

## RD4000RX

### Technical Specification

**Description:** RD4000 Precision Locator

**Part No:** 11/4KRx —\* (\*= version)  
11/4KMRx —\* (\*= EMS version)

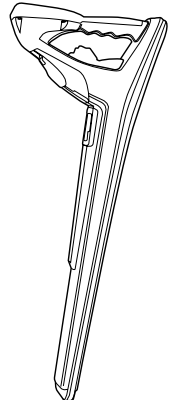
**Physical:**

**Construction** High impact thermoplastic, weatherproof to NEMA 3R and IP54

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

**Dimensions** Approximately 690mm/27" x 280mm/11" x 123 mm/4.8"

**Weight** Standard version: 2.8 kg/6lb  
EMS version: 3.2 kg/7lb



Mode	Frequency	Bandwidth / Hz	Sensitivity* @ 1 m	Locating Depth Guide (meters/yards)	
				Good Conditions	Poor Conditions
Power	40 Hz – 700 Hz	500	7.5 mA	3	2
Radio	14 kHz – 26 kHz	10,000	20 µA	2	1
Active frequencies	8 kHz–100 kHz	10 ,20 or 40	25 µA	5	2
Active frequencies	100 kHz –200 kHz	10, 20, or 40	50 µA	3	2
CD	up to 1024 Hz	10, 20 or 40	250 µA	5	2
Lf	up to 2048 Hz	10, 20 or 40	250 µA	5	2
CPS	100 Hz or 120 Hz	10, 20 or 40	10mA	3	2
Fault-Find (via optional external A-frame accessory)	8 Hz and 8.192 kHz	10 or 20	2 µV @	3	2
		10	1M	--	--
			100 µA		

\* Sensitivity specified for Peak mode

**Operating Modes:**

**Locate Accuracy:** 5% of depth (depending on depth – see below)

**Current Accuracy:** 5% of actual current (depending on depth – see below)

**Depth Accuracy** 5% of depth on undistorted signal with no adjacent signals

**Depth Range** Line — up to 3m @ 5% depth accuracy, 5% current accuracy  
up to 5m @ 10% depth accuracy, 10% current accuracy  
Sonde – up to 8m (with SuperSonde)

**Visual Indication:** Liquid crystal display indicating the following:

Signal Strength %	Line Depth	Sonde Depth
Line signal current	Gain Level	Operating Mode
Line/sonde mode	Peak/Null/Single mode	Left/Right direction arrows
Battery Status	Speaker Volume	CD direction arrows
Accessory connected		

**Audio Indication:** Audio signal output through water resistant speaker or optional headphones.

**Search Antennas:** 2 x dual wound horizontal and 1 vertical.

**Antenna Configurations:** Single horizontal for Wide response operation  
Dual horizontal for Peak operation  
Horizontal and vertical for Null operation

**Gain Control:** Rotary touch gain paddle

**Batteries:** 4 x Alkaline size D (IEC: LR20)  
Optional rechargeable battery pack with four NiMH rechargeable batteries

**Battery life** RX: greater than 16 hours @20°C (non-EMS modes)  
MRx: greater than 8 hours @20°C (EMS mode)

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

**External Connectors** RS232 connector (web-enabling/data logging)  
Accessory socket  
Headphone socket

**Standard accessories**  
• RS232 lead

**Optional accessories**

Carry bag	Sondes
2" and 4" clamps	Stethoscopes (CD and standard)
CD clamps	Headphones (summer and winter)
Submersible antenna	Rechargeable battery pack (complete with external 12 volt charging lead)
A-frame	Data logger

**Automatic Accessory Detection**

The following accessories are automatically identified by the RD4000 receiver when connected to the accessory socket. The receiver automatically selects operating mode(s) as appropriate to the accessory.

Clamps (CD and standard)	Submersible Antenna
Sondes	Stethoscopes (CD and standard)
A-frame	

**Receiver Options:**

**Electronic Marker-Ball Detection:**

**(RD4000MRx)** Operation : Detection of any 1 of 6 marker types buried to a depth of 1.4m,  
Detection of large deep markers to a depth of 3m,  
Bar-graph and variable pitch tone to indicate signal strength  
Manual EMS Gain Control – High / Low  
Dedicated Marker Detection

Dual Mode Operation: Narrow Band Cable Location (Null Mode only) combined with  
Marker Ball Detection


**Marker Types**

Application	Colour	Frequency
Power	Red	169.8 kHz
Water	Blue	145.7k Hz
Sanitary	Green	122.5 kHz
Telephone	Orange	101.4 kHz
Gas	Yellow	83.0 kHz
Cable TV	Orange/Black	77.0 kHz

**Compatibility** Recommended for use with Radiodetection T3, T3F, T10, and PTX-3 transmitters, and LMS

**Also backward compatible with obsolete Radiodetection transmitters.**

**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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and are subject to change without notice