DAQlink 4 Seismograph
A General Purpose Seismograph

Seismic Source

DAQlink 4 is the fourth generation of portable seismograph systems. It can be configured as a stand-alone monitoring system, a refraction system or a distributed seismic reflection system.

Vscope software controls the seismograph, providing acquisition control, data QC and file storage. This seismograph utilizes industry standard Ethernet for command, control, and fast data file transfer.

**DAQlink 4
24 Channel Seismograph**

System Features:

- Cutting-Edge performance with Industry leading specifications
- 1 to 24 channels per seismograph node
- Multiple Time Synchronization Modes
  - GPS Clock Discipline for Continuous Recording
  - VHF/UHF Radio for Underground Use
- Multiple Trigger Modes
  - Trigger on hammer switch for shot acquisition
  - Trigger using GPS time for noise monitoring
  - Trigger using LTA/STA for event monitoring
  - Two trigger circuits available, one for standard and a second for low-voltage inputs
- Multiple Data Storage Methods
  - 16 Gbytes internal memory standard
  - External mounted, USB-compatible Memory Plug for data backup and transfer
  - Ethernet connection for fast data transfers and remote data storage
- Built-in Ethernet, use to configure seismograph, monitor acquisition, and collect shot records
- Network is compatible with cables, Wi-Fi and Cellular Data Modems
- Internal FTP server for external data access
- Built-in Acceptance Testing
  - Instrument Tests:
    Distortion, Cross-feed, CMRR, Impulse & Noise
  - Sensor Tests:
    Resistance, Frequency, Damping, Sensitivity

Operation Modes:

Operate as Stand-Alone Seismograph
Use a sledgehammer and hammer switch
Small, lightweight unit for small, fast crews

Operate as an Acquisition System
Use a vibrator and Force 3 controller
Network a computer to Monitor Acquisition, Quality Control Data, and Store Shot Records

Passive Monitoring
True Continuous Recording
Use Cellular Modem for Remote Data Collection
Works with surface or downhole sensors

Automated Event Detection
Continuously record and store data
Use LTA/STA Tolerance (Long Term Average / Short Term Average) to detect events
Includes automatic email notifications as events are located

Click here for the SSC website.

DAQlink 4 Seismograph
for MASW Projects

Seismic Source

Compatible with Sledge Hammers

12 or 24 channel Streamers

The "MASW" version of the DAQlink 4 is configured for small projects. It is well-suited for programs requiring 12 or 24 channels and short shot records. Like MASW projects, for example.

The MASW DAQlink features:
- 12 or 24 channels
- Records up 32,000 in length
- Samples rates up to 2000 SPS
- Plus, all the industry-leading specifications of the standard DAQlink 4.

The MASW DAQlink suitable for:
- MASW Data
- Reflection Data
- Refraction Data
- Acquiring data with a land or marine streamer
- Any project requiring high-quality seismic data.

The MASW DAQlink:
- Has a solid all-aluminum case
- Is small and lightweight
- Is also frugal with power, will use any type of 12 v battery.
- Can be powered via vehicle during streamer operation
- Is compatible with the WTB 4 radio trigger system..

