary for the system:

-One or many localization handheld IF-F3162SPTIROC/ IF-F4162SPTIROC

-Several IF-ELTXLOC/BE terminals (number to be determined according to the zone to be covered)

-Several IF-BADGEEURO badges (number to be determined according to the zone to be covered)

-One IF-BF510TN822600 / IF-BF610TN822600 base and CAMELEON GUARD program with IF-PC600 and micro table.

✓ Positive security

For a maximum security, the fix equipment (base radio) can interrogates at regular intervals the handheld, which systematically sends an acknowledgement. The HQ security thus automatically supervises the user of the handheld to ensure his protection.

The positive security is activated in a discreet manner i.e. without any auditory appearance or indication on the display of the handheld. At the same time, it resends the level of the handheld battery (with the Cameleon Guard program)

✓ Management of the power up/power down setting

Possibility to check the power up setting or the stopping of the handheld by CAMELEON GUARD. This feature prevents the accidental shutdown of the handheld during a round.



Les spécifications et informations données dans ce document peuvent être modifiées sans préavis.

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