# Fault Wizard<sup>TM</sup>



## **Primary Cable Fault Location System**

### EASY TO USE

The system is very easy to operate with minimum training required.

#### 3 MODES OF OPERATION

High voltage TDR Arch
Reflection technology with
automatic readout of distance to
fault , Cycle Thump mode for
pinpointing and DC Hi-Pot mode

#### **SPECIFICATIONS**

**Weight:** Approx. 23kg (50lbs) Size: 25.4 x 45.7 x 48.2cm (10x18x19")

Power source: Internal batteries
(2 12V sealed rechargeable
lead/acid) or auxiliary pack

Charge Voltage: 0-10 kV

**Capacitance:** 250 J per pulse **Output Current:** 12.5mA for Hi-

Pot Mode

**Hi-Pot Voltage:** 0-10 kV **Output Cable Length:** 12m

(40ft) or 4.5m (15ft)



The *Fault Wizard* is a compact, portable and relatively inexpensive fault location system for primary underground cable. Since the system is battery operated, it can easily be used in remote locations. The display shows the distance in feet or meters to the fault location. The display also shows the battery voltage, the velocity of the propagation setting, the charge voltage, the fault type (open or short) and whether the system is armed for waveform storage. The waveforms can be retrieved for viewing on a computer by utilizing the *Fault Wizard Software*. However, viewing of the waveforms is not required since the Fault Wizard gives and automatic readout of the distance to the fault location.

The **Fault Wizard** can be used to perform arc-reflection on cable systems (single, half-loops, radials etc.) for quick power restoration.

- The most compact, full featured Arc
   Reflection system at a fraction of the cost
- 3 modes of operation in one compact unit:
  - High voltage TDR Arch Reflection technology with automatic readout of distance to fault (no interpretation of complication waveforms)
  - Cycle Thump mode for pinpointing
  - DC Hi-Pot mode
- Adjustable Output Voltage
- Truly portable Battery powered, weighing only 50 lbs
- Fault Wizard Software included allows optional waveform viewing on a computer

The Fault Wizard will ignore the transformer reflections and "lock" on the fault location. This allows the user to quickly determine the faulted cable section in the system. The Fault wizard will locate faults up to approx. 3km (10,000ft). The impulse voltage is variable, which allows lower voltage pulsing and minimum damage to cables. However, the Fault Wizard has sufficient power to often be felt and heard above ground. In cycle mode, its internal batteries will last over an hour and deliver a 350J pulse every 6 seconds, at full voltage. The cycle rate is faster at lower voltage settings. The system also has a hi-pot mode for checking the breakdown voltage of the fault in an isolated section of cable or the integrity of an isolated section of cable (to ensure the fault is in that section of cable before re-energizing the system.)



