



# pathfinder

PRECISION LOCATING SYSTEM

 **RYCOM**  
instruments, inc.





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## PRECISION LOCATING SYSTEM

Kit PART NUMBER 001 00700 00



### PATHFINDER RECEIVER

Precision locating receiver offering multiple active & passive frequencies, multiple locate modes, constant depth readout and current measurement. Standard package equipped with lithium-ion rechargeable batteries.



### PROTECTIVE CARRYING CASE

A heavily padded protective case for equipment during transport and use.



### PATHFINDER TRANSMITTER

10-watt transmitter capable of direct connection, transmitter induction & coupler induction. Standard with lithium-ion rechargeable batteries.



### BATTERIES

Li-Ion battery packs for both the transmitter and receiver.



### AC BATTERY CHARGER

Battery chargers for use in ac wall outlet.



### DIRECT CONNECTION CORD & GROUND ROD

Direct connection lead clips, each with 10 foot of reach & Ground rod for near end independent ground

### MANUAL

Operations manual

## COMMON OPTIONAL ACCESSORIES



### CLAMPMETER V2.0

#### WIRELESS COUPLER 4" I.D.

P# 100-00398-00

4" I.D. cordless inductive coupler used to apply signal on live cables when direct connection is not possible. Operational frequency 33kHz, 65kHz & 82kHz.



### STAFF A-FRAME

P# 001-00487-00

Stand alone a-frame works independently from the receiver. This directional ground fault detector pinpoints core-to-ground faults and sheath-to-ground faults.



### INDUCTIVE COUPLER 4" I.D.

P# 100-00398-00

4" I.D. inductive coupler applies signal on live cables when direct connection is not possible. Operational frequency range 8kHz to 82kHz.



### SONDE [OPTION OF 512Hz, 640Hz, 815Hz, 8kHz OR 33kHz]

P# 100-00281-01

Self-contained signal transmitter with 25 foot range can be used in non-pressurized conduits and pipes to track path and pinpoint blockages.



### INDUCTIVE COUPLER 2" I.D.

P# 100-00587-00

2" I.D. inductive couple applies signal on cables when direct connection is not possible. Operational frequency range 8kHz to 82kHz.



### EXPLORING COIL

P# 151-00066-00

The exploring coil for locating wiring within walls and cables within cable bundles



### GROUNDING EXTENSION KIT

P# 151-00494-25

Two 25ft cords and 2 ground rods for reaching desired grounding location



### 12Vdc BATTERY CHARGER

P# 750-00032-00

DC battery charger for use in a car's 12 volt auxiliary port

## PRECISION AT ITS CORE

The Pathfinder Precision Locating System from Rycom Instruments, Inc. is engineered for unmatched accuracy in today's complex utility environments. Built around our advanced Pathfinder SAF Technology™, this system is ideal for challenging conditions—including congested easements, extended utility runs, and essential service drops. Designed with simplicity, precision, and affordability in mind, the Pathfinder is an essential tool for professionals dedicated to safeguarding buried infrastructure.

At the core of Pathfinder is our proprietary FrequencyFlex™, offering over 1,000 programmable frequencies. With field-programmable push-button customization, users can instantly tailor frequency settings to match specific locate conditions—adding or removing frequencies as needed.

The optional PathLink™ Technology revolutionizes efficiency by creating a remote link between transmitter and receiver, allowing you to adjust output power and frequency from the handheld receiver—no need to return to the transmitter.

A high-contrast LCD interface provides real-time signal data in any environment, with automatic depth and current readings and intuitive directional arrows, visible even in direct sunlight or low light

## FEATURES

### FrequencyFlex™

- Over 1,000 field-programmable locating frequencies
- Customization on-site for maximum adaptability

### 8 Locating Modes

- Multi-channel processor with an advanced antenna array ensures pinpoint accuracy

### PathLink™ Technology (Optional)

- Remotely adjust transmitter power and frequency from up to 400 yards away using the receiver

### Automatic Impedance Matching

- Maximizes transmission range while minimizing battery usage

### High-Contrast LCD Interface

- Displays continuous depth, current, signal strength, and directional guidance in all lighting conditions

