

SmartShot®

Electronic Initiation System

Technical
Information



Product Description

SmartShot is the latest advancement in Dyno Nobel's suite of precise electronic initiation systems. The SmartShot system offers innovative features including wireless remote blasting and complete timing flexibility. Specialised waterproof and dirt displacing connectors ensure quick, easy and reliable connections, and prevent leakage.

SmartShot Detonator - To hook up, the male connector of one unit simply snaps into the female connector of the next unit, and soon, along a row.

SmartShot Base Station - Used to initiate the blast remotely from a safe distance. The PIN protected SmartKey must be docked in the Base Station to arm and fire the shot.

SmartShot Bench Box - The receiver unit that allows remote firing via radio frequency from the Base Station, passing the signal onto the detonators in order to initiate the blast.

String Starter – Connected between the blast and the Bench Box to interface 2-wire with 4-wire communication. It also assists in identifying any faults.

End Plug – Connected to the end of each string to indicate the end of a string to the control equipment.

SmartShot Tagger - Hand-held unit to test and assign timings to individual detonators and defines the hole configuration.

Properties

System Limits -

Maximum Total Delay Time (milliseconds)	20,000
Maximum Number of Detonators	2,400*
Lead in Length (wireless)	3,000m*
Lead in Length (wire)	2,000m*
Maximum in-hole Lead Length	80m

* Dependant on shot layout, please refer to training manual before use.

Detonator -

Detonator Shell	Copper
Cable Colour	Green with coloured stripe
Tensile Strength	>250 N
System Operating Temperature	-20oC to +50oC
Detonator Strength	#12
Net Explosive Quantity (per 100 units)	0.1000 kg
Dynamic Shock Resistance	>12,000 psi 500ns pulse width
ESD Resistance	Passes EN 13763-13
RF Immunity	Passes CEN TS 13763-27
Base Charge	PETN
Timing	Fully or auto programmable

Hazardous Shipping Description

Detonators, Electric, for Blasting 1.4B, UN 0255



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Packaging - Accessories

	Units per Case	Dimensions of Packaging
SmartShot Base Station	1	523 x 375 x 260mm
SmartShot Bench Box	1	523 x 375 x 260mm
String Starters and End Plugs	10	200 x 165 x 92mm
Smart Keys	1	146 x 86 x 38mm
Tagger	1	300 x 250 x 140mm
Connection Block and Cable	1	200 x 165 x 92

Packaging - Detonators

Downline x Surface Length (m)	Units per Case	Dimensions of Packaging
10 x 7	18	480 x 215 x 245
20 x 10	18	480 x 215 x 245
25 x 0.2	18	480 x 215 x 245
35 x 0.2	15	480 x 215 x 245
45 x 0.2	12	480 x 215 x 245

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 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 – For maximum shelf life (5 years), SmartShot must be stored in a cool, dry, well ventilated magazine. 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.

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. © SmartShot is a registered trademark of DetNet South Africa (Pty) Limited. © Dyno Nobel Asia Pacific Pty Limited 2018. Reproduction without permission strictly prohibited.