

DC High Voltage Probe To DMM



INSTRUCTION MANUAL

TABLE OF CONTENTS /

| | |
|--|---|
| 1. SPECIFICATIONS..... | 1 |
| 2. SAFETY PRECAUTIONS..... | 2 |
| 3. OPERATION..... | 3 |
| 4. WARNING..... | 3 |
| 5. CLEANING..... | 4 |
| 6. High Voltage Probe Dimension Comparison Fig..... | 9 |

HVP-50

DC High Voltage Probe To DMM

1. SPECIFICATIONS

| | |
|-------------------------|--|
| Ratio | 1000 : 1 (1 KV = DMM 1 V Reading Value) |
| Input Impedance | 500M Ω \pm 2% |
| Temperature Coefficient | \leq 100 ppm / $^{\circ}$ C |
| Max. Input Voltage | DC: 0 ~ 50 KV AC: 0 ~ 35 KV (50 / 60 Hz) |
| Accuracy | DC: \pm 1% to 40 KV \pm 2% to 50 KV AC: \pm 2% to 28 KV \pm 3% to 35 KV (50 / 60 Hz only) |
| Max. Loading Current | 0.1 mA at 50 KV DC |
| Max. Loading Power | 5 Watt |
| Ground Load Length | 90 cm (3 ft) |
| Output Cable Length | 100 cm (3.3 ft) |
| Dimensions / Weight | 340 mm x 80 \varnothing About 260 g |
| Operating Temperature | 0 $^{\circ}$ C ~ + 50 $^{\circ}$ C |
| Storage Temperature | -20 $^{\circ}$ C ~ + 70 $^{\circ}$ C |

2. SAFETY PRECAUTIONS

This high voltage probe must only be used by the person who are trained, experienced (electronics technician), or otherwise qualified to recognize hazardous situations and who trained in the safety precautions that necessary to avoid possible injury when using such a device.

Do not work alone when working with high voltage circuits.

For your own safety, inspect the probes for cracks and frayed or broken leads before each use. If defects are noted, DO NOT USE the probe.

Hands, shoes, floor and work bench must be dry. Avoid making measurements under humid, damp or other environmental conditions that might affect the safety of the measurement situation.

If possible, always turn the high voltage source off before connection or disconnection the probe.

The probe body should be kept clean and free of any conductive contamination.

3. OPERATION

- (1) Please connect ground lead and cables probably before the measurements.
- (2) Connect banana leads to DMM input.
- (3) Set DMM to selected range (please use fixed 10M ohm input impedance DMM).
- (4)  Caution!
Please do not turn on high voltage source before completed above procedures.
- (5) Turn on DMM and connect to the testing point probably, and turn on high voltage source.

4. WARNING

Do not attempt to take measurements from sources when the chassis or return lead is not ground.

This ground connection is critical to the safety operation of the probe. Failure to make this connection may result in personal injury or damage to the probe or voltmeter. This connection must be made before the probe tip comes into contact with the high voltage and must not be removed until after the probe tip has been removed.

Do not connect the ground clip to the high voltage source or the probe tip to the ground for any reason.

BEFORE turning the high voltage on, make sure that no part of your body is in contact with the device.

Remembering that the voltage being measured is 1000 times greater than the voltmeter reading.

- (1) Please connect ground lead and cables probably and doing the measurements.
- (2) Please put probe on the isolated table when doing the measurements.
- (3) Please do not touch probe and cables when doing the measurements.

5. 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 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 case deterioration of the probe body and cables.

6.

High Voltage Probe Dimension Comparison Fig.

