



GENERAL SURVEY

NON-ELECTRIC DETONATORS



Austin Detonator **non-electric delay detonators** are designed to provide the precise control and accuracy for blasting in surface mines, underground metal and non-metal, and construction sites where the risk of ignition of the explosive air-methane or air-coal dust mixtures does not exist.

BENEFITS

- 720 mg base charge.
- High impact protection.
- Excellent delay time accuracy ensures greater than 99% probability of in-sequence initiation.
- Manufactured with yellow Shock tubing for easy differentiation from surface detonators when inspecting the connected blast pattern.
- Easy Shock Tube connection, locking mechanism to ensure locking of the tubes in the block if needed. Capacity of 8 Shock Tubes.
- Color coded connectors according to the delay time of the detonator.
- T-connector can be provided on all in-hole detonators for rapid and easy connection to detonating cord.
- Initiating signal is transmitted at a constant velocity of 2,000 m/s and noiselessly passes also through kinks, knots and sharp bends of Shock Tube without disrupting the explosive column.
- Significant reduction of plastic remains in the muck pile (Shock★Star PF)

PRODUCT OVERVIEW

SHOCK★STAR NON-ELECTRIC DETONATORS CONSIST FROM:

- Instantaneous, millisecond and long delay in-hole detonators (with or without „T“ connector).
- Surface delay detonator with Shock★Star connector.
- Instantaneous and delay detonator with Shock★Star Bunch.
- Austin StarTube and Shock★Star StartLine.

SHOCK★STAR SPECIFICATIONS AND APPLICATIONS

PRODUCT	TECHNICAL INFORMATION	TYPICAL APPLICATIONS
Shock★Star Surface	Delay time / block color: <ul style="list-style-type: none"> • 0 ms / Green • 9 ms / Brown • • 17 ms / Yellow • 25 ms / Red • • 33 ms / Grey • 42 ms / White • • 67 ms / Blue • 100 ms / Black • • 200 ms / Orange • 	Specially designed to provide connection of surface initiation network and relay of initiation signal to the next Shock Tubes. This unit is designed for initiation of Shock Tubes only.
Shock★Star Bunch Connector	Detonator with special design which allow initiation of detonating cord placed in a special connector block.	This connector/detonating cord assembly is used especially in tunnel blasting. And is designed for reliable initiation of up to 20 Shock Tubes.
Shock★Star MS	In-hole millisecond detonator available in 30 delays: <ul style="list-style-type: none"> • delays 1-20; interval 25 ms • delays 21-30; interval 50 ms • includes instantaneous 0 ms 	The most complete in-hole millisecond delay system designed for initiation of cap sensitive explosives or boosters. „T“ connector provides fast and easy connection to detonating cord.
Shock★Star TS Shock★Star PF	In-hole detonator available in 40 delays: <ul style="list-style-type: none"> • delay 0 = 25 ms • delay 1 - 10 interval 50 ms • delay 11 - 12 interval 100 ms • delay 14 - 20 interval 200 ms • delay 25 - 90 interval 500 ms 	Designed for use in underground mines as well as tunnels, shafts, trenches and other surface work where long delays are required to provide sufficient time for rock movement. Significant reduction of plastic remains in the muck pile (Shock★Star PF)
Shock★Star LP	In-hole detonator available in 16 delays from 0 up to 9 600 ms	Designed for underground mining applications, raising and shaft sinking operations.
Shock★Star Dual Delay	Combination of Shock★Star Surface (nominal delays 25 and 100 ms) and Shock★Star MS or Shock★Star TS (nominal delays 475, 500 and 9000 ms).	Designed for use in surface applications for bench blasting or underground applications.
Shock★Star StartLine	Shock★Star Surface 0 ms – length 50, 100, 400, 600 and 800 m.	Factory-spoiled tubing with a Shock★Star Surface 0 ms connector for starting of initiation network.
StarTube	Shock Tube available in 400, 600, 800 and 3000 m on the spool.	Factory-spoiled tubing for starting of initiation network.

STORING

Detonators must be stored in an approved magazine located to conform to state and local laws and regulations. The storage place should be well built, well air-conditioned, clean, dry, fire resistant and securely locked when not in use. Detonators should be never stored in the same magazine with other explosives.

Contact your local Austin Powder representative for further information.

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AUSTIN POWDER

Our Mission is to improve the world we live in through the safe and responsible use of explosives.