

# Molecular-level 3D

JVC 3D monitors visualise molecular imaging data

# HIGHWAY

JVC'S PATH TO IMPROVED IMAGING STANDARDS



Issue 16, Summer 2011

# JVC

The Perfect Experience / —

## Fibre connections

GY-HM790 studio/ENG camera brings the flexibility required for hire and broadcast applications

## Theme park signage

JVC digital signage systems used in Ferrari World Abu Dhabi, the world's largest indoor theme park



# Fibre connections

## Full studio functionality via fibre

The GY-HM790 camera is already ideal for both ENG and studio applications, but there's now an option to replace bulky multicore cables with durable, lightweight optical fibre cables for robust two-way communication between cameras and control systems.

The FS-790 optical fibre multiplexing system consists of a camera-mounted transceiver and a 1U rack-mountable base station, with an optical fibre cable needed to connect the two. The KA-F790 custom-designed camera back transceiver module attaches directly to the GY-HM790 body using a hidden 68-pin connector, allowing users to leverage the GY-HM790's full studio functionality in the field. It connects the camera via SMPTE hybrid (powered) or tactical (unpowered) optical fibre cable to the RM-FP790 CopperHead base station, typically located in a control room, flypack or OB van.



The system simultaneously transports bi-directional digital (SDI or HD-SDI) and analogue (PAL or NTSC) video, as well as all two-way camera control, audio, video, data, sync, tally/call, prompter and intercom signals between the camera head and the remote base station. The GY-HM790 fibre system is becoming increasingly popular with rental and events companies, offering a simple setup for customers.

## Creation Tour and IBC 2011



The JVC Creation Tour hit the road again this summer in the UK, with our camcorders, production monitors and studio solutions all installed in the vehicle. The van is available until mid-August, so please contact your reseller if you wish to see this.

There's also plenty to see at the upcoming IBC show in Amsterdam, where JVC will be showcasing its ProHD tapeless camcorder range along with its professional 3D products, including a new 32" 3D display for medical and broadcast use, a 24" 3D production monitor and an upgraded IF-2D3D1 image processor, now with positive and negative image reproduction. Other new additions to the show are secret at this time of going to press.

# Ferrari World Abu Dhabi

## Digital signage keeps world's largest indoor theme park in sync



**Dubai distributor, Oasis Enterprises, has supplied and installed over twenty digital signage systems at Ferrari World Abu Dhabi – the world's largest indoor theme park – which opened last November.**

Sixteen super-slim GD-32X1 32" JVC monitors are positioned in the main admissions area of the attraction, each running TV-TOOLS digital signage software. The screens are capable of displaying a variety of messages, including pricing and show time information, along with HD footage from the park. Six further screens are placed near the main park attractions for displaying up-to-date queuing time information; these are updated remotely via park staff using Apple iPads or via a networked PC.

The powerful database engine and web support in TV-TOOLS software version 9, along with new calendar management infrastructure, makes it simple to display content. Combined with full HD JVC monitors, TV-TOOLS offers a complete professional digital signage system, perfect for 24/7 use.



## Flashmob ProHD

**The European Capital of Culture for 2013, Marseille, continued its promotion with a flashmob performance in its busy streets, all captured on JVC ProHD cameras.**

Twelve JVC ProHD camcorders were used to cover the event, which involved 500 dancers performing in the centre of Marseille, with onlookers in the form of shoppers and city workers. Cameras used ranged from the hand-held GY-HM100 up to the studio/ENG GY-HM790, delivering the quick shoot-to-edit workflow required. Lionel Carmes, Managing Director of reseller Video Events, decided to use JVC cameras due to their

## Street dance captured tapelessly

excellent feedback received from his rental customers. The workflow also meant content could be uploaded to the web quickly once filming was complete.





## German broadcaster chooses fibre system

**Bayerischer Rundfunk selects three GY-HM790 cameras for youth channel live productions**

ON-3, a specialist youth channel from German broadcaster, Bayerischer Rundfunk, has purchased three GY-HM790 cameras with optical fibre solution for use on its programme, *Südwild*. All three new cameras were used by production company, Satcom, during live filming this June.

The broadcaster initially tested the cameras together with help from JVC product specialists and got on so well with the system on the first live shoot that they filmed another three live broadcasts in one week.



The GY-HM790 cameras and Telecast optical fibre systems are now integrated into the ON-3 double-decker outside broadcast bus and have proved particularly popular due to their excellent handling and great picture quality. Each camera uses a 200-foot cable – more than enough for the programme's requirements. ON-3's camera operators also commented on how easy the GY-HM790 cameras were to use and they were extremely happy with the results.

