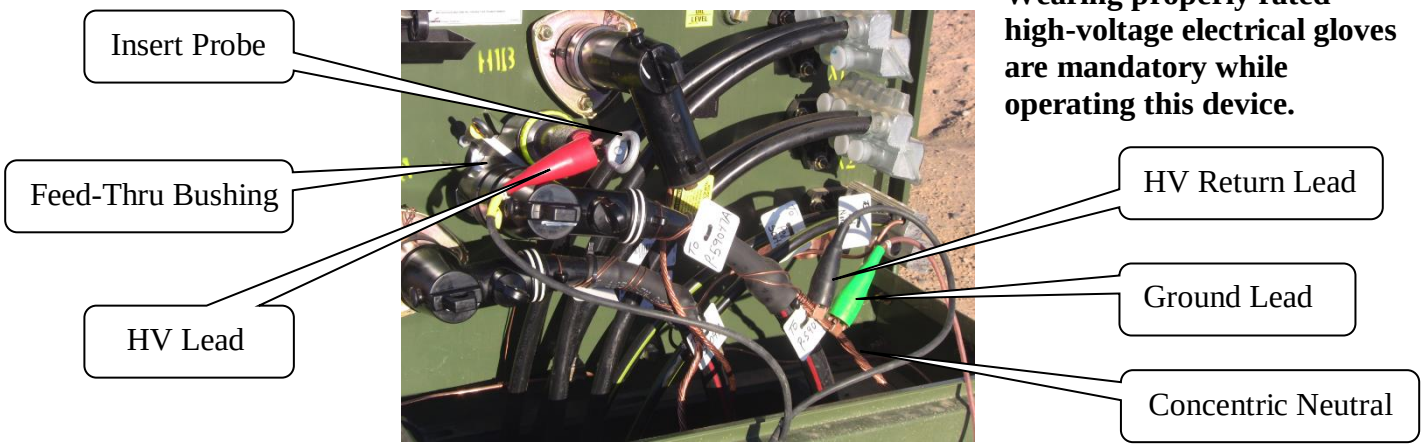
WARNING!!! The Fault Wizard produces a high-voltage electrical discharge that is potentially LETHAL. Only personnel trained in the safe handling and operation of high voltage electrical devices are allowed to use this device. All company, local and federal rules shall apply when using this piece of equipment.

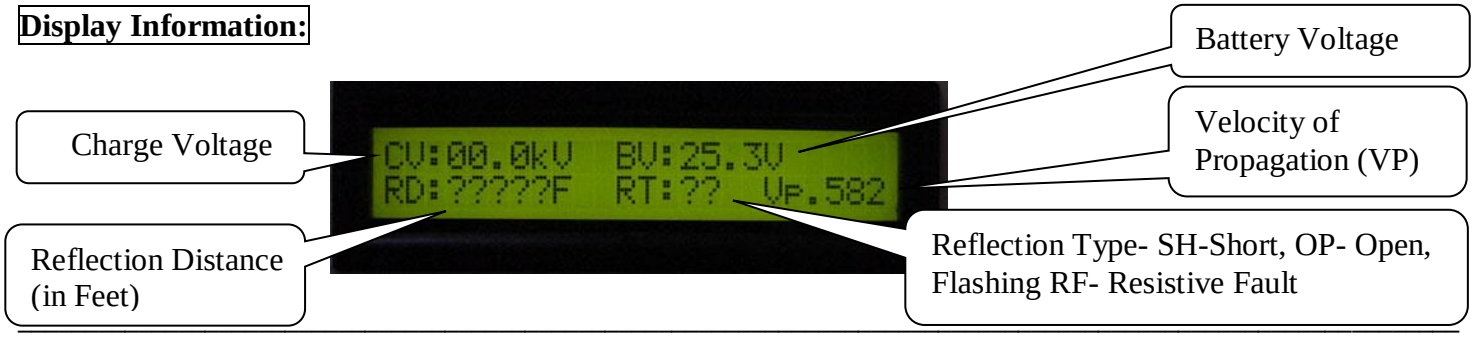
Operators must fully read and understand the Fault Wizard operation manual before using. This Guide is to be considered a reminder page only and does not include all instructions, cautions and procedures.

