Megger®

Ferrolux®
Systematic line and fault location system

- ■ **Plan view of the target line location**
- ■ **Excellent results, even when cables are bunched**
- ■ **Location of joints**
- ■ **Modular sensor design (plug and play)**
- ■ **Multifunctional system combines the most effective pinpointing methods in one device**

DESCRIPTION

The Ferrolux® Rx audio frequency receiver with IFS tracing sensor locates lines and cable faults with a high level of precision as it combines several functions in one device. These include the SuperMax and SignalSelect (signal flow direction identification) locating functions, plus tried-and-tested audio frequency functions.
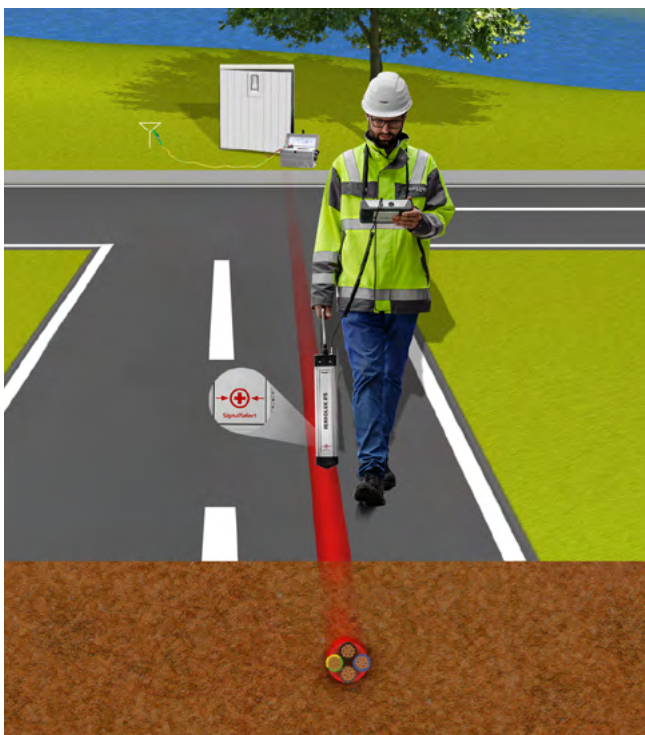

This means that the highly precise receiver is still able to deliver clear results in areas with lines that are routed closely together.

As of the low weight of the IFS tracing sensor also longer tasks can easily be performed. Additionally the systematic and intuitive guidance makes route tracing as simple as never before.

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.

SPECIAL FEATURES

- ■ Plan view of the target line location
- ■ Continuous display of the installation depth and current strength
- ■ Detects the current direction and signal quality
- ■ Frequency scanning
- ■ Programmable function keys
- ■ Sensor weighs just 900g
- ■ Rapid menu navigation with **easyGO**▶
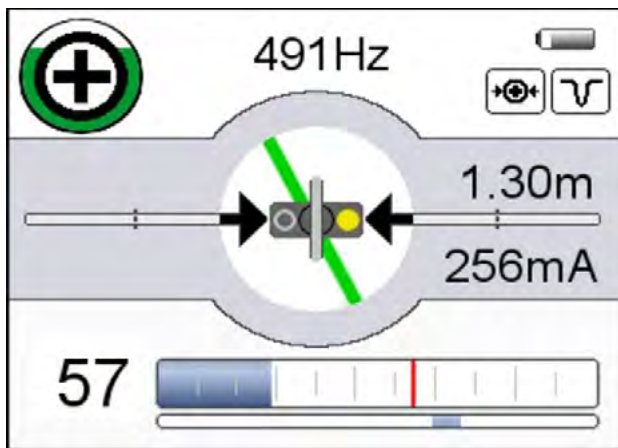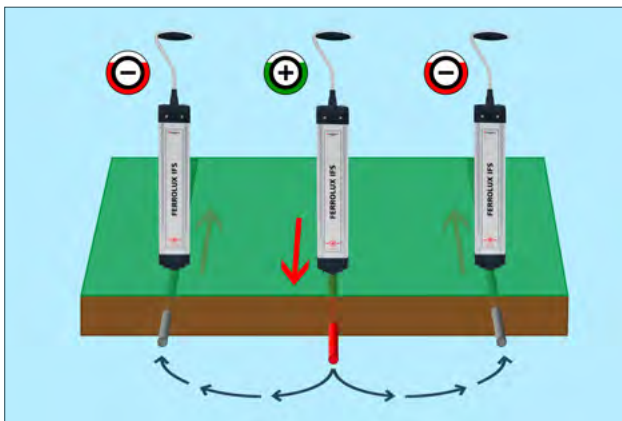- ■ Probe location mode

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This is all possible thanks to a continuous display of the installation depth and the signal current as well as automatic supporting functions (e.g. minimum turbidity). The device can be tailored to suit personal working habits thanks to the programmable F1/F2 function keys. The user can switch between frequencies, modes or speaker settings very quickly. This is also the simplest way to save a data point or waypoint.

