



# LKZ-1500 / LKZ-1500-LITE

ndev: WMGRI K71500 / WMGRI K71500I ITE

# LKO-1500 / LKO-1500-LITE

index: WMGBLK01500 / WMGBLK01500LITE

LKN-1500

index: WMGBLKN1500









# **Underground detectives**

## **Features**

The LKZ locator set consists of a LKN transmitter and LKO receiver. It allows for location, identification and tracking of the route of objects buried in the earth. The user will be able to trace:

- power cords and cables, control cables, telecommunications cables,
- underground elements of lightning protection systems, cathodic protection systems,
- water and sewage systems,
- fuel transmission systems (pipelines, gas pipelines)
- heating systems and pre-insulated pipes.

The sets of LKZ series are an invaluable support in earthworks carried out for various industries, including energy, installation, construction, railway, telecommunications, water and sanitary, heating, geodetic and many others.

**LKN-1500 transmitter** introduces a specific signal to the tracked objects, enabling LKO receivers to route in the active mode. The receivers operate also in a passive mode that uses the network frequencies and telecommunications signals present in the facility.

**LKO-1500-LITE receiver** is designed according to "intuitive and user-friendly" principle and it is an ideal solution for users entering the world of cable location and routing. **LKO-1500 receiver** is a level higher: it facilitates the work of the user to with many features, including visualization of the cable routing in the tested object or a greater number of frequencies to choose from. It is also distinguished by the option of tracing cable short-to-earth faults with the use of additional accessories.

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# LKN-1500 transmitter

- Transmission of double frequency signals.
- The mode of limiting the voltage of the transmitted signal.
- Transmitter power: 1 W, 2 W, 5 W, 10 W.
- Operation in direct galvanic or inductive connection mode internal transmitting antenna.
- · Compatible with transmitting clamps.
- Works with Sonel transmitting clamps at frequencies up to 1024 Hz.
- Continuous or interval mode of operation that extends battery life.
- Case housing.

# **LKO-1500-LITE** receiver

#### Active mode

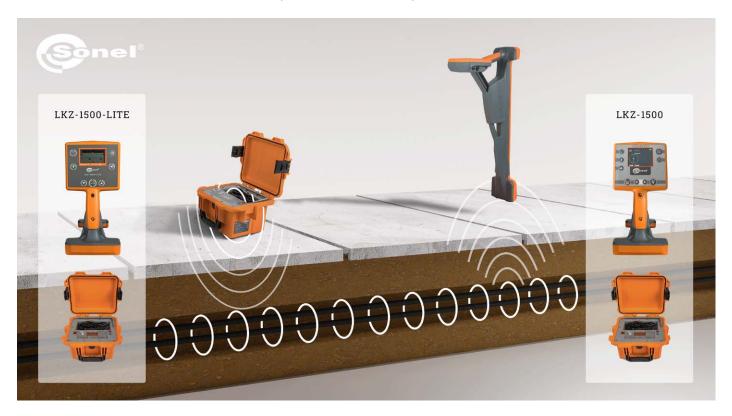
- » work with LKN-1500 transmitter at the frequencies of 1024 Hz, 8928 Hz, 33 kHz
- Passive mode work at the frequencies of:
  - » 50 Hz,
  - » RADIO (10...36 kHz),
  - » SB (48 Hz...14 kHz).
- Location depth up to 6 m.



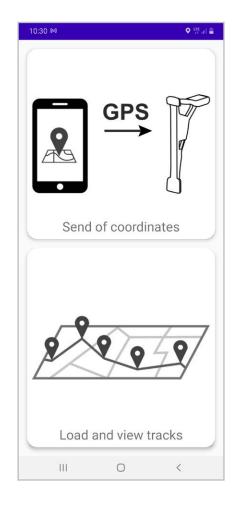
### LKO-1500 receiver

#### Active mode:

- » work with LKN-1500 transmitter at the frequencies of 273 Hz, 526 Hz, 1024 Hz, 8928 Hz, 33 kHz,
- work with transmitters other than LKN-1500 at the frequencies of 491 Hz, 512 Hz, 982 Hz, 2000 Hz, 2048, Hz 8440 Hz, 9828 Hz, 10000 Hz.
- Passive mode work at the frequencies of:
  - » 50 Hz, 60 Hz, 100 Hz, 300 Hz, 550 Hz, 1450 Hz,
  - » RADIO (10...36 kHz),
  - » SB (48 Hz...14 kHz).
- Location depth up to 10 m.
- Operation with external probes.



