Electric Seismic™ Detonator Assembly

Description

Electric Seismic™ detonator assemblies are high strength detonators designed specifically for geophysical exploration. They can be used for both single shot and pattern firing applications.

Key Benefits

- Fire within the sampling rate of most seismic acquisition systems
- Ensures initiation reliability with detonator sensitive explosives
- Assure reliable performance in high hydrostatic conditions
- Assure superior performance in the toughest of environments
- Minimize the risk of accidental detonation caused by static electricity

Features

- Have short initiation lag times
- Have a high strength detonator design
- Are pressure resistant detonators that will withstand 250 psi water pressure for extended periods of time
- Have polyolefin legwire insulation that is not adversely affected by low temperatures, water immersion or extended storage at high humidity
- Have multiple anti-static features within the design

Handling and Initiation

When used in a single series hook-up in single-shot firing or pattern shooting, limit the number of Electric Seismic™ detonators in the series to 25 and use a capacitor discharge blasting machine that will deliver a firing current greater than 10 amps RMS to the circuit for optimum performance.

Keep electric detonator wires, the blasting circuit and lead wires shunted unless testing field resistance, connecting or ready to fire.

Always twist-shunt electric detonator legwires after the factory shunt is removed.

Never handle or use electric detonators when stray current or static electricity is present or during lightning storms.

Radio Frequency Hazard Alert

When blasting with electric detonators, no personal communication equipment of any type should be on the blast site regardless of whether it is on or off. This includes but is not limited to: portable / hand held radios, radio modems, pagers, mobile and cell phones.

Radio-Frequency (RF) transmitters include but are not limited to: AM and FM radio, television, radar, cellular phones and other devices that are cellular based (i.e., on-board vehicle systems like “On Star”); wireless data acquisition systems, personal data devices such as “Palm Pilots” and “Pocket PCs” with built-in cellular phones or communication systems, Pagers, and Global Positioning Systems (GPS) base stations.

Refer to the Institute of Makers of Explosives Safety Library Publication #20 for distance / wattage parameters and guidance when using two-way radios and cell phones near electric detonators.

Special Instructions

The Electric Seismic™ detonator is not electrically compatible with any other electric detonators from Orica or other manufacturers. Wiring this detonator with any other detonators may result in misfires.

Storage

For maximum shelf life (5 years), Electric Seismic™ detonators must be stored at moderate temperatures and dry conditions in a well ventilated approved detonator magazine. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library Publications of the Institute of Makers of Explosives.
## Packaging

<table>
<thead>
<tr>
<th>Legwire Length (approx.)</th>
<th>Nominal Resistance (Ohms)</th>
<th>Quantity per</th>
<th>Wire Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feet</td>
<td>Meters</td>
<td>Copper wire</td>
<td>Case</td>
</tr>
<tr>
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<td>------</td>
</tr>
<tr>
<td>12</td>
<td>3.6</td>
<td>1.2</td>
<td>25</td>
</tr>
<tr>
<td>24</td>
<td>7</td>
<td>1.4</td>
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</tr>
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<tr>
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<td>2.7</td>
<td>10</td>
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</tbody>
</table>

K Figure “8” coil, S Spooled
12’, 3.6m assemblies are # 21 AWG single yellow colored copper wire or red colored duplex wire All other lengths are #20 AWG yellow colored duplex copper wire. Additional lengths may be made available on request.

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## Hazardous Material Shipping Description

Detonator, Electric
Class and Division: 1.4B
UN 0255, PGII

## Trademarks

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For additional information visit our web site at www.oricaminingservices.com under Seismic Exploration.

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Emergency Contact Telephone Numbers
For chemical emergencies (24 hour) involving transportation, spill, leak, release, fire or accidents:
**Canada:** Orica Canada emergency response 1-877-561-3636
**USA:** Chemtrec 1-800-424-9300

For lost, stolen or misplaced explosives:
**USA:** BATFE 1-800-800-3855. Form ATF F5400.0 must be completed and local authorities (state / municipal police, etc) must be advised.