

NEXUS

Video Server/System Controller



END-TO-END Solutions for
Broadcast & Streaming

LEIGHTRONIX

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Introduction



- Highlights**
- True station-in-a-box
 - Affordable for any television operation
 - 5 year warranty
 - Free support for the life of the product

The unique, all-in-one design of the NEXUS® separates it from other video server and television automation solutions. All of the features and functionality for unattended channel automation are built into the NEXUS, including a multi-channel digital video server, two video messaging channels, DVD/VCR device control, video\audio switching, and a powerful, programmable event controller.

With the NEXUS at your command, you can easily capture the attention of your audience with all-digital program playback synchronized with powerful video messaging. Operation is straightforward and requires little technical expertise. New users will quickly develop comprehensive broadcast schedules with minimal instruction.

Thousands of video professionals have discovered the unmatched value and performance of the NEXUS. Its user-friendly, versatile design has made the NEXUS the trusted digital television automation solution for a wide range of applications, including local broadcast, local cable television, and private, in-house communication networks.

Overview

The LEIGHTRONIX NEXUS is truly an innovation in playback automation, combining digital video server technology, DVD and VCR control, video and audio signal routing, and digital video messaging in one compact and affordable package.

Multi-Channel Digital Video Server

- Two MPEG Playback (Decoder) Channels
- One MPEG Record (Encoder) Channel
- Simultaneous Operation of all Playback and Recording Channels
- Extended, Continuous Recording for up to 24 Hours
- “Total Import™” of DVD Programs to Video Server

Scalable Local Media Storage

- External Hard Drive Storage via Four USB 2.0 Ports for up to One Terabyte (TB) of Storage
- TOTAL SHARE™ Option Expands Local Media Storage Capacity to Five TB
- Digital File Transfer via Gigabit Ethernet
- Automated Total Backup™ of Digital Media to Local or Network Drive

Integrated Digital Video Messaging

- Two Digital Video Messaging Channels
- Two Digital Media Overlay Channels (Graphic and Text)
- Web Interface with Remote Video Slide Management
- Online Video Slide Creation
- Emergency Messaging — Online Video Slide Creation and Activation
- Optional TOTAL INFO® Dynamic Video Content
- Dynamic Onscreen Program Guide

Device Control

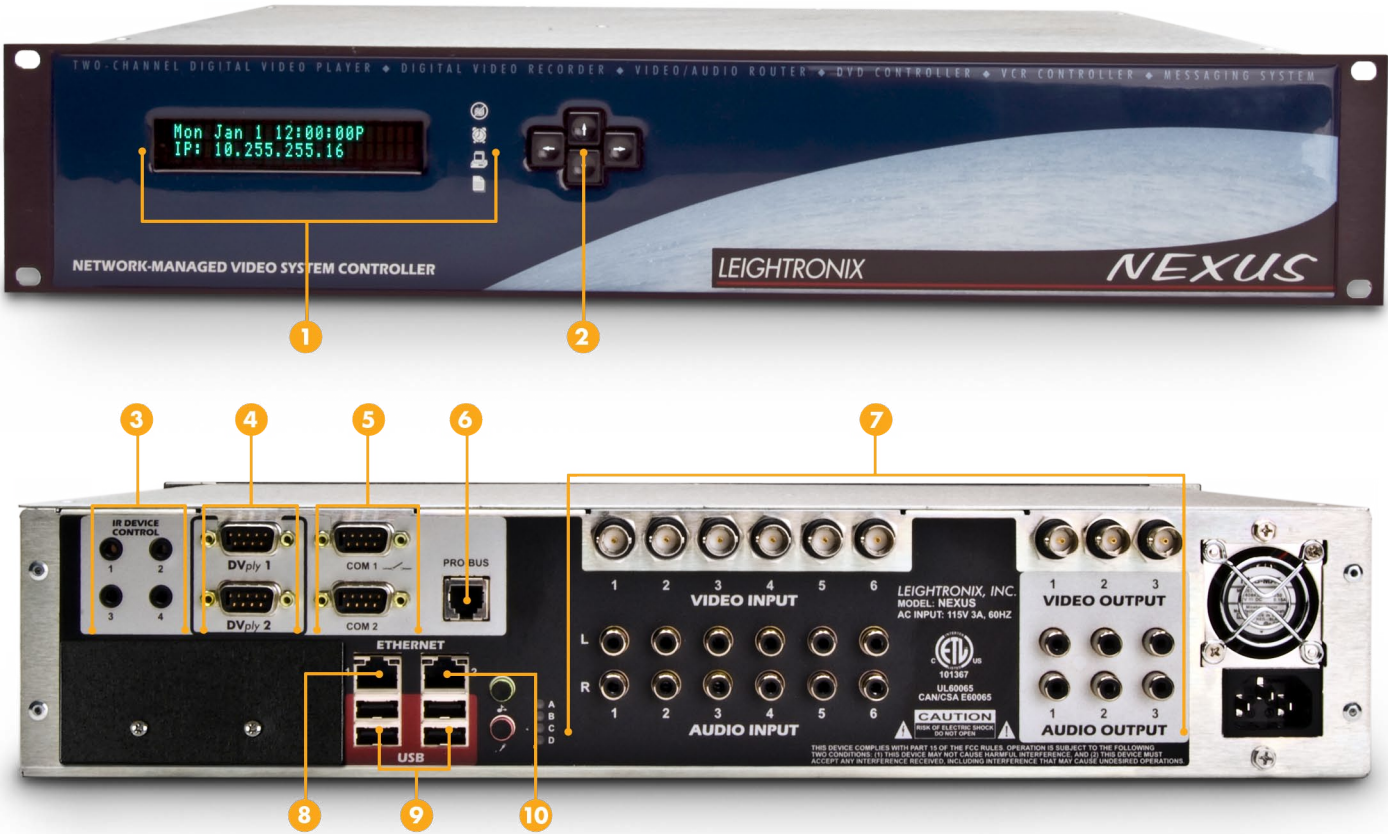
- Four Infrared Control Ports
- Two DVply™ Serial Control Ports — DVD Control with Title: Chapter Access
- Optional PRO-BUS™ Control Interfaces (DVD/VCR/GPI)
- Optional ePRO-BUS™ Remote Control for up to 16, Remote PEGvault-SD Digital Video Encoders via TCP/IP Network

Video/Audio Signal Routing

- Internal 8x4 Video and Stereo Audio Routing Switcher
- Control for Select External Routing Matrices

Local and Remote System Control

- Drag and Drop Scheduling with Error Checking and Conflict Reporting
- Comprehensive Media Library
- Remote Management via TCP/IP Network
- WebNEXUS™ Mobile Browser-Based Interface Designed Exclusively for Mobile Electronic Devices



