Guide to measuring body voltage

This guide describes how to correctly measure body voltage using the digital multimeter sold by Groundology. This guide will also apply to using most other digital multimeters for this purpose. The key requirement is that a meter be fairly sensitive and able to measure AC voltage, as this is the type of voltage induced by Electromagnetic Fields (EMF).

The Groundology multimeter can also be used for many other measurements – for full details please see the manual included in the meter box.

Setting up the multimeter

The meter comes complete with a pair of standard test leads (for this measurement you will only need the red one), plus an additional 1m cable fitted with a crocodile clip on one end.

Plug the 1m cable into the black COM socket of the meter. The crocodile clip on the other end needs to connect to Earth. This can be done by via the same connection point which you use for your grounding sheet, mat, etc.

- If you are grounding via an earth connection plug into a mains outlet, then clip the crocodile clip into the 2nd hole of the connection plug.
- If you are grounding via a grounding rod then you will need an additional 2 into 1 splitter which you can purchase via our website. The crocodile clip then clips into one side of the splitter and your grounding equipment connects to the other side.

Plug the red test lead into the ‘V’ socket to the right of the meter. If it’s the first time you’ve used the test lead you may need to remove the plastic cap from each end. Make sure you plug the lead firmly into the meter until you feel it click into place.

Set the meter range to 20 V~ (to the lower right of the dial). (On other meters this may be written 20 VAC or 20 ACV, or on auto-ranging meters just V~ or VAC or ACV.)

Press the red button to turn on the meter.

Reading body voltage

To read body voltage simply hold the metal tip of the red test lead between your finger and thumb. You will find that your proximity from electrical wiring and appliances will greatly affect the reading, as will the general level of EMF in your environment, and also which storey of a building you are on (higher up will generally result in higher body voltage).

If the meter shows just the digit 1 on the left of the screen, this indicates the range has been exceeded so switch to the next range up: 200 V~

When you ground your body by touching some bare skin to a grounding sheet, mat, band, etc. then you should see the reading drop to very near zero.