RD433HCTx-2 High Power Transmitter Technical Specification

Description: RD433HCTx-2 High power transmitter.

Part No: 10/RD400MHTX.

Physical:

Construction High impact thermo plastic injection moulding,

weatherproof to NEMA 3R and IP54.

Dimensions 37 x 22.5 x 7 cm (14.5 x 8.9 x 2.8 in).

Shipping Box Size 49 x 39 x 24 cm (19.3 x 15.4 x 9.5 in).

Weight 4 kg (8.8lb).

Shipping Weight 4.5 kg (9.9lb).

Operating Modes:



| Mode | Frequency (±3 Hz) | Output Options |
|---------|--------------------------------|------------------------------|
| FF | 8.192 kHz/8.192 Hz | Direct connection |
| | composite signal | |
| CD | 200-700Hz | Direct connection |
| Lf | 400-700 Hz | Direct connection |
| 8 kHz | 8.192 kHz (key frequency) | Direct connection, induction |
| 33 kHz | 32.768 kHz (key frequency) | Direct connection, induction |
| 65 kHz | 65.536 kHz (key frequency) | Direct connection, induction |
| User Hz | 153 Hz, 531.25 Hz, 577.5 Hz | Direct connection |
| | 1.09 kHz, 1.45 kHz, 8.5 kHz, | |
| | 8.966 kHz, 9.82 kHz, 39.2 kHz, | |
| | 83.075 kHz | |
| Multi | Combination of key frequencies | Direct connection |

| Measuring Functions | Function | Description | Range (Resolution) |
|----------------------------|--------------|--|---------------------------------------|
| | Amps | Output current (mA) | 0-200 mA (1 mA), 200-300 mA (2 mA) |
| | Output Volts | Output voltage (V) | 0-50 V (1 V) |
| | Line Volts | Voltage on line (V) | 0-50 V (1 V), 50-100 V (25 V) |
| | Impedance | ac resistance at transmitted frequency | 0-10 kΩ (1 Ω-1 kΩ) / |
| | Line | Auto ranging | 0-2 kΩ (20 Ω), 2-20 kΩ (200 Ω), |
| | Resistance | | 20-200 kΩ (2 kΩ), |
| | | | 200 k-200 M Ω (20 k Ω) |

Audio Indication Three level settings - Off, Low, High.
Transmitter On - Slow pulsing tone.
Good connection - Increased pulse rate.

Key press - Single pulse.

Low battery - 1 second on, 0.1 second off.

Alarm condition - Continuous tone



Visual Indication 56 x 56 mm transflective LCD displays the following:

 $3\frac{1}{2}$ digit numerical display - indicates output current (default mode), induction level, output voltage/line voltage, ac impedance/dc resistance according to selection with

A.V.O. and Line keys.

Four level output demand legend, indicates desired current or induction level.

Three level audio volume indicator.

Four level battery status indicator - flashes when battery low.

Bulb symbol - indicates backlight is on.

Miscellaneous symbols - mA, V, Hz, k, Ω and %.

Output Protection Output circuitry is protected against inadvertent connection to 100 V rms. Sustained

voltages above 100 V will cause an external fuse to blow.

Signal Continuous sine wave. 8 seconds on, 2 off indicates low battery.

Performance

| Connection | Output levels | Open Circuit | Limit Current | Max Power |
|-------------|---------------|--------------|---------------|-----------|
| Performance | | Voltage | | |
| | 4 | 50 V/24 V | 300 mA | 5 W |
| | 3 | 50 V/24 V | 100 mA | 5 W |
| | 2 | 50 V/24 V | 30 mA | 1.5 W |
| | 1 | 50 V/24 V | 10 mA | 0.5 W |

| Induction | Output | Fie | eld Strength | | Equivalent | Current | | |
|-------------|---------|-------|----------------|--------|---------------------|---------|--------|--|
| Performance | levels* | (dE | (dBμç/m @ 3 m) | | (10R cable @ 0.5 m) | | | |
| | | 8 kHz | 33 kHz | 65 kHz | 8 kHz | 33 kHz | 65 kHz | |
| | 100% | 130.5 | 119 | 113 | 3.4 mA | 4.4 mA | 4.7 mA | |

^{*} Output level available in four steps; 25%, 50%, 75%, 100%.

Batteries 8 x LR20 (D) 1.5 V alkaline.

20 hours life @ nominal power, 4 hours @ maximum power.

Socket provides 12 V external power input facility.

Operating Normal: 0°C to +50°C (+32°F to +122°F).

Temperature Range Maximum: -20°C to +70°C (-4°F to +158°F).

Miscellaneous

Options Signal Clamps (2, 4, 8.5 and 15.5 in), Live Plug Connector, Live Cable Connector,

Rechargeable Batteries, Ni-Cad Battery Charger.

Compatibility Recommended Radiodetection Receivers: RD400PXL-2, RD400PDL-2, RD400FFL.

Quality Control BS5750/ISO 9001/EN29001.

Complies with FCC requirements.

Warranty 12 months.

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