



## Application: VLF Cable Testing & Fault Locating

### Application Description

You have to VLF Test cables and Locate Faults. That requires two separate high voltage instruments and their accessories. It may even require two crews, one for fault locating and the other for testing after.

Overvoltage AC Withstand Cable Testing, whether for **Installation, Acceptance, or Maintenance** purposes, using **Very Low Frequency (VLF) AC** technology is among the most commonly used methods today. While performing overvoltage tests, the possibility exists of a cable insulation or component failure. If the cable system can not withstand the overvoltage conditions, let the failure occur during the off-line test rather than in-service. If there is a cable breakdown, the fault location will have to be found to make the repairs. A second instrument must be brought to the site to find the fault. A cable fault locator, most likely a Thumper/Surge Generator will be used, with or without a TDR/radar instrument to pre-locate the fault.

Reversing the above scene, when an in-service failure occurs, a thumper must be brought in to find the fault. Once the fault is found and repaired, possibly following hours of over voltage thumping, the cable should be tested to verify the integrity of the repairs and to ensure no other damage was done. A VLF AC hipot is needed.

### Possible Solutions

The process has to be made easier, quicker, less costly, and more efficient. **How about both instruments in one box?** To cable fault locate and to test new or repaired cable requires two separate and different devices: a **VLF AC Hipot** for the testing or fault burning, and a **Thumper** capacitor discharge unit to locate the fault. This instrument should also be designed to benefit from the use of a TDR/radar fault finder and a listening device to pinpoint the fault.

### HVI Product Solutions

#### Complete Cable Care: The VT Series model VT33 VLF AC Hipot & Thumper System

You **can** have it all. HVI puts all the pieces together to deliver the ultimate cable care tool in half the size, weight, cost, complexity in set-up, while keeping it easy to use.



VT33 – VLF & Thumper



#### VLF Test & Fault Locate: All-in-One

- VLF AC Hipot: 0 - 33 kVac, 1 uF @ 0.1 Hz.
- VLF Cable Burner: up to 33 kVac, > 100 mA
- Thumper Discharge: 0 - 13 kVdc, 860 Joules
- Continuous/Pulse Discharge Modes
- Internal TDR/Radar Arc Reflection Filter
- 50' Output HV Cable, Return & Ground
- Mobile - Rugged - Reliable

#### WORLD'S ONLY VLF & THUMPER

