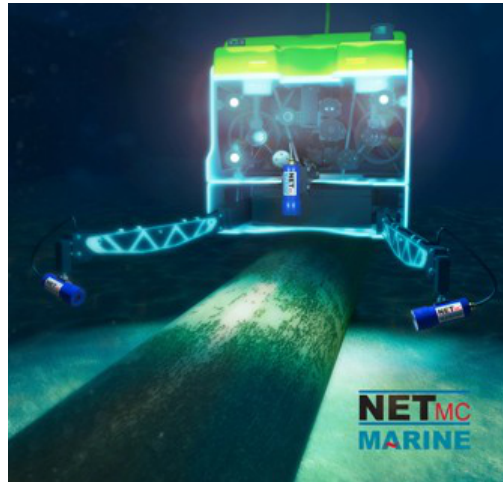


High Definition Pipeline Video from Capture to Replay

Known for its robust encoding of a variety of video signals NETmc Marine DVRs have been the backbone of the ROV structural IRM market for more than 20years. Its ease of use and generation of compliant video files keeps the process of encoding, storage, file transfer and playback simple and straightforward; no need for complicated archiving and back-up procedures or forced duplication of data, which only wastes storage resources. However, NETmc Marine also has many pipeline survey and inspection clients using multi-channel DVRs, often interfaced to survey software packages.

Now, responding to requests from the pipeline community to simplify pipeline data management deliverables, NETmc Marine has produced a **Pipeline Toolkit** of plug-ins specifically developed to ease the management of survey and video data. Plug-ins include a **CSV data logger**; an advanced system for **file back-ups** and **transcoding** and specific pipeline



Black Box functionality. The Toolkit plug-ins are now included in the standard roll out of the DVR, and are integrated to the latest DVR setup deploy file available on our website for units purchased after 2022. Combining all these new tools, and integrating them with our revamped **multichannel video player**, results in a powerful video review suite with the ability to search by the selected parameters in the CSV file. Furthermore, when combined with our multi-channel **DVCiP ROV pipeline camera system**, the Toolkit adds a cost effective solution to high definition pipeline inspections for virtually every size of inspection class ROV.

Innovation built-in

These new developments are just the latest innovations from NETmc Marine which has, over the past 20years, introduced many new features including a built-in **string parser (2017)**, the support for **RTSP-IP cameras (2020)**, and **Vessel video distribution (2021)**, and our **Universal Content Capture technology (UCC 2022)**; enabling live the switching of different inputs to the same video file on the fly Ideal for structural inspections with multiple cameras recording to a single file.

DVR



- String parser
- Parser to CSV
- Supports IP video
- Robust back-up
- Survey Software I/F

DVCiP camera

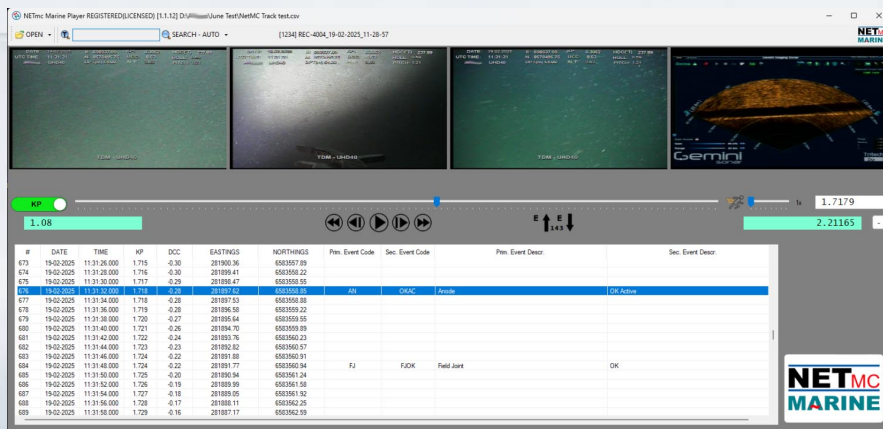


- 4 HD-IP cameras
- Low bandwidth
- Ethernet/TSP
- 6000m rated

NETmc Marine
Turfhill
New Deer
Turriff
Scotland
U.K.

Searchable pipeline video player from the CSV file

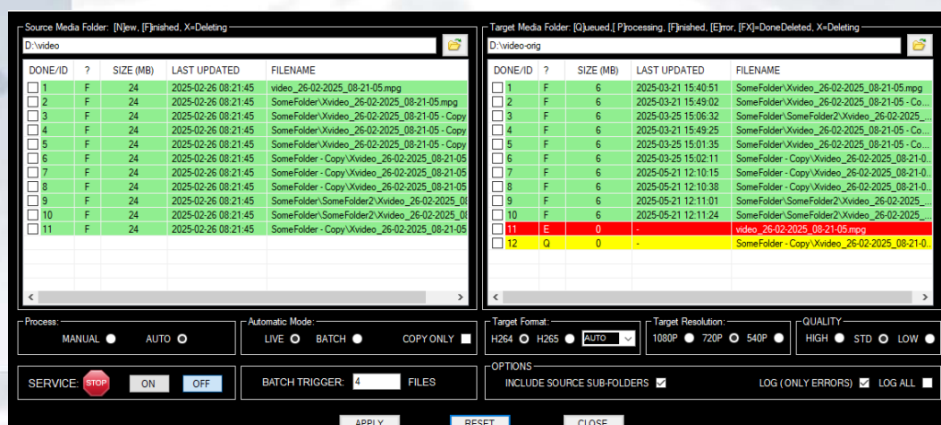
All DVRs are shipped with the NETmc Marine serial string parser plug-in within which there is a tick box on each of the four serial input parser pages and the output page; ticking the boxes will log all data to in the recording folder.



Integrating the output CSV file with the multi-channel player allows the video files to be searchable by any parameter in the CSV file; the user can scroll through events or jump to a time or KP in the table as shown. The video can also be played faster for quicker evaluation of the footage.

Transcoding / Backup

This combines real time backup to an external drive or device with the ability to compress the video files into a smaller volume or lower resolution version for fast transfer ashore.



Ticking the “copy only” box in the setup page shown here removes the transcode function, it then acts just like a copy utility which periodically copies the files from source to target, checks and compares what has been processed and its location. Files which appear to have gone missing during the process (because someone deleted them) are highlighted. A log file of either everything its done or only operations if thinks may be problematic is also created.

Black box

A feature has been added to the Black box recording plug-in for use if pipeline mode is installed. If the user is running the DVR with the pipeline mode compatibility box ticked in the setup page, the Black box will automatically change its file naming structure to be the same as the main survey recording. This would allow files from the Black box to be dropped into the survey data archive where they could be seamlessly adapted and used by the player or survey software. This is useful if the DVR main recorder has inadvertently not been initiated.