Due to this excellent reference site, other German broadcasters have been looking at the GY-HM790 fibre system. The most recent purchase was for Berlin-based news channel, N24, who has decided to produce its new live talkshow using four GY-HM790 fibre channels.

## 3D molecular visualisation

**Northwestern University uses twenty five 46" JVC 3D monitors for the visualisation of molecular imaging data at nearly 52 megapixel resolution**



Northwestern University in America is using 25 JVC GD-463D10 46-inch 3D LCD HD monitors to create a video wall display for visualisation of detailed scientific data. The impressive 5x5 video wall, which can provide presentations for up to 35 people, is located in the lobby of the Silverman Hall for Molecular Therapeutics and Diagnostics, which was built for the Chemistry of Life Processes Institute.

Professor Tom Meade, director of the Center for Advanced Molecular Imaging (CAMI) research facility within the institute, said the video wall is an integral part of the centre's mission to acquire, visualise and interpret data from magnetic resonance imaging (MRI), fluorescence and bioluminescence imaging, and other technologies within a single facility. He said the ability to display such large amounts of information (a technique known as volume rendering) in high detail allows scientists to observe and interpret data they would have never seen otherwise.

According to Matt McCrory, lead visualisation engineer, Northwestern University, a projector-based system was not an option due to space restrictions, and the original plan to create a high-resolution tile display did not include 3D. However, after he tested a single 3D display with his own

volume rendering software, he decided 3D would benefit CAMI's advanced visualisation efforts.

McCrory researched a variety of manufacturers, but said only JVC delivered the high-resolution 3D imaging and thin bezels (for a tighter installation) he required. The JVC GD-463D10 monitor also features an integrated Xpol polarizing filter, so it uses inexpensive polarised (passive) glasses to produce flicker-free 3D HD images. As a result, McCrory did not have to sync all 25 screens or invest in dozens of pairs of expensive active shutter glasses. While the panels are angled at the top and bottom of the display to maximise the 3D field of view, the video wall was not designed to be an immersive environment. "This is more about allowing a roomful of people to see the same 3D canvas," McCrory explained. "The 3D effects work really well."

The video wall displays close to 52 megapixels – more than six times the resolution of Digital IMAX – and is driven by a system of NVIDIA Quadro Plex graphics cards, which are powered by a cluster of Linux-based computers and managed through Equaliser middleware (developed under Open Source). "The JVC is a very bright, very vivid display. So far, they've been performing really well," said McCrory. "It's hard to even imagine there being a better monitor right now for this kind of application."

## JVC workflow shines at university

**The Madrid Film School (ECAM) has recently invested in five GY-HM790 studio/ENG cameras, each with HZ-CA13 PL mount to 1/3" lens adaptors.**

The adaptors attach directly to the bayonet mount on the camera, allowing the film school to use its existing cinema lenses. The school is very happy with the new fast workflow that the cameras offer, and the students are getting on very well with their new equipment too, which also includes nine DT-V series production monitors for viewing footage out on location.



### ProHD for Portsmouth University and ECAM

Meanwhile, Portsmouth University has increased the number of GY-HM100 tapeless hand-held camcorders it owns to 20. "The tapeless workflow delivered by the camcorders has really revolutionised how we operate," said Charlie Watts, Course Leader, BSc (Hons) TV and Broadcasting. "We've revised our workflow accordingly; this ultimately has brought a steeper learning curve to undergraduates wishing to pursue a more industry-focused way of doing things, but it does save time and money – most importantly the students love the camcorders and are producing great results."



**Ideal for rental  
and live events**

# Make light work.

Introducing the GY-HM790 studio camera and compact KA-F790 fibre adapter. The camera's innovative modular design offers the ultimate in connectivity – versatile enough to play a central role in the studio or out on location. Using a 68-pin connector on the back of the GY-HM790, the compact KA-F790 attaches directly to the camera body and enables broadcasters to leverage the GY-HM790's full studio functionality in the field via SMPTE hybrid (powered) or tactical (unpowered) fibre optic cable.

The system simultaneously transports bi-directional digital (SDI or HD-SDI) and analogue (NTSC or PAL) video, as well as all two-way camera control, audio, video, data, sync, tally/call, prompter and intercom signals between the camera head and the remote 1U rackmountable base station. The camera features 1080i, 1080p, 720p or 576i live output in uncompressed 4:2:2, with all the benefits of ProHD too: XDCAM EX codec and native QuickTime™ .MOV files for seamless workflow editing.

**Simple fibre connectivity with the  
GY-HM790 studio/ENG camera**



GY-HM790 camcorder with KA-F790 fibre adapter

For further information on the GY-HM790 studio camera and fibre solution, please email [marketing@jvcpro.co.uk](mailto:marketing@jvcpro.co.uk) or visit [www.jvcpro.eu](http://www.jvcpro.eu).

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