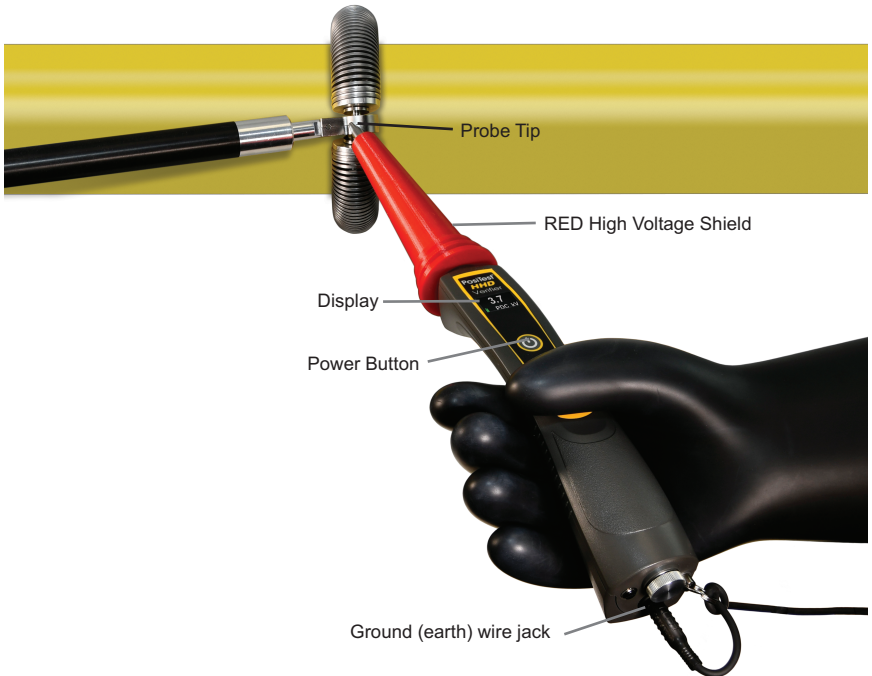


# PosiTest® *HHD* Verifier

Instruction Manual v. 1.0



## Introduction

The **PosiTest *HHD* Verifier** is a calibrated high voltage meter used to verify operating voltage of both Pulse DC and Continuous DC holiday detectors in the range from 500 to 35,000 Volts.

**WARNING:** ALWAYS ensure that the ground lead is plugged into the **PosiTest *HHD* Verifier** and that the other end of the ground lead is connected to the ground lead of the high voltage holiday detector that is being verified. Failure to ensure proper grounding may result in electrical shock.

**WARNING:** DO NOT touch the TIP of the probe or the RED High Voltage Shield with bare hands while the probe is in contact with a high voltage source. Electrical shock could occur if operator touches the tip or shield with bare hands while in use.

**WARNING:** DO NOT use this equipment in damp, wet or rainy conditions. Electrical shock could occur if the operator uses this equipment in damp, wet or rainy conditions.


**IMPORTANT:** DO wear gloves and appropriate footwear

**WARNING:** DO NOT use this equipment with high voltage power sources other than high voltage holiday detectors. The **PosiTest HHD Verifier** has been specifically designed to work with high voltage holiday detectors that have limited power output. Since the maximum power dissipation of the **PosiTest HHD Verifier** is 12.5 watts, connection to high power, high voltage sources such as mains supply WILL overheat and damage the **PosiTest HHD Verifier**. DO NOT connect the **PosiTest HHD Verifier** to an AC power outlet.

## Operating Instructions

**IMPORTANT:** Before using the **PosiTest HHD Verifier**, ensure that a proper ground is established between the holiday detector and the verifier.

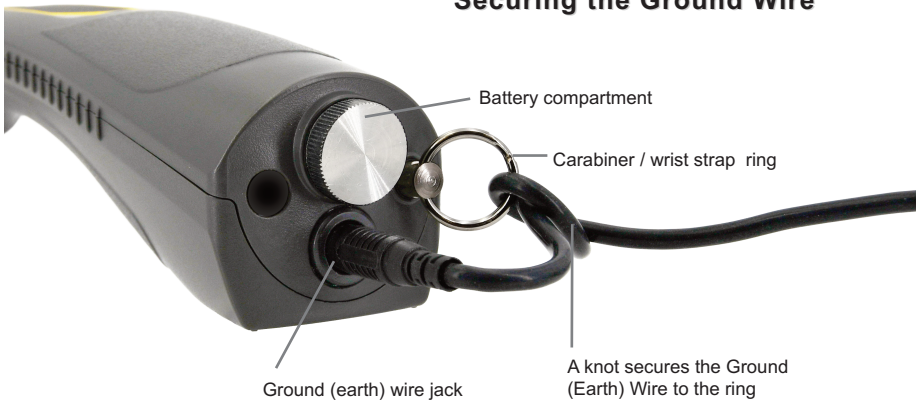
**Step 1.** Before using the HHD Verifier, ensure that a proper ground is established between the holiday detector and the verifier. Ensure that the ground lead is plugged into the **PosiTest HHD Verifier** and that the other end of the ground lead is connected to the ground lead of the high voltage holiday detector that is being verified.

