Mini-Trace II

Timeless and reliable dual-channel very high (24-bit) seismic data recorder.

Description

MINI-TRACE II DUAL ACQUISITION MODULE

The new Mini-Trace II acquisition module is a very high resolution, 24-bit sigma-delta, seismic recorder, which can be interfaced to any suitable laptop or desktop computer, using a plug-and-play USB connection.

Navigation data is acquired via the LAN of the control PC or via a serial port on the acquisition module (for old systems).

TIMELESS AND RELIABLE HARDWARE

The Mini-Trace II is timeless and will serve you a long time. It features extremely reliable hardware with fully integrated electronics, which will outlast by many years the typical life time of the control computer.

DUAL MODE PROGRAMMABLE TRIGGERS

The module contains two independent channels with two independently programmable triggers allowing to synchronize two sources without interference (Asynchronous mode) In asynchronous mode: sparker + pinger, or sparker +water gun, but also sparker + side scan can be triggered in such a way that you will see no interference of the Sparker signal on the SSS data.

Data Recording

Internal SSD disks or external hard drives (USB 3.0 recommended) and remote network devices.
Automatic continuous recording switch-over.

All raw data files are recorded in Standard SEG Y format, with samples encoded in integers and can also exported in XTF format (16 bit). In addition, extensive logging in text files of all acquisition events, manual fixes, raw and processed navigation data.

Mini-Trace II

DATA RECORDING SYSTEMS

Analogue Inputs

INPUTS AND OUTPUTS
The unit has two independent channels, each with an differential input ranging between +5 V and -5 V. The 24-bit sigma-delta A/D converter provides a 112 dB of dynamic range. This range eliminates the need to calibrate the AD converter for the incoming signal strength, thereby simplifying setup procedures, while retaining high data quality.

Trigger

TRIGGER INPUTS
Each channel has its own trigger input which is can be used for the slave mode. For instance with an external trigger from navigation for shooting at fixed distance. Standard TTL input via BNC at the rear. Accepts trigger pulse from 4 V up to 12 V, 10 mA, with a pulse length of 1 ms.

TRIGGER OUTPUTS
Each channel has its own trigger output which is can be used for the master mode, normally used to trigger the source in time. Standard TTL output via BNC at the rear.

PROGRAMMABLE TRIGGERS
The two triggers are fully programmable, including all options to set delays, time-breaks, differential triggering and custom triggering patterns.

Navigation

Navigation input is available via PC serial ports, LAN Network or Mini-Trace II dedicated serial port. The acquisition software supports NMEA data format or any other proprietary format navigation, fix and annotation strings.

All data are logged and accessible in separate log files.
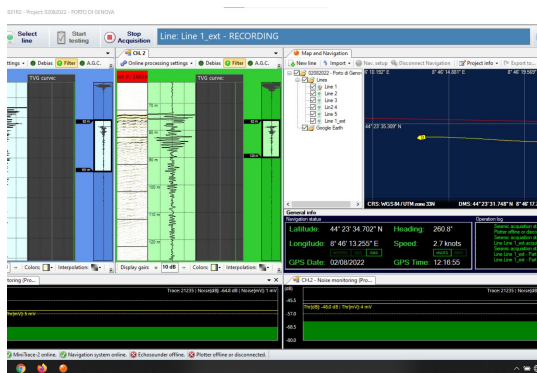
Display modes

MULTIPLE SCREENS
Simultaneous display of the navigation map, multiple data channels and data types in multiple windows, on single or dual monitors.
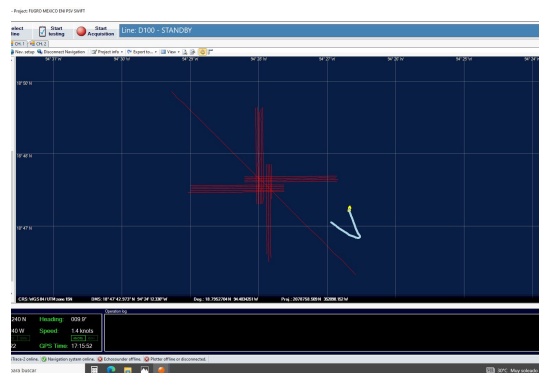
CUSTOMIZABLE WINDOW LAYOUTS
ser-defined windows, Profile, Raw Trace, Processed Trace, Spectrum Analysis, Real-time Navigation track plot window, left/right, up/down, scroll directions.

