Leader

PRESS INFORMATION FROM LEADER ELECTRONICS

Leader to Highlight Efficient SDI to IP Transition at Inter BEE 2023

Accompanying image shows the JPEG XS optioned Leader LV5600 waveform monitor, Leader LT4670 signal generator and enhanced Leader LVB440 IP analyzer.

Leader Electronics will exhibit recent additions to its wide range of test and measurement solutions at Inter BEE 2023, Makuhari Messe, from Wednesday November 15 through Friday 17. Theme of the Leader demonstrations on **Booth 6304** in **Hall 6**, will be *Efficient Transition from SDI to IP Networking and Operation*. Solutions on show will include the new LT4670 SDI/IP reference/test signal generator, enhanced LVB440 IP analyzer and expanded JPEG XS quality control options for the LV5600 waveform monitor and LV7600 rasterizer.

New: Leader LT4670 SDI/IP reference/test signal generator

Making its Inter BEE debut, the Leader LT4670 is a 1U full-rack width synchronous SDI/IP reference/test signal generator. Designed for use in SDI, SDI/IP-hybrid and fully-IP systems, it comes with a wide range of tools augmented by options which customers can add when needed.

The standard LT4670 toolset includes genlocked black burst signals and tri-level sync pulse generation; stay-in-sync in the event of an error in the incoming genlock signal; low-lock stabilization when returning to genlock from stay-in-sync; 48 kHz word-clock signal output synchronized to incoming video, and synchronous control between

devices (L-SYNC). Preset and memory functions are included. Power supply and fan units are hot-swappable to ensure workflow continuity.

Optional features for the LT4670 include GNSS synchronization, PTP synchronization, 4K quad-link, plus 3G-SDI, HD-SDI and SD-SDI outputs in any combination, allowing optimal management of synchronous systems.

Enhanced: Leader LVB440 IP analyzer with extended toolset

Designed for use across a wide range of IP-connected broadcast production and content distribution environments, the Leader LVB440 IP analyzer can be accessed locally or remotely by up to eight users simultaneously via a standard HTML-5 web browser. Applications include monitoring and analyzing high-bitrate media traffic in broadcast studios, OB vehicles, remote production facilities, master control environments and transmission networks.

Occupying a compact 1U, the LVB440 gives production teams the resources they need to perform real-time checks on large numbers of media data streams in parallel across multiple locations. The instrument allows high-precision analysis of SD, HD, UHD and full 4K data flow. Data rates of 10, 25, 40 and 50 gigabit/s are supported, extending up to 100 gigabit/s via dual interfaces. Operators gain the ability to survey every media transport layer of an IP network quickly and easily, allowing issues to be rectified before they impact the quality of service experienced by television viewers.

The new additions include an extended audio toolset supporting all current Dolby™ standards, enhanced event logging capabilities and a supplementary information display giving operators advice relevant to each measurement.

Expanded: JPEG XS quality control options for LV5600 waveform monitor and LV7600 rasterizer

Leader’s LV5600 waveform monitor provides the facilities needed to monitor SDI as well as video-over-IP signals seamlessly in a hybrid operating environment. Housed in a half-rack width 3U rackmount or desktop chassis with a touchscreen front panel display, its feature set includes test pattern generation, eye pattern display, closed caption monitoring, CIE chroma chart, HDR measurement, focus assist, customizable screen layout, tally interface, 4K/UHD operation, 10G/25G IP input and 12G-SDI interfaces. SMPTE 2022-6, SMPTE 2022-7 and SMPTE 2110 protocols are all supported. Also incorporated are Leader's CINEZONE and CINELITE which allow fast and intuitive quality monitoring by content production staff.

The Leader LV7600 rasterizer offers the same capabilities as the LV5600 but in a low-profile 19 inch 1U form-factor for easy rack or desk mounting.

Available as an option for the LV5600 and LV7600, the SER33 toolset offers television broadcast production teams the resources they need to check the quality of JPEG XS feeds during pre-transmission system alignment and live content delivery. Incoming JPEG XS signal streams can be decoded within the test instrument for comparison with uncompressed sources using the multiscreen facilities common to the LV5600 and LV7600. The toolset also includes a JPEG XS test pattern generator. JPEG XS compresses the data volume by up to 15:1, dependent on the amount of detail and movement in the transmitted image, with a high level of multi-generation encoding/decoding robustness. JPEG XS is HDR compatible and accommodates up to 16 bits depth per component channel.

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Leader (www.leader.co.jp/en) has earned a worldwide reputation for designing and manufacturing highly reliable, practical and powerful test and measurement instruments. Leader products are specified for broadcast, production, post-production, research, product development and service applications. Manufacturing quality is built in every step of the way. The Leader product range includes award-winning 3G/HD/SD SDI waveform monitors and rasterizers, all with customizable layouts. Among the available options are 8K, 4K/UHD, CIE chroma chart, HDR measurement, test pattern generation, eye and jitter measurement, closed-caption display, IP, and 12G/6G-SDI. Leader has helped many customers manage their transition from analog to digital, from SD to HD, from HD to 4K/UHD, from SDR to HDR, and from BT.709 to BT.2020 wide color gamut. Leader also provides SMPTE ST2022-7 and ST2110 support for the transition from SDI to IP.