

Ultra NEXUS SDI™

System Diagrams



END-TO-END Solutions for
Broadcast & Streaming

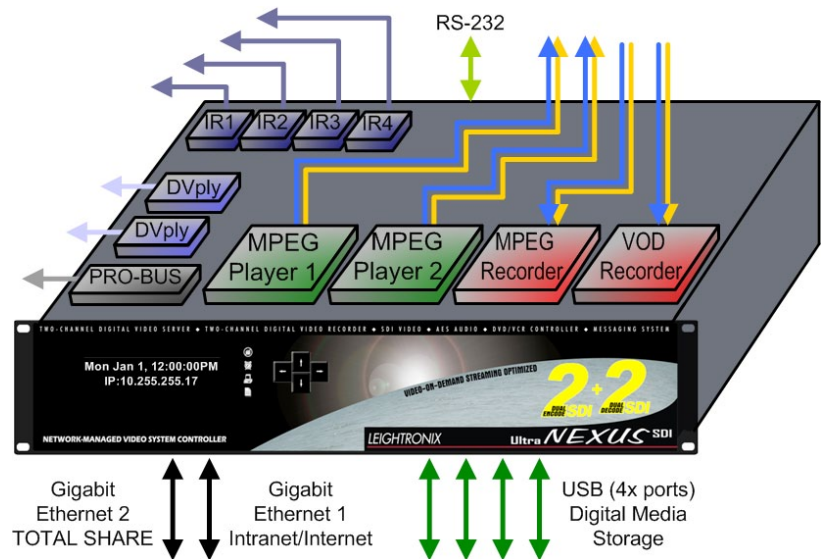
LEIGHTRONIX

Connectivity

Key:

- SD-SDI Video w/Embedded Digital Audio
- SD-SDI Video
- Composite Video
- Digital Audio (AES)
- Analog Audio (line level)
- Analog Audio (microphone)
- Network
- RS-232
- USB
- PRO-BUS
- DVply
- Integrated IR
- Cable TV

- **Video/Audio Connections:** The UltraNEXUS-SDI™ features an all-digital video/audio interface with support for analog audio. Video inputs and outputs are BNC type, SD-SDI digital video (SMPTE 259M-C) and support embedded audio (SMPTE 272M). Audio inputs and outputs are via a removable terminal block and support two channel AES digital audio (IEC 60958 type 1 balanced), and two channel balanced analog audio.
- **RS-232:** Serial data port for external routing switcher control
- **Network 1:** TCP/IP, gigabit Ethernet, user-configurable IP address, subnet, and gateway
- **Network 2:** Gigabit Ethernet, dedicated port for use with the TOTAL SHARE™ network attached storage (NAS) option
- **USB:** 4 USB ports for connection of digital media storage devices
- **PRO-BUS™:** Single PRO-BUS connection for up to 16 device control interfaces (sold separately)
- **DVply™:** Two advanced DVD player control ports, RS-232, support for select DVD players
- **Integrated Infrared:** Four IR ports for standard device control, support for a variety of popular DVD players



