

## VIB PRO™ HD

INOVA's Vib Pro HD vibroseis source controller is centered on increased productivity coupled with best-in-class broadband sweep generation, established with the previous Vib Pro version.

### FEATURES

- Provides accurate and versatile sweep generation across all surface terrains ensuring delivery of the desired energy
- Increased computing power improves control resolution and force accuracy
- Optimized low and high frequency control for INOVA's vibroseis vehicles
- INOVA's patented Low Frequency Limit (LFL)Control™ enables high force, low frequency linear sweeps to be performed using short tapers within physical constraints of the vibrator
- INOVA's patented Harmonic Distortion Reduction (HDR) Control™ attenuates harmonic energy in real-time generating more fundamental force with lower distortion on each sweep
- Integrated wired and wireless Ethernet communication
- Integrated VSS and PSS data management and storage
- Dynamic TDMA, collision-free radio communications
- Analog and Digital radio support
- Compatible with most acquisition systems and vibroseis vehicles on the market
- Units can be easily programmed as an encoder or decoder
- Low ground force mode for environmentally-sensitive areas

## HDR CONTROL™ ADVANTAGE

- Patented Harmonic Distortion Reduction (HDR) Control provides better vibrator performance generating more fundamental force over a broadband frequency spectrum in any environment using nonlinear compensating control algorithms
- HDR Control reduces harmonic distortions and results in improved signal-to-noise ratios
- HDR Control is included in the Vib Pro HD firmware to compensate for the nonlinear behavior of the main-stage servovalve
- When utilized with the DR Valve, HDR Control is further optimized by dampening the earth/baseplate resonance and improves the linearity and bandwidth of the vibrator's servo-valve



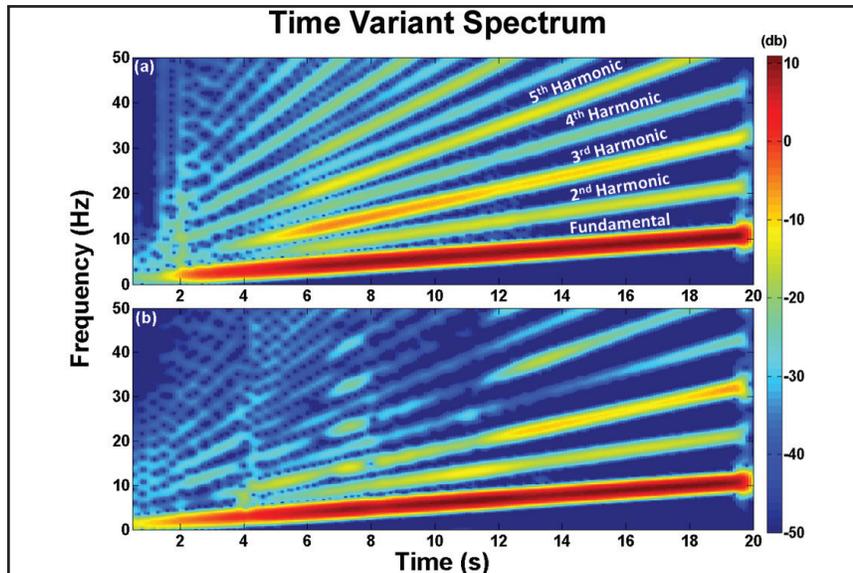
### TECHNICAL SPECIFICATIONS

Voltage Input:	9 Vdc – 36 Vdc
Timing Synchronization:	Local GPS or analog radio message
Start Time Accuracy:	±20 µs
GPS:	External only via 9-pin connector
Number of Sweeps:	32
Sweep Resolution:	24 bit
Control System Sample Rate:	0.25 msec
Vibrator Signature Recording:	Built-in with USB, ethernet or wireless data access
High Productivity Vibroseis:	ISS, DSS, DSSS
External Storage:	USB Flash
Built-in Ethernet Speed:	100 Mbit
Accelerometer* Sensitivity:	25 mV/g ±2%
Accelerometer Range:	±380 g

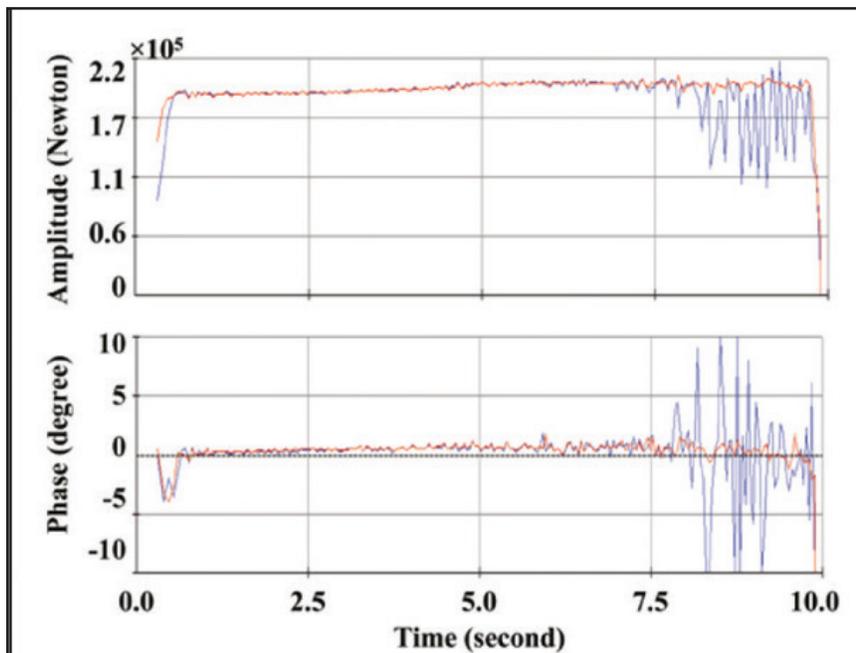
### PHYSICAL SPECIFICATIONS

Height (without shock mounts):	406 mm (16 in)
Width (without shock mounts):	305 mm (12 in)
Length (without shock mounts):	152 mm (6 in)
Weight (without shock mounts):	10 kg (22 lb)
Accessories:	Radios, antennas, cables to perform fleet operations and Accelerometers are sold separately

## VIB PRO™ HD



(Top) HDR Control off, (Bottom) HDR Control on. A linear sweep from 1 to 11 Hz in 20 seconds was used to run the vibrator.



Linear sweep from 5 Hz to 240 Hz in 10 seconds.

The blue curve is produced using a standard controller while the red curve is produced using Vib Pro HD with high frequency control.

\*Model M5 and M6 Accelerometers.