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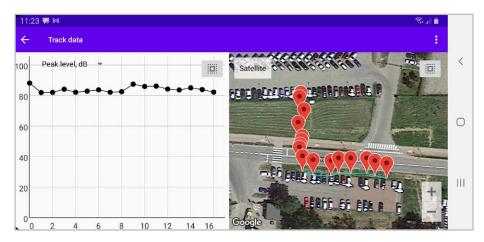
# **Sonel LKZ Terminal**

The application works with the Sonel LKZ-1500 wire and cable locator. By replacing the external GPS module, it allowing the user to define and record the geographic coordinates of the cable route.



The application additionally enables:

- · live positioning preview,
- · measuring the distance to a specific point on the route,
- export of routes saved in LKO-1500 to the phone's memory,
- · reading routes from the phone's memory,
- preview of the saved values of all parameters,
- · data export to PC.



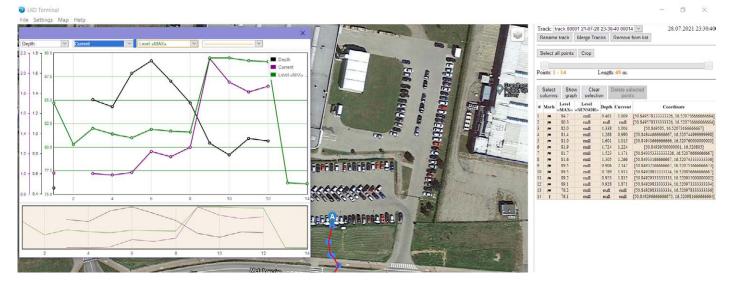


# Sonel LKO Terminal

A dedicated PC program for handling data stored in Sonel LKO-1500. It allows you to map a route from your location and read the data stored in the receiver. The data includes:



- coordinates of the place of measurement according to GPS information,
- reading the depth of the object and value of current flowing in it,
- · the direction of the forced current,
- · operating frequency,
- · date and local time at the time of measurement according to GPS information,
- export of route data to a file.



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# **Technical specifications**

# LKN-1500 transmitter

IP54					
IP54					
VRLA (AMG) lead-acid 12 V / 7 Ah					
275 x 250 x 180 mm					
ca. 4.9 kg					
-20+55°C					
-50+70°C					
23 ± 2°C					
no more than 90% at the temperature of +30°C					
IP54					
Ni-MH 6 V/2000 mAh battery pack					
5x AA 1.5 V battery					
5x Ni-MH 1.2 V rechargeable battery					
700 x 300 x 140 mm					
ca. 1.7 kg					
ca. 1.8 kg					
-20+55°C					
	275 x 250 x 180 mm  ca. 4.9 kg  -20+55°C  -50+70°C  23 ± 2°C  no more than 90% at the temperature of +30°C  IP54  Ni-MH 6 V/2000 mAh battery pack 5x AA 1.5 V battery 5x Ni-MH 1.2 V rechargeable battery  700 x 300 x 140 mm  ca. 1.7 kg  ca. 1.8 kg				

Relative humidity

Storage temperature

Nominal temperature

no more than 95% at the temperature of +30°C

-50...+70°C 23 ± 2°C



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# Standard accessories

Standard accessories ————————————————————————————————————						
		LKZ-1500-LITE	LKZ-1500	LKN-1500	LKO-1500-LITE	LKO-1500
		WMGBLKZ1500LITE	WMGBLKZ1500	WMGBLKN1500	WMGBLKO1500LITE	WMGBLKO1500
	LKN-1500 transmitter WMGBLKN1500	1	1	1		
	LKO-1500-LITE receiver WMGBLK01500LITE	1	1		1	
<b>]</b>	LKO-1500 receiver WMGBLK01500	1	1			1
	Crocodile clip 1 kV 20 A red / blue WAKRORE20K02 / WAKROBU20K02	1/1	1/1	1/1		
	Test lead 5 m 1 kV (banana plugs) red / blue WAPRZ005REBB / WAPRZ005BUBB	1/1	1/1	1/1		
	Sun-protecting cover WAPOZOSL4		1			1
	Ground probe 23 cm WASONG23	1	1	1		
	Battery compartment WAPOJ3	1	1			1
	Rechargeable battery NiMH 6 V, 2 Ah	1	1			1
4) 18	Battery charger Z16 WAZASZ16	1	1	1		
	Battery charger Z17 WAZASZ17	1	1		1	1
	Bag L13 WAFUTL13	1	1		1	1
<u> </u>	Declaration of verification	1	1	1	1	1

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# Optional accessories 3117-0051-071 3

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GPS adapter BT-Q1000XT

N-1 transmitting clamp (fi 52 mm)

N-4 transmitting clamp (fi 110 mm)

N-5 transmitting clamp (fi 125 mm)

WAADAQ1000XT

WACEGN1BB

WACEGN4

WACEGN5

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