

24 Bit Digital Hydrophone



DH2-24/48M

FEATURES

The DH2-24/48M is a high performance hydrophone with build-in 24 Bit Audio A/D Converter and digital audio transmitter.

The AES/EBU standard digital audio signal is transmitted via twisted-pair 110-ohm cable and is phantom powered over extra conductors in cable.

ADVANTAGES

- very low input noise
- very high dynamic range
- complete immunity from induced noise

APPLICATIONS

- underwater sound recording
- underwater acoustic measurements
- maritime traffic monitoring
- whale watching
- borehole and marine seismic

TECHNICAL SPECIFICATIONS

Hydrophone sensor	Benthos AQ2000, sensitivity -203 dB re 1V/µP, frequency range 1 Hz to 15 KHz
Analog input filter	Lowcut filter 20 dB per decade, adjustable from 7 Hz to 500 Hz (-3 dB)
Preamplifier	Gain adjustable from 0 to 40 dB
A/D Converter	Cirrus CS5351, sampling rate 48 kSamples, 24 bit resolution, mono
Digital transmitter	Cirrus CS8406, pulse transformer output AES/EBU standard, supports 75 ohm S/PDIF interface
Cable	Lenght 130 m, DigiTwo AES/EBU, conductor 2x2x0.22 qmm, impedance 110 ohm, diameter 7.2 mm
Instrument housing	Diameter 36 mm, length 270 mm, usable depth 100m, power consumption 6 V, 60 mA typ.
Power	Build in rechargeable NiMH battery 7.2 Volt 2.4 Ah, allows more than 24 hours continuous operation

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APPLICATION SCENARIO

PORABLE RECORDING

Autonomous underwater recording system using SPDIF or AES3 digital audio inputs

records on compact flash card or hard disk drive

- M-Audio MicroTrack II
- Fostex FR2
- Roland Edirol R-4
- and others similar in design with digital audio inputs



COMPUTER BASED RECORDING

With sound card or USB interface using SPDIF, Cinch, TOSLink or AES3 digital audio input

Digital recording and analysing with

- Adobe Audition
- Audacity
- SpectraPLUS



BOREHOLE AND MARINE SEISMIC

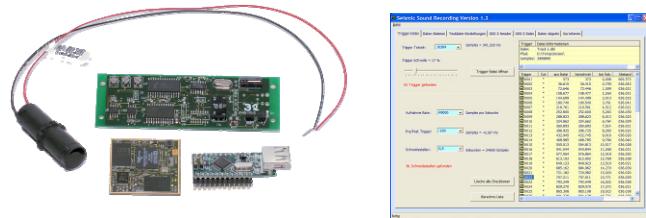
With SPDIF to DMT-Summit Interface

- Generation of seismic standard records
- High accuracy VSP / Seismic Tomography
- High frequency / high resolution application
- Low background noise / low electrical noise



IN DEVELOPMENT

- Multichannel digital hydrophone chain
- Time domain multiplex data transmission
- Autonomous data recording
- Data file conversion software WAV – SEG2



Version 1608