

Calibration Instruction



for

**Personnel Grounding Tester PGT®130.DT
with Calibration Unit**

Allgemeines

The calibration unit contains resistors for Personal-Grounding-Tester PGT® 130.DT **PGT130.DT** verification. It works without battery or any external power supply.
The calibration is performed in measure mode, to measure the test voltage an additional DC-voltmeter is required.

Important : Remove all connections from the measuring inputs of the PGT® 130.DT!

Open Calibration Menu

Info: This option can be disabled via web interface settings [Device settings – Config buttons]



Press the left button for at least 3 seconds



Keep the left button pressed and tap the right button at least 4 times back-to-back

The device switches to configuration mode. The configuration mode will time-out automatically after 5 minutes without operation, settings will be stored.

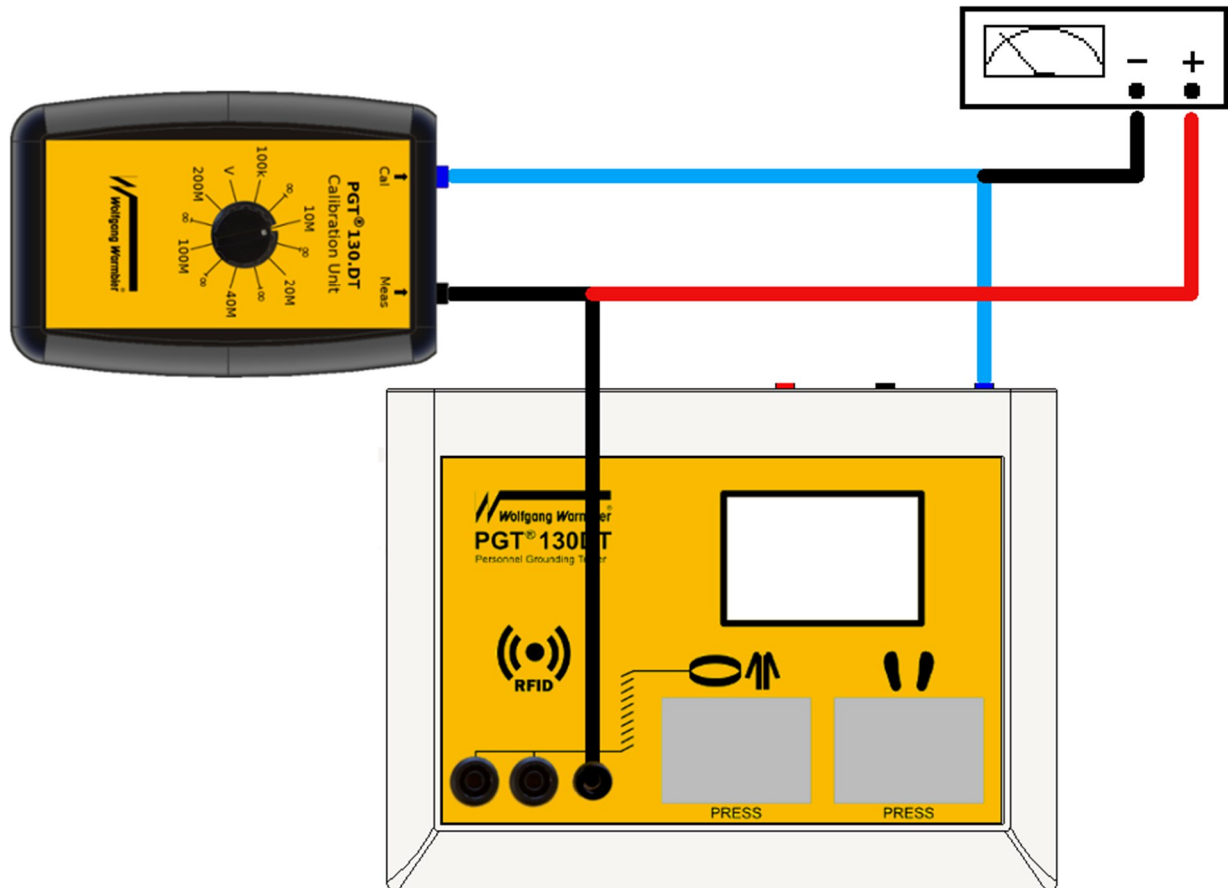
Browse through the parameter menu with the left button until **CALIBRATION**



Test Voltage Measurement

To check the PGT® 130.DT **PGT130.DT** test voltage set the marked lever of the rotary switch to position **V** and connect:

- the blue socket of the Calibration Unit with the blue [CAL] 4mm socket of the PGT® 130.DT
- the black socket of the Calibration Unit with the black 4 mm socket for wrist strap test of the PGT® 130.DT



Use a DC-voltmeter with an impedance $R_i \geq 10M\Omega$, preferably measuring range 3V.

Connect the socket of the Calibration Unit additionally with the voltage input of the voltmeter.

The test voltage of the voltmeter is read in factor 1:100.
(100V => 1,00V)

Compare the displayed values with the measurements of the voltmeter.

