User Manual

Walking Test Kit
ELECTROMETER
WT5025

Part.-No.: 7100.WT5025

■ Scope of Supply

- Electrometer WT5025
- Hand probe & measuring cable
- Grounding cable
- USB-data cable
- 3 pcs rechargeable Lithium-Ionen-battery
- Charger with EU plug
- Conductive carrying case
- User manual available for download (www.warmbier.com)
- Calibration certificate „German / English“

■ Description – WT5025

The WT5025 is a measuring device to measure the body voltage of a person in combination with floor and shoes according to DIN EN IEC 61340-4-5. This test evaluates the quality of the system "person/shoes/floor". The test is of particular importance if the system "person/shoes/floor" is the primary grounding system.

■ Technical Data

Test range	± 200 V and ± 2000 V
Resolution	1 V
Display	Colour display
Power supply	3 Lithium-Ionen-batteries, Type 18650, FlatTop, 3,7 V, 2,2 Ah
Housing	Plastic
Safety class	IP20
Operating conditions	10 °C to 40 °C / up to 60 % r.h.
Output	USB 2.0
Dimensions	200×190×90 mm (W x D x H)
Weight including batteries	900 g
Fastening option	Foldable feet for desktop application
Serial number	Label on back side of housing
Design	For indoor operation

■ Calibration

We recommend a calibration cycle of 2 years.

■ Warranty

We grant a guarantee of **12 months** if handled correctly in accordance with the user manual.
This does not apply to the Lithium-Ionen-batteries.

The warranty expires in the event of mechanical damage to the electrometer and/or unauthorized opening of the device!

■ Installation

Insert all three Lithium-Ion batteries into the battery compartment. **Observe the polarity!** The negative pole must point to the spring contact. Connect the supplied charger and charge the batteries.
After charging the device it is ready to use. **You must disconnect the charger for operation.**

■ Power Supply

The WT5025 is powered with three Lithium-Ion batteries. The battery runtime is app. 6 operating hours.

■ Settings

Offset/BVT measurement		
Alarm Level	Voltage level for audible alarm	Off 10 V – 100 V in 10 V steps 100 V – 2000 V in 100 V steps

As well as in the event of measurement over-range, regardless of the setting.

Setting of the alarm levels, see the section „Operation“.

■ Connection

Ground
The device must be grounded on the 4mm grounding socket. The connection must be low ohmic without resistor.

USB
USB connection to the PC for real-time visualization of the measurement with the “Digilloscope” software.

Charger
Connection for the battery charger. The device is out of operation during charging, only charge condition is displayed.

Charge conditions	
	Battery is charging (Remaining time app. 3,5 h with 2,2 Ah Battery)
	Battery is charging (Remaining time app. 1-2 h with 2,2 Ah Battery)
	Charging nearly finished (Device can be used)
	Charging is finished (Charger is still connected)

■ Safety Instructions

Please read the following notes.

- Do not try to open the device or to repair it by yourself. The device generates internal high electrical voltage.
- The device must be grounded. **Ground** the device on the 4 mm banana plug socket on the side of the unit directly with “protective earth”. Earth bonding points (EBP) with a safety resistor shall not be used.
- The front input socket must not get in contact with any powered item or electrostatically charged objects.
- Use the unit within the specified operating conditions.
- Use only the original charger which was included in the scope of delivery.
- Use a non-solvent based cleaner and soft fabric for cleaning.

■ Verification of Body Voltages (Walking Test)

Ground the device on the 4 mm banana plug socket Ground.
Connect the handheld probe to the front input socket and start the measurement.
You can perform now a walking test and the unit will show the latest value measured and the maximum positive and/or negative peak values.

For measurement, the device can be connected to the PC and record the measurement via the "Digilloscope" software.
To do this, first connect the device to the PC via USB, switch on the device and then start the "Digilloscope" software.

■ Operation

Button On/Off:
Press long to switch the device on or off.
After switching on, the device is in the last set measuring range. It switches off automatically after 15 minutes without use.

Button Start/Stop:
Start / Stop of testing.
In „Stop“ the last peak-hold values will be displayed.

Button Range / ▼:
Change the measuring rate of the graphic display.
In the setting menu: Reduce the alarm level.

Button Reset / ▲:
In this operating mode, automatic measurement is performed in the following steps:

Short press to reset the peak-hold values.

Longer press in mode „Stop“ will enter the setting menu. The setting menu will automatically close after a few seconds.
In the setting menu the corresponding alarm level can be increased or decreased.

Messages

Message	Root cause / Troubleshooting
STOP	Measurement was stopped
low battery	Battery should be changed soon, but you can still perform measurements
battery empty	Battery empty and unit will switch off ➔ Charge **or** change the battery
power off	Unit will switch off
charging	Akku wird geladen, Gerät schaltet sich ab
temp. failure	Temperature is too high; unit will switch off
alarm level	Settings menu for acoustic alarm level adjustment

■ Device return and environmentally compatible disposal

This instrument complies with IEC 63000:2016 (Restriction of the use of certain hazardous substances [RoHS]).

This device complies with the requirements according to category 9 of the ElectroG (monitoring and control instruments).
We identify our electrical and electronic devices in accordance with WEEE 2012/19/EU and ElektroG with the symbol shown to the right per DIN EN 50419.
These devices may not be disposed of with the trash.
Please contact our service department regarding the return of old devices.

If you use **batteries** or **rechargeable batteries** in your instrument or accessories which no longer function properly, they must be duly disposed of in compliance with the national regulations.
Batteries or rechargeable batteries may contain harmful substances or heavy metal such as lead (Pb), cadmium (Cd) or mercury (Hg).
The symbol shown to the right indicates that batteries or rechargeable batteries may not be disposed of with the trash, but must be delivered to collection points specially provided for this purpose.