Resources

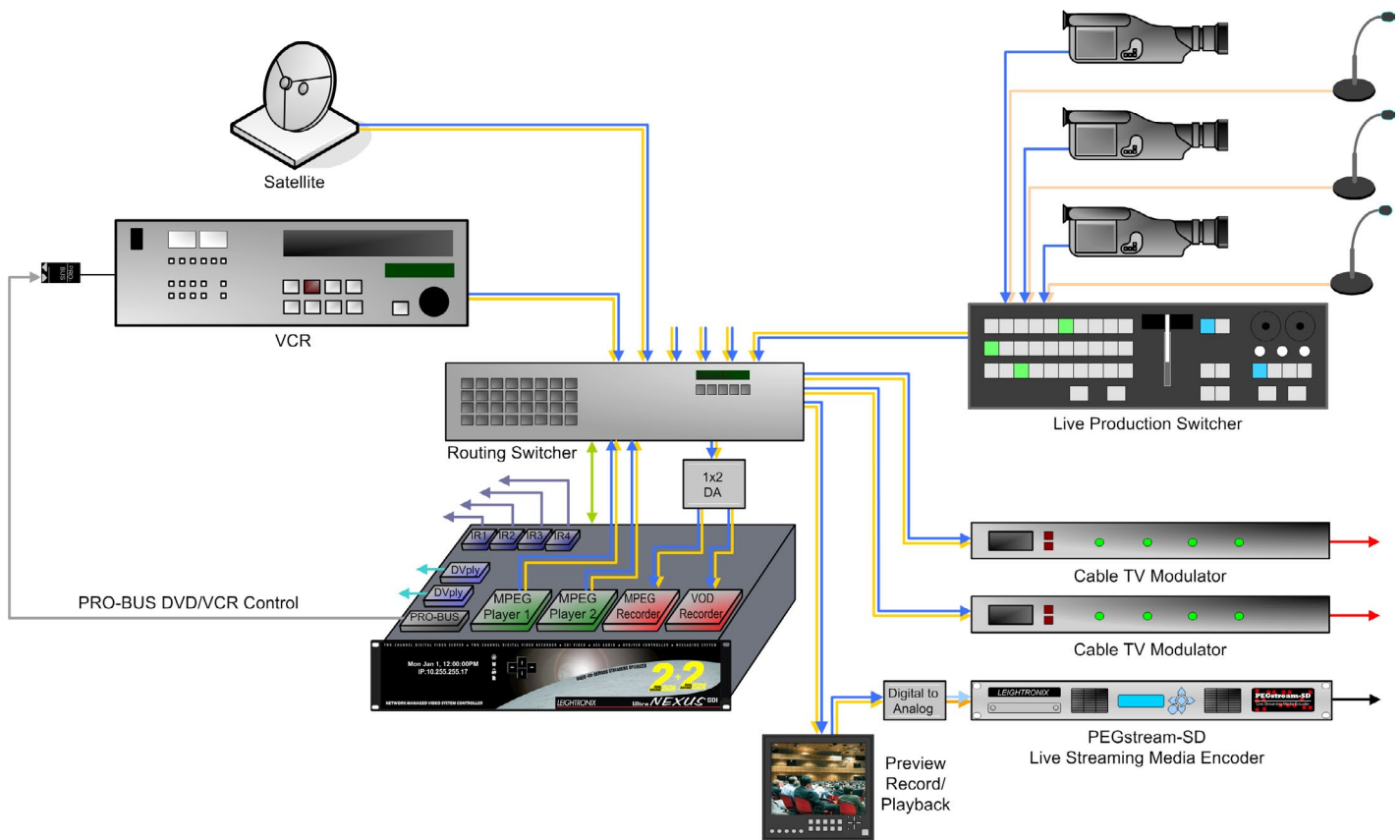
- [USB Digital Media Storage](#)
- [TOTAL SHARE and NAS Digital Media Storage](#)
- [Device Control](#)

Video/Audio Signal Routing

Key:

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The UltraNEXUS-SDI interfaces with a wide range of popular video/audio routing switchers as large as 250 inputs by 250 outputs, allowing for a vast assortment of controlled (VCR or DVD) and/or uncontrolled (studio feed or satellite receiver) devices to be connected for recording or broadcast. The UltraNEXUS-SDI is equipped with an RS-232 serial data control port (COM 1), providing direct connection to an external switcher for control and status.
















Resources

- [Listing of Supported Routing Switchers](#)
- [PEGstream-SD Live Streaming Media Encoder](#)

Audio Connections

Key:

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SD-SDI Video with Embedded Audio

Digital audio (SMPTE 272M) is embedded within the SD-SDI digital video input/output signals. No additional audio connections are required.



SD-SDI Video with Digital AES Audio

Digital audio (AES two channel, balanced) can be input/output independent of the digital video signal.