- 1** Vacuum Fluorescent Display and Status LEDs — Front panel offers status on: time/date, MPEG channels (play/record), switcher, schedule activity, hardware/firmware versions, serial number, IP address, valid video, schedule activity, and logged events.
- 2** Keypad — Password-protected access to the main display menu. Quickly and easily configure the NEXUS for network connection (IP address, subnet, gateway) and enable/disable key system functions.
- 3** Integrated IR Device Control — Four infrared (IR) device control ports are built into the NEXUS and may be configured to operate with a variety of DVD and videotape equipment from leading manufacturers.
- 4** DVply — Advanced DVD player control for two commercial grade DVD players allows random disc access with title:chapter selection.
- 5** Communication Ports — For expanded switching, connect COM 1 to a supported video/audio routing switcher for system control of up to 32 inputs and 32 outputs. COM 2 is for diagnostic purposes only.
- 6** PRO-BUS — Your versatile solution for device control. PRO-BUS device control interfaces are available for hundreds of models of VCRs and DVD players and recorders.
- 7** Internal Routing Switcher — A fully integrated, true matrix video/audio routing switcher is standard on the NEXUS.
- 8** 10/100/1000BASE-T Ethernet 1 — Provides a high speed connection to a TCP/IP network. Remotely control system and manage digital media using the provided WinLGX software.
- 9** Four USB 2.0 Ports — Local digital media storage via USB allows configuration of up to one terabyte of local media storage.
- 10** 10/100/1000BASE-T Ethernet 2 — High speed connection exclusively for private, local media storage network using the TOTAL SHARE option. Add up to 4 more terabytes of local media storage using approved network attached storage devices.

Digital Video Server

Video Server Key Features

- Simultaneous operation of all channels (play & record)
- Extended program recording capability — individual program recording for up to 24 hours in length
- Compliant with Alliance for Community Media (ACM) Server Standards



Two fully independent digital video playback channels plus a record channel are built right into the NEXUS and can be simultaneously operated. The built-in record channel supports both constant (CBR) and variable (VBR) bit rate encoding. Three user-defined recording parameters allow the operator to select and save the video bit rate(s), full D1 or half D1 resolution, and audio sampling settings. For immediate or scheduled recording, simply click on one of the three recording presets to select the right parameters for the job. During a record session, the NEXUS can even be told to always overwrite an existing MPEG file or create a new, unique name on-the-fly. Extended length, continuous file recording for up to 24 hours at high-quality MPEG-2 video/audio bit rates ensures that even the most demanding record situations are no problem for the NEXUS.

A special ingest feature included with the NEXUS uses PRO-BUS control to automate recording from videotape and DVD source machines. Select the source device from any of the system resources, indicate the desired quality using the recording presets, name your file, enter the length, and go. WinLGX software automates the process and allows you to digitize your video with ease.

File Transfer

If your programming originates from a source outside your playback system, such as output from a non-linear editor, simply transfer the files onto the NEXUS hard drive for immediate playback. The NEXUS accepts MPEG-1 and MPEG-2 files output from many popular non-linear editing systems and professional encoding equipment. Gigabit Ethernet ensures rapid transfers of large media files.

Scalable Local Media Storage

For an innovative approach to media storage, the NEXUS uses external hard drives connected to USB (Universal Serial Bus) ports. The NEXUS digital media storage is fully scalable, with four USB 2.0 ports that allow you to set up and adjust your file storage capacity to meet the specific needs of your operation. Connect up to a total of one terabyte of external USB storage to hold hundreds of hours of programming.

The LGX-500GBR-D and LGX-1TBR-D are high performance USB hard drive arrays featuring full data redundancy. Each model is equipped with dual hard drives, configured in RAID 1 mode, providing fully mirrored data (the drives are exact copies of each other). The drive enclosure is rack mountable and occupies only one rack unit of space.

With increased drive capacity at a lower cost, USB storage makes sense and saves you money (USB storage devices sold separately).

Visit leightronix.com/USBstorage for additional information on USB digital media storage options.



LGX-4TBR-N
4 terabyte RAID hard drive array for use with TOTAL SHARE option

Expanded Media Storage

The NEXUS TOTAL SHARE™ option dramatically increases your digital media storage capacity through a private, dedicated digital media storage network using approved Network Attached Storage (NAS) devices. The expanded private storage network is exclusively for local digital media storage and is isolated from the primary gigabit Ethernet port used for system control. Up to four terabytes of expanded storage may be configured in addition to the standard USB storage for an overall system capacity of five terabytes!

Increased Channel Capacity

Increase your system’s channel capacity by attaching up to four NEXUS, UltraNEXUS™, or UltraNEXUS-SDI™ video servers to the TOTAL SHARE network. The NEXUS series video server share all NAS devices on the TOTAL SHARE network, creating a modular video server system.

Visit leightronix.com/TOTALSHARE for more details on expanded storage and channel capacity.

Digital Media Storage Chart

The following table shows typical record times for the NEXUS constant video bit rate (CBR) recording. The examples given in the table below are based on MPEG-2 encoding with full D1 resolution (720x480) video and 256Kb/sec audio bit rate. The NEXUS also supports variable bit rate (VBR) encoding, offering the potential for even more storage time.

Total Storage	Hours @ 4Mb/s	Hours @ 6Mb/s	Hours @ 8Mb/s
500GB	225	156	120
1TB	450	312	240
5TB	2,250	1,560	1,220

Note: Manufacturers’ methods for reporting hard drive sizes as well as data protection (RAID) will affect the actual usable drive capacity realized by the NEXUS system.



LGX-1TBR-D
1 terabyte USB RAID hard drive array

Digital Video Messaging



The NEXUS can handle your digital video messaging needs without external hardware. Drag and drop video slides right into your schedule and synchronize your vital messages with program playback.



Graphic and text video overlay — scheduled and/or emergency messaging

Powerful Digital Video Messaging - Built In!

The NEXUS is equipped with two independent digital video messaging channels and two digital media overlay channels that support both graphics and text. No additional hardware is necessary. Everything you need for communicating with dynamic, professional looking video messaging is built in.

Video Slides and Slide Shows

Video slides may be organized on an individual basis or grouped into slide shows using up to 32 user folders. WinLGX management and control software makes it easy to complement video programming with video messages as part of the standard broadcast schedule. Simply select video slides, and/or video slide shows from the media library and drag and drop them into your schedule. Introduce programming by strategically placing slides before or following programs with “coming up next” information.

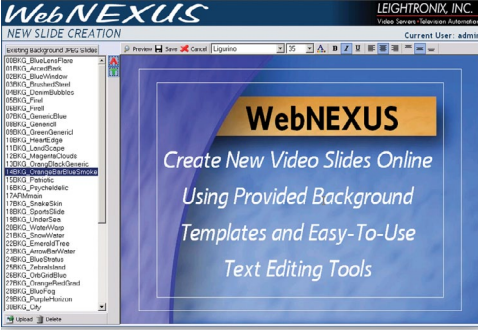
Video Overlay

The NEXUS also provides support for hundreds of video overlay resources. Video overlays may be integrated within the broadcast schedule or initiated on an urgent basis using the emergency messaging feature. Each video overlay resource includes can include full screen graphics with support for transparency, and custom text in the lower third of the screen. Video overlays may appear over digital resources such as digital video clips and programs, and/or video slides.