**Step 2.** Turn the **PosiTest HHD Verifier** on by pressing and releasing the power button . Once powered on, the verifier continuously monitors the voltage on the probe end of the verifier. The verifier will update the display when the probe is touching an exposed electrode of a holiday detector. The voltage displayed on the verifier should match the voltage displayed by the detector within the combined tolerance of both units.

**NOTE:** An icon on the **PosiTest HHD Verifier** display will indicate if the detected voltage is Pulsed DC [PDC] or DC [DC].

- ◆ For Pulse DC holiday detectors such as the **PosiTest HHD**, the verifier probe tip can be left connected to an exposed electrode indefinitely with no concern. For best results, try to position the verifier probe perpendicular (90°) to the electrode on the holiday detector.
- ◆ For Continuous DC holiday detectors, the verifier probe tip should just be briefly tapped against an exposed electrode to obtain a measurement. The Verifier will not update the display if left in contact with a continuous DC power source. The **PosiTest HHD Verifier** display will not update properly if the DC power source is adjusted while connected to the **PosiTest HHD Verifier**. Prolonged contact with a continuous DC holiday detector may result in overheating of the **PosiTest HHD Verifier** probe.

## Securing the Ground Wire



## Accuracy, Calibration, and Adjustment

The **PosiTest HHD Verifier** is accurate to +/- 5% of the peak voltage presented to the tip of the probe.

The **PosiTest HHD Verifier** is shipped with a Certificate of Calibration showing traceability to a national standard. DeFelsko recommends customers establish calibration intervals based upon their own experience and work environment. A detector used frequently, roughly, or in harsh operating conditions may require a shorter certification interval than a gage used less frequently and handled with care. Based on our product knowledge, data and customer feedback, a one year certification interval from either the date of calibration, date of purchase, or date of receipt is a typical starting point.

## PosiTest HHD Verifier Troubleshooting

**PROBLEM:** The **PosiTest HHD Verifier** is displaying a voltage different than observed on the holiday detector

The **PosiTest HHD Verifier** is a Peak reading volt meter that can be used for both Pulse DC and DC applications.

When used with Pulse DC type holiday detectors, it is important to maximize the distance of the verifier tip to ground. This will reduce capacitive coupling to ground of the high frequency DC pulse.

When used with a Continuous DC type holiday detector, the **PosiTest HHD Verifier** will present a load to the holiday detector being tested and lowering of the output voltage is likely. In such cases, repeated or slow contact with the electrode may result in lower voltages being displayed on the **PosiTest HHD Verifier**.

## Technical Data/Specifications

Pulse DC (30Hz) or DC

**Input Impedance:** 1Mohm

**Max Input Power Dissipation:** 12.5 watts

**Range:** 500–35,000 volts

**Resolution:** 500–1,000 volts in 10 volt increments  
1,000–35,000 in 100 volt increments

**Accuracy:** +/-5%

**Operating Temperature Range:** -20° to 60° C (-4° to 140° F)

**Battery:** 3 AAA alkaline

**Weight:** 520 g (1.15 lbs.) with batteries and 3 m (10 ft) ground lead and clip

**Dimensions:** 43 x 5 x 5 cm (17" x 2" x 2")

## Returning for Service

If you need to return the **PosiTest HHD Verifier** for service, describe the problem fully and include reading results, if any. Be sure to include contact information including your company name, company contact, telephone number and fax number or email address. [defelsko.com/support](http://defelsko.com/support)

## Limited Warranty, Sole Remedy and Limited Liability

DeFelsko's sole warranty, remedy, and liability are the express limited warranty, remedy, and limited liability that are set forth on its website:

[www.defelsko.com/terms](http://www.defelsko.com/terms).

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