



NASA and Harmonic Partner to Launch First UHD Consumer Channel in North America

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Ambient Video Channel Highlights Beautiful Imagery From the Space Program Leveraging Latest 4K UHD Technologies

SAN JOSE, CA -- (Marketwired) -- 09/12/15 -- The National Aeronautics and Space Administration (NASA) and Harmonic (NASDAQ: HLIT), the worldwide leader in video delivery infrastructure, today announced that they are partnering to launch NASA TV UHD, the first consumer UHD channel in North America. Utilizing an end-to-end UHD video delivery system from Harmonic, NASA can deliver live and linear 2160p60 video content, enabling consumers to enjoy crystal-clear footage on a wide range of television and IP-connected devices. A test signal of NASA TV UHD is currently available on the AMC 18C satellite, with an expected launch date of Nov. 1, 2015.

NASA TV UHD video is being sourced from high-resolution images and video generated on the International Space Station (ISS), Hubble Space Telescope, and other current NASA missions. Programming will also include remastered footage from historical missions, shots from NASA's development and training processes, and ultimately live launches. Leveraging the 8M pixel resolution of the UHD format, the channel will create the closest possible experience to looking out of the viewing Cupola of the ISS, for example.

Like the current NASA TV channels and on the same transponder, NASA TV UHD will be transmitted via the AMC-18C satellite, in the clear, with a North American footprint. Harmonic is currently in discussions with pay-TV operators to carry the channel on their satellite DTH, cable and optical networks, for consumer access. The channel will also be streamed on the Internet, which will require at least 13 Mbps access connectivity to receive the signal and achieve the UHD experience.

Transmitted from NASA's Atlanta uplink facility, remotely produced by Harmonic and jointly operated, the complete infrastructure includes examples of Harmonic's Ellipse® 3000 contribution encoder, ProView™ 7100 integrated receiver-decoder (IRD), MediaGrid shared storage system, Polaris™ playout management suite, Spectrum™ X advanced media server system, Electra™ X3 advanced media processor, ProMedia® Origin packager and streaming video server and NSG™ Exo distributed CCAP system.

A key element in the UHD workflow is Harmonic's Electra X3 advanced media processor, the industry's first converged media processor for UHD content with live, full-frame, full-GOP UHD encoding. Powered by the Harmonic PURE Compression Engine™, an advanced encoding technology that supports resolutions up to 2160p60 (HEVC Main 10) for broadcast and OTT multiscreen delivery, the Electra X3 enables NASA to deliver superior video quality at minimum bandwidth.

"As NASA reaches new heights and reveals the unknown, the NASA TV UHD channel can bring that journey to life in every home. And as organizations at the forefront of innovation, together we are leading the adoption of this exciting technology," said Peter Alexander, CMO, Harmonic. "As the leader in UHD development, Harmonic provides a complete solution for Ultra HD video production and delivery, enabling content and service providers to offer better video quality at a low total cost of ownership."

NASA and Harmonic have also begun discussions about adding high dynamic range (HDR) and expanded color-space technologies to the channel as standards emerge. Some testing is expected before the end of the year.

At IBC2015, Sept. 11-15, in Amsterdam at stand 1.B20, Harmonic will showcase its comprehensive line of market-leading solutions that optimize the production and delivery of high-value video services in the broadcast, pay-TV and new media environments.

For more information on Harmonic and to view the trailer for the NASA TV UHD channel, visit: <http://info.harmonicinc.com/nasa-uhd>.

About Harmonic

Harmonic (NASDAQ: HLIT) is the worldwide leader in video delivery infrastructure for emerging television and video services. Harmonic enables customers to produce, deliver and monetize amazing video experiences, with unequalled business agility and operational efficiency, by providing market-leading innovation, high-quality service and compelling total cost of ownership. More information is available at www.harmonicinc.com.

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements related to the anticipated capabilities and benefits of Harmonic's Ellipse® 3000 encoder, ProView™ 7100 IRD, MediaGrid, Polaris™ playout management suite, Spectrum™ X, ProMedia® Origin server, NSG™ Exo system, and PUI Compression Engine™ products. Our expectations and beliefs regarding these products may not materialize and are subject to risks and uncertainties, including the possibility that the products may not meet some or all of their anticipated capabilities or provide some or all of their anticipated benefits, such as enabling content and service providers to offer better video quality at a low TCO.

The forward-looking statements contained in this press release are also subject to other risks and uncertainties, such as those more fully described in Harmonic's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended Dec. 31, 2014, its Quarterly Reports on Form 10-Q and its Current Reports on Form 8-K. The forward-looking statements in this press release are based on information available to Harmonic as of the date hereof, and Harmonic disclaims any obligation to update any forward-looking statements.

EDITOR'S NOTE - Product and company names used herein are trademarks or registered trademarks of their respective owners.

Image Available: http://www.marketwire.com/library/MwGo/2015/9/11/11G053728/Images/NASA_TV_UHD_-_Harmonic_Logo_Black-879501511127.jpg

CONTACTS:

Paulien Ruijssenaars

Senior Director, Corporate Marketing
Harmonic
+1.408.490.7021
paulien.ruijsenaars@harmonicinc.com

Blair King
Director, Investor Relations
Harmonic
+1.408.490.6172
blair.king@harmonicinc.com

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