

# 8880-DFF Directional Fault Finder

**Rycom Instruments® makes utility locating as accurate as you need, as simple as you want.**

- DFF A-frame integrates with digital receiver to guide the user straight to line faults
- 1 passive frequency of 50/60 cycles locates live utilities without the use of a transmitter
- 3 active frequencies of 815 Hz, 8 kHz, and 82 kHz allow accurate tracing in congested areas or the length of a single line
- Powerful 2.6 watt tracing signal is reliable for direct connection, transmitter and coupled induction
- Backlit digital display for low-light reading
- Triple antennae with push button depth and current measurement
- Rechargeable 12.6 volt sealed lead acid battery
- Made in the U.S.A.

The 8880-DFF cable, pipe, line and directional fault finder offers utility locators three active frequencies – 815 Hz, 8 kHz, and 82 kHz – ensuring adequate signal is applied to buried utilities in any environment. Multiple active frequencies allow the user to accurately locate with a minimum of “ghosting” to adjacent lines while maintaining the ability continue locating past faults and around conduit bends. Passive frequencies identify “live” and charged lines by their naturally occurring electromagnetic fields. The 8880-DFF offers one passive frequency – 50/60 cycles – allowing line locating without the use of a transmitter.

Updated transmitter functions include improved transmitter induction, dual frequency coupled induction at 8 kHz and 82 kHz, and automatic impedance matching for direct connections. The 2.6 watt transmitter has the ability to simultaneously apply an 815 Hz and 82 kHz frequency to a utility. From one transmitter setting the user can locate the main line as well as other services by “lighting up” the entire site. This set-and-forget feature saves you time and money by reduc-

ing the need to repeatedly relocate the transmitter. All functions are accessed via weather-proof membrane buttons and both user input and transmitter status are verified with audible responses.

The ergonomically designed and balanced 8880-DFF receiver provides instant push-button depth up to 15 feet and current measurement to identify the target utility in crowded easements. Proximity cues to the tracing signal are given to the user through either peak or null tone modes while the backlit digital display provides both relative and actual signal strength.

Line faults can be quickly and simply located when used with the included “A-frame” ground return probe. The receiver’s backlit digital display provides instant directional feedback and guides the user forward and back along the line to the precise location of the fault.

Conduit pinches can be located using the optional Sonde accessory. Operating on active frequencies of 815 Hz or 8 kHz, Rycom Instruments® Sondes are pushed into non-pressurized conduits and pipes until they reach the point of pinch or blockage. Traceable 20 feet in the air and 10 feet in cast iron, the 8880-DFF receiver will identify the precise location of the line blockage.

Rycom Instruments®, Inc. locators are designed and manufactured to make utility locating as accurate as you need and as simple as you want. For more information on the 8880-DFF, or any other Rycom Instruments® product, please call us toll free at 1-800-851-7347 or visit us online at [www.rycominstruments.com](http://www.rycominstruments.com).



Each 8880-DFF comes complete with a 2.6 watt transmitter, multi-function digital receiver, collapsible A-frame, ground rod, red/black test leads, 3 inch hard coupler, AC and DC battery charger, locating basics training video, manual and carrying cases.

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[www.rycominstruments.com](http://www.rycominstruments.com)  
**Accurate Utility Locating Made Simple**

# 8880-DFF Specifications

## Transmitter

**Operating Frequencies:** 82 kHz, 8 kHz, 815 Hz, DFF mode 8 Hz pulse

**Indicators:** AC load assistance measurement, low battery indicator with modulated low battery warning

**Load Matching:** Automatic from 5 ohms to 2000 ohms

**Output Power:**

Frequency	Normal	High
815 Hz	0.6 W	2.6 W
8 kHz	0.6 W	2.6 W
82 kHz	0.2 W	1.0 W
Both (815 Hz + 82 kHz)	.12 W + .06 W	1.33 W + .67 W

**Power Source:** 12 V, 7 amp-hour maintenance free sealed lead acid battery includes 120 V AC wall mount charger and DC truck charger

**Battery Life:** (dependant on load, frequency, power setting) continuous: 10-20 hours intermittent: 50-70 hours with 400 to 1200 rechargeable cycles

**Operating Temperature:** -4° F to 133° F (-20° C to 55° C)

**Size:** 16" x 6.32" x 6" (41 cm x 16 cm x 15 cm)

**Weight:** 11.5 lbs (5 kg)

## Receiver

**Operating Frequencies:** 82 kHz, 8 kHz, 815 HZ, 50/60 Hz, DFF mode 8 Hz pulse

**Antenna Mode:** Peak, pin-point peak, and null

**Display Indicators:** Backlit LCD bar graph, low battery, signal strength, mode and function indicators, fault direction

**Audio Indication:** Variable pitch response

**Current Measurement:** Display indicates relative current

**Power Source:** 6 "C" cell batteries

**Battery Life:** Continuous: 40 hours intermittent: 82 hours

**Signal Strength:** LCD bar graph and absolute signal strength readout 0-999

**Gain Control:** Manual up/down gain adjustment or automatic centering

**Dynamic Range:** 126 dB

**Depth Measurement:** Push-button readout to 15 feet or manual triangulation method

**Operating Temperature:** -4° F to 133° F (-20° C to 55° C)

**Size:** 30.3" x 9.4" (77 cm x 24 cm)

**Weight:** 3 lbs (1.3 kg)



**WARRANTY:** One-year 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. **Terms:** Net 30 days, Missouri sales tax charged where applicable. **Shipping & Delivery:** All orders are FOB Raytown, MO. Specifications subject to change without prior notice.

RYCOM Instruments®, Inc. is a leading manufacturer and global supplier of cable, pipe and fault locating equipment. Established in 1946, RYCOM Instruments® Inc. maintains a state-of-the-art production facility and engineering department. Our guarantee is to deliver our customers a superior product and the locating equipment they need.

RYCOM Instruments®, Inc. locating devices are designed and manufactured to make utility locating as accurate as you need, and as simple as you want.



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