Virtual Channels

For a simpler approach to video messaging, the NEXUS Virtual Channels provide two looping, fallback video sources that automatically appear between scheduled programs. The Virtual Channels allow users to easily create and display a default looping playlist of multiple NEXUS video/audio sources between programs. The Virtual Channels may be used along with video messaging resources in the broadcast schedule.

A wide range of system resources may be added to the Virtual Channels, including video slides, video slide shows, digital video (MPEG) clips, and the TOTAL INFO dynamic data display option.



The WebNEXUS interface is simple enough for a first-time user to create and manage striking and effective video slides.



A dynamic, onscreen program guide provides viewers with a complete listing of upcoming programs.

WebNEXUS Digital Video Messaging

A built-in Web interface, WebNEXUS™ is a powerful and versatile tool for remote digital video messaging. From anywhere your network extends, up to 32 authorized users can log into WebNEXUS and upload slides, create new slides, and generate emergency messages. Authorized users can quickly and easily submit video slides imported as common JPEG images into separate, password-protected user accounts. Each user can upload hundreds of slides into their own folder within the NEXUS to form an individual slide show. During upload, users determine the days, times of day, and/or date(s) the slides will appear.

Individual video slides remain inactive until they have been reviewed and added to the slide show by the system administrator. Select, trusted users can be assigned automatic authorization rights, adding new slides to the slide show without administrative approval.

Online Video Slide Creation

With the WebNEXUS text editor, users can also create custom slides by placing text directly over any of the uploaded or provided background slide templates. Text editing tools give users the ability to choose from specialty type fonts designed especially for broadcast television and also select the text’s font color, size, and position on the screen.

Onscreen Program Guide

The NEXUS can automatically generate a dynamic onscreen display of upcoming programs. Retrieving information from the schedule, the NEXUS automatically overlays a listing of the next ten upcoming programs on a user-selected graphic background. The program guide can be scheduled at specific times as an individual slide or appear within the normal rotation of one or more slide shows.

More information on WebNEXUS can be found on page 16.

Emergency Messaging

Log into WebNEXUS and activate urgent video messages. WebNEXUS makes emergency messaging fast, easy, effective and is available to any authorized user.

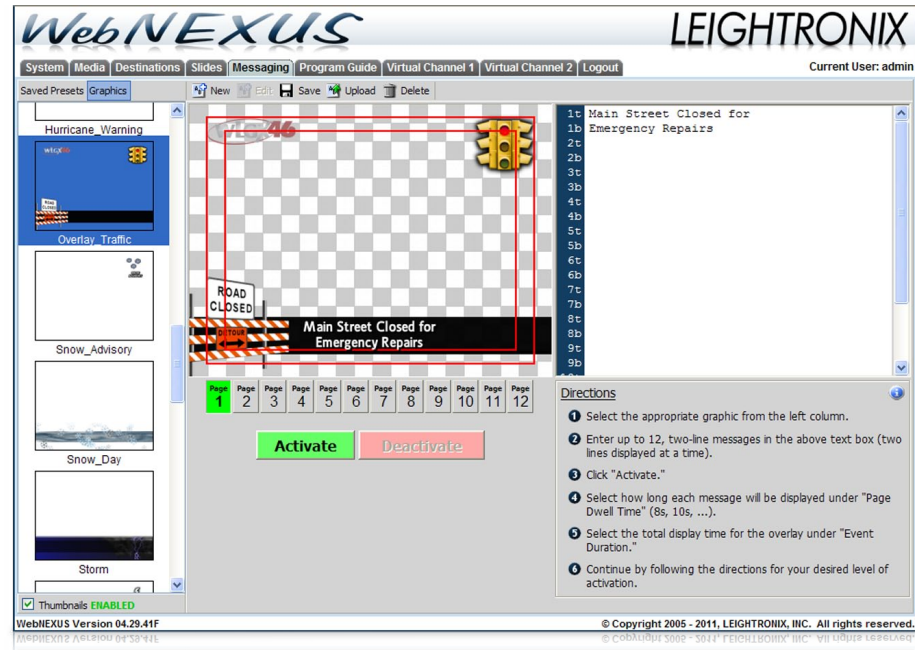


Before



After

Using WebNEXUS, authorized users can create and activate an emergency message quickly and easily by simply selecting a background graphic and entering up to twelve pages of two-line text. Text appears in the lower third of the screen while users can determine the placement of images by creating and uploading graphic files that support transparency. The ongoing programming is fully or partially covered based on the configuration of the selected graphic. Once activated, emergency messages are displayed immediately over digital programming and remain available for the specified duration.



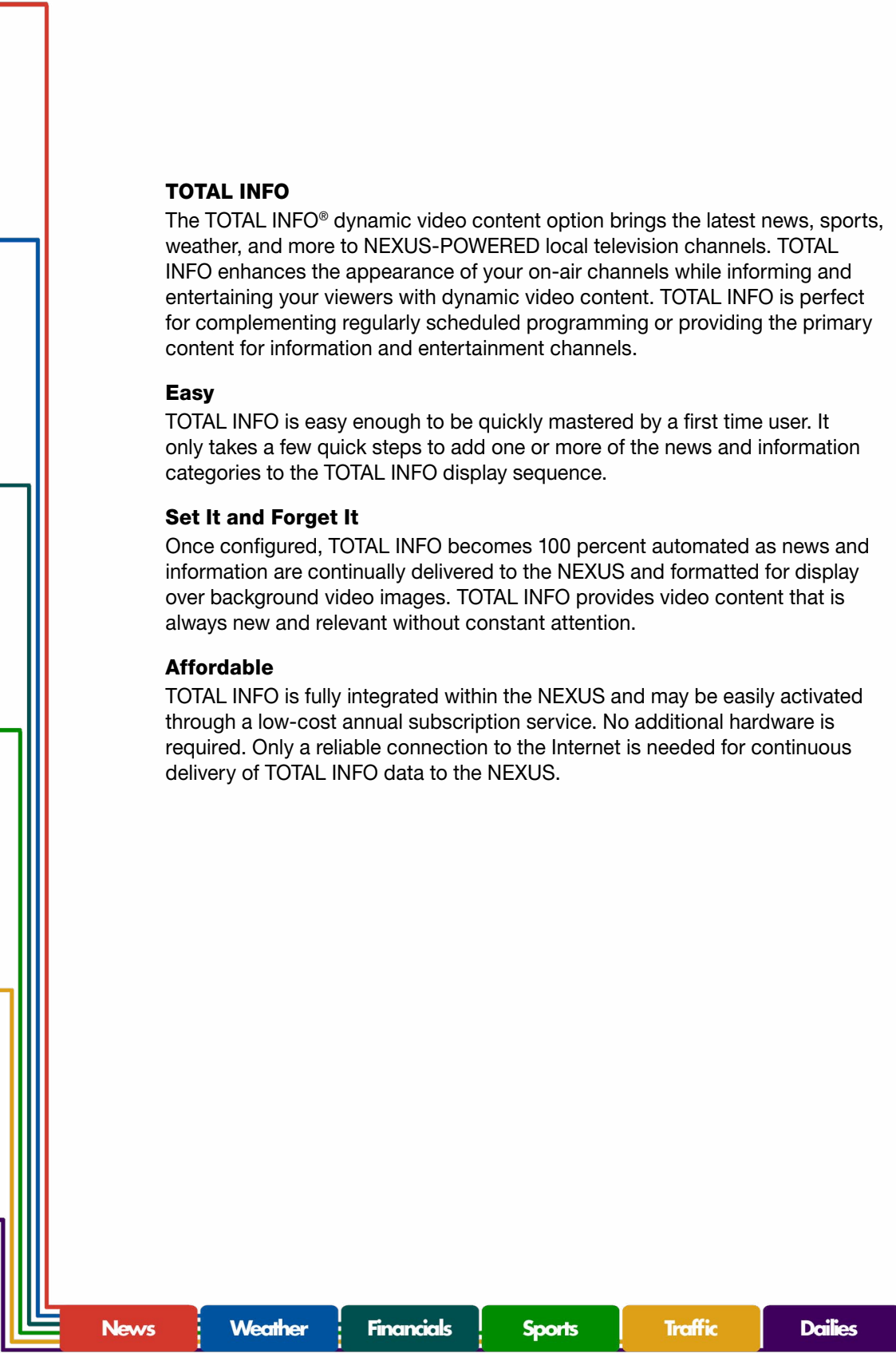
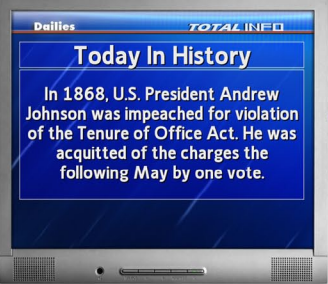
Dynamic Video Content

