NETmc Marine DRS

Survey optimised digital review, management and archiving

Manage MPEG and other digital video combined with survey data to enable rapid review, duplication and distribution of specific event, position or other input coded video footage

The DRS is a 3 channel digital video replay system. When coupled with its data acquisition partner the DVR, it forms the NETmc Marine offshore digital media management suite. The DVR and DRS aim to provide a digital replacement paralleled with current analog video record and review strategies used within the offshore survey community. In so doing the DVR/DRS combination offers a logical and easy transition from analog to digital world.

Unlike older analog recording technologies currently in use, this digital replacement offers advantages in end to end quality, simplicity and speed of access to data for review, ease of transmission across communication links, where necessary and above all the ability to eliminate costly tape changing resulting in loss of survey time.

Indeed, further cost savings can be made when reviewing media due to the random access capabilities of the digital media, one can go instantly to a video frame based upon it's time, location or other parameter. The better than 6:1 reduction in tape requirements, (6 hours of 3 channels on a single Digital DLT tape), means less storage and easier transportation.

Whilst savings can be made and productivity significantly improved the move to digital media most importantly means better quality and faster access to current and historic data. The non-visual watermarking of video data by the DVR enables every section of video to be marked with information relating to the acquisition of that section. This is clearly a great advantage where such information is distributed and shard or used within reporting.

Digital Media Review

DRS allows multiple video sessions recorded by the DVR to be combined into a single transparent record, the job. Unlike traditional analog video or timecode digital video the DVR video streams can be accessed directly by parameters such as associated position, distance, or GPS time in addition to linear timecode.

Direct video access bridges the gap between video and telemetry data of each 3 camera channels. Whilst each channel can easily be reviewed individually and sequentially as with the analogue tape equivalent, DRS brings this into the digital domain by allowing direct access to the three video data channels using synchronised telemetry as well as time based parameters.
Simple editing, freeze frame capture and synchronous replay allow captured data to be used for reporting without the need to exchange large quantities of digital video data.

The DRS allows markers to be placed within the 'job' which similarly can be addressed directly from the DRS user interface or later used to identify regions of interest. Markers can be designated with a number of pre-defined types and an almost unlimited number of user defined types, plain text notes, bookmarks, position corrected data, and event codings are just a few examples.

Integration with external systems can be performed either by insertion of foreign keys within the digital stream or by reference to the digital stream system reference created by the DVR when capturing the data.

Overview of Operation

The DVR data acquisition system combines and stores digitised video and telemetry data in a self databasing stream format that can be utilised either by the DRS or by a customers own software where it has been integrated more closely using the optional DRS Application Developers Toolkit.

The DRS provides an entry level tool for the review of digital data acquired by the DVR and the export of data for reporting purposes. Simple editing facilities are provided to combine clips that can be either distributed digitally in MPEG1/2, transcode into other formats such as MPEG 1/2, AVI, QuickTime etc (optional extra - DVX) or laid down to analog tape.

NETMC MARINE

DRS

NETmc Marine DRS

Power Requirements	100-260Vac, 50-60 Hz
Power Consumption	300 W [peak - without monitor(s)]
Operating Temperature	5 to 40 degrees C
Dimensions	220(W) x 437(H) x 570(D) @ 20kg
Display	19" CRT desktop monitor * (* base configuration - multiple / LCD options)
Video Output	SVGA (local monitor) PAL / NTSC re-broadcast
Audio Output	Unbalanced Stereo
Data capacity	RAID storage - 140 Gb of SCSI drives, giving 24hrs editing and review before archive (MPEG-2 4 Mbps) Upgrades to 32, 64 ……. Hrs
Archive Media	NETmc Marine suggest DLT 40/80 tape as preferred media. Other systems can be specified to integrate with existing customer equipment - DAT, AIT …
Network Support	100 Base T (link to DVR system)
Video Outputs	SVGA, std 15way D type socket Y_C (S-VHS) SVIDEO Minidin socket (-0.3 to +0.1) PAL/NTSC BNC socket
Audio Output	1/8th in Stereo Jack
Serial Ports	9W D-type
Expansion	Connection to auxiliary storage modules and backup system components