

Volvo Ocean Race 2008 – 2009

Extreme Racing in HD

by Livewire Digital

Introduction

The Volvo Ocean Race – the world's premier offshore yachting event – is circumnavigating the world for the 10th time. This is the yacht race that pushes the physical and technical boundaries, setting new standards in racing excellence and event organisation.

The fleet of yachts will race over 37,000 miles around a new route, visiting 10 ports in 10 countries, which, for the first time includes stopovers in China, India and Russia.

Teams include PUMA Ocean Racing, Ericsson Racing Team (2 yachts), Team Russia, Green Dragon, and Telefonica (2 yachts). The cream of international sailing talent will man the yachts to demonstrate the power and speed of the second generation of the record-breaking capabilities of Volvo Open 70's design.



While crews face the extreme challenges of ocean racing, anything from the dead calm of the Doldrums to wild tornados and icebergs, the Volvo Ocean Race media teams in the ports and at Race HQ will bring this gripping spectacle to a global audience via TV, Radio, Podcast, Volvo Ocean Race Web TV, Mobile and SMS.

Extreme Racing in High Definition

Each yacht is fitted with the latest High Definition Media Desk from Livewire Digital – providing a media and communication platform suitable for the most extreme weather conditions and taking advantage of the latest camera, microwave and satellite technology.

Each team now has a designated media person, a professional whose sole focus is to capture the action of this extreme racing adventure, anytime, day or night, using the media desk and the range of fixed and mobile HD cameras and microphones positioned around the yacht.

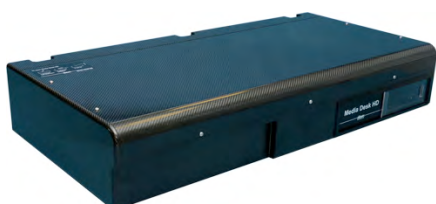
The crews will be filing their own video and audio reports during the race, providing their expert analysis, as well as their own personal motivations and feelings – in person, online, or through their racing blogs – which you can access through the web or mobile phone.

No drama should be missed because the Media Desk HD automatically records the unexpected by using “*Crash Recording*” and HD Digital Delay Video Recording (HD-DDVR). The stern camera is recording continually throughout the race, keeping the latest few minutes of action in ‘rolling’ memory. When a major event takes place, the crew members can punch any of the “*Crash Buttons*” fitted around the yacht and the event will be stored immediately. Likewise, if the media desk sees unusual telemetry events, such as heel angle or speed, it can automatically trigger the recording.

During leg starts and finishes, and for the in port racing events, the Livewire Port Media Support Centre (PMSC) will be deployed, a revolutionary media management hub, providing remote control of the on-board media system, including the microwave links, the cameras and the microphones. The PMSC presents the feeds to the host broadcaster, the race village display systems and to the web.

To track your team's progress, regular location reports are filed automatically with the Duty Officers, at Race HQ, who plot the progress of the individual yachts in near real-time.

Media Desk HD



The move to High Definition represents a step-change in technology, this is reflected in all aspects of the system from the cameras and microphones, through to the software and the satellite services.

The media desk is the control centre for the new HD cameras and microphones, designed and built by Livewire Digital Ltd. Each camera can be controlled and

selected from the video console onboard, as well as the PMSC and, if enabled, from Race HQ by the Volvo Ocean Race production team.

Each yacht has five fixed HD cameras, two handheld HD cameras, three fixed and two wireless microphones. Cameras and microphones can be combined through the HD Media Desk for recording, as well as for live broadcasts.

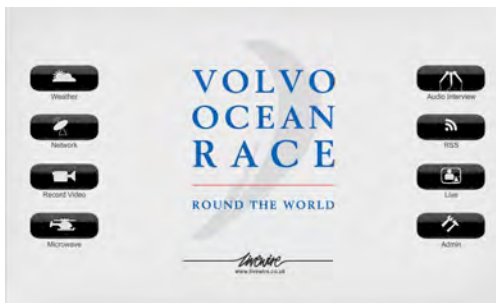
The stern camera is a 1080i HD camera that looks forward, covering the helm, hatchway and foredeck. The unit is 'roll compensated' to keep the horizon level, is day-and-night capable, and has a powerful infrared illuminator installed alongside.



Stern Camera

A second 'roll compensated' 1080i HD camera is mounted on the mast and provides a clear view of the cockpit. Two 1080i HD Pan, Tilt Zoom cameras, are mounted on either side of the mast on the spreaders. These can be controlled by joystick and offer a birds eye view of all the action on-deck. Waterproof microphones are mounted on the front of the hatchway and alongside the mast camera to record the atmospheric background sound. These incorporate wind jammers and sophisticated isolastic mounts. The diary HD camera is below decks, mounted in the navigation area, and has an integral microphone.

Increased transmission rates from the new generation of satellites have made it possible to conduct mid ocean, full frame rate live video interviews with the crews.



Media Desk HD – Graphical User Interface

The crew operate in such hostile conditions that the media management tasks have been captured in simple workflows. The Media desk console provides the single screen user interface, which manages all media tasks.

By pressing a few buttons, a crewmember can set up an interview via satellite to the Volvo Ocean Race HQ or to a TV studio. Likewise, cameras and microphones can be selected through simple button presses.

It Is Not Just The Media: Weather Updates

The Media Desk downloads updated weather reports every 6 hours from Race HQ, and simultaneously uploads the video and media files, while optimising the data transfer.

The video is edited with the Media Desk's integral HD editing facilities and then compressed with the latest generation of M-Link H.264AVC compression software.

At Race HQ the production teams do the final edit of the received media before putting it out onto the wire and the web. They then compile the list of Media Tasks required from the yachts for next day's gripping interviews and exciting images. The Volvo Ocean Race – Extreme Racing in HD – brought Live to you by Livewire Digital!

Volvo Ocean Race HD Media Desk		
Audio and Video	System Management	Communications
1-8 Managed HD Cameras 1-16 Integral Microphones Digital Delay HD Recording VCR and Hard Disk Recording Live A/V Conferencing A/V Matrix & Mixer Broadcast Quality Video	Single Click Video GUI Java User Interface Crash Buttons Battery Backup Laptop PC/Mac with Media Manager and Edit Software Energy Efficient Standby Mode	Direct Switching of all Communications Intelligent Multi-Terminal routing Wireless A/V connections Configured for delivery via satellite, UHF and Microwave ¹

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