DX-6 Seismograph

Has all the features NOT found in nodal acquisition systems

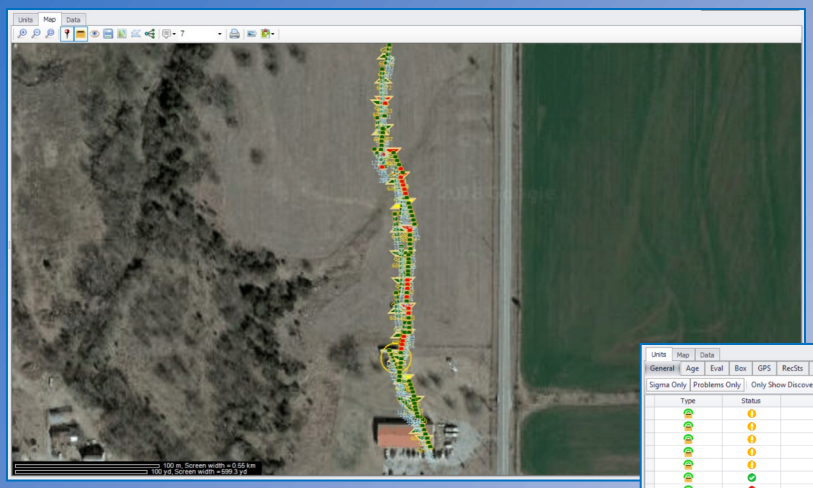
(and it does nodal recording, too!)

- *Real-time Command & Status*
- *Real-time Quality Control*
- *Real-time Data Collection*
- *Simultaneous Active & Passive*
- *Automated Deployment*
- *Cabled & Wi-Fi links*

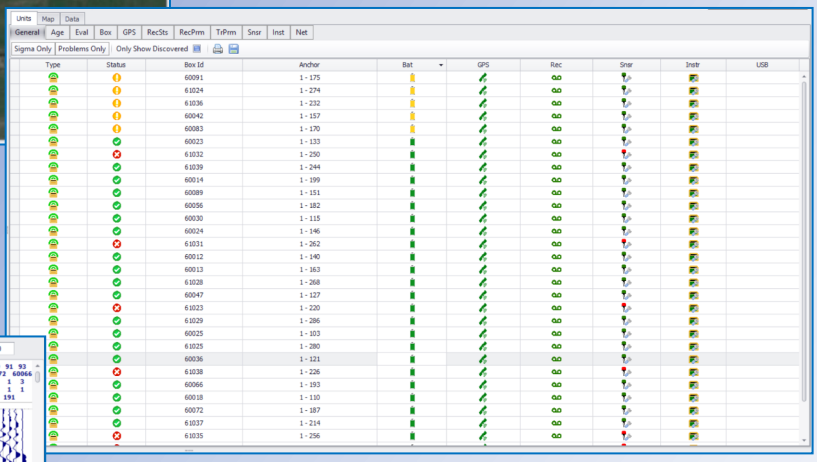
The DX-6 Seismograph

DX-6 Seismograph

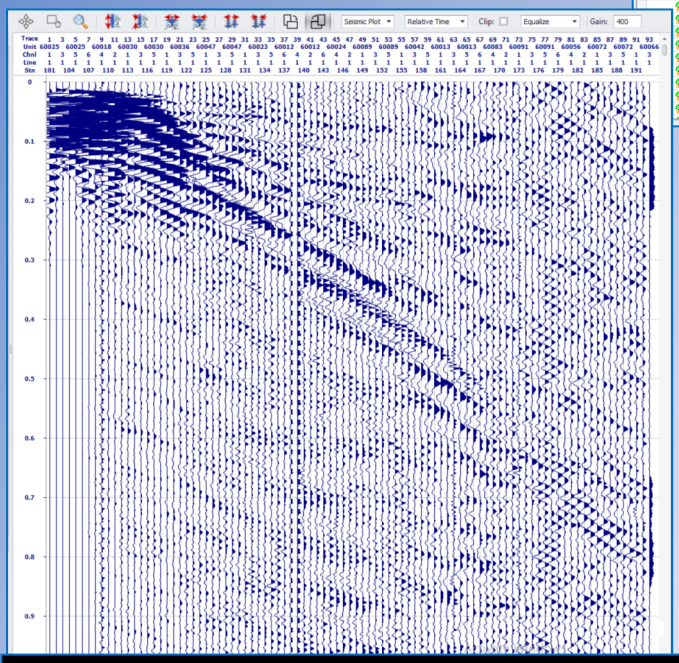
Advanced software for complete control for Real-Time Operation, QC and Results