### Constant Depth & Current Readout

- Real-time updates for line depth and signal quality during active locates

### 84 wH Lithium-Ion Batteries

- Lightweight, long-lasting power source for both transmitter and receiver

### 4-Year Warranty

- Extendable with registration, backed by decades of Rycom reliability

### Made in the USA

- Proudly designed and manufactured in Raytown, Missouri, since 1946



## RECEIVER SPECIFICATIONS

Available Operating Frequencies.....	476.527 kHz*, 262 kHz*, 200.330 kHz*, 145 kHz, 131 Khz, 117.850 kHz, 116 kHz, 93 kHz, 83.00kHz, 82.70kHz, 82.315 kHz, 65.536 kHz, 33.0 kHz, 32.768 kHz, 9.2 kHz, 8.9 kHz, 8.4 kHz, 8.192 kHz, 4.010 kHz, 1.450 kHz, 1.100 kHz, 1.020 kHz, 1.010 kHz, 940 Hz 920 Hz, 870 Hz, 815 Hz, 797 Hz, 760 Hz, 640 Hz, 577 Hz, 570 Hz, 512 Hz, 273 Hz, 256 Hz, & 200 Hz (* where permitted by law) Sonde: 640Hz, 512Hz, 815Hz, 8.192 kHz & 32.768kHz Passive: Power modes 50 <sup>env</sup> & 60 <sup>env</sup> , 50Hz, 150Hz, 250Hz, 350Hz, 450Hz, 60Hz, 180Hz, 300Hz, 420Hz, 540Hz; LiveSound™; Radio Frequency; Rectified CP 50Hz & Rectified CP 60Hz
Antenna Mode .....	Simultaneous peak/null (dual horizontal antennas & vertical antenna), pin-point peak (dual horizontal antennas), directional guidance, peak (single horizontal antenna) & null (single vertical antenna).
Display Indicators .....	Backlit segmented LCD bar graph, battery condition, continuous mode signal strength, depth measurement, line orientation, left/right line guidance, operating mode, volume level & function indicators
Audio Indication .....	Variable pitch & LiveSound. 4 volume selections including mute.
Current Measurement .....	Display indicates relative current
Power Source .....	6 "C" cell batteries or Lithium Ion
Battery Life .....	Continuous: 30 hours intermittent: 82 hours
Signal Strength .....	LCD bar graph, absolute signal strength 0-999
Gain Control .....	Left/Right Guidance Mode: Automatic All other locate modes: Manual gain adjustment & automatic centering
Dynamic Range .....	126 dB
Depth Measurement .....	DIGITAL: 3 digit LCD readout of push-button measurement (1 inch - 50 feet) (.02m- 15 m) with accuracy > 5% of depth. MANUAL: 45° triangulation method
Operating Temperature .....	-4° F to +133° F (-20° C to +55° C)
Ingress Protection Rating .....	IP65
Dimensions .....	30.3" x 9.4" (77 cm x 24 cm)
Weight .....	Rechargeable: 4.2 lbs (1.9 kg); C-cell: 4.2 lbs (1.9 kg)

## TRANSMITTER SPECIFICATIONS

Available Operating Frequencies.....	476.527 kHz*, 262 kHz*, 200.330 kHz*, 145 kHz, 131 Khz, 117.850 kHz, 116 kHz, 93 kHz, 83.00kHz, 82.70kHz, 82.315 kHz, 65.536 kHz, 33.0 kHz, 32.768 kHz, 9.2 kHz, 8.9 kHz, 8.4 kHz, 8.192 kHz, 4.010 kHz, 1.450 kHz, 1.100 kHz, 1.020 kHz, 1.010 kHz, 940 Hz 920 Hz, 870 Hz, 815 Hz, 797 Hz, 760 Hz, 640 Hz, 577 Hz, 570 Hz, 512 Hz, 273 Hz, 256 Hz, & 200 Hz (* where permitted by law)
Indicators .....	AC load assistance measurement, relative ohms, voltage, live voltage output, current output, power level, frequency, mode, battery indication alert, low battery indicator audio/visual with modulated low battery warning transmitted to receiver.
Load Matching .....	Automatic from 5 ohms to 25,000 $\Omega$
Output Power .....	10 power settings Low & Medium Frequency Range: 0.2w to 10w High Frequencies (above 44kHz) : 0.2 to 1w
Power Source .....	Rechargeable: 10.8 V, 10 amp-hour maintenance free Lithium Ion Battery Non-Rechargeable: 12 "D" cell batteries
Battery Life .....	Continuous: 8-20 hours (dependant on load, frequency, power setting) Intermittent: 40-60 hours
Operating Temperature.....	-4° F to 133° F (-20° C to 55° C)
Ingress Protection Rating .....	IP65
Dimensions .....	16" x 6.32" x 6" (41 cm x 16 cm x 15 cm)
Weight .....	Rechargeable: 6 lbs (2.7 kg); D-cell: 8 lbs (3.6 kg)

WARRANTY .....	48 Month (4 Years) Warranty when registered at <a href="http://www.rycominstruments.com/extended.html">http://www.rycominstruments.com/extended.html</a> within 1 month of date of purchase. Warranty from date of delivery against defects in material and workmanship (EXCEPT BATTERIES) on all instruments. This warranty is void if, after having received the instrument in good condition, it is subjected to abuse, unauthorized alteration or casual repair. We will repair or replace products that prove to be defective during warranty period. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED. THE WARRANTY DESCRIBED IN THIS PARAGRAPH SHALL BE IN LIEU OF ANY OTHER WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WE ARE NOT LIABLE FOR CONSEQUENTIAL DAMAGES.
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Country of Origin .....	United States of America
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Manufactured By.....	<b>RYCOM</b> instruments, inc.
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