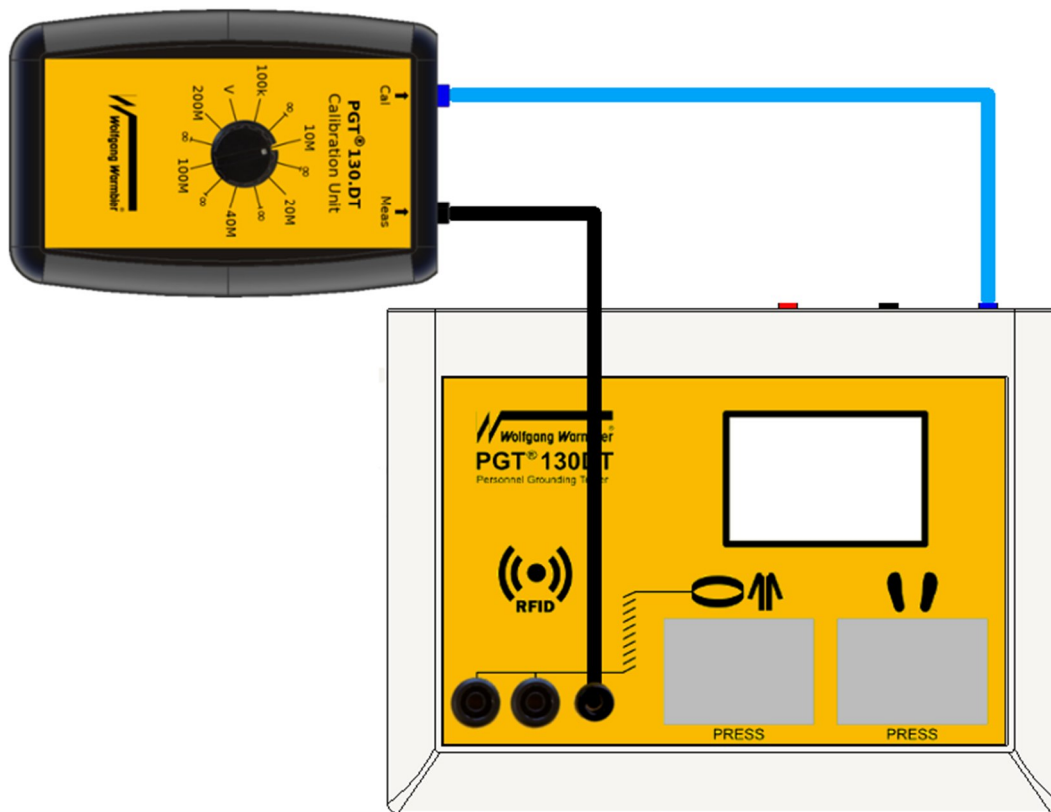
Admissible deviation: $\pm 5\%$

Example: For 100V measuring voltage the instrument must display a value between 0,95V and 1,05V.

Wrist strap verification

To check the limits of the wrist strap test connect:

- the blue socket of the Calibration Unit with the blue [CAL] 4mm socket of the PGT® 130.DT.
- the black socket of the Calibration Unit with the black 4 mm socket for wrist strap test of the PGT® 130.DT



Set the marked lever of the rotary switch in succession to the positions mentioned below and read the displayed values.

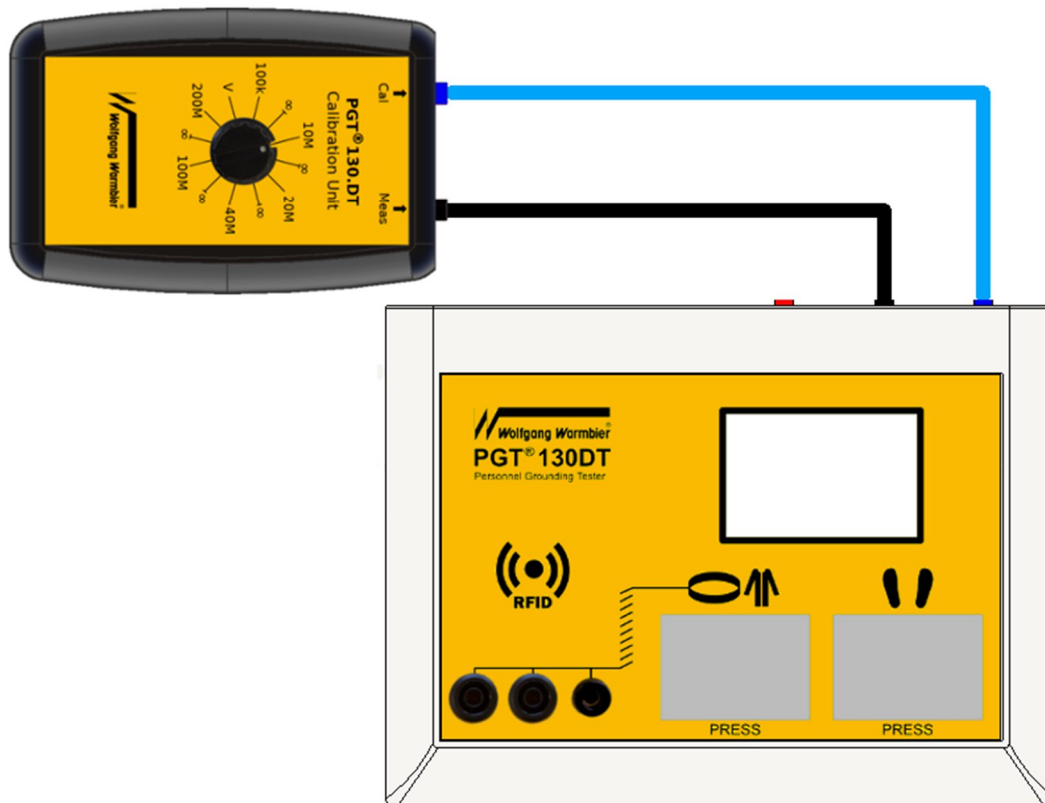
Switch position	Set-point	Display
100k	100 kΩ	
∞	disconnect	
20M	20 MΩ	
∞	disconnect	
40M	40 MΩ	
∞	disconnect	
200M	200 MΩ	