Map Display shows field equipment with satellite, road, or terrain background

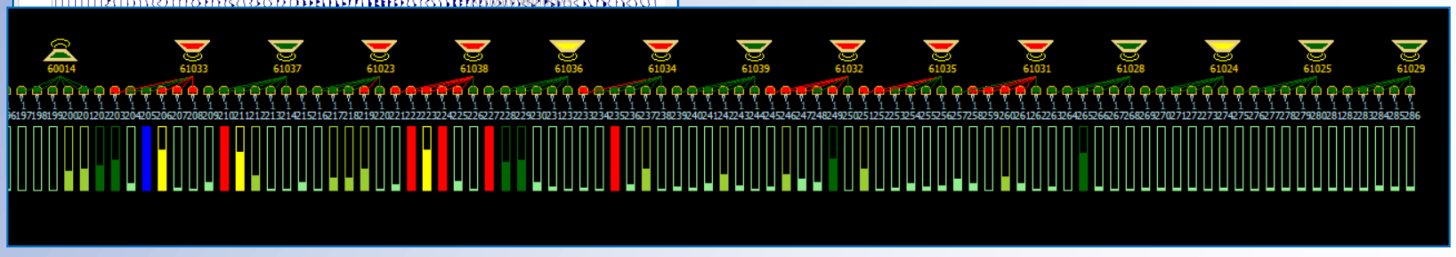


Icon-based status provides battery and GPS plus test status for each node



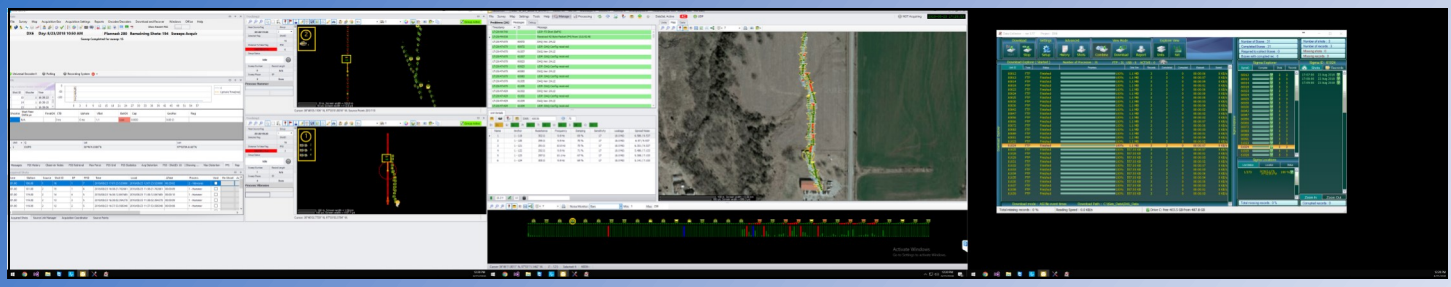
Data displayed on-screen as it arrives includes Vibroseis correlation and both straight and diversity vertical stacking

