



## FERROLUX® FLE 10

### Audio Frequency Receiver

#### Benefits:

- ▶ **Perfect ergonomics and little weight for comfortable operation**
- ▶ **SignalSelect for clear line location even in congested areas**
- ▶ **Extensive PC software for evaluation of measurement data**

#### Description

The FERROLUX® audio frequency receiver FLE 10, in conjunction with the route sensor FS 10, combines the location techniques SuperMax, SignalSelect (identification of the direction of the signal flow) and the conventional audio frequency methods in one instrument.

With the aid of an audio frequency generator, the following techniques are available:

- ▶ Normal-Minimum, Normal-Maximum
- ▶ Super-Maximum
- ▶ SignalSelect (only in conjunction with Audio Frequency Generator FLG 10, FLG 50 or FLG 200)
- ▶ Twisted-Field-Method
- ▶ Depth measurement (digital + 45° method)
- ▶ Cable selection
- ▶ Location of sheath faults
- ▶ Ground survey

The Route Sensor allows both the cable depth and the signal current to be measured simultaneously. The handle of the Route Sensor can be turned by 90° which is very useful in implementing the available techniques and meets all requirements of ergonomics.

#### All benefits at a glance

- ▶ Data recording with direct graphic display on receiver FLE 10 (option)
- ▶ Very wide dynamic range of 120 dB ensures high sensitivity and avoids overload at strong signal current
- ▶ Direct measurement of cable depth and signal current strength
- ▶ Cable locating with left-right guidance
- ▶ RS-232 interface: Transfer of recorded data to PC for evaluation and processing in GIS-systems

The SignalSelect transmitter signal has a specific code which allows the target cable to be identified unambiguously.

#### Accessories

- ▶ Route Sensor FS 10
- ▶ Standard headphones KS10

#### Optional Accessories

- ▶ Mini antenna FLA 10 (for cable selection)
- ▶ Step Voltage Probe DEB 3-10 (for sheath fault locating)



#### Technical Specification

Receiver frequencies	
passive:	50 Hz / 60 Hz / 100 Hz / 120 Hz
active:	491 Hz / 982 Hz / 8440 Hz
Dynamic range	(referred to a cable depth =1 m)
50 Hz	10 mA ... 10,000 A 120 dB
491 Hz	400 µA ... 400 A 120 dB
982 Hz	180 µA ... 180 A 120 dB
8440 Hz	20 µA ... 20 A 120 dB
Depth measurement	0.1 m ... 7 m; (active frequencies only)
Current measurement	1 mA ... 400 A / 180 A / 20 A
Power supply /	Alkaline batteries 4 x LR 6 >20 h
Operating time	NiCd/NiMh 4 x R6 >13 h
Dimensions (W x H x D)	
FLE 10	220 mm x 100 mm x 110 mm
FS 10	550 mm x 100 mm x 40 mm (without handle)
Weight	
FLE 10	approx. 1.5 kg
FS 10	approx. 0.9 kg
Temperature range	- 20 °C ... + 55 °C

#### Major Benefits of Using SignalSelect

- ▶ Independent of cable length, as phase shifts in long cables do not have any effect
- ▶ To be used at any transmitter frequency
- ▶ Multiple measurement ensures high reliability
- ▶ No synchronisation of transmitter and receiver signals needed
- ▶ Patent method, easy to operate, efficient and reliable