TX5W MK1 Transmitter Module

Modular Operating Instructions

Applicable FCC Rules:

FCC 47CFR Part 90, sub part 1

Operational Use conditions:

TX5W MK1 transmitter module is used exclusively in Scope products. It must NOT be sold or made available as an OEM module.

System Power Consumption: less than 50mA standby, up to 2.4A (transmit)

RF Power output: 0.1W to 5W max

Frequency Range: 446-460 MHz

Channel Spacing: 12.5 KHz

TX Baud Rate: 512 or 1200

RF Standards applied: FCC Pt 90

FCC ID: JRNUSAFIVETX

Modular Procedures:

Trace antenna designs: N/A

RF Exposure Considerations:

Module is for use in fixed, wall mounted equipment only.

Human Exposure: a minimum distance of 30 cm from the antenna must be observed for safe operation at all times.

Antennas: Centre fed Dipole or mini dipole, restricted to 0dBd gain.

Label & Compliance information:

TX5W MK1 Transmitter module label content & location, as per cover photo of this document.

Test Modes & additional testing:

As per Scope internal controlled work instructions & Test Procedures.

Important Installation Information

Licence

This equipment requires a licence for use within the USA. Certain restrictions apply in respect of power output and antenna installations. Frequencies are available by formal license application (Form 600) via the FCC. Users should obtain the FCC Rules and Regulations, Title 47, Part 80 to End, inc. Parts 90 & 95, available from the US Gov. Printing Office, FCC Office or www.fcc.gov/oet/info/rules/ website.

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 authorization has been given in writing by the manufacturer.

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.

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

Human Exposure: a minimum distance of 30 cm from the antenna must be observed for safe operation at all times.

- 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.

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Installation

Installation must only be undertaken by an Approved contractor, who shall ensure that all work is carried out in compliance with the appropriate State and Federal Regulations. This equipment must be earthed. For mains powered equipment, a readily accessible isolating fuse or socket must be located within 1 meter of the equipme

Some major points for users when installing equipment:

1 Never install antennas near or adjacent to telephone, public address or data communication lines or overhead power cables.

2 Avoid, wherever possible, running antenna coax alongside other cables.

3 Avoid mounting the transmitter in the immediate vicinity of telephone exchanges or computer equipment.

4 Always use proprietary 50 ohm coaxial cable between the antenna and the transmitter. If cable runs exceed 5 metres, always use low loss 50 ohm cable such as RG213, UR67 or equivalent.

Coaxial cable intended for TV, Satellite or CCTV installations is normally 75 OHM and therefore totally unsuitable for any transmitter installation manufactured by Scope.

5 Also remember that the performance of the system will be affected by the type of material the unit is mounted on and its surroundings.

The following is a list of materials that this transmitter will be adversely affected by if mounted on or if mounted in close proximity to:

a) Foil back plasterboard
b) Metal mesh or wire reinforced glass
c) Metal sheeting, large mirrors or suspended ceilings
d) Lift shafts

All of the above can reflect radio waves and thereby reduce the capability of the transmitter to perform its desired functions.

6 The circuit boards within this equipment may be harmed by Electrostatic Discharge (ESD). Installers should ensure that both themselves and the system's chassis are grounded before beginning any installation and should ensure that adequate anti-static procedures are adhered to at all times.

7 ***Warning!*** Never transmit without an aerial attached to the transmitter.

8 ***Warning!*** Carefully check the **Installation** section in this manual covering data pin connections prior to installation. Damage caused by incorrect connection is the responsibility of the installer!