TOTAL INFO
The TOTAL INFO® dynamic video content option brings the latest news, sports, weather, and more to NEXUS-POWERED local television channels. TOTAL INFO enhances the appearance of your on-air channels while informing and entertaining your viewers with dynamic video content. TOTAL INFO is perfect for complementing regularly scheduled programming or providing the primary content for information and entertainment channels.

Easy
TOTAL INFO is easy enough to be quickly mastered by a first time user. It only takes a few quick steps to add one or more of the news and information categories to the TOTAL INFO display sequence.

Set It and Forget It
Once configured, TOTAL INFO becomes 100 percent automated as news and information are continually delivered to the NEXUS and formatted for display over background video images. TOTAL INFO provides video content that is always new and relevant without constant attention.

Affordable
TOTAL INFO is fully integrated within the NEXUS and may be easily activated through a low-cost annual subscription service. No additional hardware is required. Only a reliable connection to the Internet is needed for continuous delivery of TOTAL INFO data to the NEXUS.



Remote Recording



leightronix.com/PEGvault-SD



leightronix.com/cameracontrol

The PEGvault-SD captures video/audio from a live feed, VCR, or any other source you want to record and produces high quality digital media files for playback on broadcast, cable, and streaming video-on-demand systems.

Push button recording and preset encoding parameters simplify the process of capturing video while hardware-based, superior MPEG encoding technology ensures consistent, and top-quality results every time.

When you are done recording, the PEGvault-SD automatically transfers digital media files to a pre-assigned video server of your choice, including NEXUS® series video servers and PEG Central®, the Web media hosting and streaming video-on-demand service from LEIGHTRONIX.

Install the PEGvault-SD anywhere you need it and automatically transfer the digital files to your playback site's location.

Camera Control

Record any event with consistent, broadcast quality results using the PEGvault-SD Remote Video Capture and Multi Camera Control System. This solution allows a single operator to easily manage a live, multi-camera production, recording an event from multiple vantage points with professional, broadcast quality results.

The camera control system was designed for government agencies of all sizes, educators, and any other organization seeking a compact, all-in-one system for event capture. Ideal for capturing public meetings, fine arts concerts, local sporting events, or any other event that requires multiple camera angles to capture all the action from multiple vantage points.

Multi-Site Remote Recording

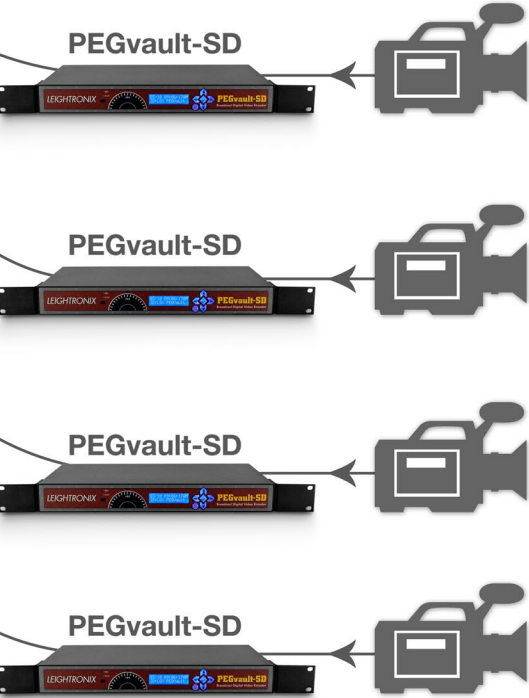
- Scheduled and immediate recording control for up to 16 remote sites
- Content is automatically transferred from all active sites to the host NEXUS server
- Files are transferred, not streamed, maintaining high-quality digital media suitable for rebroadcast

Remote Recording Control



ePRO-BUS

With optional ePRO-BUS™ control, even unmanned, remote locations are no problem for the PEGvault-SD. The NEXUS can send commands (scheduled or immediate) to up to 16 remote encoding sites, where the PEGvault-SD is instructed to RECORD, STOP RECORD, then automatically transfers digital media files back to the commanding video server.



Remote Broadcasting

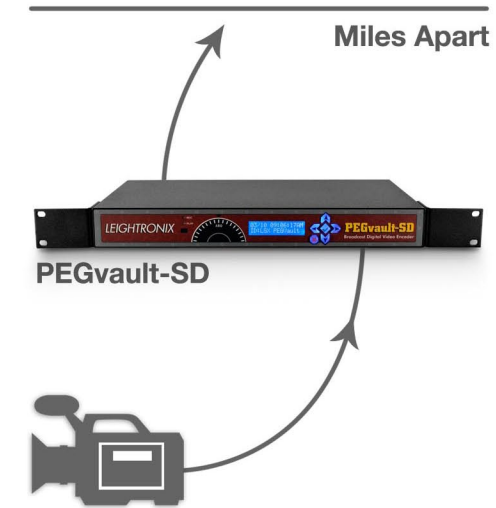


PEGcasting
Cover a remote, live event without a direct video feed by letting the PEGvault-SD and the Internet deliver it for you.

