

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® 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 Rx® FLG series, even joints and cable faults (e.g. short circuits in wires) can be located with precision.

SPECIAL FEATURES

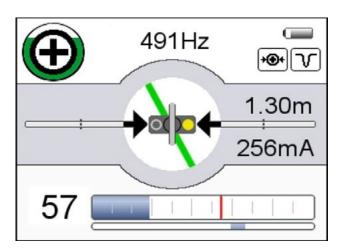
- Plan view of the target line location
- Continuous display of the installation depth and current strength
- Detects the current direction and signal quality
- Frequency scanning
- Programmable function keys
- Sensor weighs just 900g
- Rapid menu navigation with easy 60



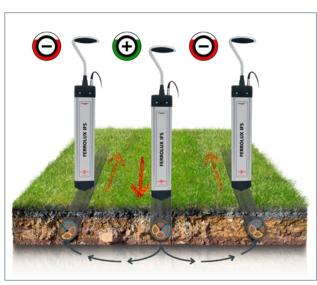
Probe location mode

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 pinpointing 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: 50/60/100/120/150 Hz and 15 to 23 kHz

active: 491/512/640/982/1090/2000/8840/9820/20000/32768 Hz

Dynamic range 120 dB

 $\textbf{Sensitivity} \hspace{1.5cm} 5~\mu A~@~1~m~(33~kHz)$

Depth measurement accuracy $\pm 5 \% < 2 \text{ m and } \pm 10\% > 2 \text{ m}$

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

DisplayTFT 3.5" graphic, measured values displayed as a bar graph and

numerically

Power supply 6 x LR6 (AA) ca. 2650 mAh

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) $730 \times 100 \times 45 \text{ mm}$ Operating temperature $-20 \text{ to } +55^{\circ}\text{C}$ Storage temperature $-30 \text{ to } +70^{\circ}\text{C}$

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+2

4 mm connection sockets for connecting the soil probes
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)

Location methods

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

 $\textbf{Sensitivity} \hspace{1.5cm} 5~\mu\text{V to } 200~\text{V}$

Interference suppression 50/60 Hz, 16 2/3 Hz, KKS, DC

Zero-point adjustmentAutomaticCycle detectionAutomatic

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

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ORDERING INFORMATION				
Receiver (please select one set)	Order No.	Generators (optional)	Order No.	
Line location (RX set)				
Ferrolux® RX audio frequency receiver, including control unit, connection cable and carry case	1011692	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	
Line location + sheath fault location (R	XNT set)			
Ferrolux® RXNT audio frequency receiver and earth probes, including control unit, connection cable, sponges and two carry cases	1014127	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	



RXNT set



Optional	Order No.
Headphones for Ferrolux® RX	2010525
Ferrolux [®] IFA readout antenna for cable identification	1011682
"Earth fault" sensor upgrade set for Ferrolux® RX, including earth probes, connecting cables, contact sponge	1011722
GPS upgrade set (GPS receiver + casing)	
Li-Ion battery pack 9 V 650 mAh, incl. inlay, 2 batteries (1 spare) and charger	



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