

Technologies Inc.

Body Voltage Professional Test Kit



For Precise "True RMS" Measurements of Body Voltage According to International Guidelines for Sleeping Areas Bau-Biologie (SBM 2008)¹

Measures the amount of **AC Voltage** coupled onto the human body from:

- Electrical wires hidden in the ceilings, walls and floors
- Overhead power lines
- Power outlets / receptacles
- Extension cords
- Power bars
- Appliance power cables and more...

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Contents of Kit:



- 1] Premium Body Voltage Meter including a 9V Alkaline Battery
- 2] Test Lead 39 inch / 1 Meter Red For Hand Probe (4mm banana)
- 3] Test Lead 20 foot / 6.1 Meter Black For Ground Wire (4mm banana)
- 4] Hand Probe 4 Inch Polished Solid Brass
- **5**] Ground Plug For Grounding to an AC Electrical Outlet
- 6] Ground Clamp For Grounding to a Water Pipe
- 71 Outlet Tester
- 8] Standard Test Leads
- 9] Optical Serial RS232 Cable (9 pin DIN)
- 10] Temperature Probe
- 11] Alligator to Banana Adapter Cable
- 12] CD Data Display Logging Software for PC (Windows 2000, XP, Vista, Win 7 32/64 bit compatible)
- 13] Ground Clip Alligator Clip to assist with Grounding (4mm banana)
- 14] Hard Plastic Carrying Case

International Guidelines for Sleeping Areas Bau-Biologie (SBM 2008)

Bau-Biologie (SBM 2008)		Ideal	Weak	Strong	Extreme
Body voltage in milliVolts	mV	< 10	10 – 100	100 – 1000	> 1000

Understanding the Measurements



 $\begin{aligned} Range &= Auto \\ 18.78 &\ Volts &= 18,780 \ mV \end{aligned}$



Range = Auto 1.703 Volts = 1703 mV



Range = milliVolts "mV" 79.5 mV = 0.079 Volts



Range = milliVolts "mV" Value too high for Range Overload Condition "OL" Switch to "AUTO"

Body Voltage Measurement Instruction

Assembly of Equipment

- Connect one end of the red test lead to the jack of the Body Voltage Meter labeled " $HzV\Omega$ " and the other end to the Brass Hand Probe (Figure 1A, 2A)
- Connect one end of the black test lead to the jack of the Body Voltage Meter labeled "COM" and clip the other end to the Electrical Ground (Figure 1A, 1C) or the Water Pipe Clamp via the Alligator clip (Figure 2A, 2B) See below

Caution! Test Outlet Before Inserting Ground Plug Into The AC electrical Outlet.

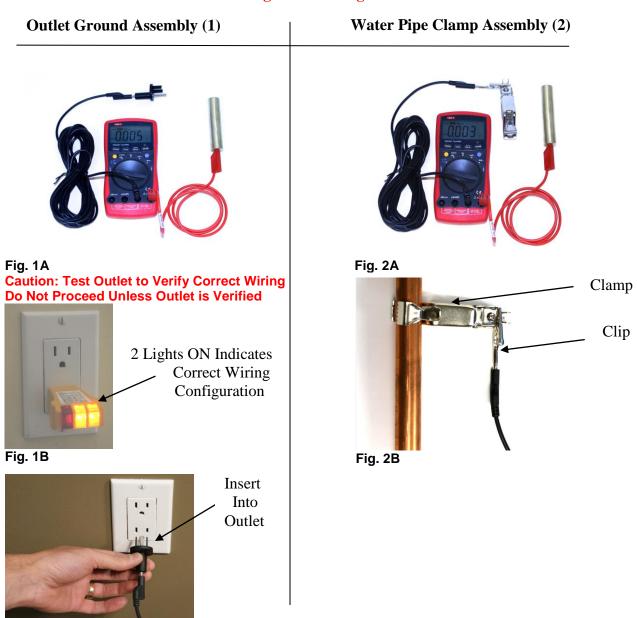


Fig. 1C

Note: Either of these grounding points may have a small voltage on them which can cause deviations in the actual readings. As an additional option, a Ground Rod can be used. This rod is physically inserted into moist soil outside of the home and provides a direct connection to the earth. The best ground reference point is the one that yields the highest reading.

Conditions for Proper Measuring

- Plug in all power cords from devices, appliances or extension cords that are normally connected to outlets in the area of measurement (Including rooms beside, above and below area of investigation)
- Other people in the immediate area can influence the measurement. They should keep a minimum distance of 5 feet
- The person to be measured should not have direct contact to the black grounding wire, the Body Voltage Meter or any other connection to ground
- The measurement is "position-sensitive" and will vary from place to place and with the position of the measurement subject

Configuring the Body Voltage Meter to Measure AC Voltage

- Rotate the "Main Selection Dial" to the Voltage Function "V \(\sigma\)"
- Press the **orange "Power"** button to turn the meter on
- Press the **blue "Alternate Function"** button once to place the meter in AC Voltage Mode. "**TRMS**" and "AC" will appear on the display.
- * Note: This meter is auto ranging and will automatically select the appropriate Voltage Range. If Body Voltage is below 0.400 Volts, and more accuracy is desired, one can switch to a more sensitive setting in milliVolts. This can be done by pressing the Range button 5 times. The milliVolt "**mV**" symbol will appear on the display, and "AUTO" will disappear

Measuring Procedure

- Ensure the equipment is assembled correctly and connected to a proper ground
- Ensure the conditions for proper measuring are met
- Ensure the Body Voltage Meter is configured correctly and the proper function and range is selected
- The person to be measured sits or lies in the position where the body voltage is to be measured
- The person should grip the hand probe tightly in one hand and remain still
- Record the body voltage measurements for future evaluation

Techniques for Reducing Body Voltage

- Begin with unplugging power cords from devices, appliances or extension cords that are normally connected to outlets in the area of measurement, including rooms beside, above and below area of investigation
- If there is still a significant body voltage reading then the source is from the electrical wiring in the walls, ceiling and floors or power lines external to the building
- Temporarily shut off branch circuit breakers that supply power to the room under investigation, including rooms beside, above and below area of investigation

Caution! If affected circuits are critical and power a refrigerator, furnace, septic pump, life support systems, smoke or carbon monoxide detectors and so on, do not turn them off! If the branch circuit is non-critical, one can simply turn it off via the circuit breaker or have a Demand Switch or a Remote Cut Off Switch installed on the circuit. Please consult with a licensed electrician for proper installation.

For a digital copy of this manual please visit our website at: http://slt.co/Products/BodyVoltageKits/ProfessionalTestKit.aspx Under the downloads tab.

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