

SoundTrap ST640

Four Channel Sound Recorder

Key features:

- 4 x individual wet plugs for HTI hydrophones
- Selectable 1 to 4 channel recording
- Bandwidth 20 Hz - 150 kHz
- 384 kHz x 4 channel sampling
- 4 x microSD provide up to 2 TB of removable data storage
- Up to 50 days continuous 4 channel recording on 12 Panasonic NCR18650 rechargeable batteries
- Rugged titanium housing, with up to 500m depth rating



The SoundTrap ST640HF is a four-channel digital acoustic recorder intended for ocean acoustic research. Its unique ability to record synchronous high bandwidth audio on four channels make it ideal for creating tetrahedral or linear arrays. Applications include sound localisation and particle motion studies.

The ST640 HF records signals from up to four HTI hydrophones connected via the four wetplugs on the base of the recorder. The hydrophones are the pre-amplified type, meaning long cables can be used to enable array spacing's of several meters. HTI hydrophones can be specified with various gain and bandwidth options.

The ST640 can accommodate up to 12 18650 lithium ion rechargeable batteries and 2TB of microSD memory, delivering up to 50 days of continuous recording. The batteries and memory are field swappable, allowing for fast turnaround in the field.

Output files are in the industry standard multi-channel WAV format. The included software offers flexible deployment options for channel selection, sample rate, delayed start and duty cycle.

Detailed Specifications

Hydrophones	Not included. To be purchased separately from High Tech Inc, USA. Recommended: HTI-96-MIN/3V/Low Noise/SoundTrap/-165dB or HTI-99-HF/3V/Low Noise/SoundTrap/-165dB
Bandwidth	20 Hz - 150 kHz \pm 3dB
Sample rates	384, 192, 128, 96, 64, 48, 32 kHz
ADC's	4 x 16-bit SAR
Calibration	Self-calibration check
Memory	4 Slots for up to 4 x 512GB removable SDXC cards for up to 2TB total (Stores up to 6TB wav data due to advanced loss-less compression)
Battery	12 x Panasonic NCR18650B Lithium Ion 18650 cells. Provides up to 50 days continuous operation. Batteries not included.
Dimensions:	200mm L x 60mm D (excluding connector dummy)
Housing	Titanium. Maximum depth is 200m, or 500m with optional safety valve. Dimensions: 500mm Long x 60mm Diameter Weight: 2.7 kg in air with 12 batteries loaded 1.3 kg in water with 12 batteries loaded

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