# L1072, L1073 and L1073-10 Portable Locators



- Lightweight, rugged field instrument
- Multiple location modes
- Multiple frequencies
- Pushbutton depth and current indication
- Transmitter variable output power levels
- Powerful 10 W transmitter option
- SONDE support
- Rechargeable or alkaline battery options

#### **DESCRIPTION**

The Megger portable locators, models L1072, L1073 and L1073-10, accurately and quickly locate buried cables and pipes. They are built to a proven design and benefit from advanced technology making them ideal for today's demanding requirements. The transmitter is available with either disposable or rechargeable batteries.

Suitable for use on long or short ranges, inductive or conductive, and active or passive, the units deliver quick and accurate results with a user-friendly interface.

Operating the receiver at multiple frequencies optimizes performance for specific needs of the user. Typically low frequencies of 815 Hz provide longer range while reducing potential errors from adjacent cables. The higher frequency of 82 kHz will locate past bad telephone bonds, locate underground stubs and permit inductive locating with either the optional flexible coupler or direct induction. The special feature on all units allows the user to select and compare receiver information on two frequencies simultaneously, without having to return to the transmitter.

Excellent passive 50/60 Hz locating will pinpoint active power lines and other utilities where AC is present without the use of the transmitter.

The L107X family of portable locators also offers a SONDE capability of detection and locating. By selecting this feature, the user is able to choose a SONDE that will match the same frequency and the receiver.

#### **APPLICATIONS**

The L107X family offers flexibility which remains their key strengths, making them suitable for use in various and demanding applications.

Combining high power at low frequency helps eliminate the problem of false coupling into adjacent objects and allows the high transmitter power to transmit a signal past several grounds and into multiple distributed grounds. Multi-grounded electrical distribution service, continuously grounded water pipes, multi-grounded telephone shield wiring, highly capacitive, cathodically protected coated gas pipes and CATV systems all benefit from the flexibility of the L107X family.

Conductor current readout on the units give the user information on the amount of current flowing on the target conductor with correction for changes in depth. To trace the direction where the transmitter signal is divided or where it goes into the soil at an insulation ground fault, press the CURRENT button. This feature is useful in cathodically protected systems with ground faults.

An optional ground return probe allows ground fault detection on unshielded electric services or sheath faults on telephone services through the technique of voltage gradient.



PEWA Messtechnik GmbH

Weidenweg 21 58239 Schwerte

Tel.: 02304-96109-0 Fax: 02304-96109-88 E-Mail: info@pewa.de Homepage: www.pewa.de

### Megger.

#### **FEATURES AND BENEFITS**

- Multiple transmit/receive frequencies provide accurate long or short range locates.
- Push-button depth measurements up to 15 ft (4.6 m) quickly identify service depths prior to digging.
- Passive 50/60 Hz location of energized electric services aids as an excellent safety feature.
- Multiple location modes deliver quick and accurate results.
- High power at low frequency solves the difficult multipoint grounded utility locating problem.

#### **SPECIFICATIONS**

#### **Transmitter**

Operating Frequency: 82 kHz, 33 kHz, 8 kHz, 815 Hz;

Simultaneously: 815 Hz/82 kHz

**Load Matching:** Automatic from 5  $\Omega$  to 20.000  $\Omega$ 

**Output Power:** 6 settings

Frequency	L1072/1073		L1073-10	
	Low	High	Low	High
815 Hz	0.2 W	5 W	0.6 W	8 W
8 kHz	0.2 W	5 W	0.6 W	10 W
33 kHz	0.2 W	5 W	0.6 W	10 W
82 kHz	0.2 W	5 W	0.2 W	1 W
Both 815 Hz & 82 kHz	0.6 W	0.6 7W	0.6 W	0.67 W

**Display:** AC load resistance measurement, low battery indicator with modulated low battery warning

#### **Battery Supply**

L1072

Type: Standard 1.5 V "D" cells

Life: Continuous: 8 to 15 hrs depending on load, frequency

and power setting

Intermittent: 40 to 60 hrs

L1073

Type: Rechargeable 12 V 7 Ah lead acid

Life: Continuous: greater than 30 hrs depending on load,

frequency and power setting

Intermittent: 50 to 70 hrs depending on load,

frequency and power setting 90/264 V ac 47-63 Hz ac charger

DC car charger - Optional

L1073-10

Charger:

Type: Rechargeable 2 x 12 V 5 Ah lead acid

Life: Continuous: greater than 30 hrs depending on load,

frequency and power setting

Intermittent: 60 to 80 hrs depending on load,

frequency and power setting

Charger: 90/264V ac 47-63Hz ac charger DC car charger - Optional

#### **Operating Temperature Range**

-4° to +133° F (-20° to +55° C)

#### **Dimensions**

6 H x 6.32 W x 16 L in. (15 H x 16 W x 41 L cm)

#### Weight

L1072: 8 lb (3.6 kg) with alkaline D cells

L1073 & L1073-10: 12.5 lb (5.7 kg) with rechargeable batteries

#### Receiver

**Operating Frequency:** 815 Hz, 33 kHz, 8 kHz, 82 kHz, 50/60~(PASSIVE)

#### **Antenna Mode**

Null-responding vertical coil Peak-responding horizontal coil

Audio Indication: Variable pitch response on all frequencies

#### **Current Measurement**

Display indicated relative current simultaneously between any two selected cables for target cable verification in a multi-conductor environment

#### **Operating and Storage Temperature Range**

-4° to +133° F (-20° to +55° C)

**Battery Type:** Six 1.5 V C size alkaline

#### **Battery Life**

Continuous: 40 hours Intermittent: 82 hours

Auto power shutoff after 10 minutes of non-use

#### **Signal Strength**

LCD Bargraph. Absolute digital signal strength readout from 0 to 999

**Gain Control:** Up/Down button for automatic centering and manual control

#### Manual

Bubble-level triangulation for verification of automatic readout in congested environments. Note: Accuracy is dependent on site conditions, nonconcentric conductor shape, number of nearby conductors, and soil return currents.

## **Dynamic Range:** 126 dB **Depth Measurement**

Automatic: Push-button 3 digit readout to 15 ft in feet/inches,

(optional meter/centimeters to 4.6 m)

#### **Dimensions**

9.4~H~x~3.75~W~x~30.3~L~in.(23.8~W~x~9.3~W~x~76.9~L~cm)

**Weight:** 3 lb (1.36 kg)

ORDERING INFORMATION					
Item (Qty)	Cat. No.				
Portable Locator, transmitter "D" cell	L1072				
Portable Locator, transmitter rechargeable	L1073				
10W Portable Locator, transmitter rechargeable	L1073-10				
Included Accessories					
L1072: Receiver, transmitter, red/black cord, batteries, ground rod, instruction manual and soft carrying case					
L1073/L1073-10: Receiver, rechargeable transmitter, red/ black cord, batteries, ground rod, AC charger, instruction manual and soft carrying case					
Optional Accessories					
Folding ground return probe (grounded fault locator	651075				
Flexible coupler (Inductive Coupler)	651076				
DC charger (automotive)	651078				
4 in. coupler (inductive coupler)	651079				