

CSP-N Seismic Energy Source



The CSP-N seismic energy source is the driving force behind Applied Acoustics' Dura-Spark range of sound sources that have extremely hard wearing electrode sparker tips. This durability is a consequence of the CSP's reverse polarity high voltage charger and unique proprietary thyristor switching.

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

Key Features

- Unique dual negative voltage output
- Variable Input Power Circuitry for 'soft start'
- Additional safety/protection features
- All settings externally selectable
- LED fault indicators
- High current and voltage solid state (semi-conductor) discharge method
- Meets EC emissions regulations enabling interference-free field use
- Dual voltage technology allows operator tuning to suit application
- Supplied in robust transit case, with HV junction box (HVJ3001), mains lead and HV connector plug

Technical Specification

PHYSICAL

Size	Transit Case (7U) with cover in place and handles flat: 50cm(H) x 58cm(W) x 74cm(D)
Weight	CSP-N1200, case and cover: 60kg CSP-N2400, case and cover: 63.5kg

ELECTRICAL SPECIFICATION

Mains Input	240Vac 45-65Hz@4.0kVA single phase. 3 pin connector Variable Input Power Circuitry (AVIP) 'soft start' circuitry
Voltage Output	2500 to 3950Vdc, 4 pin interlocked connector Solid state semi-conductor discharge method

CSP-N Technical Specification continued...

Output Energy	Easy switch selectable in increments
	CSP-N1200 50,100,150,200,250,300,350,400,450,500,550,600 700,800,900,1000,1100,1200 Joules
	CSP-N2400 50,100,150,200,250,300,400,500,600,750, 800 900,1000,1250,1500,1750,2000,2250,2400 Joules
Charging Rate	2000J/second for continuous operation at 0-45°C
Capacitance	CSP-N1200 208µF, 10 ⁸ shot life
	CSP-N2400 304µF, 10 ⁸ shot life
Trigger	+ve key opto isolated or isolated closure set by front panel switch BNC connector on front panel and remote box (optional)
Repetition rate	6pps maximum Limited by charge rate, energy level and sound source rating
Earth	M8 stainless steel stud on front panel

SAFETY FEATURES

- Main electronic control circuits and secondary layer of safety circuitry
- Specially designed HV connector with interlock
- High speed dump resistors for high voltage components
- Capacitor bleed resistors
- Open circuit shutdown
- Timer shutdown
- Output current monitor and shutdown
- Over temperature shut-down
- Cover and connector interlocks
- Remote control available for triggering and operation

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-N1200	Dura-Spark 240, 400 AA201, AA251 and AA301 Boomer plates S-Boom System
CSP-N2400	Dura-Spark 240, 400 AA201, AA251 and AA301 Boomer plates S-Boom System



Due to continual product improvement, specification information may be subject to change without notice.
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Applied Acoustic Engineering Ltd

T +44(0)1493 440355
F +44(0)1493 440720
E general@appliedacoustics.com
W www.appliedacoustics.com