FERROLUX®



For systematic line and fault location

- Plan view of the line location
- Excellent results, even when cables are bunched
- Location of joints
- Modular sensor concept (plug and play)
- Multi-functional system combines the most effective pinpointing methods and puts them in one device

FERROLUXIES



Easy and simple location!

The Ferrolux[®] Rx audio frequency receiver combines several functions and puts them in one device to locate lines and cable faults with a high level of precision. This includes the SuperMax and SignalSelect locating functions (for identifying signal flow direction) as well as proven audio frequency functions. This means that the highly precise receiver is able to deliver clear results, even in areas with lines that are routed closely together.

Longer tasks are easy as the device weighs very little and provides a clear and intuitive display of the measurement results.

Combined with the audio frequency generators in the Ferrolux[®] FLG series, even joints and cable faults (e.g. short circuits in wires) can be located with precision. This is all possible thanks to a continuous display of the installation depth and signal current, as well as automatic supporting functions (e.g. the minimum turbidity function).

GPS coordinates can be integrated via a Bluetooth[®] interface. All measurement data can be displayed graphically on a computer or on the display, which is still legible even in bright sunlight.



Ferrolux[®] **Rx** multi-functional control unit with IFS tracing sensor

Special features

- Continuous display of the installation depth and current strength
- Detection of current direction and signal quality
- Frequency scanning
- Probe location mode
- Programmable function keys
- Sensor weighs just 900 g
- Rapid menu navigation with easyGO





Multiple locating functions in one device

SuperMax

Until recently, the maximum method was used to locate cables; the relatively low level of accuracy meant it was mainly used for probing terrain. Thanks to the Ferrolux[®] Rx receiving system - a purpose-designed combination of the standard maximum and minimum methods - the maximum method can be used to achieve a new level of quality: SuperMax. With this method, even less experienced users can easily achieve very good locating results.



Maximum method



Maximum method

Advantage: Best signal strength when positioned directly over the line *Disadvantage:* Very wide location range

Minimum method

Advantage: Very precise location results Disadvantage: Strongly influenced by asymmetrical field geometries

SuperMax method

Very precise location with optimum signal when positioned directly over the line and no signal next to the cable



Minimum method



SuperMax method

The maximum signal is very distinctive, making it easier to locate and identify adjacent cables.

Clear identification of lines

SignalSelect

The proven **SignalSelect** method for detecting the direction of the signal flow in a cable makes determining the route of one line significantly more efficient and more safe. This method is particularly useful in areas with systems that are routed closely together. Ferrolux generators in the FLG series (e.g. the new FLG 12 audio frequency generator) generate a specifically coded audio frequency signal that is applied either directly or inductively. The Ferrolux[®] Rx receiving system selects this signal when the device is positioned above the target line and determines the direction of the signal flow.

- → ⊕ ← Signal flow from generator to far end
- →⊖← Signal flow from far end to generator
- Functions irrespective of cable length
- For any type of line (cable, pipe)
- Direct or inductive signal coupling
- Display of signal quality for additional safety

Ferrolux[®] Rx also automatically determines the quality of the SignalSelect signal and, for example, can warn if there are parallel lines in a higher position.

If there are several lines (cables, pipes) located next to each other, it is often difficult to determine which the correct one is. Sometimes the signal from the generator can flow through both lines, but the signal in the lines may be flowing in different directions. With the SignalSelect function, the generator applies a signal that contains direction information. When the device is positioned over the correct cable, a "+" symbol is displayed to facilitate precise identification.

Everything at a glance

Along with the tracking signal, the new measurement screen provides a clear overview of all relevant information for locating the cable or probe.





Ferrolux[®] – multi-functional platform

The modular, multi-functional pinpointing system is based on the Ferrolux[®] Rx audio frequency receiver with universal control unit. Thanks to plug and play functionality, additional sensors can easily be connected to the Ferrolux[®] MLE set.

In addition to tracing and fault location, with audio frequency, it enables the user to acoustically pinpoint cable faults with great precision and accurately locate cable sheath faults using the voltage gradient method.

- 1 Soil spike connection sockets
- 2 Connection socket for route sensor and ground-borne sound sensor
- **3** Headphone connection socket







A modular sensor concept for pinpointing cable faults

The set Ferrolux[®] MLE is equipped with a surge wave receiver type digiPHONE⁺ enabling the user to acoustically pinpoint flashover faults in cables that are routed in the ground. Excellent acoustic characteristics, background noise reduction, automatic headphone cut-off and an 84 dB volume limit ensure that the fault can be located efficiently using the proven coincidence method.

Other special features at a glance:

- Distance measurement in milliseconds or metres
- Tracing with right/left indicator
- Compass to indicate when the user is going in the wrong direction
- Ergonomic, adjustable and detachable handle





Locating faults using the surge wave receiver



The Ferrolux[®] MLE can even locate faults in the cable sheath, which always have a direct influence on the service life and quality of cables. Once two earth probes have been connected, the control unit switches to the voltage gradient method. A signal generator then creates a potential gradient at the fault location.

The device is so sensitive, it even displays voltage differences in the μ V range. The device features automatic interference signal filtering and parameter adjustment, so no manual adjustment is required during use. A fault can be located in minutes.









Click here to watch the video FERROLUX (1:51)



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