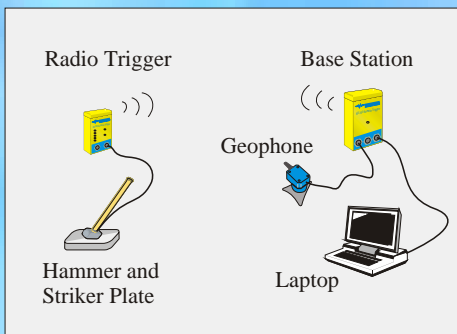


Typical Field Data



Typical Field Setup

RS-100 RadioSeis Wireless Seismic System



Applications

- Geotechnical investigations
- Depth to bedrock
- Site remediation
- Rippability surveys
- Landslide delineation
- Weathering profile

Features

- Wireless - No cables to drag around
- Easy to use - One person surveys
- High resolution 24-Bit A/D conversion
- Produces a continuous profile
- Signal enhancement
- Operates with Windows 95/98/ME laptop
- Small and lightweight
- Affordable for even the smallest firms

■ The RS-100 is an innovative new instrument designed for refraction seismic exploration. With state-of-the-art 24-bit signal conversion, wireless radio link, and novel discretionary stacking software, the RS-100 provides geotechnical and civil engineering firms with a cost-effective tool for small-site surveys.

■ The RS-100 offers features and performance rivaling larger multi-channel seismographs. The 24-bit A/D signal conversion provides wide dynamic range ensuring that the largest and smallest signals are recorded with precision. The interactive wireless trigger will, in most cases, eliminate the necessity of using cables and reels, dramatically reducing field work. For long lines, or in areas where the radio trigger is unuseable, a cable link is supplied as standard equipment.

■ And the RS-100 is easy to use. Simply plug the hammer switch into the Radio Trigger, the geophone and laptop into the RS-100 Base Station and you're ready to run a survey. For first time users, the RS-100 setup wizard guides you through the process of setting up the instrument and on-line help is just a click away..

■ The RS-100 software provides the tools you need for collecting and interpreting data. Data from every hammer blow is stored in a single raw data file which is then selectively stacked to form a multi-station refraction record stored in standard SEG-2 format. Using the refraction record, interactive first-break picker, and interpretation software, subsurface profiles can be determined in the field on your laptop.

For more information on how the new RS-100 can help you solve a wide range of geotechnical and engineering problems, please contact Seistronix.

RS- 100 Specifications

GENERAL

Number of Channels:	1 or 2
Sample Intervals:	0.125, 0.25, 0.5, 1, 2 and 4 ms
Record Length:	Fixed: 50ms, 100ms, 200ms, 250ms, 300ms, 500ms Variable: 0.01- 4 seconds
Stacking:	Manual or automatic. Can be done after data collection.
First Break Picking:	Manual or automatic.
Max coverage:	Radio - 500 ft; Cable - 1200 ft
Recording Format:	SEG-2
Operating System:	Requires Windows 95, 98 or ME

RS-100 SYSTEM

RS-100 standard system:	Base Station Radio Trigger Geophone (10Hz) with spike Hammer switch Base Station to laptop serial interface cable 100m Base Station to Radio Trigger cable Striker plate
Options:	100m Base Station to Radio Trigger extension cable Portable printer Portable ruggedized computer

BASE STATION

Channels:	1 or 2
A/D Resolution:	24 Bits
Preamp Gain (PG):	12db
Frequency Response:	0.125 ms: 2 - 2000 Hz, 0.25 ms: 2 - 1650 Hz, 0.5 ms: 2 - 825 Hz, 1 ms: 2 - 412 Hz, 2 ms: 2 - 206 Hz, 4 ms: 2 - 103 Hz
Dynamic Range:	117db @ 2 ms (typ)
Distortion (THD):	.005% at 25 Hz, 2 ms sample interval (typ)
Crosstalk:	Greater than 90db (for two-channel unit)
CMR:	Greater than 90db @ 60 Hz
Max Input Signal:	.88 VRMS
Input Noise:	1.6 mVRMS @ 2ms
Anti-Alias Filters:	4 ms 103 Hz, 2 ms 206 Hz, 1 ms 412 Hz, 0.5 ms 825 Hz, 0.25ms 1650 Hz, 0.125ms 2200 Hz
Instrument Tests:	Internal digital tests, battery voltage, internal voltage, amplifier pulse, CMR, amplifier noise, dynamic range, gain & phase similarity, communications, and trigger verification, geophone pulse, geophone resistance.
Connectors:	Two 3-pin connectors for geophone and hammer. One 4-pin connector for serial computer connection.
Power:	4 AA Batteries
Physical:	7.7" x 4" x 2.3", 0.75 lb
Operating Temp:	-30 to 70°C



RS-100 Base Station

RADIO TRIGGER

Readouts:	Ready, Move, Stacked, Error, Signal Strength, Battery Voltage.
Buttons:	Ready/Batt, Move (Reset Stack)
Connectors:	One 3-pin connector for hammer. One 4-pin connector for cable connection to Base Station.
Radio Range:	500 ft under optimal conditions
Cable Range:	1200 ft
Power:	2 AA Batteries
Physical:	6" x 3.25" x 1.9", 0.5 lb
Operating Temp:	-30 to 70°C



RS-100 Radio Trigger