



NEXUS-gbe

gigabit ethernet



NEXUS-gbe is a broadcast server with integrated audio, video and graphics capabilities for complete (D)TV channel layout and channel branding solutions. A MPEG or H264 encoder is integrated to support direct multicast DVB compliant transport streams on the gigabit Ethernet outputs, eliminating the need for external encoders.

It implements an integrated high-end playout solution which can be used in conjunction with PubliTronic Cobalt automation, stand-alone operation, or under control by 3rd parties.

Cost-efficiency and modularity is offered to every customer by utilizing a unique "pay for what you use" - model. From simple channel and bug playout, to high-end and feature rich graphics branded playout channels, **NEXUS-gbe** offers a fitting solution for a wide range of branding and playout applications. The integration of the audio/video encoder and multicast output is a further enhancement on the successful **NEXUS** product range; increasing cost efficiency, manageability and easy deployment.

Key features

- Integrated MPEG2/MPEG4/H264 encoder
- Outputs fully configurable SPTS multicast streams
- SD and HD compatible
- Integrated clips, text, animations, audio, tickers, crawls, logo's, 2D and 3D effects, DVE's, wss, teletext, closed caption subtitles and DVB subtitles
- Multi-channel audio support
- Free form channel design
- 4x 1Gbit/sec ethernet ports for IGMP multicast output supporting redundant connectivity
- 1x 1Gbit/sec ethernet content port
- 1x 100Mbit/sec Ethernet management port
- 24/7 playout
- Redundant HDD and PSU
- Stand-alone, networked or distributed (remote) operation

Typical Applications

- (D)TV channels
- Thematic channels
- Barker and multi-picture channels
- Distributed and remote playout
- Deployment close to distribution infrastructure
- Single and multi-channel playout
- "Channel-in-a-box" solution
- Function rich playout (EPG, SMS/MMS, voting and interactive channels)
- Tapeless playout

Integrated Playout

The integration of server, graphics branding and encoding functionality allows the **NEXUS-gbe** to be deployed closer to the distribution interface. It's integrated playout capabilities not only offers cost-efficiency by lowering capital investment, the resulting simplification of broadcast workflow and decreased maintenance costs have an amazing effect in lowering the cost of ownership. Without sacrificing any of the required functionality for function rich TV channels!

Audio, Video and Graphics server

NEXUS-gbe can playout a wide variety of videoclips in SD and HD format. Whether you play segments from larger video clips, a few frames or indefinite loops, multi-channel audio or with Dolby support; you will find the integrated video server functionality is amongst the most versatile servers in the market today.

The integrated graphics functionality is capable of rendering and displaying a variety of objects simultaneously in real-time. 2D and 3D effects are now supported through OpenGL alongside high quality text rednering, multiple tickers, animations, stills and bugs. PubliTronic offers free form template design tools for direct control or control by automation suppliers.

Innovative System solution

State-of-the-art multi-core processor technology has enabled deterministic and high performance behavior based on 12 years proven technology with the PubliTronic predecessors of the **NEXUS-gbe** server. PubliTronic boosts the application of **NEXUS-gbe** for integrated playout as a solution for both high-level and low-level playout.

Redundancy

NEXUS-gbe is designed for broadcast; a solid state disk is incorporated for the OS, redundant dual lead AC power supply and harddisk drives in a RAID1 configuration, provide optimal resilience. **NEXUS IP-manager**, using a separate processor, manages the status and health of the **NEXUS** unit and provides remote management tools for unmanned and remote playout sites.

The basic NEXUS-gbe 1U frame is available with a large variety of options to fulfil a wide range of playout applications.

Contact PubliTronic or your local distributor for more information on NEXUS, Cobalt automation and Indigo technology. We look forward to showing you the exciting possibilities this innovative product can offer your business!

Technical Details

PLAYOUT CAPABILITIES	
Clip playback	MPEG2 (PS, TS, long-GOP, I-frame only), D1030, D1050, IMX, DV, Quicktime, AVI, MXF, h263, h264, MPEG4, WMV
Disk capacity	RAID1-1TB (optional 2 TB), solid state disk for OS backup
Screen formats	PAL, NTSC, 720p, 1080i, 1080p
Graphics	OpenGL support
DVE	2D and 3D, multiple
Layers	unlimited
Animations	streaming, multiple
Text rendering	multiple, anti-aliased truetype TTF
Tickers, crawls	multiple
SIGNALS	
Streaming I/O	4x Gigabit Ethernet IGMP, SPTS, DVB TR 101 290 compliant stream
Encoding formats	Video: MPEG2, MPEG4, H264. Audio: MPEG1L2, MPEG1L3, AAC
Audio channels	48 kHz - 16 channels (Dolby optional)
Subtitles	optional, DVB subtitles, closed caption and in-vision
Teletext	optional
SYSTEM	
Linux OS	real-time 2.6 kernel
Ethernet	10/100/1G content, 10/100 for IP manager
PC i/f	VGA, keyb, RS232
Size (WxHxD)	484 x 44 x 600 mm / 19" x 1,74" x 23,6"
Weight	max. 15 kg / max. 33 lbs
PSU	Redundant, dual AC, max. 500 VA
Operating environment	10°C to 30°C / 32°F to 86°F
Relative humidity	10% to 90% non-condensing

PubliTronic

The Netherlands

Phone: +31 55 360 4344

Fax: +31 55 360 4113

e-mail: sales@publitrionic.com

website: www.publitrionic.com