SD-SDI Video with Analog Audio

Analog audio (two channel, balanced) can be input/output independent of the digital video signal.



Dual Recording

When utilizing the UltraNEXUS-SDI's dual recording feature (broadcast and Web media), a common video/audio signal must be sent to both record inputs. A distribution amplifier (DA) is recommended.
















The UltraNEXUS-SDI's input and output interface is highly versatile, supporting embedded (within the digital video signal), digital AES, and analog audio. Many configurations are possible. Additional digital to analog video and audio conversion devices may be required when connecting to peripheral equipment.

Audio Input and Output

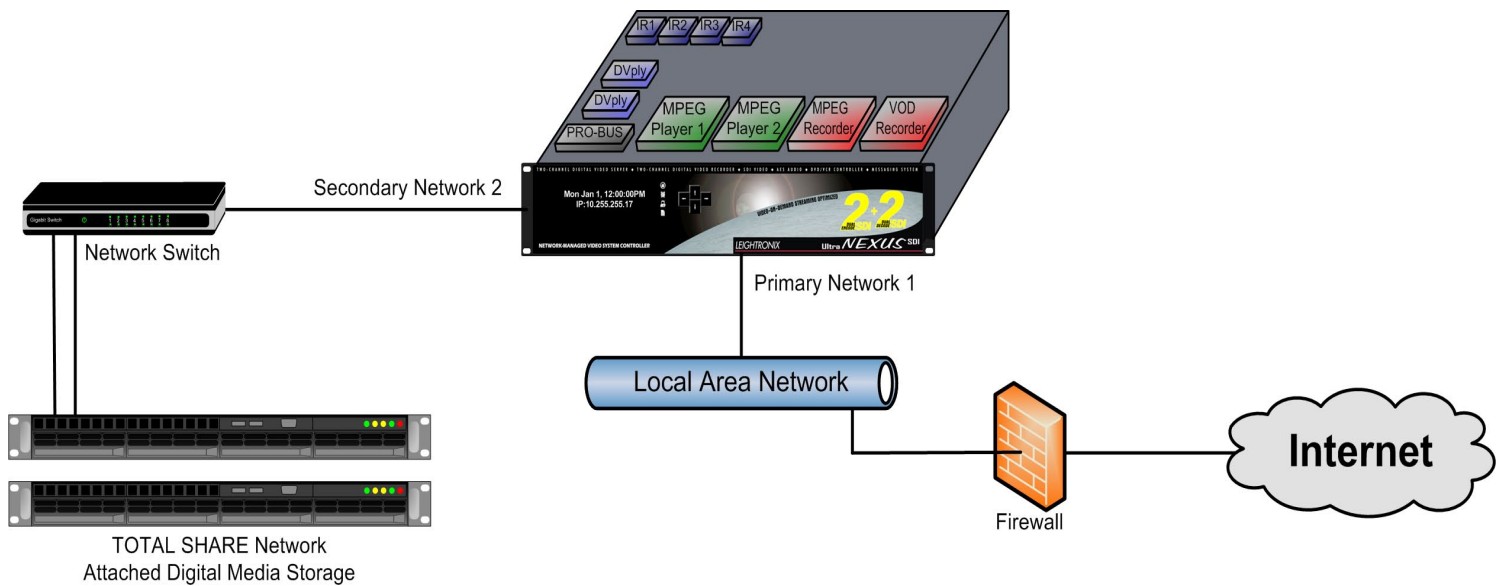
The UltraNEXUS-SDI supports two channels of audio. During recording, the audio source is user selectable (embedded digital pair, digital AES, or analog). During playback, all outputs (embedded all pairs, digital AES, and analog) are populated with the same pair of audio channels 1-2.

Network

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The UltraNEXUS-SDI is equipped with primary and secondary gigabit Ethernet network ports. The primary Ethernet port is ready for connection via a local network or direct connection to the Internet and is easily configured from the front panel (IP address, subnet, and gateway). The secondary port is reserved for configuration of a private digital media storage network using the TOTAL SHARE option and NAS storage devices.