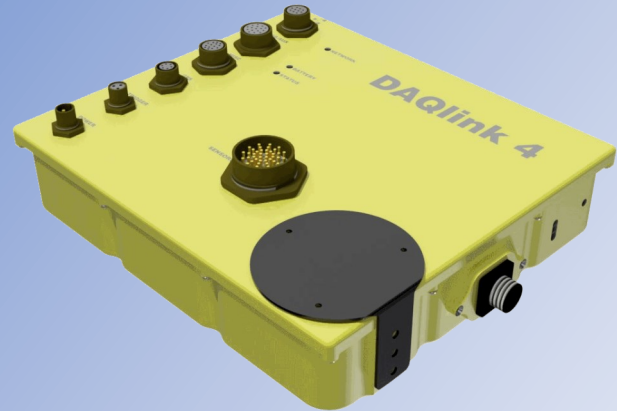## DAQlink 4
12 Channel Seismograph

DAQlink 4 Seismograph
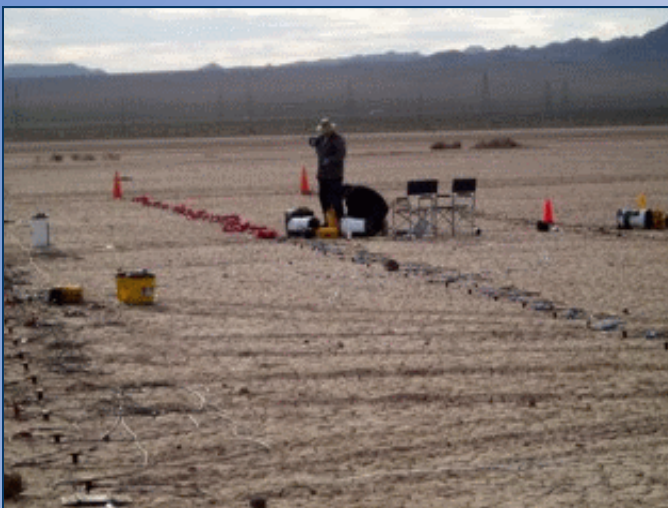## Distributed DAQlink for Larger Projects

The Distributed DAQlink 4 System adds the ability to reliably connect multiple DAQlinks into a network.

The Distributed DAQlink:

- Contains local and remote network extenders inside the case for reliable connections.
- Individual network cable links can reach 10,000 ft, or 3 km.
- Using inexpensive twisted pair telephone cable, or spread cables with imbedded communications
- Networking cables also send trigger signals to the rest of the DAQlinks for reliable triggering
- Networking cables send commands from the computer to the DAQlinks and return seismic data from them.
- Over 20 DAQlink 4's can be networked for systems with hundreds of channels.
- The field computer controls the seismograph network, provides quality control for the data, and stores the shot records all in real time.
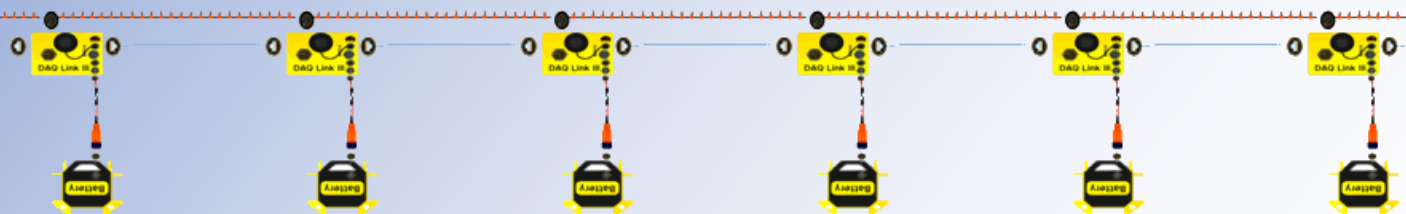

Distributed DAQlink 4

Distributed DAQlink in the Field

Large Projects

Connect Multiple Distributed DAQlinks for a Large Spread
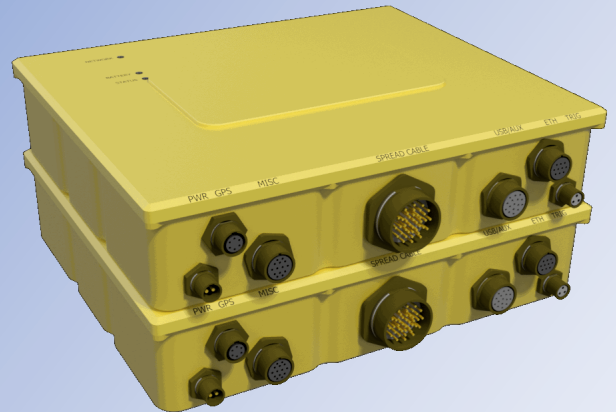
DAQlink 4 Seismograph

Seismic Source

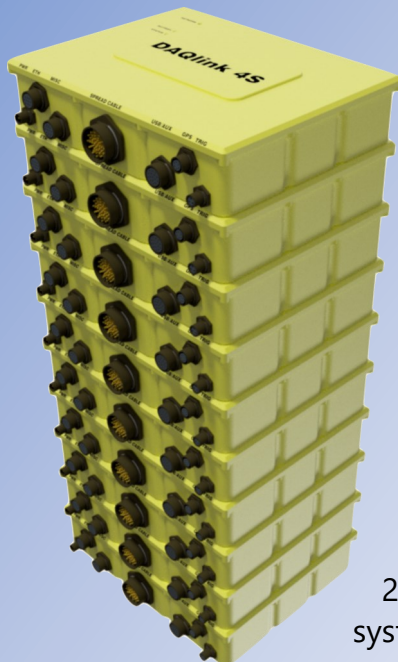## Stackable DAQlinks for More Channels in Less Space