NAVIGATION TRACK-PLOTS
Real-time navigation annotation on screen is standard, dedicated window for real time track plot, navigation editing, smoothing, speed correction etc.
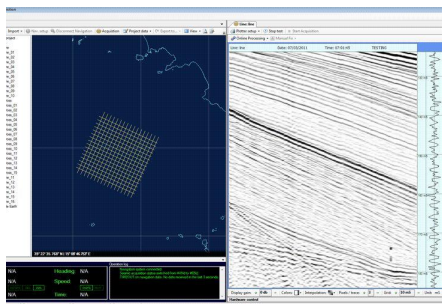

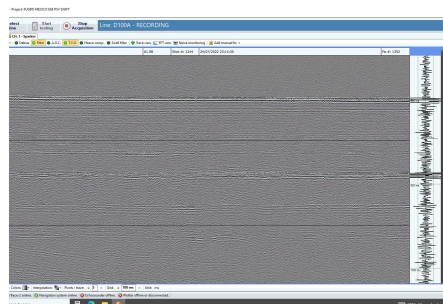Option for dual-channel seismic acquisition.
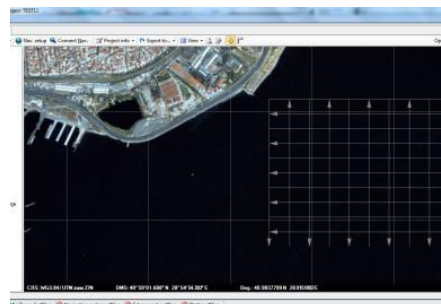

Powerful GIS-based navigation.

Mini-Trace II

Real-time navigation and data display.

Efficient acquisition interface for quality control.

Dynamic platform for planning and carrying out your survey.

Software Interface

THE LATEST VERSION OF GEOSUITE ACQUISITION

The GeoSuite Acquisition software is written using the latest development technologies available for the 64 bit windows platform.

By taking advantage of the windows network infrastructure it is possible to run post processing tasks on the GeoSuite Allworks PC while acquiring data on the GeoSuite Acquisition PC.

AUTOMATIC SOFTWARE UPDATES

Software updates are now fully automatic via the Internet. Just connect your system and the GeoSuite software will check if you need any updates. Online support and news is available via www.geo-spark.com.

EFFICIENT ONLINE QUALITY CONTROL

The new status monitor makes recording of very high quality seismic data very easy. It tells you all you need to know about the dynamic range in use. The software also analyses your settings and warns you for any problems, which might occur in your recording.

REAL-TIME NAVIGATION MAP

The navigation map is displayed in real-time showing your current position and route. You can combine it with any geo-referenced background e.g. from Google Earth. You can also use public domain data from hydrographic data bases. To generate a track plot of the seismic lines is just one click of the mouse.

SEAMLESS INTEGRATION WITH GEOSUITE ALLWORKS

GeoSuite Acquisition software outputs the raw data as a standard SEG-Y file, which is seamlessly imported into Geo-Suite AllWorks. Alternative you export the data in XTF format for import in any other third party environment.

Mini-Trace II

DATA RECORDING SYSTEMS

Physical Specifications

Models	**Portable** Slim-line module with High-quality 17" laptop **Workstation version** Slim-line module with 19" stainless steel mounting brackets 19" rack mountable industrial workstation plus wall mounted monitor(s)
Dimensions (cm)	**Acquisition Module** 45 (L) x 40 (W) x 28.5 (H)
Shipping Cases	- Portable version: in laptop hand carry bag or in indestructible watertight PELI case - Workstation 19" rack-mountable system: delivered in flight case
Mains Power	- Portable version: 100-240 Volts 50-60 Hz AC, mains power failure protected - Workstation 19" rack-mountable system: 100-240 Volts 50-60 Hz AC, UPS is always recommended
Processor	- Portable version Intel Dual Core 2.0 GHz or better - Workstation 19" rack-mountable system Intel Dual Core 2.0 GHz or better
Hard disks	- Portable version: minimum 2 Gigabyte - Workstation 19" rack-mountable system: minimum 2 Gigabyte
Multiple screens	Dual screens are optional for the Laptop and Multiple Screens depend on the choice of the workstation For the 19" rack-mountable systems we recommended wall mounted screens, which can be suitably placed in the survey room
3-year guarantee	Each Mini-Trace II module comes with a 3-year guarantee for any hardware breakdown, which is not due to an operator error, over voltage or obvious negligence.

GEO MARINE SURVEY SYSTEMS

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