Schematic display of line deployment with real-time noise monitor



DX-6 Seismograph

Wi-Fi or Cabled Network Operation - 6 channel Node for Real-Time Operation



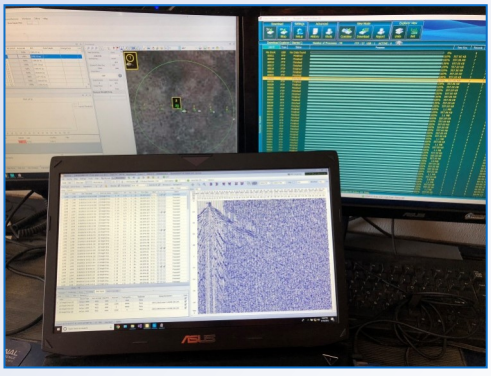
Left: SourceLink Console ***Center: Observer Console*** ***Right: Data Management Console***

DX-6 seismograph nodes can be linked together with cables or Wi-Fi for real-time operation. This includes system status and control, plus real-time data collection, file harvest and SEG-Y output.

Networked Operation features:

- DX-6 equipped systems monitor noise and other environment conditions in real-time, no more "shoot-blind" acquisition.
- DX-6 optional components include:
  - Line Interface Units connect to multiple lines and the Central Computer.
  - The Central Computer manages spread, controls acquisition and collects data to generate SEG-Y files.
- Same DX-6 node can be used for autonomous GPS controlled operation.
- Central Computer can be moved off-line.
- Wi-Fi links can be used to "skip" line across roads or water and over or around obstacles.

DX-6 Node with existing battery, cable, and geophones



Source Tracking & QC, Data Offload, And Shot Records All in Real Time

DX-6 Seismograph

Autonomous Operation
Deploy a station anywhere at any time

DX-6 seismograph nodes are equipped to record data autonomously. Each node comes with internal GPS, plus 8 GB flash memory. A DX-6 node can be deployed anywhere, and at any time.

Managed Operation
Deploy a receiver spread and actively manage it

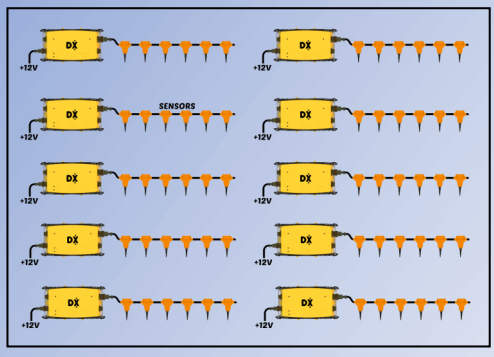
DX-6 seismograph nodes can be linked together with cables or Wi-Fi for real-time operation. This includes system status and control, plus real-time data collection, file harvest and SEG-Y output.

Autonomous Operation features:

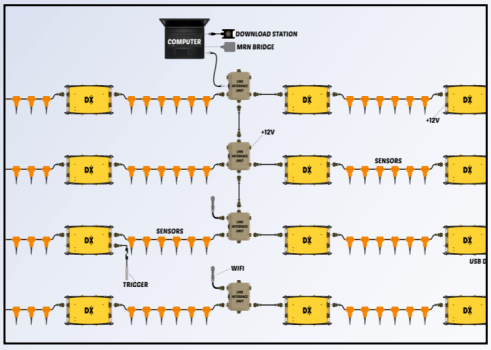
- Internal GPS disciplines clock, locates the node, and organizes internal file structure.
- Internal memory plus optional external memory for data security and long term operation.
- Records with geophones, hydrophones, microphones and/or accelerometers.
- Includes full featured, complete software package for data collection, file creation and SEG-Y output.
- Same DX-6 node can be used with Wi-Fi or cabled network for real-time operation.

Real-Time Operation features:

- Supported 2D, 3D, and random spreads
- 600+ channels per line
- 32+ lines per spread
- Nodes automatically deployed using GPS
- System supports SEG-P1, GPX, & SPS files
- Modes can be networked using cables or Wi-Fi
- Includes full featured, complete software package for data collection, file creation and SEG-Y output.
- Same DX-6 node can be used with Wi-Fi or cabled network for real-time operation.



