

Instruction Manual

ESMini Item. No. 97427 **Device for measurement** **of bodyvoltage**



Thanks for using the ESMini instrument. The ESMini is a smaller version of the well approved ESM instrument.

By using the ESMini you are able to measure the voltage on the body of a person who's exposed the electrical field from power supply cables or electrically operated equipment. According to the results of the measurement you'll be able to select a suitable protection or check the efficiency of an existing protection.

Basically the ESMini is used for two purposes:

- A. With a consultation in the jobsite the ESMini opens the possibility to the expert to evaluate the situation of exposition to low frequency electrical fields quickly and to decide about further measurements or protection
- B. Due to a very simple handling the ESMini can be used by everybody to check the situation of field exposition regularly.
In case of higher exposition the consultation of a specialist is recommended

Warning: The ESMini shall be used in the indicated way only. Any variations / contraventions may cause damaged on the ESMini. Beside this guideline all valid national rules and standard as well as the usual rules of technique have to be observed.

How to use:

The exposition of humans to low frequency electrical fields will cause a voltage on the human body. The level of this voltage is an indication for the electrical stress for the human organism.

Open the battery compartment on the backside of the ESMini, connect a 9V standard battery or accumulator to the battery clip. Put the battery in the compartment and close it.



Connect the earthing clip (crocodile clam) of the ESMini to suitable earthing. In general metallic piping systems of watersupply of heathing systems can be used, as well as the earthing wires of the electric power supply. To avoid electric shock, never connect to ESMini to elements which are under power or may be under power!

Hold the ESMini and press the button on the frontside with one finger. The metallic ring around the button is the electrode for measurement, which is the connection between the instrument and the person who is measured.



The indication of the voltage on the body is done by color LED's and is related to the actual research and their results :

Green: The voltage on the human body is small and a below a value which is evaluated as not critical.

Yellow: The voltage on the human body is in a scope which is not high, but which can't be evaluated as uncritical. A reduction on the voltage / the exposition to fields is recommended.

Red: The voltage on the human body has reached a value where a reduction is strongly recommended.

Cleaning and Care:

Please use a slightly wet cloth for cleaning only. Never use aggressive cleaning supplies.