Resources

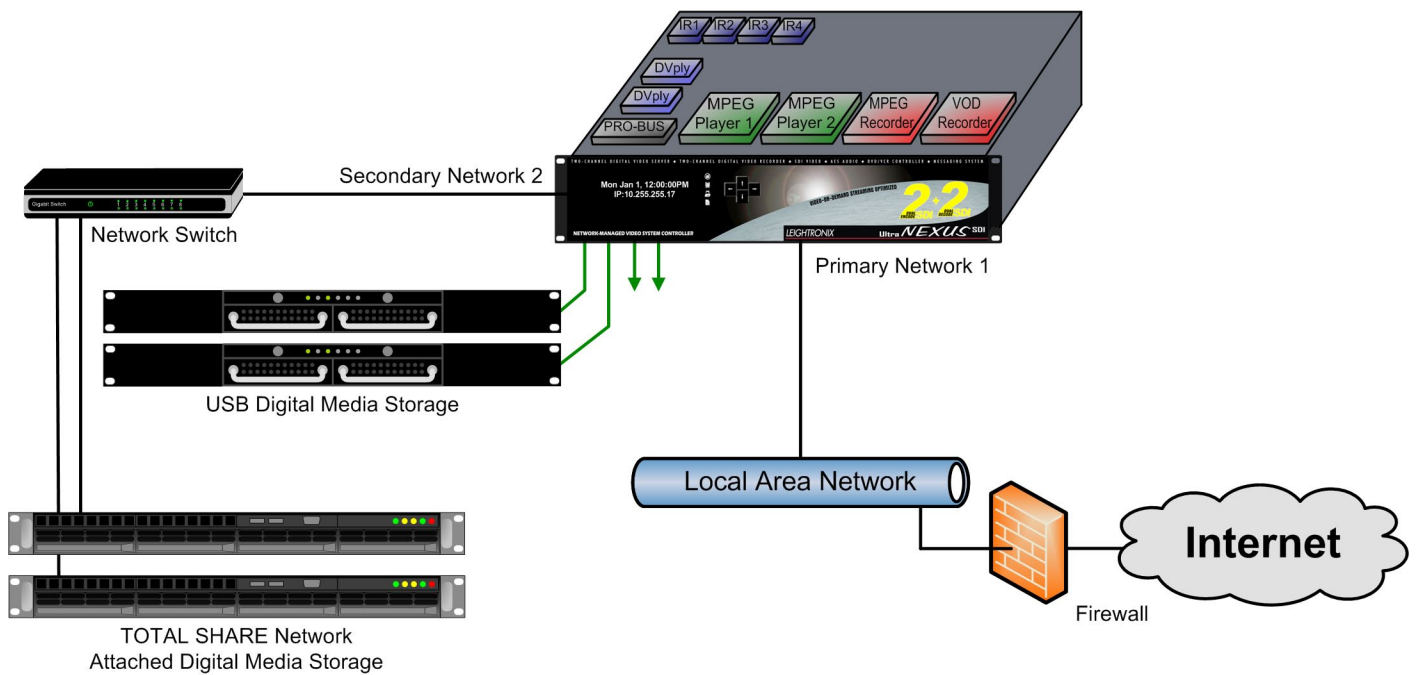
- [TOTAL SHARE and NAS Digital Media Storage](#)

Digital Media Storage

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The UltraNEXUS-SDI has an overall digital media storage capacity of 20 terabytes (TB). USB storage is user-scalable to 4TB and supports up to four external hard drive arrays. An additional 16 TB of storage may be configured using the secondary network port and the TOTAL SHARE option.



