

## Instruction manual

The manual contains information and instructions that are necessary for safe operation and maintenance of the instrument. Before using the device, the operating instructions must be read carefully and follow all instructions. If you don't follow the instruction manual, or if you fail to comply with the warnings and instructions, you may occur serious or fatal injuries or damage to the device.

## Functionality



The equipment set consists of a transmitter OE - SF T30V with cable set and a receiver OE - SF R30V. The transmitter supplies a modulated alternating voltage in the affected line. This AC voltage generates an electric field in the line. If the receiver is brought into proximity of the affected line with its search coil, the modulated AC voltage is evaluated and displayed.

- Locating cables in the wall, line interruptions
- Line tracing in the ground, open circuit of wire loops for Robot - Lawnmowers

## Safety guidelines

When working on electrical system, the respective accident prevention regulations of the professional trade association for electrical equipment and utilities must be followed. To avoid electrical shock, the valid safety and VDE regulations must be strictly observed relative to excessive contact voltage when working with voltages

exceeding 120V (60V) DC or 50V (25V) rms. AC is working. The values in brackets are valid for limited ranges (such as medicine and agriculture). Measurements in dangerous proximity of electrical systems are only allowed directed by a qualified electrician and never alone..

Check the meter and test leads before each use for exterior damage. Make sure that the meter and the connecting cables are used in perfect condition. The instrument may no longer be used if one or several functions fail or if no functional reliability can be detected. If the operator's safety is no longer guaranteed, the device must be shut down and be protected against use. This case finds application when the device:

- shows obvious damage.
- does not carry out the desired measurements.
- was stored under unfavourable conditions for a long period of time.
- has been exposed to mechanical stresses during transport.

If the device is exposed to an extremely high electromagnetic field, the function may be affected.

Never attempt to disassemble a battery! The electrolyte in the cell is highly alkaline. Burns! When it comes to contact with skin or clothing, these areas must be rinsed off immediately with water.

If electrolyte gets in the eyes, immediately flush with clean water and consult a doctor.

Never try to connect the two poles of a battery cell, for example, with a wire. Never throw the batteries in a fire, as this could cause an explosion. Never expose batteries to moisture. Note, when changing the battery to correct polarity. Wrongly polarized batteries may destroy the device, furthermore, they may explode or ignite. Only use the specified batteries! Avoid the instrument from direct sunlight and heat. Only then, a proper function and a long service life are assured.

## Normal use

The device may only be used under the conditions and for the purposes for which it was designed. The operational safety is no longer guaranteed for modified or adapted devices.

## Connect the transmitter OE - SF T30V

(single pole application)

Connect the transmitter to only one conductor. The signal generated by the transmitter is a high-frequency signal, even a single conductor can be searched or tracked. The second circuit replaced the earth. With this arrangement, a high frequency current flows through the conductor, over the air back to earth, very similar to a radio transmitter and a radio receiver. We want to call this described mode from now on "single pole application".





Connect the red cord to the red socket of the transmitter and the black cord to the black socket of the transmitter. Disconnect all lines from the lawnmower station. Connect the red cable to one of the wires of the affected line. The black cable has an attached spike, stick this spike into the ground. Turn on the transmitter by pressing the button briefly. For control, the red LED lights. The transmitter will turn off after an hour, but can be turned on when needed again. If the transmitter don't stay on again, the battery has undervoltage. The security level is activated to prevent deep discharge. The transmitter must be charged using the AC adapter.

## **The receiver OE - SF R30V**

Fitted is the receiver with a search coil and a high-sensitivity controlled RF amplifier. The analysis is controlled by a processor. The signal strength of the received modulated AC voltage is carried out visually and acoustically. To locate exactly the break or interruption of the affected line, the near field key can be used.





For example, we are looking for the interruption of a line in the earth. The mode is the single-ended application.

After the transmitter was taken as described above in operation, switch the receiver with a short press on the power button. To check if the power is on the lowest red led (it is the left Led in the picture) lights. As you approach the recipient of the affected line, depending on the signal strength, the Leds shine red, yellow or green. The more Led's light, the higher the received signal. In addition, they hear the beep, the speed of which increases with increasing signal. Keep the receiver (as in the picture) and rotate it through 90 °, you quickly identify the direction of the installed cable. Now you can walk along the line until you cannot detect a received signal anymore. Now you move slowly backwards until the signal can be seen again. You have the interruption and want to locate the exact position. For this purpose press the button near field and put the receiver close to the ground, check with slow movements where you can receive the signal and from which point you cannot see the signal anymore. Now you have found the exact interruption in the affected line.



The receiver will turn off after one hour, but can be turned on again. If the receiver is not turned on, the battery has under voltage and the security level to prevent deep discharge is working. The transmitter must be charged using the AC adapter. The charging socket is splashproof under the yellow border..