DX-6 Receiver Spread configured for Autonomous Acquisition



DX-6 Receiver Line networked via Cables and Wi-Fi plus the Central Computer

DX-6 Seismograph

DX-6 Node Options

DX-6 seismograph nodes are available in two different configurations. The first version is optimized for flexibility. With six channels on one connection and POE-equipped Wi-Fi compatible connections on the other this box can be used for autonomous projects, and down-hole projects as well as cabled acquisition. The second version has symmetrical connections for use with legacy equipment, like batteries, cables and geophones.

Both versions of DX-6 nodes can be used in any field application.

The first DX-6 configuration is designed for flexibility and to maximize a crew's options.

DX-6 Configuration 1:

Two Network Ports:

- Data - 6 Channels & Ethernet
- Connection - Ethernet with POE

Battery Port:

- 3 Pin Connector - Sigma compatible
- Supports 12 volt Batteries

Auxiliary Port:

- Ruggedized USB for Data Backup
- External Trigger

The second DX-6 configuration is designed to use a crew's existing equipment.

DX-6 Configuration 2:

Two Network Ports:

- Up-side - 3 Data, Battery Power & Ethernet
- Down-Side - 3 Data, Battery Power & Ethernet

Battery Port:

- 8 Pin Connector - Seistronix compatible
- Supports 12 volt Batteries

Auxiliary Port:

- Ruggedized USB for Data Backup
- External Trigger

DX-6 Line Tap Box

DX-6 Line Tap Boxes connect together individual lines, and also connect the line to the central recorder. Line Taps can be connected with CAT-5 cable, standard ruggedized tap cables, twisted pair extenders for extra distance, or Wi-Fi should there be obstacles between the line and the truck.

DX-6 Seismograph

Expandability and Flexibility

DX-6 seismograph nodes are compatible with the entire line of Seismic Source Co source control electronics. This includes the Force 3 Vibroseis controller, the Boom Box 3 dynamite blaster, and the Remote Trigger Module for mechanical impact sources. The DX-6 system is also compatible with the Universal Encoder 3. Use the UE3 for precise source operation with any source type.

DX-6 Acquisition Unit Specifications

Electrical	
A/D Converter	24 bit sigma delta (24 bits stored)
Preamp Gains	x1, x4, & x16 (0 dB, 12 dB, & 24 dB)
Max Input (x1 gain)	±3.25 volts (2.30v RMS)
Max Input (x16 gain)	±0.217 volts (0.153v RMS)
Sample Rates	125, 250, 500, 1k, 2k, 4k, 8k, 16k, 32k & 64k, SPS
Bandwidth	DC to 85% Nyquist
Input Impedance	100k Ohms
Clock Sync	GPS or Ethernet
Internal Mesh Radio	Optional
Ethernet Network 1	100Base-T or 10Base-T (user selectable)
Ethernet Network 2	100Base-T or 10Base-T (user selectable)
Network Links	Can be either Cabled or Wi-Fi
Memory (Internal)	8 Gb (standard, can be upgraded)
Memory (External)	16 Gb (standard, can be upgraded)

Performance (at 500 sps)	
Dynamic Range	125 dB (x1 gain)
	122 dB (x16 gain)
Distortion	0.0001% (x1 gain)
	0.0001% (x16 gain)
Noise	1.2 µV RMS (x1 gain)
	0.15 µV RMS (x16 gain)
CMRR	> 125 dB (x1 gain)
	> 123 dB (x16 gain)
Trigger Accuracy	± 1 µs at all sample rates
Physical	
Case Type	Aluminum and ABS plastic
Size	11.5 in x 7.25 in x 2.25 in
	292 mm x 184 mm x 48 mm
Weight	3.1 lbs
	1.4 kg
Power Requirement	9-28 volts DC
Power Draw	2 watts at 12 volts