Downhole Monitoring

A Compact System for 48 channel Streamers

MegaDAQ - Multiple DAQlink 4 Seismographs in a single chassis


240 channel system shown

MegaDAQ Features

- All connectors have been relocated to the side of the case, enabling DAQlinks to be stacked.
- With the connectors centralized, cable runs are shorter and easier to maintain.
- With the seismograph modules in a central location, they can be networked for real-time data.
- MegaDAQ configurations utilize a single GPS module for consistent timing.
- The MegaDAQ configuration packs the largest number of channels into the minimum amount of space.
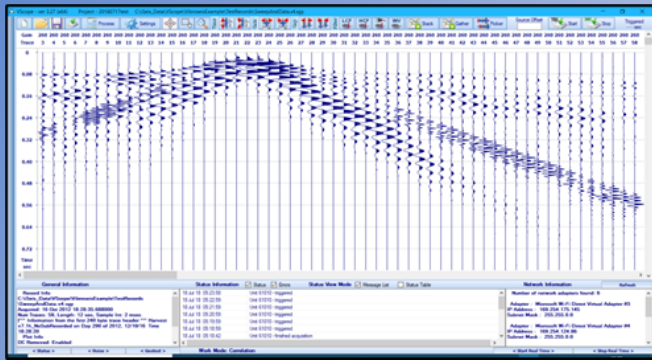
DAQlink 4 Seismograph
## Acquisition Software Options

Seismic Source
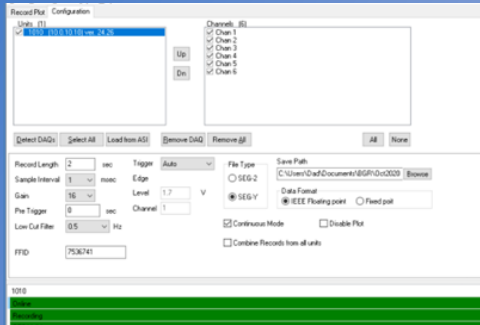
BGR

    BGR is a single screen, basic data acquisition program. It is typically employ for single person crews, or for automated acquisition. All acquisition parameters are available on the single screen, including channel selection and directory. BGR comfortably runs several seismographs, and can handle different types of seismographs simultaneously.

Vscope 3

Use the SSC Land Streamer with the DAQlink for rapid data acquisition. Deploy the spread cable at the beginning of the line, and then quickly move it for the next shot. Especially useful for MASW projects.
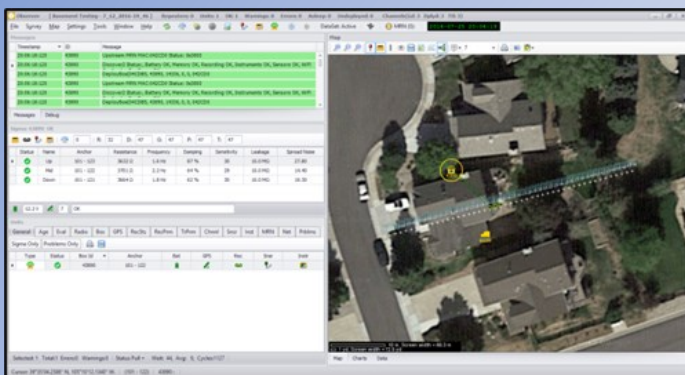
Observer

All DAQlink 4 seismographs 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 synchronizer and the RTM 3 remote trigger module. DAQlink seismographs are also compatible with the Universal Encoder 3, use it for precise source operation.

