

System Components

Blast Control Unit (BCU) II

- The BCU II provides upstream communication to the Surface Blast Controller and downstream to the last detonators via the mine's existing communication network.
- The BCU II can be used in a centralised or standalone blasting mode.
- The BCU II can be powered from 110, 220, or 525 V and incorporates a 24-hour battery back-up system in case of power failures.
- The BCU II can link via Wi-Fi, fiber optics, or a Ethernet network to the Surface Blast Controller to form an integrated communication system that enables users to have access to real-time information and alerts on all events occurring and to blast the entire installation from a central point.
- The system continuously runs a diagnostic test on any connected devices at the BCU II and reports the results at the Surface Blast Controller.

Surface Blast Controller (SBC)

- The SBC allows centralised blasting to take place from the control room and is password protected with 2-factor authentication.
- All events are displayed and stored on a real-time basis, and the SBC supplies warnings of all faults or errors on the system. This enables users to conduct fault diagnostics and fix all problems prior to the blasting time.
- Blast instructions are sent to all selected BCU IIs when prompted by the blaster.
- A blast report can be generated that contains an event's history for reporting purposes.

Initiation Systems

- Initiation systems that integrate with BlastWeb II include:
 - DigiShot® Plus 4G
 - DriftShot® Starter
 - CyberDet®



CE4 Tagger

- The CE4 Tagger is a leading innovation from Dyno Nobel and the best of its kind in the industry.
- The CE4 Tagger is an inherently safe device used for tagging, testing, and troubleshooting. Each detonator is assigned a unique ID and timing programmed into the detonator memory.
- The scratch-proof glass screen provides excellent visibility.
- User alerts engage multiple sensory formats: tactile (vibration), audible (speaker) feedback, and visual alerts through bright LEDs.
- It uses excellent battery management technology and standard USB or wireless charging.



Blast Cards

- The Activate NFC card is used for centralised blasting. The blast command will be issued from the Surface Blast Controller.



blastweb^ϕ II

NEXT GENERATION DIGITAL ELECTRONIC INITIATION SYSTEM FOR EASY, SAFE, CONTROLLABLE, AND RELIABLE UNDERGROUND BLASTING FROM THE SURFACE



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Introduction

BlastWeb II® is Dyno Nobel's next generation digital electronic initiation system, enabling easy, safe, and reliable underground blasting from the surface. The advanced digital technology enables integrated web-based network capabilities with limited user interaction to provide the best solution for an underground blasting operation. The BlastWeb II system has the ability to communicate with all Dyno Nobel initiation systems, allowing for seamless integration with existing and future products.

Through Dyno Nobel's ViewShot 3D® software, the drilling designs and patterns from 3rd-party systems can be imported into BlastWeb II, allowing the application of precise timing parameters and optimising your blasting like never before.

Why Use BlastWeb II?

Safety and Security

- BlastWeb II allows safe, selective blasting from a central point on surface or from a safe location underground. This ensures the removal of personnel and elimination of exposure to blast fumes and gases underground.
- The controlled blasting authentication requires a unique, password-encrypted NFC blast card to activate and execute the blast. The system administrator can set up and configure the shotfirer's access and permissions; similarly, NFC blast cards can be controlled to prevent unauthorised blasting.

System Capabilities

- The conventional tagging mode utilises location-based tagging with sides, rows, hole numbers, and detonator numbers.
- This option allows the user to tag the detonators' locations and later send the delays to the detonators via the Tagger when all detonators are connected to the harness wire.

Revolutionary Build

- Its revolutionary, modern, and lightweight design uses advanced technology to withstand the demands of safe and reliable blasting.

Integration

- Advanced digital technology enables integrated web-based network capabilities with the mine's existing underground network.

User Friendly

- BlastWeb II provides easy-to-follow instructions and information to navigate through different options and blasting procedures. The web-based interface for the Surface Blast Controller allows information to be easily accessible to view and monitor real-time events.
- It has visibility of warnings and notifications of any status changes.
- The ability to upload firmware remotely removes personnel from underground exposure.

System Adaptability

- The Portable Blast Control Unit II provides the same functions as a fixed Blast Control Unit (BCU) but offers the flexibility to be used in areas with minimal infrastructure.

Dyno Nobel continually strives for excellence in electronic initiation systems. As a world leader in our field, we aim to deliver world-class safety, state-of-the-art technology, and consistent quality for improved loading and fragmentation to ensure mining becomes more sustainable today and into the future.

blastweb® II DEPLOYMENT

