

DC High Voltage Probe Meter(Analog)

Operation

⚠ WARNING!

Before taking any measurements, first connect the alligator clip of this probe to earth ground and make sure connection is electrically good.

1. Examine probe, make sure it is clean and dry. Dirt, moisture and grease can provide a creep path for voltage. If in doubt, wipe with a clean, dry, lint-free cloth.
2. Make sure appropriate tip is installed in probe for measurement. Use round needle tip for general applications, flat tip for CRT's; hand tighten, do not use pliers.
3. Connect alligator clip of your probe to earth ground-electrical connection must be good.
4. Verify that measurement source is positive polarity DC. Never use this probe for negative polarity DC or AC measurements.
5. With your free hand in your back pocket, touch probe to high voltage point and note reading at meter. Avoid contacting any exposed metal parts.

HVP-40M



CE
EN 61010

Safety Precautions

These steps outline the minimum, basic safety precautions that must be followed when using this high voltage probe. Before you use this instrument, read and thoroughly understand this information. You must have a thorough understanding of the hazards that may occur when working with high voltages and when using this probe. Failure to follow good safety practices could cause you serious personal harm, even death. Remember, high voltage kills if safety precautions are not followed!

1. Examine probe, make sure it is clean and dry. Dirt, moisture and grease can provide a creep path for voltage. If in doubt, wipe with a clean, dry, lint-free cloth.
2. Look at the condition of the floor in the test area. It must be dry, clean and free of oil. Never stand on a wet or damp floor.
3. Always connect the alligator clip of this probe to earth ground before taking any measurements.
4. Examine the entry to your high voltage test point. Make sure that you are able to bring the probe test point. Also, make sure the tip is clear of wires, metal supports and other nearby conductive surfaces.
5. Only use this probe to measure positive polarity DC voltages.
6. Verify that you are able to remain clear and avoid contact with any exposed metal and/or other conductive parts of the device being checked.
7. Only use one hand to hold the handle of the probe. Keep your free hand behind you, preferably in your hip pocket. This position helps avoid a situation where the voltage could flow across your chest should a mishap occur. Current flow across your chest is very damaging as it disturbs the rhythm of the heart.

8. Always work within sight and hearing of another person. If an accident occurs, you will be able to get aid quickly.
9. In addition to these safety instructions, follow those given by the manufacturer of the device being checked.
10. When handling a CRT, avoid touching the conductive coating before it's discharged. Remember, it can hold a dangerous charge long after the set is turned off.

Description

This probe is a self-contained instrument; it measures positive polarity DC high voltages up to 40KV. IT consists of two interchangeable screw-in contact tips, a direct-reading meter, ground clip and high-impact ABS case. This case has excellent insulation properties, light-weight and is resistant to damage.

One tip is a round needle type for general use; the other is a special flat spring type for easy access to a CRT anode. An alligator type clip lead provides a secure earth ground connection.

A rugged, core magnet-type meter is supplied. It is reasonably free from the effects of outside magnetic fields and can withstand moderate shock and vibration without damage.

The probe was factory calibrated at 25 KV. Under normal conditions, it should not require periodic calibration.

This probe is typically used to measure high voltages in TV sets, power supplies, laboratories and for general high voltage commercial applications.

Specifications

Input Resistance	Approx. 600M Ω
Max. Operation Voltage	40KV DC, CAT II, Pollution 2
Polarity	Positive Only
Accuracy	$\pm 3\%$ of full scale.
Resolution	1 KV
Temperature Coefficient	$\leq 200\text{PPM}/^{\circ}\text{C}$
Maximum Loading Current	$\leq 70 \mu\text{A}$
Maximum Loading Power	≤ 3 watt
Voltage Range	40KV / 1 Range
Power Source	Need not power
Operating Temperature	0 ~ 50 $^{\circ}\text{C}$
Storage Temperature	-20 ~ +70 $^{\circ}\text{C}$
Ground Lead Length	90 cm(35")
Dimensions	420 L x 80 ϕ
Weight	360g
Approvals	CE, IEC1010

Cleaning

Clean only the exterior probe body and cables. Use a soft cotton cloth lightly moistened with a mild solution of detergent and water. Do not allow any portion of the probe to be submerged at any time.

Dry the probe thoroughly before attempting to make voltage measurement.

Do not subject the probe to solvents or solvent fumes as these can cause deterioration of the probe body and cables.