Resources

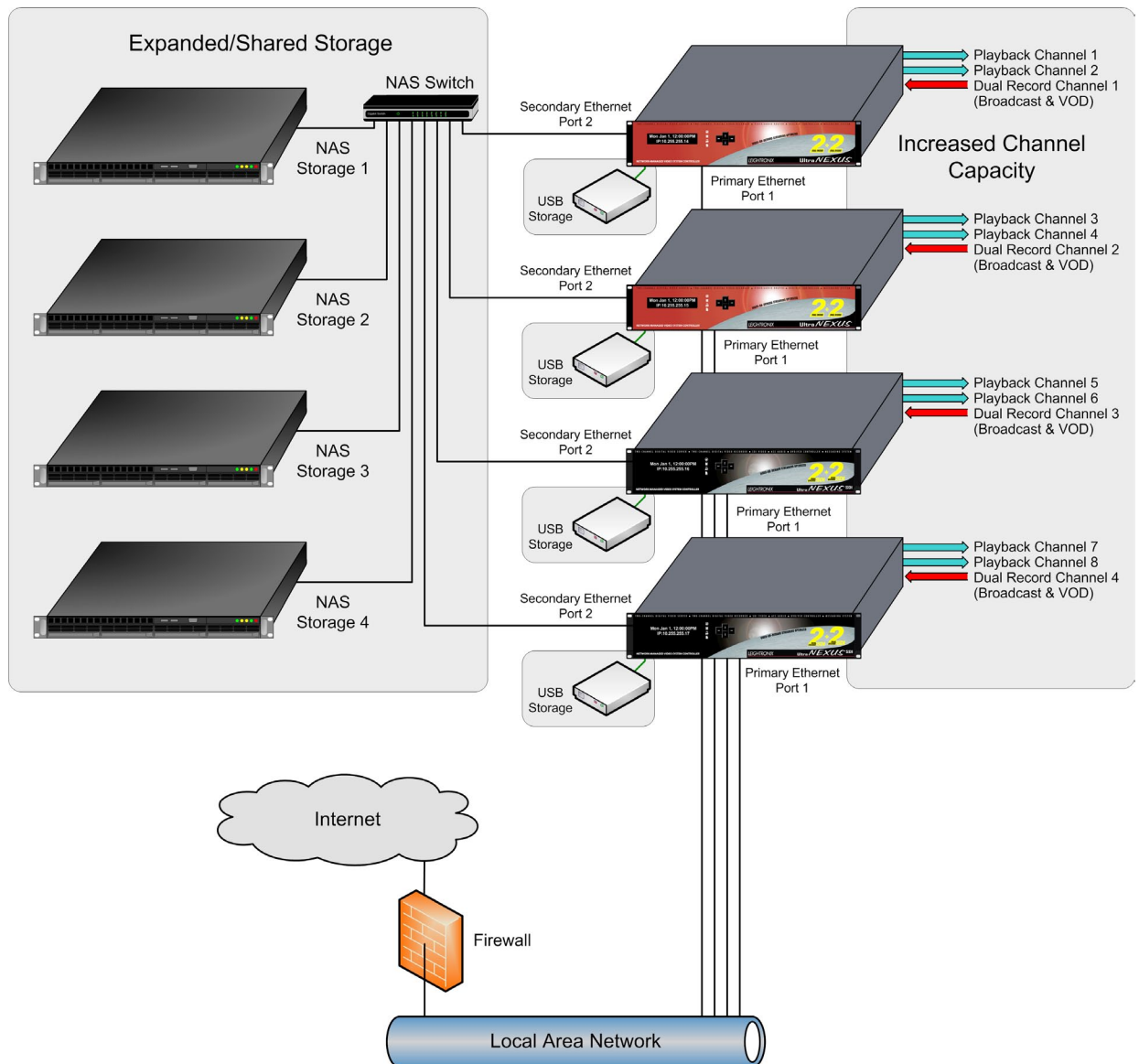
- [USB Digital Media Storage](#)
- [TOTAL SHARE and NAS Digital Media Storage](#)

TOTAL SHARE

Key:

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The TOTAL SHARE option increases the overall storage capacity for an individual video server and also allows multiple servers to share video content in a modular multi-channel server system.



Resources

- [TOTAL SHARE](#)

Typical System Diagram

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