

COMMON SENSE SOLUTIONS

- **TWO QUICK-SWAPPABLE BATTERIES**
 - » Charge your spare battery while you locate
- **ERGONOMIC 3D SOFT TOUCH KEYPAD**
 - » Provide intuitive feedback with each button press
- **COMFORTABLE BALANCED RECEIVER**
 - » Reduce fatigue with balanced ergonomic design
- **BREAK-AWAY LEADS**
 - » Reduce accidental damage to transmitter leads
- **DUAL OUTPUT PORTS**
 - » Connect any two accessories
 - » Select the active accessory with a single button



THE ALTERNATIVE

There's a new player in the Utility Locating game. Underground Magnetics is happy to announce the production of a revolutionary Utility Locating System.

 **Underground Magnetics**
simplicity meets versatility

UMAGUL.COM | 515.505.0960

UTILITY LOCATING SYSTEM SPECIFICATIONS

RECEIVER

Model	UM Dual
Dimensions	26.7in x 5.8in x 12.7in (679mm x 148mm x 324mm)
Weight	4.8lbs (2.2kg)
Operating Temperature	-4°F to 122°F (-20° to 50°C)
Storage Temperature	-40°F to 160°F (-40° to 70°C)
Environmental	IP65 ¹
Batteries	Lithium ion battery pack, 35.5Wh 6x AA (LR6) with Alkaline battery pack Automatic battery type detection
Battery Life	Lithium: 15 hours continuous (30 intermittent) Alkaline: 5 hours continuous (10 intermittent)
Display	High-Visibility Color Transflective Display, 4.3"

PERFORMANCE

Frequency Range	50Hz - 200kHz
Max Automatic Depth ³	19.7 ft (6m)
Max Pushbutton Depth ³	36 ft (11m)
Accuracy (Locate)	+/- 5% of depth
Accuracy (Depth) ³	
- Line	+/- 5% to 9.8ft (3m)
- Sonde	+/- 5% to 9.8ft (3m)
- Passive	+/- 10% to 9.8ft (3m)
Sensitivity:	1x10 ⁻¹⁵ Tesla (1uA @ 1m, 32.8kHz)
Automatic overload protection	Up to 60dB

FEATURES

Locate Modes	Single Twin Null Sweep (Omnidirectional) Twin Sweep (Omnidirectional)
Gain Control	Manual with One Touch
Active Locate Frequencies	Standard Frequencies: 256Hz, 263Hz, 440Hz, 512Hz, 560Hz, 577Hz, 640Hz, 815Hz, 870Hz, 940Hz, 1.02kHz, 1.17kHz, 3.14kHz, 4.1kHz, 8.01kHz, 8.19kHz, 9.82kHz, 12.1kHz, 16.3kHz, 22.5kHz, 29.4kHz, 32.8kHz, 44.5kHz, 66.1kHz, 88.8kHz, 99kHz, 132kHz, 200kHz
Custom Frequencies	Available by request
Sonde Frequencies	4 Frequencies: 512Hz, 640Hz, 8.19kHz, 32.8kHz
Passive Frequencies	Power - 50Hz, 150Hz, 450Hz for 50Hz grid - 60Hz, 180Hz, 540Hz for 60Hz grid Grouped Power: Detects power frequencies and harmonics simultaneously Cathodic Protection (CP) - CP120 for 60Hz grid - CP100 for 50Hz grid Radio: 13kHz to 28kHz
Locate Direction	Automatically detected, Any frequency up to 10kHz
Frequency Analyzer	Scans the area for noise in all directions Recommends the best frequencies
Data Logging	4Gb internal storage, over 16 million records
Wireless Connections	BLE 5.1
Accessories	Ring Clamp

TRANSMITTER

Model	UM 10w
Dimensions	8.3in x 7.6in x 15in (210mm x 193mm x 381mm)
Weight	7.9lbs (3.6kg)
Operating Temperature	-4°F to 122°F (-20° to 50°C)
Storage Temperature	-40°F to 160°F (-40° to 70°C)
Environmental	IP65 ¹
Batteries	Lithium ion battery pack, 94.7Wh 8x D-Cell (LR20) with Alkaline Pack Automatic battery type detection
Battery Life	Lithium: 17 hours continuous (34 intermittent) Alkaline: 10 hours continuous (20 intermittent)
Display	High Contrast Graphical LCD

PERFORMANCE

Frequency Range	256Hz - 200kHz
Max Power Output	10w (1w above 45kHz)
Max Current Output	1000mA (500mA above 45kHz)
Max Voltage Output	90Vrms
Output Power Levels	4 levels + Standby ²

FEATURES

Active Locate Frequencies	Standard Frequencies: 256Hz, 263Hz, 440Hz, 512Hz, 560Hz, 577Hz, 640Hz, 815Hz, 870Hz, 940Hz, 1.02kHz, 1.17kHz, 3.14kHz, 4.1kHz, 8.01kHz, 8.19kHz, 9.82kHz, 12.1kHz, 16.3kHz, 22.5kHz, 29.4kHz, 32.8kHz, 44.5kHz, 66.1kHz, 88.8kHz, 99kHz, 132kHz, 200kHz
Custom Frequencies	Available by request
Induction Frequencies	3.14kHz and above
Dual Output Ports	Connect any two accessories Select the active accessory with Mode key
Locate Direction	User enabled, Any frequency under 10kHz
Accessories	Direct Connect Leads Ring Clamp

SYSTEM

Regulatory Compliance	FCC, CE.			
Data Transfer	USB-C 2.0			
PC based Setup	User-configurable with UM Setup software			
Language Support	22 user-selectable languages:			
English	Polish	Danish	Czech	Chinese
Spanish	Dutch	Estonian	Finnish	Korean
French	Portuguese	Norwegian	Greek	
German	Russian	Latvian	Hungarian	
Italian	Swedish	Lithuanian	Romanian	
General Warranty:	Standard 2-year warranty against manufacturer defects. Optional 1-Year warranty extension available			
Parts and Accessories:	Standard 2-year warranty against manufacturer defect, no option for third year extension.			

¹ IP65 Rating: The IP65 rating indicates a product is "dust tight" and protected against water jets from any direction. Whether used in harsh weather conditions or dusty settings, an IP65-rated device offers reliable protection, ensuring long-lasting performance and durability.

² In standby, a small amount of voltage and current are used to measure the impedance of the utility

³ Depth accuracy based in a single undistorted signal source