General Connection Diagram:



Wearing properly rated high-voltage electrical gloves are mandatory while operating this device.

Display Information:



Power Supply: Always **TURN** Power Switch to **Off** when not in use and when working with clips.

The unit can only be operated from DC. If both battery sources are low, the battery must be recharged before the unit can be used again.

Lethal Voltage is possible any time unit is on, use caution and follow all safety protocols!

Finding Distance to Open Point:

Always **PRESS** the **LV TDR** button first to display the Reflection Distance (RD) to the open point of the circuit or cable under test. Read display for distance to the open point. When shooting through transformers, this could be:

1. The end of multiple cable runs,
2. An elbow that has blown off a transformer,
3. Or an open in a conductor where all of the strands are burnt in half.

LV TDR

RT: OP

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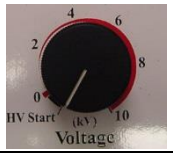
Find the Distance to the Fault:

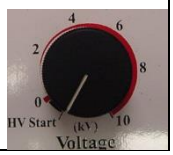
1. **TURN** Mode knob to **HV TDR**

2. **TURN** Voltage knob to **ZERO**



3. **PRESS**

4. **ADJUST** Voltage Knob to Desired Charge Voltage



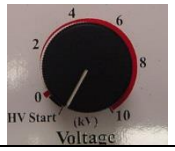
5. **PRESS**

THUMP

☼ Distance to Fault will be displayed. - RD:4293F RT:SH

6. On the screen, if the RT: result displays a flashing "RF", the fault distance may not be correct. The Fault Wizard may not see a high resistive fault.

7. **TURN** Voltage knob to **ZERO**



8. **PRESS**

STOP/GROUND

Terminates **HV TDR** function.

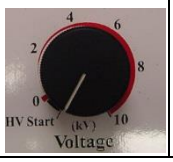
☼ - Listen to the sound the Fault Wizard makes. A "thud" sound indicates a good discharge at the fault and the fault distance should be accurate. If a "click-click" relay-sound is heard, the fault distance is probably inaccurate due to the cable possibly being good.

Cycle Mode, used to pinpoint fault by sound: **Use only on isolated cable sections!!**

Warning: - Stay clear of cable and connections, after step 3 below. Discharge will occur once charge voltage is reached and will discharge every 6 seconds until the STOP/GROUND button is pressed.

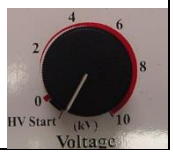
1. **TURN** Mode knob to **CYCLE**

2. **TURN** Voltage knob to **ZERO**

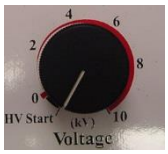


3. **PRESS**

4. **ADJUST** Voltage Knob to Desired Charge Voltage



5. After fault is located, **TURN** Voltage knob to **ZERO**



6. **PRESS**

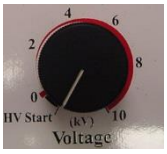
STOP/GROUND

Terminates **Cycle** function.

Hi-Pot Mode, to verify cable is faulted: **Use only on isolated cable sections!!**

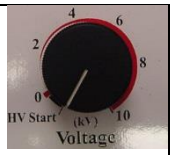
1. **TURN** Mode knob to **Hi-Pot**

2. **TURN** Voltage knob to **ZERO**



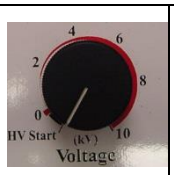
3. **PRESS**

4. **ADJUST** Voltage Knob to Desired Charge Voltage



Adjust Voltage knob upward observing the CV: on the screen. A faulted cable will cause the charge voltage to collapse or drop to a lower value because it is arcing at the fault location. A good cable will charge up to 10 kV.

5. **TURN**



Voltage knob to **ZERO**

6. **PRESS**

STOP/GROUND

Terminates **Hi-Pot** function.

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