RD4000T3 and T3F Transmitters Technical Specification

Description: RD4000 transmitter

Part No: 10/T3 -* (*=version)

10/T3F -* (*=version)

Physical:

Construction High Impact thermoplastic injection moulded case

sealed to IP55

(excludes all battery tray variants)

Ruggedness Withstands one metre drop onto concrete (BS EN 60068-2)

Dimensions Approximately 180mm/7.1"(D) x 350mm/13.78"(W) x 230mm/9"(H)

Weight Approximately 4.2kg/9.26lb

Available Operating Modes:

Locate mode by Induction

Locate Mode by Direct Connection

FaultFind Mode by Direct Connection (T3F only)

Available Frequencies (±3Hz)

1 Induction Frequency from the following: 8.192kHz, 32.768kHz, 65.536kHz,

83.000kHz or 200.000kHz - factory configurable

Up to 3 Direct Connection Frequencies from RD standard range 440Hz - 200kHz -

factory configurable

FaultFind Output (RD4000T3F Only)

FaultFind frequency 8.192kHz/8Hz composite signal compatible with existing

Radiodetection fault finding equipment FaultFind Voltage 120V at 8mA maximum.

Audio Indication

Transmitter On 1 second tone at switch on

Connection Quality Sliding Tone from 40-400Hz lower tone equals

more current on line (i.e. better connection)

Low Battery Connection Tone pulses off 1 second in 5

Alarm Condition 2 second warning tone

Visual Indication

Nine LEDs provide feedback of transmitter operation
Output Level indicator Four Red LEDs
Induction selected One Red LED
Frequency/Mode selection Four Green LEDs

All nine LEDs illuminate for 2 seconds at switch on as a lamp check function

Output Protection

Output protected from inadvertent connection to 240V AC RMS.



Signal Output

Continuous sinusoidal output waveform of selected frequency or FaultFind composite waveform if selected. Output pulses off 1 second in 5 (synchronised to connection tone) to indicate low battery conditions in normal modes of operation. To enable continued locating, FaultFind output does not pulse with low batteries

Performance

Connection Performance

Output Level	Open Circuit Voltage	Limiting Current	Maximum Power
1	30V RMS	5mA	0.15W
2	30V RMS	10mA	0.30W
3	30V RMS	30mA	0.90W
4	30V RMS	100mA*	3.00W**

^{*} Limiting current reduced to 60mA for frequencies less than 1kHz

legislation

Induction Performance

Output adjustable in four steps: 25%, 50% 75% and 100% At 45kHz and above the output power is limited to 1W to comply with current legislation

Batteries

12 off LR20 (D) Alkaline 1.5V cells >8 hours continuous life at maximum output power (3W) at 20°C External 12V input socket for external power supply Optional rechargeable pack

External Connectors

RS232

Accessory outlet

Standard accessories

- · Direct connection lead
- External 12 volt supply lead
- Earth (ground) stake

Optional accessories

- 2" and 4" clamps
- Carry bag
- Earth extension lead
- Live plug connector
- Live cable connector

Temperature Range (

Operating temperature: -20°C to +50°C Storage temperature: -40°C to +70°C

Quality Control

BS5750/ISO 9001/EN29001.

Approvals

€ Complies with European R&TTE Directive 1999/5/EC

Complies with FCC Rules Part 15

Warranty

12 months.

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^{**} At 45kHz and above the output power is limited to 1W to comply with current