An integral part of PEGcasting™, the PEGvault-SD pre-send and auto-play features allow programs remotely recorded to be automatically sent to and broadcast at a NEXUS site within minutes after a recording starts.

After the NEXUS begins to receive a pre-sent file, the PEGvault-SD auto-play setting triggers playback of the file as quickly as two minutes after the transfer begins resulting in a Next to Live™ (N2L™) broadcast.

Visit leightronix.com/pegcasting for more information.



leightronix.com/PEGcasting

Device Control & Switching

PRO-BUS interfaces provide control for a wide range of DVD Players, DVD recorders, and VCRs.



VCR and DVD Control
The NEXUS has the power to command and control up to 22 external playback and recording devices and even includes four integrated infrared control interfaces right out of the box. The IR control ports are user-programmable for operation with select DVD players/recorders and VCRs. One IR transmitter cable is included with the NEXUS. Additional IR transmitter cables are available for purchase.

The NEXUS also supports the PRO-BUS™ control scheme. Optional PRO-BUS™ interfaces support hundreds of DVD players/recorders and VCRs and are available for infrared, wired (mini-plug), and serial (RS-422) remotes.

Advanced DVD Player Control
For advanced DVD player control, the NEXUS is equipped with two DVply™ RS-232 DVD player control ports. Add a couple of commercial DVD players and you will open new doors to playback flexibility with random disc access (cue by Title: Chapter).

Facility Signal Routing
If you're running a local television operation, chances are you need signal routing. The NEXUS has a powerful video/audio routing switcher built right in. Six external inputs plus two internal digital player inputs can be routed to any of three external outputs. A fourth internal "output" is routed to the digital video recorder inside the NEXUS. True matrix routing, any source to any destination, is a standard feature of the NEXUS.

Video Detection
Loss-of-video detection is featured on all three video outputs of the internal switcher. Each video output is independently and continually monitored for a valid video signal. If video is lost, a default input will automatically be routed to the output. A unique default input (1 of 6) may be assigned independently for each output.

Control for External Routers
The NEXUS is capable of interfacing with and controlling video/audio routing matrices with up to 32 inputs by 32 outputs from select manufacturers.

WebNEXUS Web Interface

WebNEXUS™ is a built-in Web server within the NEXUS providing system status and control using a standard Web browser. WebNEXUS provides easy access for system status/logs, media management, video messaging, and configuration of the Virtual Channels.

WebNEXUS provides support for up to 32 unique users, with individual user rights assignable by the system administrator.

Monitor System Status

- Site information - name, location, serial number, firmware version
- Switcher status inputs/outputs
- MPEG player 1-2, and MPEG recorder status
- USB digital media storage - used space, free space, diagnostics

Manage Digital Media Destinations and Transfers

- Select digital media files for automatic transfer to other NEXUS video servers
- Transfer to LEIGHTRONIX PEG Central streaming video-on-demand site
- Transfer to third party streaming, broadcast, or archive server (FTP capable)

Create and Contribute Video Slides

- Upload complete slides as standard JPEG images
- Create new slides online with the online slide editor

Emergency Messaging

- Login and easily activate urgent messages
- Add lower third text to graphic backgrounds
- Graphic transparency allows for full or partial screen display
- Limit event duration in days, hours, and minutes

Virtual Channels

- Configure Virtual Channels 1 and 2 for automatic display between program playback
- Select from video slides, video, external sources, and/or dynamic video content

WebNEXUS Mobile

Control the NEXUS from the palm of your hand with WebNEXUS Mobile



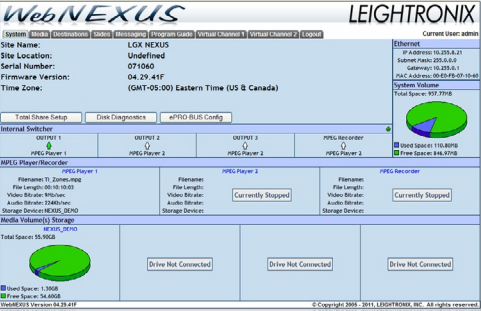
WebNEXUS Mobile™ gives users handheld, remote access and control to their NEXUS television automation and video server systems. System administrators can easily check status, activate video playback, trigger a recording, or perform video/audio switches.

WebNEXUS Mobile is accessible over the Internet through several popular handheld devices, including cellular phones and wireless network devices based on the Apple® iOS operating system. The WebNEXUS server automatically detects the device type and provides a Web format suitable for their individual display capabilities.

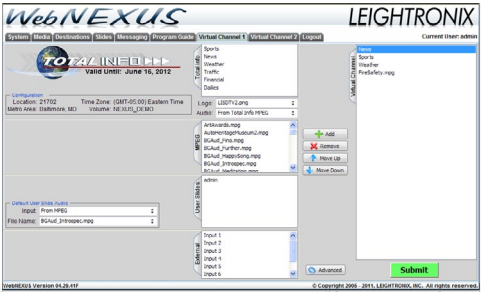
Once connected, a user is prompted with a standard login. With the entry of a valid username and password, the remote user is provided a menu offering status and control over the digital video playback and record channels and the internal or external system routing switcher. The interface provides real time device control and status.

Mobile Control and Monitoring Features

- Check system and switcher statuses
- Send switch commands
- Monitor activity of MPEG playback and record
- Play MPEG video files
- Record MPEG files
- Supports Apple® iOS — works with iPhone® and select iPod touch® models



WebNEXUS provides convenient access to the NEXUS using a standard Web browser.



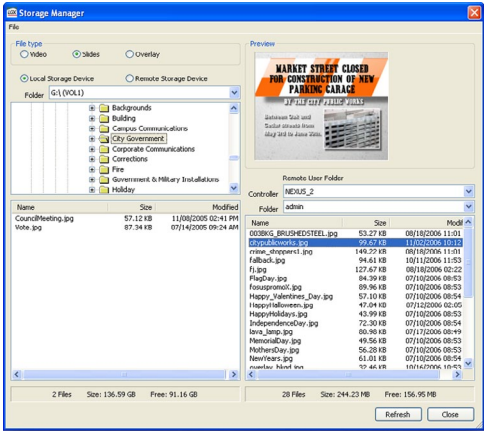
The NEXUS Virtual Channels make it easy to configure default video sources for automatic display between video programs.

WinLGX Software

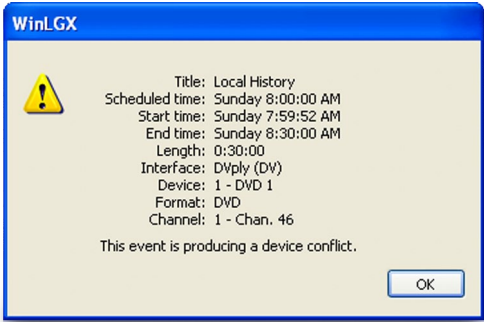
Included with the NEXUS controller is the WinLGX™ management and control software. WinLGX provides all of the tools necessary for local and remote system control of LEIGHTRONIX digital video servers and system controllers via TCP/IP network. System configuration, immediate device control, scheduling, and system status are all easily managed through the software’s powerful yet easy-to-use interface.