Admissible deviation: ±5%

Footwear test verification - shoe left

To check the limits of the footwear test connect:

- the blue socket of the Calibration Unit with the blue [CAL] 4mm socket of the PGT® 130.DT.
- the black socket of the Calibration Unit with the black 4 mm socket of the PGT® 130.DT - shoe left.



Set the marked lever of the rotary switch in succession to the positions mentioned below and read the displayed values.

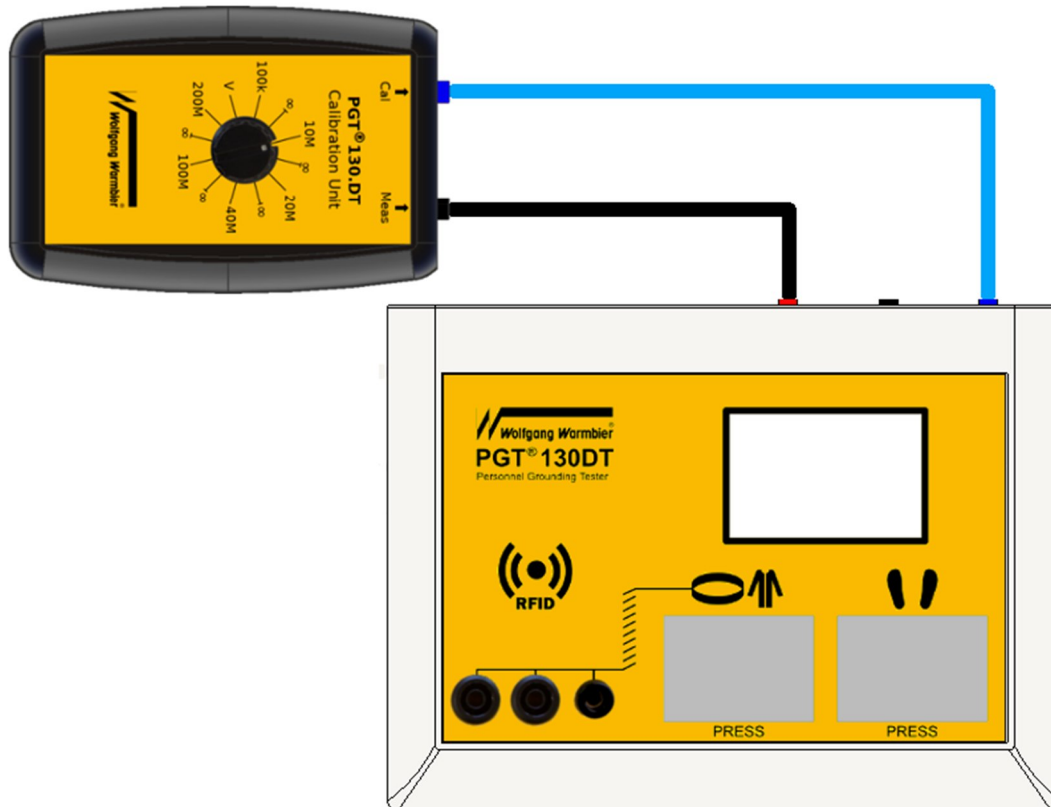
Switch position	Set-point	Display
100k	100 kΩ	
∞	disconnect	
10M	10 MΩ	
∞	disconnect	
20M	20 MΩ	
∞	disconnect	
200M	200 MΩ	

Admissible deviation: ±5%

Footwear test verification - shoe right

To check the limits of the footwear test connect:

- the blue socket of the Calibration Unit with the blue [CAL] 4mm socket of the PGT® 130.DT.
- the black socket of the Calibration Unit with the red 4 mm socket of the PGT® 130.DT - shoe right.



Set the marked lever of the rotary switch in succession to the positions mentioned below and read the displayed values.

Switch position	Set-point	Display
100k	100 kΩ	
∞	disconnect	
10M	10 MΩ	
∞	disconnect	
20M	20 MΩ	
∞	disconnect	
200M	200 MΩ	

Admissible deviation: ±5%