

FORCE-III

with SourceLink™ software



Complete Source Control solution for all Recording Systems



FORCE-III Vibrator Control System

Vibrator control system

- Fully compatible with all servo-hydraulic vibrators
- Maximum Force output with minimum distortion
- Stable, Fault tolerant system
- Automatic Vibrator Calibration
- Dual Accelerometer circuits



Meshed Wireless Ethernet system

- High speed wireless communication
- Vibrator Group messages
- Automated group Center of Gravity (COG)
- Source Driven operation
- Wireless Digital Similarities
- Upload Custom Sweeps

GPS System and Clock timing

- GPS time synchronization
- VHF timing verification
- Centimeter accurate GPS

Vibrator Navigation Software

- SSC Navigator program
- Allows Stake-less Navigation



SourceLink™ software

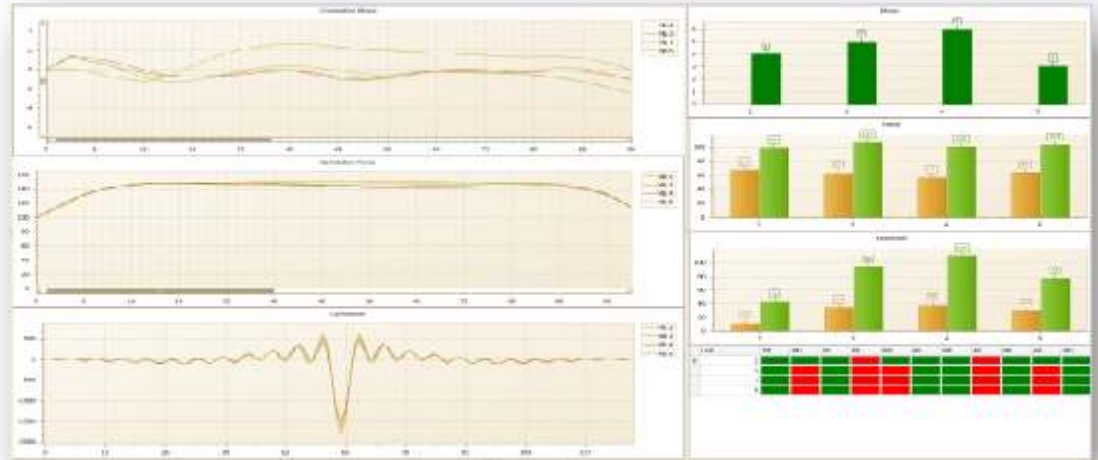
- Specifically designed to maximize production with Continuous Recording Systems like iSeis Sigma, OYO GSR, Fairfield Node, Sercel Unite and all other systems.
- Uses GPS time synchronization - synchronizes sources with the Recording systems clock - no sample skew.
- System provides Simultaneous Control and QC of all sources on the project:
 - Multiple Vibrator Groups
 - Multiple Dynamite Groups
 - Multiple AWD Groups
 - Air Gun boats
- Easy to use Graphical Map Interface:
 - Provides complete control
 - Automatically finds Group COG
 - Selects near flag
 - Fires the shot
- Real-Time Group Status:
 - Distance to selected flag
 - Sweep/Ready status
 - EP Number of VP
 - Error conditions
- Supports all Simultaneous Vibraseis Methods:
 - Slip Sweep (Shell)
 - HFVS (ExxonMobil)
 - ZenSeis (ConocoPhillips)
 - ISS and DSSS (BP)
 - Combination of above methods



Real-Time QC - Real-Time Graphical QC of Source performance

Classical Display of Vibrator performance:

