



### Description

Dyno Nobel's GeoShot® Seismic Electronic Initiation System is another in the suite of Dyno Nobel electronic systems. Built on the proven DigiShot® platform, GeoShot provides an electronic solution to our seismic customers' need for security by using a system-specific, coded command for detonator communication during testing and firing. As a precision electronic initiation system, GeoShot provides excellent data acquisition and reporting. In addition, the GeoShot detonator is produced with robust over-extruded downline wire for additional abrasion resistance plus an easy to deploy coiling configuration which facilitates hole loading efficiency.

GeoShot equipment (principally, a GeoShot Tagger and GeoShot Seismic Interface Unit (SIU)) is designed to meet the specific needs of seismic customers and is compatible with most seismic firing equipment in use today. The GeoShot Tagger is used in the field to test the GeoShot detonators and to record information from the loaded holes. The GeoShot SIU is used to test and fire the GeoShot detonators. Easily incorporated into the firing pack of seismic crews, the GeoShot SIU delivers the specific coded fire command required to fire a GeoShot detonator. Because there is two-way communication with the GeoShot detonators, both the GeoShot Tagger and GeoShot SIU record and store data that can be extracted by users later to analyze what holes have been loaded and/or fired and when.

With safety always Dyno Nobel's number one priority, the GeoShot system is inherently safe, because the GeoShot Tagger communicates with the GeoShot detonators using a voltage below minimum firing voltage and does not contain the encrypted firing command. In addition, the GeoShot detonators are fully testable with the GeoShot Tagger via 2-way communication (either at the hole or from the firing location) which facilitates easy fault identification and repair.

### Properties

Detonator Shell / Cable Conductors	Copper
Detonator Shell Dimensions	88.9mm long / 7.5mm outside diameter
Cable Colour	Orange
Wire Diameter	0.63mm
Wire Tensile Strength	27.06kg
Wire Elongation	21.2%
Net Explosive Quantity (per 100 units)	0.1000kg

### Hazardous Shipping Description

Detonator, Electric for Blasting, 1.4B, UN 0255



### Packaging

Length (m)	Case Quantity*	Case Weight (kg) *	Length (m)	Case Quantity*	Case Weight (kg) *
3.5	150	11.1	24	40	15.9
7	98	13.7	30	32	15.4
11	88	15.9	37	24	13.8
14	66	16.0	45	24	15.7
20	44	14.3	54	16	13.2

\* Estimated

### Features & Benefits

- Providing an added level of security, a **coded command** is required to fire GeoShot detonators which can **only** be delivered by GeoShot equipment.
- **Electronic accuracy** meets geophysical exploration industry standards of accuracy of < 1.0ms deviation in function times.
- **Easy to use, menu-driven software** for GeoShot Tagger makes it simple to Communicate with and test GeoShot detonators.
- **Minimal on-site components** during loading - just the electronic GeoShot detonator (in the borehole), the firing line and the GeoShot Tagger.
- The **GeoShot Tagger acquires information** on each hole loaded, which can later be downloaded to a PC. The driller can assign specific information about the hole (depth, type of explosive, shot-point from the Tagger table) and also include the GPS location and time assigned by the GeoShot Tagger.
- The **GeoShot Seismic Interface Unit (SIU)** connects the detonator with the firing backpack and automatically converts the high voltage pulse to the correct voltage and coded signal to fire the GeoShot detonator.
- The connectors are all **rugged and water resistant**. ESD Resistance, RF Resistance, Cable Abrasion & Cutting Resistance all pass CEN TS 13763-27, the European Standards of Compliance for Electronic Detonators.

### Recommendations

**Use** - Due to the system's flexibility, contact your local Dyno Nobel representative for application recommendations.

**Temperature Range** – The GeoShot system can be used as described in this technical data sheet in temperatures ranging between -40°C to +50°C.

### Recommendations (continued)

**Shelf Life** - For maximum shelf life of three (3) years, GeoShot must be stored in a cool, dry, well ventilated magazine. Explosive inventory should be rotated. Avoid using new materials before the old. 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.

### Safe handling, transportation and storage

**First Aid** – You can find detailed first aid information on the relevant Dyno Nobel Safety Data Sheet. Refer to [www.dynonobel.com](http://www.dynonobel.com) for more information if required.

**Safety** - All explosives are classified as dangerous goods and can cause personal injury and damage to property if used incorrectly.

**Transportation and Storage** - All explosives must be handled, transported and stored in accordance with all relevant regulations. Stock should be rotated such that older product is used first.



GeoShot Seismic  
Interface Unit



GeoShot Tagger

**Product Disclaimer** The explosive products discussed in this document should only be handled by persons with the appropriate technical skills, training and licences. While Dyno Nobel has made every effort to ensure the information in this document is correct, every user is responsible for understanding the safe and correct use of the products. If you need specific technical advice or have any questions, you should contact your Dyno Nobel representative. This information is provided without any warranty, express or implied, regarding its correctness or accuracy and, to the maximum extent permitted by law, Dyno Nobel expressly disclaims any and all liability arising from the use of this document or the information contained herein. It is solely the responsibility of the user to make enquiries, obtain advice and determine the safe conditions for use of the products referred to herein and the user assumes liability for any loss, damage, expense or cost resulting from such use. © DYNO, GROUNDBREAKING PERFORMANCE and the Loop device are registered trademarks of the Dyno Nobel / Incitec Pivot Group. GeoShot and DigiShot are registered trademarks of DetNet South Africa (Proprietary) Limited © Dyno Nobel Asia Pacific Pty Limited 2013 Reproduction without permission strictly prohibited.