Vib Pro HD

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

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 servovalve
• Low ground force mode for environmentally-sensitive areas

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

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A linear sweep from 1 to 11 Hz in 20 seconds was used to run the vibrator.

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

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*Model M5 and M6 Accelerometers.*