

FOX-500CPL

Cable Path Locator



Although it is not so difficult to identify a damaged cable and calculate the accurate distance with a test instrument, it does not help the user to pinpoint the exact position where you should dig a hole on the ground. FibreOptica's FOX-500CPL, a Cable Path Locator can help you out.

The FOX-500CPL utilizes the principle of electromagnetism which is a well-tested and the most popular method in underground utility survey. It is embedded with advanced DSL techniques quickly and efficiently measuring and pinpointing faults and accurately tracing the path and depth of underground cables such as Telco cables, optical fiber cables (with metallic support/trace wires), CATV cables, power cables, gas pipes and etc.

FOX-500CPL has also adopted a unique filtering technique to significantly reduce the interference caused by unexpected sources. This makes FOX-500CPL work perfectly under most environmental conditions.

FOX-500CPL is lightweight, compact and easy-to-carry test sets. It consists of a directional RF Transmitter and a Receiver.

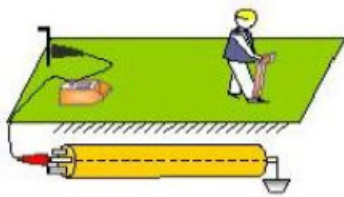
Main Features

1. All-in-one test set
2. Generate four user-selectable frequencies ensuring the equipment the best performance in varying conditions.
3. Individual signal or simultaneous signals sent enable the receiver to verify cable location.
4. The receiver alone can detect 50/60Hz passive frequencies of Power Line.
5. Three signal application methods (direct connect, induction and coupling) offer flexibility for a user to select according to actual plant conditions.
 - Direct Connect – applicable to the location where has point for direct connection
 - Coupling – applicable to the location where the cable sheath partially exposes outside and is able to use a coupler.
 - Induction – applicable to the location where there is no point for either direct connection or coupling.
6. Cable status checking up – in direct connection mode, prior to measurement it will check the insulation resistance and remaining voltage. The built-in ohmmeter enables to test earth insulation resistance and confirm grounding and shielding continuity as well as cable open and short. If insulation resistance is too small the receiver will stop the test; if the remaining voltage is high, the receiver will alarm.
7. Automatic output power adjustment ensures the maximized signal during a test.
8. The receiver provides four user-selectable test modes (Peak, null, differential and special peak with adjustable gain) to locate the cable path. The user can choose the most effective mode according to test conditions.
9. Adopting a unique filtering technique - significantly cut the frequency interference caused by other sources. This makes FOX-500CPL still work well at most environmental conditions.
10. Intensity of signal can be displayed on the receiver side in both bar graph and numeric value, then the user can easily differentiate between light and severe faults.
11. Visual and audible indications help the user quickly and accurately locate a cable in varying field conditions.
12. Large graphic display enables the user to see all the results in one screen.
13. Both the receiver and the transmitter do a self-test each time when the unit is turned on.
14. Measurement of signal current in cable to help identify the target cable.
15. Both the transmitter and receiver come with a rechargeable battery pack, and vehicle charger is also available as option.
16. Low-battery warning – when battery level is below the threshold it will alarm and auto shut down.
17. Easy-to-use, no need for training.

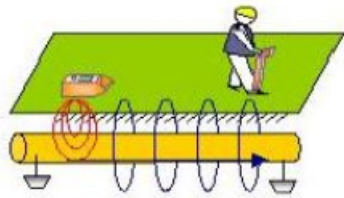
Applications

- Traces the path of underground cables such as Telco cables, optical fiber cables (with metallic support/trace wires), CATV cables, power cables, gas pipes and etc.
- Measures and pinpoints cable faults and reads-out the depth.
- Identifies target cables and energized power cables.

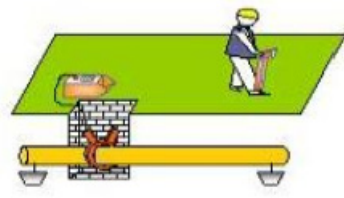
Transmitter's Application methods



Direct Connect

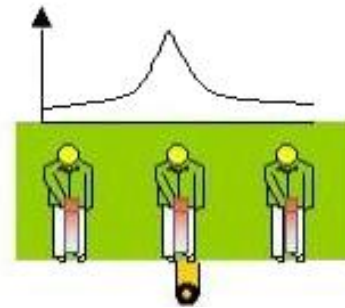


Induction

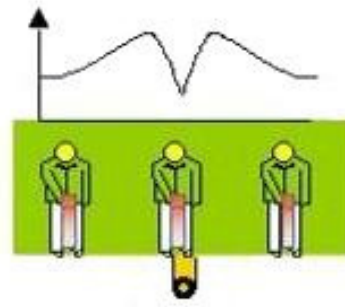


Coupling

Receiver's Locating Modes

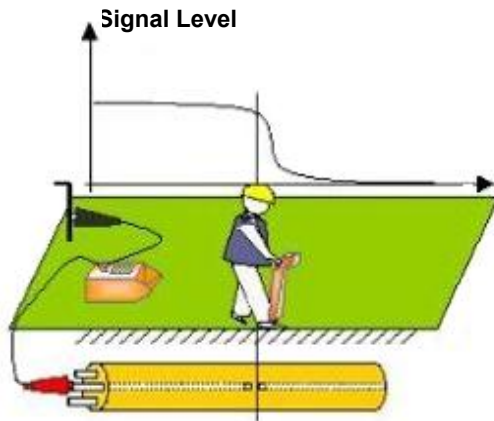


Peak Mode

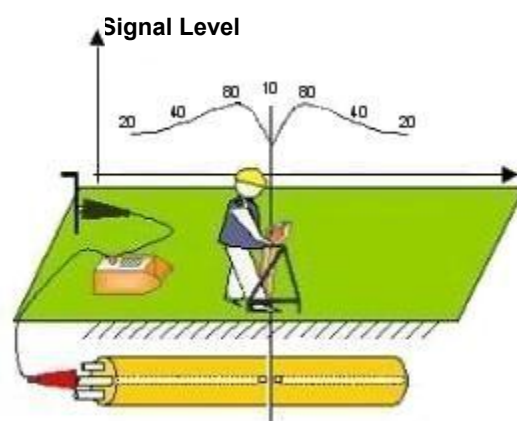


Null Mode

Methods of Locating Sheath Faults



Signal Comparison Method



Signal Differential Method