- Correlation Phase
- Correlation Force
- Distortion
- Vibrator Error Limits

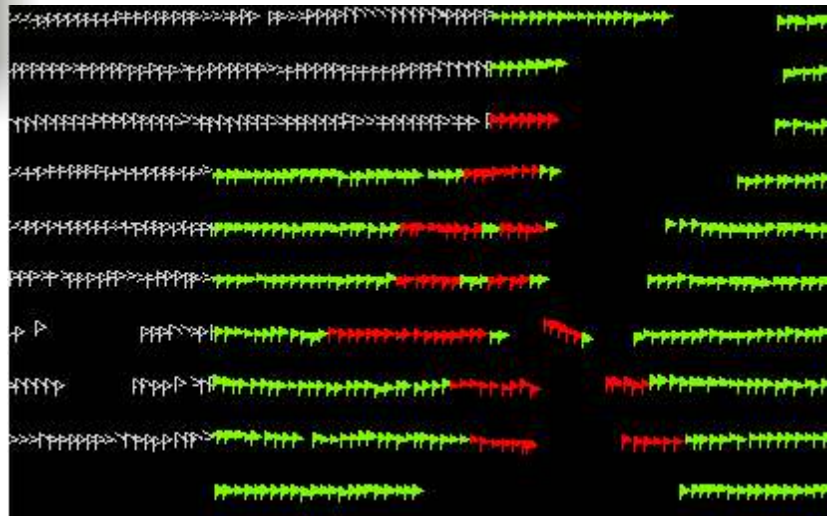


Real-Time Statistics:

- Line Graph shows Vibrator Performance for last 100 sweeps
- Easy to see any Vibrator problems

Post Sweep Service (PSS) Status can also be displayed graphically on MAP

- Out of specification shots and missing shots are easily identified
- For Dynamite operation different Uphole times are shown in different colors to show variance of Uphole time graphically



Statistical Analysis of PSS data

- Summarizes Vibrator performance
- Shows number of errors and percent
- Each Vibrator statistics are shown for easy comparison

Universal Encoder-II and FORCE-III features

Universal Encoder -II Features

- 24-bit Digital Reference
- Fully Compatible with all Recording systems
- Separate Analog Pilot Sweep for Each Group
- Monitor Mode allows remote QC of Crew
- Universal Operation

