



## *Revolutionary P-wave Seismic Sound Source*

Since the early 1950's, seismologists have been searching for the ideal impulsive sound source. From explosive charges to machine-driven hammers weighing hundreds of pounds, seismologists have struggled to achieve an ideal sound source that would provide high amplitude pressure, and be simple to use. If the device were highly portable and safe, then it would be a true breakthrough. Trident scientists and engineers have invested their entire careers in modernizing and miniaturizing sparker technology. The resulting **Scorpion™** borehole sparker device holds all high voltage safely captive in the lower unit and operates all day on the energy contained in a single motorcycle battery. Instead of performance that falls off with operating depth, Trident's **Scorpion™** can be employed at depths of several hundred feet, producing full power in any deployment scenario.

And with precise computer controlled discharge timing, modern data processing techniques like tomography are made possible. The secret to Trident's revolutionary **Scorpion™** is the logic-controlled pulse electronics and low power charging design. **Scorpion™** is designed to output a consistent energy level with every pulse. With all high energy components located in the sparker head, there are no high voltage power cables or external capacitor banks. Small enough to be used in a 3-inch diameter borehole, **Scorpion™** minimizes drilling requirements, and with its significant acoustic amplitude, supports capture at greater distances, expanding the range of surveys and the analyses that can be performed. The simple all-weather control unit is small and lightweight, making **Scorpion™** the most portable and simple to use sparker on the market. In a word, it's revolutionary.



# SCORPION

## KEY FEATURES

### SAFE

All high voltage in lower unit

### ACCURATE

Timing output: +/- 41 microseconds

### LONG-LASTING

Field-replaceable electrode

### PORTABLE

- Powered by 12-volt battery (not included)
- Upper/Lower Units total weight: < 15 lb (7 kg)
- Cables available up to 300 ft (90 m) long

### COMPATIBLE

- Industry-standard trigger
- Control box output: PT07A-8-3S
- Cable: PT06A-8-3P to PT06A-8-3P

### FLEXIBLE

Selectable p-wave output  
Up to .94 bar at 1 meter



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