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

Along with the tracking signal, the new measurement screen provides a clear overview of all relevant information that can be useful in locating the cable or probe.

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 directional information. When the device is positioned over the correct cable, a "+" symbol is displayed to facilitate precise identification.

FERROLUX® - THE MULTI-FUNCTIONAL PLATFORM

The modular, multi-functional pinpointing system is based on the Ferrolux® Rx audio frequency receiver with universal control unit. The control unit can optionally be used for accurate sheath fault pin-pointing using the earth probes.

Once the 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 µV 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.

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Ferrolux® Rx — audio frequency receiver

Incoming frequencies	passive: 50/ 60/ 100/ 120 Hz and 15 to 23 kHz
	active: 491/ 512/ 640/ 982/ 1090/ 8840/ 9820/ 32,768 Hz
Dynamic range	120 dB
Sensitivity	5 µA @ 1 m (33 kHz)
Depth measurement at active frequencies	0.1 to 7 m
Depth measurement accuracy	±5 % < 2m and ±10% > 2m
Current strength measurement at active frequencies	1 mA to 400 A
Current measurement accuracy	10%
Current direction (SignalSelect)	For all active frequencies
Measurement data memory	99 measurements with 99 measuring points
Display	TFT 3.5" graphic, measured values displayed as a bar graph and numerically
Power supply	6 x LR6 (AA) ca. 2650mAh
Operating time	> 15 h
Display unit dimensions (L x W x H)	100 x 225 x 65 mm
Weight	< 1 kg (control unit and tracing sensor)
Sensor unit dimensions (L x W x H)	730 x 100 x 45 mm
Operating temperature	-20 to +55°C
Storage temperature	-30 to +70°C
Relative humidity	93% at 30°C (non-condensing)
Degree of protection	IP 54
Interfaces	Bluetooth for pairing with GPS receiver, headphones, connection points for an IFS sensor to locate lines or digiPHONE[+] 4 mm connection sockets for connecting the soil probes
Location methods	Normal minimum, normal maximum, super maximum (precision location), minimum turbidity (of cable joints location)
Suitable generators	FLG 12, FLG 50, FLG 200

Ferrolux® IFA — readout antenna (optional)

Incoming frequencies	As for Ferrolux® Rx
Dynamic range	120 dB
Current direction detection (SignalSelect)	For all active frequencies
Weight	180 g
Dimensions (L x W x H)	54 x 75 x 22 mm

Voltage gradient location with earth probes

Sensitivity	5 µV to 200 V
Interference suppression	50/60 Hz, 16 2/3 Hz, KKS, DC
Zero-point adjustment	Automatic
Cycle detection	Automatic
Length of probes	1 m (separable and insulated)
Weight of probes	0.8 kg each
Length of connecting cable	2 m

*We reserve the right to make technical changes

ORDERING INFORMATION

Product	Order no.
Ferrolux® Rx audio frequency receiver, including connecting cable and carry case	1011692
FL 12-Set, consisting of Ferrolux RX receiver and Ferrolux FLG 12 signal generator	1013164
Options:	
Ferrolux® IFA readout antenna for cable identification	1011682
"Earth fault" sensor set for Ferrolux® Rx, including earth probes, connecting cables, contact sponge	1011722
GPS receiver set (GPS receiver + casing)	1013171
Headphones for Ferrolux® Rx	2010525
Li-Ion battery pack 9V 650mAh, incl. inlay, 2 batteries (1 spare) and charger	2013006
Recommended signal generators:	
Ferrolux® FLG 12, 12 W audio frequency generator	1012522
Ferrolux® FLG 50, 50 W audio frequency generator	1012965
Ferrolux® FLG 200, 200 W audio frequency generator	1012966

Ferrolux® FLG12

Ferrolux® Rx

Ferrolux® IFA

**„earth fault"
sensor set**

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