

The DoReMi[®] seismograph is a digital telemetry system with the recording electronics embedded in the cable. This architecture has several benefits, especially in the modularity and possibility to operate in any position of the seismic line.

◆ Each channel works as a single seismograph, and when linked with other elements, creates a network that is easy to transport using its cable wheeler. The system is fully modular, allowing you to purchase the exact number of channels you need, ranging from 1 to 255.

◆ A lightweight and durable rechargeable battery is built in the main interface. When not used, the system enters standby mode to preserve battery power.

◆ By having the A/D converter very close to the geophone, most of the electromagnetic noise that affects other instruments is eliminated. Digital transmission prevents signal loss and crosstalk along the cable. The system architecture offers also other benefits:

- add cable extensions
- overcome obstacles
- replace individual channels
- share channels with working partners
- roll-along procedures can be strongly simplified

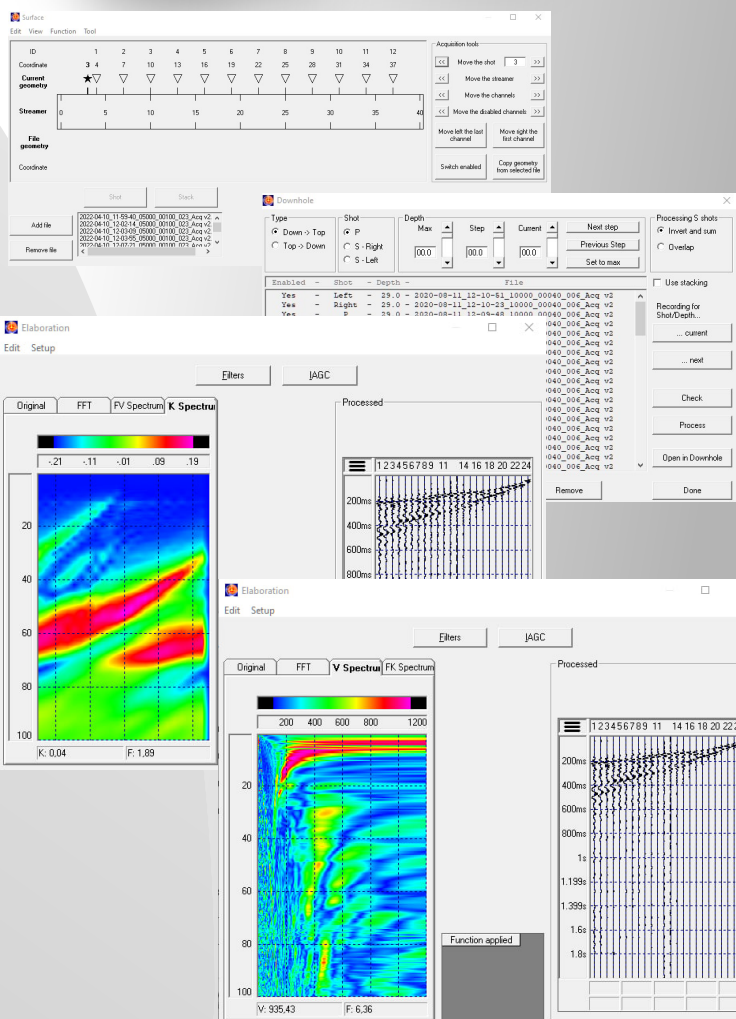
◆ The software, available in Italian, English, and Chinese, is flexible and providing a lot of tools to simplify the on-site data quality checks, some of them are:

- Pre-shot noise monitoring
- Downhole data acquisition management
- Surface acquisition management
- SH shots signal inversion and overlapping
- Data interlacing and roll-along acquisition
- Refraction and HVSr preview
- Filtering, frequency spectrum, **FK** and **FV** spectrums
- Compatability of data output with any processing software

◆ Typically used for MASW surveys, it can be used for any other seismic survey:

- Refraction (GRM and Tomography)
- Reflection (1D and 2D)
- ESAC/SPAC, ReMi and HVSr
- Water search (SSV)
- Downhole / Crosshole (with SS-BH-5C)

◆ Entirely designed and produced in-house, our company guarantees fast customer service, training, customization, and consultation. With over 15 years of heavy operation and hundreds of clients worldwide, the system has proven to be one of the most reliable and practical systems on the market.



Technologies for seismology, engineering and geophysics

Specifications:

No. of bits	16	24	No. of bits	16	24
AD converter type:	SAR	SIGMA DELTA	Connector:	XLR 4 poles	XLR 4 poles
Converter input span:	5 V	5V	Geophones connector:	Split spring	Split spring
S/N ratio @ 500 SPS:	96 dB (@ 27db gain)	140 dB	Diagnosis:	Memory	Memory + Vdc
S/N ratio @ 5000 SPS:	94 db (@ 27 db gain)	130 dB	BUS communication:	115 kbps	115-300kbps
S/N ratio @ 20000 SPS:	92 db (@ 27db gain)	105 dB	DATA transfer to PC:	USB	USB
Input type:	For geophones	For geophones	Data Format:	.drm, SEG-2, SEG-Y, .saf, .csv	.drm, SEG-2, SEG-Y, .saf, .csv
Input impedance:	>20 kΩ	>20 kΩ	Operating temperature:	-20 / +70 °C	-20 / +70 °C
Common mode rejection:	> 80 dB	> 80 dB	Storage temperature:	-40 / +90 °C	-40 / +90 °C
Band pass:	2 - 200 Hz	DC - 400 Hz	Maximum number of power booster:	8	8
Filters (IIR o 0 Phase):	Low pass, High pass, notch and customizable	Low pass, High pass, notch and customizable	Humidity:	0 - 100 %	0 - 100 %
Max sampling lag between Ch.:	< 30 ppm	< 30 ppm	Certifications:	CE	CE
Max error between trigger Ch.:	< 0.2 us	< 0.2 us			
Maximum samples:	30000	40000			
Sampling rates:	200Hz to 50000 Hz	200 Hz to 20000 Hz			
Maximum connectable channels:	255	255			
Power supply:	18Vdc embedded NiMh battery	18Vdc embedded NiMh battery			
Power consumption:	≈ 0.3 W per Ch.	≈ 0.3 W per Ch.			
Nominal battery worktime (24ch):	300 shots @ 0.5ms / 2s	300 shots @ 0.5ms / 2s			
Instrument chain max length:	1000 m	1000m			
Best results geophones:	4.5 Hz High Gain 80 V/m/s	4.5 Hz High Gain 80 V/m/s			
Interdistance geophones:	5m (customizable at order)	5m (customizable at order)			



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