

TRANSPORTABLE ACOUSTIC RECORDER

Compact & Portable – Multichannel – Broadband



Cetacean Research



Noise impact studies



Seismic/shipping Construction

Description

TR-SDA14 is a suitcase recorder able to acquire up to 4 wideband hydrophones simultaneously.

The TR-SDA14 accepts both passive and pre-amplified active hydrophones. Its wide band and analog input allows up to 500 kHz with a dynamic range greater than 100 dB guaranteeing efficient signal to noise ratio.

The embedded digital signal processor allows high speed acquisition, filtering and storage.

In autonomous mode, data is stored whether on SD card or hard drive. In wired mode, data is stored then transferred via Ethernet.

Its power consumption is between 600 mW to 3 W in active mode and less than 1 mW in sleep mode.

TR-SDA14 can be programmed with a mission schedule including date of beginning, sleep and record periods in order to improve battery life-time.

The configuration and monitoring are facilitated through a web browser interface.

Advantages

- 4 synchronized hydrophone channels
- Broadband high quality data
- Easy deployment and data recovery
- Software

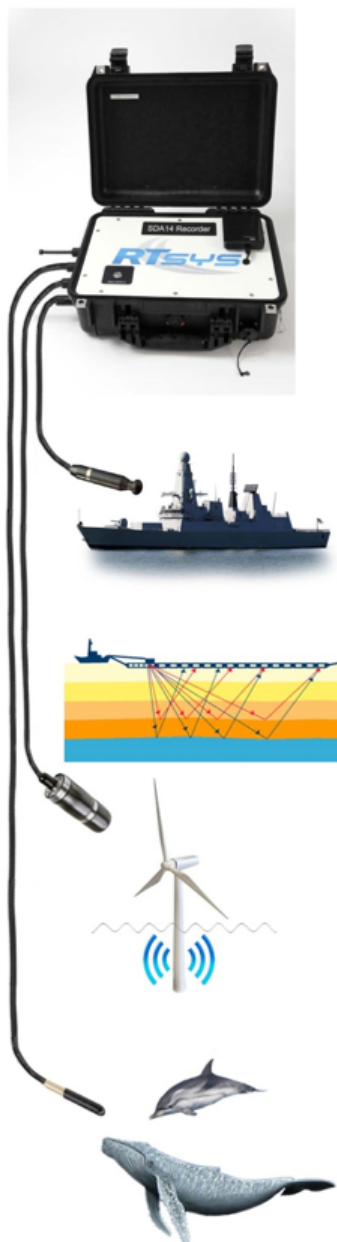
Payloads & Options

- Up to 4 hydrophones passive and/or pre-amplified
- Up to 2TB memory extension on hard drive
- GPS data input
- Additional battery extensions for larger autonomy

Supplied

- Waterproofness: IP67
- Storage 128 or 256 GB SD Card to 2 TB HDD
- Autonomy: 48 hours

V.004



4 synchronized hydrophone channels

Channels are electronically synchronized and calibrated at +/- 0.2 dB.

Gains are electronically configurable on each channel between - 0 dB and +16 dB.

High pass filters are also configurable.

Hydrophones can be easily plugged in and out from the TR-SDA14.

Broadband high quality data

Eight recording frequencies going from 39.0625 kS/s to 2.5 MS/s are selectable. The TR-SDA14 can thus monitor noises and a frequency bandwidth going from 3 Hz to more than 1 MHz guaranteeing great dynamic and Signal to Noise Ratio (>100 dB).

This high SNR allows recording strong and low level noise simultaneously.

Raw data are collected in 24 bits and stored in .WAV standard format.

TR-SDA14 recorders are equipped with DSP running Linux allowing to integrate real-time data processing.

Easy deployment and data recovery

Light and compact, TR-SDA14 can be easily deployed by a single person.

In autonomous mode the duty cycle and recordings parameters are programmed via software and TR-SDA14 then runs automatically.

In triggered mode, a push-button allows to launch and stop recordings at will following pre-programmed parameters.

The extractable Hard-drive allows to recover data very quickly and efficiently.

System can be used in real-time and data is also recoverable via Ethernet link.

Software

The Web Browser Interface gives intuitive access to configuration of the recorder and to the recorded files.

Recording capacities

- Reception sensibility: sea state 0 up to 180 dB/ μ Pa
- Emission level: 185 dB from 3 to 20 kHz
- 150 to 185 dB from 500 Hz to 3 kHz
- 130 dB from 20 kHz to 30 kHz
- Frequency band (E/R): 500 Hz to 30 kHz
- Measures in ref: dB/ μ Pa related at 1 m

Dimension

- Length: 1312 mm
- Diameter: 205 mm
- Weight: 19 kg

POWERED BY SDA[®]