

# RD433HCTx-2 High Power Transmitter

## Technical Specification

**Description** RD433HCTx-2 High power transmitter.

**Part No.** 10/RD433HCTX2-200

### Physical

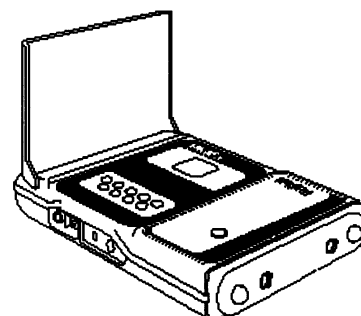
**Construction** High impact thermo plastic injection moulding, weatherproof to NEMA 3R and IP54.

**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 (8.8 lb).

**Shipping Weight** 4.5 kg (9.9 lb).



### Operating Modes

Mode	Frequency ( $\pm 3$ Hz)	Output Options
FF	8.192 kHz/8.192 Hz composite signal	Direct connection
CD	200-700 Hz	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, 1.09 kHz, 1.45 kHz, 8.5 kHz, 8.966 kHz, 9.82 kHz, 39.2 kHz, 83.075 kHz	Direct connection
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 k $\Omega$ (1 $\Omega$ -1 k $\Omega$ )
Line Resistance	Auto ranging	0-2 k $\Omega$ (20 $\Omega$ ), 2-20 k $\Omega$ (200 $\Omega$ ), 20-200 k $\Omega$ (2 k $\Omega$ ), 200 k-200 M $\Omega$ (20 k $\Omega$ )

### 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 transfective LCD displays the following:  
 3½ 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 Performance	Output levels	Open Circuit Voltage	Limit Current	Max Power
	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 Performance	Output levels*	Field Strength (dBµV/m @ 3 m)			Equivalent Current (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 Temperature Range** Normal: 0°C to +50°C (+32°F to +122°F).  
 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.

**FCC Warranty** Complies with FCC requirements.  
 12 months.