Support for Mixed Media Formats

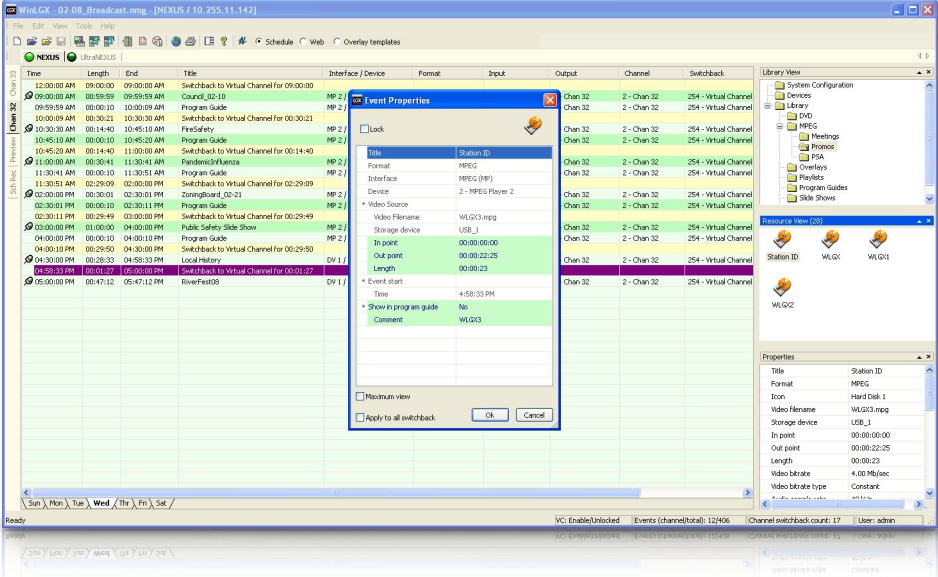
The media resource library included with WinLGX makes it a breeze to organize programs, including digital video files (MPEG), DVD programs, videotape titles, and JPEG video slides. Custom library folders can also be created for at-a-glance media selection. New MPEG programs can be automatically added to the library during recording or file transfers with the special “Add to library” function.



The Storage Manager makes it easy to send, retrieve, move, and delete digital video programs, slides, and overlays.



WinLGX monitors resources and channels for conflicts during scheduling.

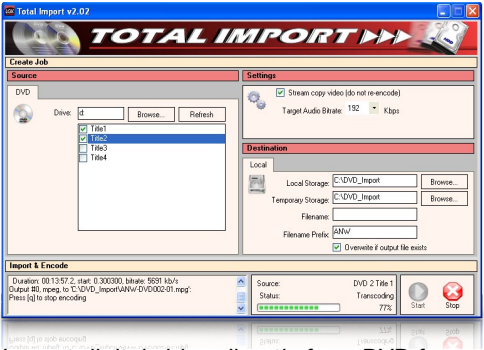


Drag and Drop Scheduling with Error Checking

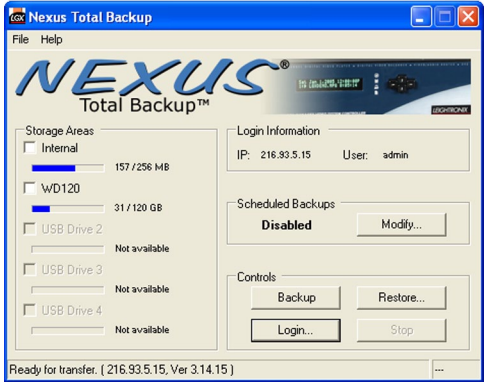
Drag and drop scheduling with conflict reporting ensures quick and easy development of playback schedules. Each time a new program is added to the schedule, the comprehensive error checking routine reviews all devices, resources, and channels, immediately alerting users of any conflicts.

Licensing and Updates

No need for a license with WinLGX. WinLGX is provided with the NEXUS free of charge and may be copied and distributed to multiple users as necessary. Updates are also provided at no cost to registered customers at the LEIGHTRONIX online Support Center.



Import digital video directly from DVD for playback on the NEXUS.



Automatically back up system and digital media files to a local or network location with Total Backup.

Multi-Channel, Multi-System Control

WinLGX is a one-stop application that offers simple channel expansion, allowing users to easily operate up to eight LEIGHTRONIX digital video servers and system controllers from one interface. With up to eight NEXUS or UltraNEXUS servers, users have 16 channels of digital video playback at their command. Users just click on the controller tabs displayed across the top of the WinLGX scheduler to access separate schedule windows for each of their LEIGHTRONIX digital servers/controllers. The WinLGX scheduler also allows users controlling larger routing switchers to automate 16 channels per switcher for even greater system control.

Additional Software Utilities

DVD Import

For programming received on DVD, TOTAL IMPORT™ allows you to maintain an all-digital workflow. Simply place the DVD in your PC drive and TOTAL IMPORT reads and converts the DVD video for storage and playback on the NEXUS. Total Import combines multiple VOB video files into a single, contiguous MPEG file ready for immediate playback. The TOTAL IMPORT software utility is included free of charge with the NEXUS.

Automatic System Backup

Schedule automatic system data and media backups at regular intervals using the NEXUS Total Backup™ application. Simply point to a local or network drive and indicate how often and at what time regular backups should occur. System backup is performed as a low-priority background task and does not impact your on-air operations.

Live Streaming



Simply connect the output from a LEIGHTRONIX broadcast video server or any other live video/audio source to the PEGstream-SD™ and you're ready to deliver your programming live over the Internet. The PEGstream-SD live streaming encoder captures your video feed in real time and sends it out as a single digital video stream directly to PEG Stream™, the online live streaming service. World class servers receive and replicate the stream, accommodating online viewers both locally and worldwide. Together, the PEGstream-SD and PEG Stream ensure a high quality viewing experience while alleviating any potential strain on your local network.

