

## Data Sheet



## Cable Locator CL 20

The BAUR cable locator CL 20 is unchallenged for successful location in a variety of situations. Capable of locating long or short cables, inductive or directly coupled, using active transmitter frequencies or passive (50 Hz), the CL 20 is a light-weight, user friendly instrument in ergonomic design that delivers quick and accurate readings.

### Features:

- Most simple handling, self-explaining keypad and display
- Membrane keypad with separate button functions
- Integrated digital graphic display with backlight and baragraph indication for signal strength
- Acoustic indication with variable pitch response
- Minimum mode and maximum mode selectable by activating a push-button
- Digital display of cable depth
- Current measurement for identification of target cable
- Automatic gain control by pushing a button
- 3 active transmitter frequencies, 50 Hz and RF (12 – 24 kHz) passive frequency selectable
- Powerful frequency transmitter with automatic load matching
- Simultaneous transmission of two active frequencies possible (815 Hz + 82 kHz)



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By operating the receiver at multiple frequencies, performance can be optimized for the specific need of the user. Low frequency of 815 Hz provides longer range and fewer errors from adjacent cables. High frequency of 82 kHz will locate and pass bad telephone bonds, locate ungrounded stubs and permit inductive locating with either the optional Flexicoupler or direct soil induction with the built-in induction antenna.

A design element of the CL 20 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 trace active power lines where AC current is present without the use of the transmitter.

### **Flexibility:**

The advantage of High Power at Low Frequency with the CL 20 solves the difficult multi-point grounded utility locating problem. Low frequency 815 Hz virtually eliminates the false coupling into adjacent objects and allows the high transmitter power to burn a signal 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 CL 20 advantage.

High power at high frequency provides excellent inductive coupling and direct soil induction that will bridge or jump across an open or damaged cable. No direct connection is needed.

### **Push Button Depth:**

The Cable Locator CL 20 has the added capability of determining the depth of a conductor by activating a push-button. Depths up to 5 meters are quickly displayed in centimeters.

### **Absolute Signal Strength:**

To make path identification easier, absolute signal strength is continuously displayed on the Cable Locator CL 20. Position the receiver over the target cable and simply look for the highest signal. By activating a push-button the CL 20 performs either in maximum mode or minimum mode.

Absolute signal strength can also identify a loss of signal to ground caused by damaged cable or cable sheath fault.

### **Rechargeable battery:**

The Cable Locator CL 20 is provided with a rechargeable battery in the transmitter. This sealed lead acid battery provides over 10 hours of continuous battery power.

### **Normal and High Power:**

Having a high power transmitter is a superb asset in field locating, however, most locating will be done in the low power mode. This will save battery life and limits high frequency coupling during routine location with normal power.

### **Conductor Current Readout:**

The Cable Locator CL 20 gives the user information on the amount of current flowing on the target conductor with correction for changes in conductor depth. To trace the direction where the transmitter signal is divided or where it goes into the soil at a ground leakage fault, push the Current Button. This feature is very successful when used on cathodically protected systems with ground faults.

**Technical data: CL 20 receiver**

Operating frequency	815 Hz 8 kHz 82 kHz 50 / 60 Hz & RF 12 – 24 kHz (passiv)
Antenna mode	Minimum - responding vertical coil Maximum - responding horizontal coil
Audio indication	Variable pitch response on all operating frequencies
Current measurement	Display indicates relative current simultaneously between any two selected cables for target cable verification in a multi-conductor environment.
Operating temperature	- 20 to + 55 °C
Battery type	Six 1.5 alkaline IEC LR14
Battery life	
Continuous operation	40 hours
Intermittent operation	82 hours (auto power shutoff after 10 minutes of non-use)
Signal strength	Analogue LCD bargraph Absolute digital signal strength readout from 0 to 999
Gain control	Up / Down button for automatic centering & manual control
Dynamic range	126 dB
Depth measurement:	Max. 5 m (Tracing up to 9 m)
Automatic:	Push-button 3 digit readout in meter/centimeter
Accuracy:       815 Hz	± (1 - 6) % under normal conditions ≤ 1.5 m
82 kHz	± (5 - 12) % under normal conditions ≤ 1.5 m
Manual:	Bubble-level triangulation (45 °) for verification of automatic readout in congested environments
Dimensions (W x H x D)	105 x 820 x 250 mm
Weight	1.5 kg

**Technical data: CL 20 transmitter**

Operating frequency	815 Hz 8 kHz 82 kHz Two frequencies simultaneous (815 Hz + 82 kHz)
Indicators	AC load resistance measurement Low battery indication Low battery warning modulated on output signal every 20sec.
Load matching	Automatic from 5 to 2000 Ω
Output power	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
Rechargeable battery	12 V, 7 Ah maintenance-free sealed lead-acid including charging unit
Operating time	(400 to 1200 recharge cycles) 10 - 20 h depending on load, frequency, power setting 50 - 70 h depending on load, frequency, power setting. 25 % duty cycle average
Operating temperature	- 20 to + 55 °C
Dimensions (W x H x D)	160 x 160 x 405 mm
Weight	5 kg with rechargeable



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## Cable Locator CL 20 transmitter with rechargeable battery

### Delivery includes:

- Frequency transmitter with incorporated **rechargeable battery**
- Battery charging unit 1A; 12 W
- Receiver with built-in probe
- Battery alkaline-manganese; 1,5 V; IEC LR 14 (6 pcs.)
- Connection cable with large terminals
- Ground rod
- Soft carrying case for frequency transmitter
- Soft carrying case for receiver
- Operating manual

### Options:

- Small flexicoupler Ø 100 mm
- Large flexicoupler Ø 200 mm 815 Hz / 82 kHz
- Large flexicoupler Ø 200 mm 82 kHz / 8 kHz
- Ground return probe GRP (foldable)
- Headphone