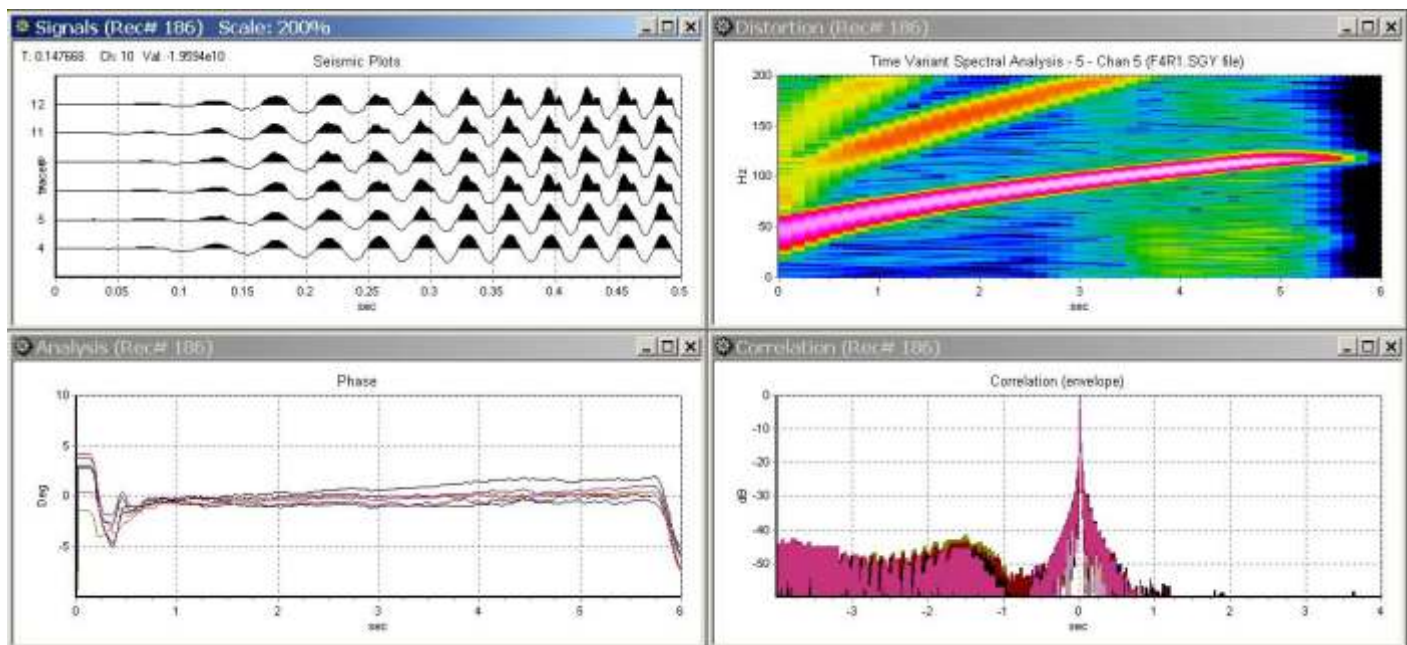
VHF radio

- Standard VHF radios
- Advanced radio telemetry
- Analog radio Similarities
- No radio collisions
- Full QC Reporting



Vibrator Signature System

- Standard on all F3 units
- 24-bit recording
- GPS time and position
- Allows digital Similarities
- Standard SEG-Y format



F3/UE2 system operates in Classic Mode with following older equipment:

- SSC Force-II Vibrator Control System
- SSC Boom Box Blaster
- SSC AWD - Weight Drop Control System
- INOVA Vib Pro™ Vibrator Control System
- INOVA Shot Pro™ Blasters

SPECIFICATIONS

GENERAL

Number of sweeps in library	64 standard, custom or linked
Sweep resolution	24-bit
Control system sample rate	0.25 msec
Vibrator Signature recording (HFVS™)	Standard
Timing synchronization	Set by GPS time or VHF radio message
Meshed Wireless Radio	Available
External storage	USB Flash
Built-in Ethernet speed	100 Mbit

SIZE AND POWER

Universal Encoder-II

Size	325x242x66 mm (12.8x9.5x2.6")
Weight	3.6 kg (8 lbs)
Power Input	9-36VDC

Force-III

Size	406x2304x152 mm (16x12x6")
Weight	10 kg (22 lbs)
Power Input	9-36VDC

SOFTWARE

Platform	Windows XP, Windows 7 (32- and 64-bit)
Software Framework	Microsoft .Net 4.0
I/O	Ethernet, USB, Serial
Supported Survey Input Standards	SEG-P1, SPS
Supported Output Standards	SPS, SEG-P1, SBS
Maximum number of Groups	256
Maximum number of Vibrators or Shooters	256
Maximum number of Simultaneous Sweeps	64

Supported Recording systems:

In Stand Alone mode:

- All GPS synchronized nodal recording systems, such as Sigma, Z-Land, GSR, Unite, and other systems.
- All GPS synchronized cable based continuous recording systems, such as 408/428 in microseismic mode

In Slave mode:

- RTI interface: OYO, ARAM, etc.
- OVC and SGD Interface: Sercel

Note: Specifications subject to change without notice.



USA: Seismic Source Co., 2391 E. Coleman Rd., Ponca City, OK 74604, Phone: +1 580 762-8233, Fax: +1 580 762-1785
email: mail@seismicsource.com, www.seismicsource.com

EAME: Seismic & Oilfield Services Ltd., Unit 3 Cypress Court, Sunbury on Thames, Middlesex, TW167EL, UK. Phone: + 44 1372 842060

Canada: Global Seismic Repairs Inc., 4405A - 75th Ave SE, Calgary, Alberta T2C2K8, Canada. Phone: +1 403 252 7552

India: Toshniwal Bros (Delhi) Pvt. Ltd., Mohit House SC-II, D-3 Mansarovar Garden, New Delhi 110015, India. Phone: +91 11 4553 1692

China: Beijing Communication Office, Building F-2608, Zi Zhu Hua Yuan, No 88 Zi Zhu Yuan Lu, Hai Dian District, Beijing 100089,
P.R.China Phone: +86 10 8855 2956, Cell: +86 139 1158 1756

source: F3UE2SLjobV1R4.txt