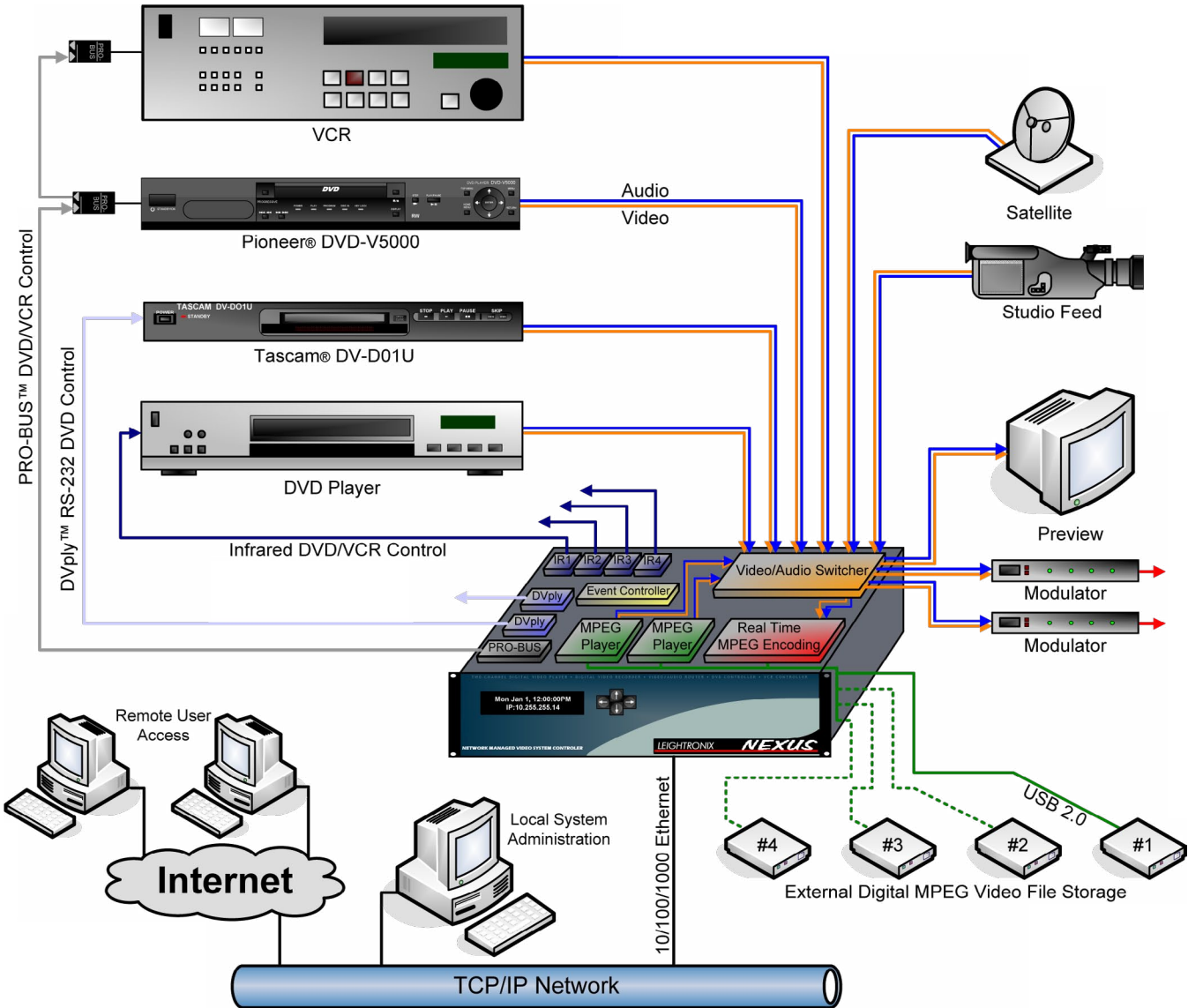
The PEGstream-SD is designed for smart integration with LEIGHTRONIX NEXUS series broadcast video servers. The PEGstream-SD is capable of receiving commands on the fly to adjust stream bit rates and can even block and substitute video content not approved for Webcasting.

Visit leightronix.com/streaming and learn how you can experience the seamless integration of broadcast and Web-based media.



System Configurations

A true station-in-a-box, the NEXUS is equipped with everything necessary for successful unattended broadcasting. Need more inputs and outputs? The NEXUS is capable of interfacing with and controlling video/audio routing matrices with up to 32 inputs by 32 outputs from select manufacturers. Visit leightronix.com/hexus for more system diagrams featuring external routing switcher control.



Video Server Comparison

The NEXUS series all-in-one video server/station automation solutions share many common features and functions. These unique products offer varying levels of performance and system control capabilities, including digital video playback and recording, device control, and video/audio routing. Use the following table to compare features and find the best LEIGHTRONIX video server solution for you.

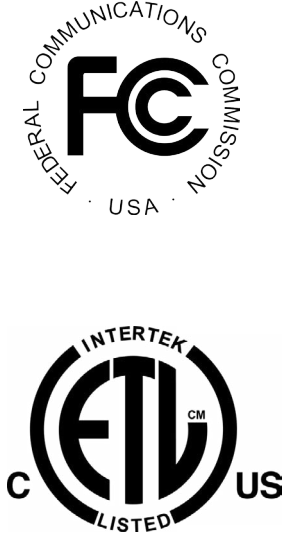


Price	\$8,995.00	\$10,995.00	\$13,495.00
Digital Video Server	2 Digital Video Playback Channels 1 Digital Video Record Channel for Broadcast	2 Digital Video Playback Channels 1 Digital Video Record Channel for Broadcast 1 Digital Video Record Channel for Streaming Video-on-Demand (VOD)*	
Storage Options	Up to 5TB RAID Storage (1TB USB and 4TB NAS with TOTAL SHARE™)	Up to 20TB RAID Storage (4TB USB and 16TB NAS with TOTAL SHARE)	
VOD Streaming	Not Available	Automatic Transfer of Digital Media Files to LEIGHTRONIX Streaming VOD Service — PEG Central®, Schoolstream.TV™, or Worshipnet.TV™	
Live Streaming	Smart Streaming Integration with LEIGHTRONIX PEGstream-SD™ Live Streaming Media Encoder and PEG Stream™ Live Streaming Service		
Digital Video Messaging	2 Digital Video Messaging Channels 2 Digital Video Overlay Channels		
Video Messaging Features	2,000 Video Slide Capacity, Online Slide Management and Creation, Text and Graphic Overlay for Digital Media, Onscreen and Online Dynamic Schedule Display, and Online Emergency Messaging Creation		
Online Video Slide Editor	Browser-Based Slide Editor Included	Advanced, Browser-Based Slide Editor — Multi-Layer Support, Web Cam Photo Capture and Import, Multiple Font Effects, Powerful Graphic and Text Filters, Drawing Tools, Graphic Library	
Dynamic Video Content	Optional TOTAL INFO® — News, Local Weather, Sports, Financials, Metro Traffic, Dailies	TOTAL INFO First Year Included — News, Local Weather, Sports, Financials, Metro Traffic, Dailies	
Zoned Video Display	Not Available	Zoned TOTAL INFO — Dynamic, Multi-Zone Display Consisting of a Primary Playback Window for Digital Video and Video Slide Shows Complemented by TOTAL INFO Local Weather and a User-Selected Rotation of TOTAL INFO News, Sports, Financials, Metro Traffic, and/or Dailies	
Device Control	Control up to 22 VCR/DVD Players (Standard and Optional Control), ePRO-BUS™ Control for Remote PEGvault-SD™ Digital Video Encoders		
Video/Audio Connections	Composite Video (BNC), Two Channel Audio (RCA)		SD-SDI Video In/Out, Support for Embedded, Digital (AES), and Analog Audio In/Out
Signal Routing	Internal 8 x 4 Video/Audio Routing Switcher, Control for External Routing Switchers (32x32)**	Internal 8 x 4 Video/Audio Routing Switcher, Control for External Routing Switchers (250x250)**	2 Record Inputs, 2 Playback Outputs, Control for External Routing Switchers (250x250)**
Software	WinLGX™ Network Management Application — System Control, Scheduling, Media Management; Total Backup™ Automated Backup Utility for Schedules, System Data, and Digital Media; Total Import™ DVD Import Utility		
Web Interface	WebNEXUS™ Web Interface — System Monitoring, Online Slide Creation and Management, Emergency Messaging, Virtual Channel Configuration, WebNEXUS Mobile™ Remote System Access and Control using Select Electronic, Handheld Devices		
Warranty and Support	FREE 5 Year Parts and Labor Warranty with Priority Service FREE Telephone Support FREE Live Desktop to Desktop Support via WebEx® FREE Email Support and Dedicated Support Center Web Site: www.supportcenter.leightronix.com FREE Software and Firmware Updates and Assistance for the Life of the Product		

