



CSP-Nv Seismic Energy Source



The **CSP-Nv** is built on the proven high voltage technology of the industry leading CSP range of power supplies. Incorporating microprocessor control and configuration for greater configuration flexibility and reliability whilst retaining a fail-safe logic design.

The CSP-Nv seismic energy source is the driving force behind Applied Acoustics' Dura-Spark range of sound sources that have extremely hard wearing electrode sparker tips.

The CSP-Nv adds to the standard safety systems and operational functions found across the entire range of CSP energy sources, the CSP-Nv is also suitable for use with the Applied Acoustics' S-Boom and single plate boomer systems.

Key Features

- Microprocessor configuration and control.
- Intuitive user interface, with LCD display and LED indicators.
- Enhanced operator system feedback
- User programmable 'soft start'
- Master / Slave Key Support
- Additional safety/protection features
- Programmable voltage technology allows operator tuning to suit application
- All settings externally selectable
- High current and voltage solid state (semi-conductor) discharge method
- Debug log and diagnostics.
- Meets EC emissions regulations enabling interference-free field use
- Supplied in robust transit case, with HV junction box (HVJ3004) and mains lead.

Technical Specification

PHYSICAL

Size	Transit Case (7U) with cover in place and handles flat: 50cm(H) x 58cm(W) x 74cm(D)
Weight	CSP-Nv1200, case and cover: 61.5kg CSP-Nv2400, case and cover: 63.5kg

ELECTRICAL SPECIFICATION

Mains Input	240VAC 45-65Hz@ 5.0kVA single phase. 3 pin connector Variable Input Power Circuitry (AVIP) 'soft start' circuitry
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CSP-Nv Technical Specification

Voltage Output	2500 to 3950VDC, 4 pin interlocked connector Solid state semi-conductor discharge method
Output Energy	Easy switch selectable in increments CSP-Nv1200 50,100,150,200,250,300,350,400,450,500,550,600 700,800,900,1000,1100,1200 Joules CSP-Nv2400 50,100,150,200,250,300,400,500,600,700,750,800, 900,1000,1250,1500,1750,2000,2250,2400 Joules
Charging Rate	2000J/second for continuous operation at 0-45°C
Capacitance	CSP-Nv1200 208μF, 10 ⁸ shot life CSP-Nv2400 304μF, 10 ⁸ shot life
Trigger	User configured: External: +ve key (5-12VDC), -ve key or isolated closure Internal: +ve key (5-12VDC), -ve key Opto isolated BNC connector on front panel and remote box (optional)
Repetition rate	User configured: External: 6pps maximum Internal: 166ms to 60 seconds Limited by charge rate, energy level and sound source rating
Earth	M8 stainless steel stud on front panel

SAFETY FEATURES

- Main microprocessor control circuits with fail-safe layer of logic circuitry
- LCD display with system status information, configuration
- Specially designed HV connector with interlock
- High speed dump resistors for high voltage components
- Capacitor bleed resistors
- HV output open circuit shutdown
- Trigger monitoring with time out and over clock shutdown
- HV output current monitor and shutdown
- Supply Voltage monitoring and shutdown
- High Voltage monitoring
- Over temperature shutdown
- Cover and connector interlocks
- Diagnostic log download for improved support
- Intelligent remote control available to configure, trigger and operate remotely

*The unit's internal design has a modular construction for ease of servicing and capacitor replacement. However, for safety reasons, **only** Applied Acoustics trained engineers should attempt a repair.*

COMPATIBLE SOUND SOURCES

CSP-Nv1200	AA251/AA301 boomers and S-Boom triple plate; Dura-Spark L200, Dura-Spark UHD 240/400 and Dura-Spark 400+400.
CSP-Nv2400	AA251/AA301 boomers and S-Boom triple plate; Dura-Spark UHD 240/400 and Dura-Spark 400+400.



Due to continual product improvement, specification information may be subject to change without notice.
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