DAQlink 4 Seismograph
Expandability and Flexibility

Wireless Trigger Box 4

The WTB 4 removes the cable between the source and the seismograph, plus the frustration of dragging the firing line through the brush and around other obstacles.
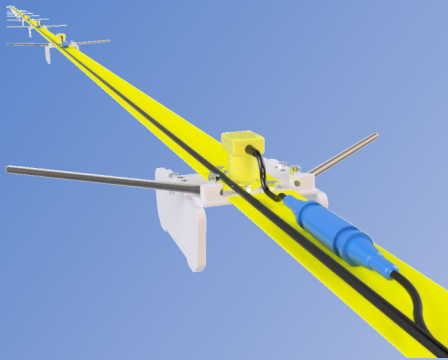
SSC Land Streamer

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Force 3 / RTM 3 / RTM 3

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DAQlink 4 Seismograph

DAQlink 4 Seismograph Options

Standard DAQlink 4

* *A General-Purpose Seismograph for All Seismic Projects*

* *GPS Disciplined Clock*

* *True Continuous Recording for ReMi data and Passive Monitoring*

Cutting-Edge Performance
   1 to 24 channels per seismograph node
   High-Speed 24bit ADC – up to 64,000 sps
   Wide Bandwidth – DC to 32 KHz
   Low Distortion – <0.00008% THD @ 500 sps
   Wide Dynamic Range – >124 dB @ 500 sps
   Low Noise – <0.15 µV RMS @ 500 sps
   Maximum Trace Length – Continuous & Unlimited

Multiple Time Synchronization Modes
   GPS Clock Discipline for Continuous Recording
   VHF/UHF Radio for Underground Use

Multiple Trigger Modes
   Trigger with hammer switch
   Trigger on selected channel
   Trigger on TTL Signals
   Trigger using GPS time for noise monitoring

Multiple Data Storage Methods
   8 Gbytes internal memory card standard
   External mounted, USB-compatible Memory Plug
      for data backup and transfer
   Ethernet connection for fast data transfers and
      remote data storage

Built-in Ethernet Network
   Use network to configure seismograph and monitor
      acquisition
   Compatible with cables, Wi-Fi and Cellular Data

Built-in Acceptance Testing
   Instrument Tests
   Sensor Tests

MASW DAQlink 4

* *Low Cost / High Performance Recorder for Refraction, Reflection & MASW*

* *DAQlink 4 with the following limits:*
   - *No GPS*
   - *Max Sample Rate of 8000 sps*
   - *Max Record Length of 32k samples*

Cutting-Edge Performance
   1 to 24 channels per seismograph node
   High-Speed 24bit ADC – up to 8,000 sps
   Wide Bandwidth – DC to 3.4 KHz
   Low Distortion – <0.00008% THD @ 500 sps
   Wide Dynamic Range – >124 dB @ 500 sps
   Low Noise – <0.15 µV RMS @ 500 sps
   Maximum Trace Length – 32,000 samples

Multiple Trigger Modes
   Trigger with hammer switch
   Trigger on selected channel
   Trigger on TTL Signals
   GPS-based triggering unavailable

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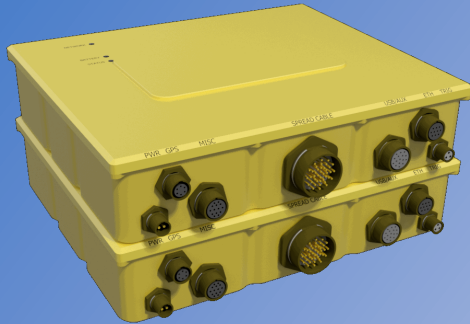Sales@SeismicSource.com | Seismic-Source-Co | iSeis@SeismicSourceCo | www.SeismicSource.com

DAQlink 4 Seismograph
DAQlink 4 Seismograph Options

Stackable DAQlink 4

 Compact Design Maximizes Channel Count and Minimizes Space Required

 Modified Case Design for Ease of Installation

 Use with Land and Marine Streamers

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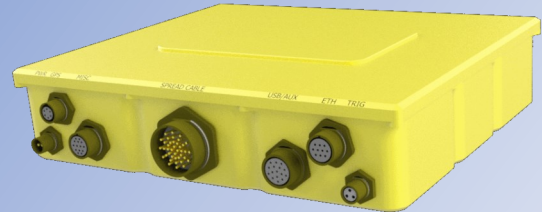   remote data storage

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Built-in Acceptance Testing
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New! GeoDAQ

 Adapted for 61-pin Cables

 Use with Legacy Geode Equipment

 Update an Established Crew with new DAQlink 4 Seismographs

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