* VOD recorder requires a USB hard drive in addition to either a standard USB hard drive or expanded (NAS) media storage.
** RS-232 interface cables for PRO-16™/NET-164™, AUTOPATCH™, KNOX, KRAMER, LEITCH®, PESA, SIGMA, and TEQ GEAR routing switchers are included. EXTRON® and SIERRA routing switchers are also supported. Visit leightronix.com/routersupport for a complete list of supported routing switchers.

Technical Specifications

- Dimensions—Two standard 19” rack units with overall dimensions of 3.50”H x 19.00”W x 15.00”D
- Weight—17 lbs.
- Network Port 1—Eight-position/eight-conductor RJ-45 modular jack, 10/100/1000BASE-T Ethernet, TCP/IP, user-configurable IP address, subnet, and gateway
- Network Port 2—Eight-position/eight-conductor RJ-45 modular jack, 10/100/1000BASE-T Ethernet, dedicated port for use with the TOTAL SHARE option
- Display—2 x 24 character vacuum fluorescent display
- Keyboard—Keypad with four push buttons for password-protected front panel status and configuration
- Internal Clock—Battery-backed time and date, temperature compensated crystal oscillator for high accuracy
- Video Standard—NTSC, standard definition, 4x3 aspect ratio
- Video Encoding—MPEG-2, full D1 and half D1 resolution, 1.5-10Mb/s variable bit rate encoding, 3-8Mb/s constant bit rate encoding
- Video I/O—6 BNC video inputs, 3 BNC video outputs, NTSC composite video 1V P-P, active switching, unity gain
- Audio Encoding—MPEG-1 layer II, 44.1K and 48K sampling rates, 192Kb/s and 224Kb/s audio bit rates
- Audio I/O—6 dual RCA audio inputs, 3 dual RCA audio outputs, -10dBV unbalanced line level, unity gain
- Video/Audio Recording Capacity—Maximum individual MPEG program length of 23 hours, 59 minutes
- Standard Digital File Storage—External hard drive, 4 USB 2.0 ports, 1 terabyte maximum storage
- Expanded Digital File Storage—Expanded storage capacity with TOTAL SHARE option, 4 terabytes total storage (in addition to standard storage, 5 terabytes maximum overall system capacity)
- Infrared Control Ports—4 mini-jack device control ports
- PRO-BUS—Six-position/six-conductor modular jack, LEIGHTRONIX proprietary interface control bus
- DVply—2 DB9M RS-232 device control ports
- Power Input—Three-position IEC power input with removable power cord
- Power Supply—Internal, accepts 90 to 264VAC @ 47 to 63Hz
- Product Safety—Certification by ETL Semko for U.S. Standard(s) for Audio, Video & Similar Electronic Apparatus (UL-60065) and Canadian Standard(s) for Safety Requirements for Audio, Video & Similar Electronic Apparatus (CAN/CSA-C22.2 No. 60065)
- Compliance—FCC Part 15
- Digital Media Licensing—Licensed under MPEG LA® LLC’s MPEG-2 Patent Portfolio
- Warranty—5 Years, Parts and Labor



Support and Warranty

At LEIGHTRONIX we understand that your success depends not only on the products you choose but the support that accompanies it. That's why we back our products with an amazing 5 year hardware and software warranty, and free support for the life of our products.

Support Center

Register your products and gain convenient access to the LEIGHTRONIX Support Center resources and learning tools. Everything in our Support Center, including software and firmware updates, training videos, manuals, tutorials, and more, is FREE.

Live, Online Support

Interact directly with a live LEIGHTRONIX technical support representative via the Internet through WebEx®, a software sharing application. WebEx allows you and the representative to share desktop views and transfer PC control between one another.



At LEIGHTRONIX, our experience and expertise gives us the confidence to back up our products with a 5 year warranty and the best factory support in the industry.



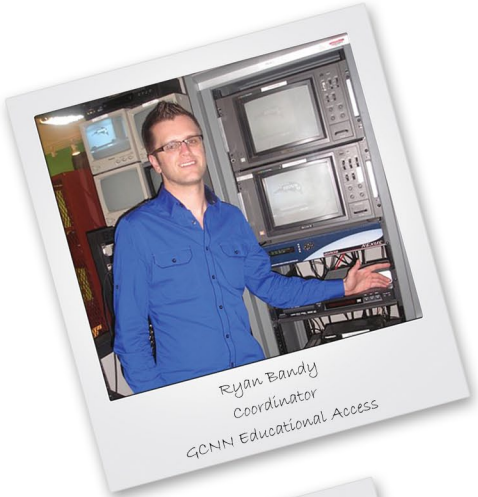
NEXUS Customers

Proven Success - Don't just take our word for it

Head to leightronix.com/customers to view these and more customer success stories with exclusive video interviews.

“ The key thing for me as a teacher is that I want to spend less time worrying about technical issues and more quality one-on-one time to instruct my students. That's really where the NEXUS has come in handy for me. ”

- Ryan Bandy
Read the rest of Ryan's story at leightronix.com/chatham



“ I got recommendations to use the NEXUS from people in the industry that I both admire and respect, so word of mouth was a strong force in making a decision. I'd definitely recommend the NEXUS to any government agency. ”

- Nathan Snook
Read the rest of Nathan's story at leightronix.com/fortbenning



“ The NEXUS has reinvented our workflow on Channel 16. The NEXUS has changed every aspect of our operation from the amount of programming we are able to produce, to how we get that programming on air. ”

- Matthew Brandimarte
Read the rest of Virgil's story at leightronix.com/oakpark



About LEIGHTRONIX

LEIGHTRONIX is recognized as an industry leader in specialty video equipment design and manufacturing, including digital video solutions, television automation, live and video-on-demand streaming media, and remote equipment control. A model of stability and longevity in the quickly evolving professional video market, LEIGHTRONIX continues to set standards in product value and versatility that exceed customer expectations in both product performance and support.

Exceptional product reliability, a standard 5 year warranty, and cost-free technical support have made LEIGHTRONIX a leading innovator of specialized video solutions.