



# Sonar Data Recording System

## Acoustic Data Recorder

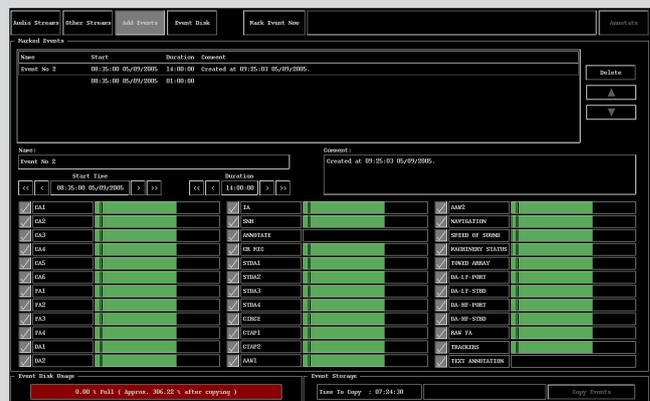


Submarines capture a significant amount of acoustic information which is valuable for later analysis ashore to support intelligence gathering and post-event reconstruction. The Sonar Data Recording System (SDRS), is an advanced acoustic data recorder, which can reliably capture this sonar data.

The system interfaces to the sonar data network to receive both acoustic sonar streams as well as own platform tactical data such as heading, depth and machinery status. A simple to use control panel is provided that allows operators to quickly and easily manage specific event recordings.

The system uses the Mission Data Format (MDF) that provides time synchronous recordings for each channel. This provides significant benefit by simplifying tertiary analysis by allowing easy time synchronisation of the data channels that require analysis.

- Continuously captures and record
- Simple “event” recording control
- Acoustic and own platform data recorded
- Time synchronous recording
- Data replay facility



... a sound decision



The SDRS is made up of three hardware components; the recording unit, rack computer and flat panel display. The recorder houses the four Hard Disk Drives (HDDs) that are used to continuously capture and record the selected data streams, whilst the flat panel display provides system control and monitoring for the operator.

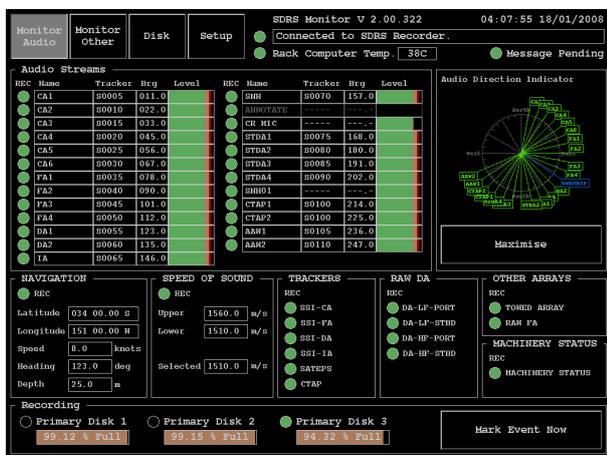
The HDDs include the “event” disc which is removable to allow recorded data to be easily transferred to a shore facility for secondary or tertiary analysis. The event recording allows the operator to enter comments on the recording.

SDRS supports replay of data streams onto the sonar network by allowing the operator to replay a selection of data from the event disk. The operator can view and select an event, as well as then selecting, or deselecting, the individual streams that they wish to replay.

Monitoring of recording systems is a critical function to ensure that crucial acoustic data is not lost. SDRS provides this either from the dedicated flat panel display or a sonar console that is connected to the platforms sonar network.

The monitoring program provides a number of screens based around four major functions of the program. These are:

- Monitor Audio;
- Monitor Other;
- Disk Monitoring and Control; and
- System Setup



Component	Height	Weight	Depth
SDRS Recorder (including 4 HDDs)	355mm	483mm	478mm
SDRS Rack Computer	45mm	483mm	502mm
Flat Panel Display	274mm	371mm	75mm

Hardware Name	Weight
SDRS Recorder (including 4 HDDs)	35kg
SDRS Rack Computer	10kg
Flat Panel Display	9kg

The Monitor Audio page provides the overall status of the SDRS, the Monitor Other page provides a view of the current position (depth and shape) of the Towed Array, whilst the Disk Monitoring and Control Page provide a visual indication of the status of the HDDs. The Setup page allows the user to view all the data streams and select those for recording.