

# PREMIER

## Electric Instantaneous Detonators



**Product Description:** Premier Electric Instantaneous Detonators are designed for safe and reliable initiation of cap-sensitive explosives and primers.

These detonators have an aluminium shell with a fuse head, prime and base charge sealed by crimping a PVC plug having 2 lead wires connected to the fuse head.

On passage of Electric Current, the flame generated by the fuse head initiates the prime charge: Nickle Hydrazene Nitrate (NHN) which in turn detonates the base charge: Penta Erithritol Tetra Nitrate (PETN).

**Application :** Premier Electric Instantaneous Detonators are used for the initiation of commercial cap sensitive explosives in open cast mines, quarrying, underground non gassy mines etc. The product can also be used for secondary blasting



**Benefits:**

- Excellent performance with accuracy and high strength
- Ease and convenience in handling
- Excellent water proofness.
- Abrasion resistant insulation on lead wires.
- Low cost, reliable means of simultaneous initiation

Shell Material	Aluminium
Detonator strength	No.8
Shelf Life	2 years under recommended storage conditions.
No fire current	180 mA for 300 seconds
Minimum All fire currents	0.8A
Minimum series firing current	1.5 A
Firing Impulse	2.4 mWs / ohm
Fuse head resistant	1.6 to 2.4 ohm
Lead wire material	Galvanised Iron
Lead Wire Colour	White - as per customer requirement
Standard lead wire length	1.5, 1.8 & 3.0 mtrs – as per customer requirement
Base wire guage / dia	25.5 SWG / 0.487 ± 0.02 mm
Lead wire resistance	0.8 ohms/ mtr
Identification mark	PEL Mark on plug

**Recommendations for use:**

- Electric Detonators should only be used by personnel who have adequate knowledge in handling and use of explosives.
- Electric Detonators contain sensitive components and must be handled with care at all times.
- Not to be used in a gaseous environment or where there is danger of coal dust explosion.
- While using in a circuit, the total resistance to be monitored to ensure recommended in flow of current.

**Safety:**

- The cases should be handled carefully not to cause accidental initiation by intense impact, friction or heat.
- Never force a detonator into explosives cartridge. Always use a pricker made of non-sparking material to pierce the cartridge while priming.
- Never hold the detonator shell while unfurling the wire for use. Always hold the lead wires 5 cms away from the crimped portion to avoid sudden pressure coming on the fuse head assembly.
- Do not handle electric detonators while wearing Woolen or Synthetic clothes or in the vicinity of cell phones, walkie – talkie etc.
- When used to initiate the detonating cord trunk line, connect detonator just at the time of blasting.
- Always keep the ends of lead wires or blasting cable shunted and open just prior to connections. Disconnect the firing cable from the exploder if circuit requires rechecking.
- Do not carry out charging of explosives during an approaching storm or when there is lightening near the blast area.
- Do not attempt to fight explosive fire.

**Packaging**

25 Nos are made into a bundle ensuring that all that lead wires ends are shunted and folded within the bundle. Two such bundles are wrapped in a kraft paper to form a packet. Required number of packets are placed in a corrugated fiber board case.

Wire Length	No. of Detonators / Case
1.5	1500
1.8	1250
3.0	1000

**Storage:**

Store under moderate and dry condition in a well ventilated, approved magazines.

**Classification:**

PESO : Class 6, Division 3  
 UN No. : Class 1.1 B, UN No. 0030

**Premier Explosives Limited**

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