312MHz Radio Output Module (Supervised) Installation Guide

This guide is for use with Tunstall Radio Output Module 64604/01

1 Confirm Functionality and Compatibility

The Radio Output Module (ROM) is a radio transmitter device activated by external interfacing equipment. Once (manually) activated, a red indicator (LED) on the front of the enclosure glows for a short time Input compatibility criteria include:

a) Must be Volt free output from a relay or opto-coupler.

b) Must provide a switching pair output with neither conductor connected to ground or zero Volts.

c) Compatible with normally open (N/O) momentary initiation systems. Should the contacts be repeatedly closed for an appreciable length (>2 seconds) of time, battery life will be reduced.

d) Primary interface is via 3.5mm (approximately 1/8 inch) jack eg a switch, (see later for cabled and reed switch options)

Note 1) this product must not be directly connected to the ac power supply and that 2) the input is polarity sensitive.

2 Installation

a) Operate the power switch on the rear of the ROM using a narrow, but blunt, non-conductive item (eg cocktail stick). Take care not to damage components on the circuit board below.

Position the ROM and fix to the surface (if required) using the self-adhesive hook and eye adhesive strips. The strip should be fitted to the surface and coins fitted to the ROM as the diagram below. Note that the ROM must be mounted away from electrically conductive surfaces/ materials to ensure no impairment of radio range. The surface should be stable, dry and dust free (preparation may be required).

Program the ROM into the appropriate Personal Emergency Response System (PERS). The PERS should be placed into radio programming mode and a ROM transmission initiated. Complete any configuration if necessary (eg non plug and play systems).

Refer to the relevant advanced user or programming guide.

d) Test the installation by activating the associated equipment either via a test button or raising a full alarm condition.

3 Cable Interface

Should the initiating equipment not have a 1/8 inch jack interface, a cable assembly is available from Tunstall (Part number D1405004B)

Connect the cable pair to the contacts on the associated equipment. Note that the striped lead is for connection to the emitter (more +ve) connection of a polarity sensitive opto coupler. The non striped lead is 0V.

4 Reed Switch Interface

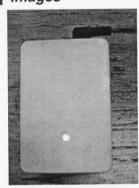
An integral reed switch is incorporated within the ROM to the alongside of the jack.

This reed switch is activated by a magnetic field- i.e. from a magnet on a door.

Presence of magnetism will close the reed contacts and initiate a transmission- note concern about battery life and longer contact closure. The cable (see above) or equivalent should be still inserted into the jack socket to ensure optimum radio range. It should be cut down to 25cm, not coiled up nor connected to other equipment. The ends should be insulated. (eg tape).

The ROM should be mounted on the most secure surface (i.e not on door/ drawer) to reduce environmental shock- eg door closures

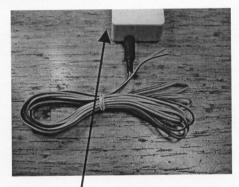
5 Images



Front View



Rear View



Cable attached- not yet installed (Reed switch is here)

6 Label Interpretation

The product and packaging have a small label containing a bar code.

This bar code (code 128) contains (reading left to right):

6 digits, decimal to represent the radio identity; 1 digit to represent the product type (=5 for ROM); 1 digit checksum.

(Eye readable version is printed underneath)

Additionally on the label is the part number and issue (top right) and the week and year of manufacture (bottom left)

On the packaging there is a larger label and barcode.

This bar code contains:

8 digit serial number (being week number, year, sequential serial), 7 digit part number, 2 digits issue. (Eye readable version is printed underneath)

7 Specification

Battery life: 10 years with over 20 operations per day.

Battery Monitoring: A flashing LED upon manual activation locally indicates low battery. The battery status is also communicated to the PERS Equipment. The battery is checked upon manual activation or within the supervision cycle.

Radio Range: 120 metres free space.

Interface characteristics: Source current: 1mA into contacts, closure of nominal 100ms required to initiate transmission. No subsequent transmission within 3 seconds of previous.

Weight: 55grams.

Supervision interval: Every 4 hours a supervision transmission is made. The battery is checked at the same time. No indication of

transmission is given. (i.e 6 transmissions per day)

Environment: intended operating temperature between 0 to +40 Celsius.

Frequency: 312.000MHz.

Programming: Plug and play (automatically configuring ROM product type) on compatible 34 bit systems only.

8 Approvals and Statements

Federal Communications Commission (FCC) notices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

312 Radio Output Module (Part Number 64604/01) FCC ID: G2X-6460401

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. Warning Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada Notice This equipment meets the applicable Industry Canada Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Service

This product contains no user serviceable parts.

This product contains Lithium battery which must be disposed of in suitable facilities- do not incinerate.

It is recommended that regular system testing is performed.

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