

## ZIXI-INTEGRATED PROFESSIONAL CAMCORDERS

JVC'S CONNECTED CAM SERIES FEATURES SIMULTANEOUS RECORDING AND SENDING OF ZIXI STREAMS TO ANY STUDIO FOR LIVE SHOTS

#### AT A GLANCE

# JVC SOLUTIONS WITH ZIXI INTEGRATION

Connected Cam Series - Professional camcorders for broadcast and remote production (REMI) applications with built-in Zixi encoders and direct connectivity to any studio/newsroom across the globe

**End-to-End IP Workflows** – JVC offers Zixi-enabled decoder, encoder and IP video servers for complete video-over-the Internet workflow

#### **KEY FEATURES**

- Advanced camcorders 2/3"
   3xCMOS B4 lens mount (GY-HC900) and built-in up to 40x
   zoom lenses (GY-HC500SPC/550)
- Recording 10-bit 4:2:2 H.264 to SDXC cards
- Streaming H.264/HEVC video using Zixi transport
- Receiving Return Video over IP via Zixi protocol (Zixi pull)
- RCU Full remote control (RCU) over the Internet

#### **Products**

- Professional camcorders GY-HC900; GY-HC550; GY-HC500SPC; GY-HM660; GY-HM250I; KY-PZ100 (PTZ).
- Decoder BR-DE900
- Encoder BR-EN900
- Zixi Broadcaster Servers BR-800; zRamp-2/4

## OVERCOMING LIMITED BANDWIDTH NETWORKS

Streaming live video from any location over LTE or even Wi-Fi/LAN presents many challenges including bandwidth limitation, packet (data) loss, latency and jitter which may result in the corrupted video. Remote productions, using a Remote Integration model (REMI), are often faced with these challenging network conditions. Any attempt to compensate for the bandwidth issues, would require sophisticated encoders that create excessive overhead and/or higher latency.

# THE ONLY PROFESSIONAL CAMERAS WITH THE BUILT-IN ZIXI FEEDER

JVC's **Connected Cam** series features a built-in Zixi Feeder (ZF), offering simultaneous recording and live video streaming directly from the camera without the need for outboard devices. The Connected Cam cameras can send broadcast-quality H.264/HEVC video via the Zixi protocol from any location directly through LAN, Wi-Fi, or 4G/5G LTE connections. The Zixi transport protocol offers resilience to the packet loss, jitter, and bandwidth fluctuations. Its continuous link quality assessment adds controlled amounts of FEC (Forward Error Correction), ARQ (Advanced Repeat request), and ABR (Adaptive Bitrate) to assure sending the broadcast-quality video via limited bandwidth networks without excessive overhead and latency.

JVC's flagship 2/3" Connected Cam **GY-HC900** is a unique an innovative broadcast camcorder that provides the highest image quality while offering an unparalleled level of connectivity, ideal for broadcast, studio and sports markets. Streamline ENG workflows with JVC's powerful communications engine that makes News-over-IP a reality that's both reliable and cost-effective. For a smaller, handheld option, JVC's **GY-HC550** provides the same level of connectivity in a compact device, ideal for broadcast newsgathering, which can deliver high quality, low latency error-free video right from the camera.





GY-HC550



# RELIABLE BROADCAST-QUALITY DELIVERY OVER ANY IP

#### **KEY ZIXI BENEFITS**

- Security Zixi provides best-inclass security enhanced with DTLS and AES standards-based protection
- Reliability Contribute source streams with 99.999+% broadcast reliability with hitless failover provides redundant transmission options for higher reliability and disaster recovery
- Low Latency With network adaptive forward error correction and recovery, proven sub 1 second live linear latency
- Interoperability Zixi is compatible with the largest ecosystem of encoding devices and contribution sources

#### **ABOUT JVCKENWOOD Corporation**

JVCKENWOOD Corporation was formed from the merger of Victor Company of Japan, Ltd (JVC) and Kenwood Corporation in 2008. JVC was founded in 1927 in Japan and has been manufacturing consumer and professional electronics since then, selling worldwide.

#### www.pro.jvc.com

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#### **ABOUT ZIXI**

Zixi provides a cloud based and on-premise Software-Defined Video Platform (SDVP) that enables reliable broadcast-quality video delivery over any IP network, any protocol, any cloud provider and any edge device. Over 10+ years, the Zixi Enabled Network (ZEN) of partners has grown to over 250 OEM and service providers with whom Zixi serves well over 700 customers representing most of the top media brands around the world with 10,000+ channels delivered daily.

#### https://zixi.com/

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## END-TO-END IP WORKFLOW PROTECTION WITH ZIXI

With Zixi integrated into JVC's Connected Cam Series and JVC's IP video servers and decoders, users can leverage key elements of the Zixi Software-Defined Video Platform (SDVP) to transport broadcast-quality live video over challenging IP network conditions.

The resilient congestion and network-aware **Zixi protocol** adjusts to varying network conditions and employs patent pending, dynamic FEC techniques for error-free video transport over IP at minimal latency. It allows for protected multicast transport, provides bandwidth efficiency and enables encoder backpressure. The Zixi protocol removes jitter, recovers and re-orders packets, smooths video delivery enabling the secure streaming of broadcast-quality video over any distance, with up to 45% packet loss recovery.

The Zixi SDVP's **video solutions** stack provides essential software tools and core media processing functions that allows for transcoding, auto-slating and time-shifting over multiple transmission paths and bitrate adaptation to ensure reliability over any IP network, any protocol, and any cloud provider, allowing for ease of interoperability with existing infrastructure. Zixi's ability to conduct Hitless Failover allows for 99.999% uptime for the highest reliability. Zixi's ability to bond across multiple connections (ex 5G, 4G LTE, Internet) increases available bandwidth and provides efficient error correction to compensate for data loss recovering up to 100% in difficult network conditions.

With reliance on Zixi for streaming contribution, JVC Connected Cam users can leverage ultra-low latency delivery of high performance 1080 60p/50p live streaming video over managed or unmanaged IP networks resulting in advanced QoS for broadcast and flawless QoE for the end user.

## Leverage Zixi for Advanced QoS/ABR for Live Streaming

