



# NEXUS-vds

video delay server



**NEXUS-vds** is a 1U video, audio, VBI & HBI delay server, with built-in branding for delay, repeat or loop applications.

NEXUS-vds delays up to 1.5 hour of video in uncompressed 270Mb SDI mode, with no quality degradation or loss of signal integrity. Up to 165 hours is possible through a high quality 4:2:2 MPEG2 compression in I-frame or long-GOP mode.

The VBI & HBI is always recorded as uncompressed bit perfect data to avoid any degradation on data such Dolby and teletext ensuring a 100% signal integrity and compatibility after delay. Next to these, propriety formats or standards such as closed caption, teletext, GPI cue tones, VITC, WSS, AFD, Nielsen and others are supported in a bit-perfect delay by the HBI &VBI.

#### Branding capabilities

The **NEXUS-vds** is based upon our industry leading **NEXUS-avs** and therefore shares the same power and resilience. It provides logos, clips, lives, DVE, local ads, animations, text, tickers, audio and captions. Original program content (video **and** audio) can be delayed, blanked, replaced and added.

#### Flexibility

Branding capabilities are available in a flexible configuration scheme and may be added to the delayed or undelayed signal. GPI or other real-time controls may apply in the delayed or undelayed domain. An additional 'cheat time' function allows operators to make corrections to the signal in

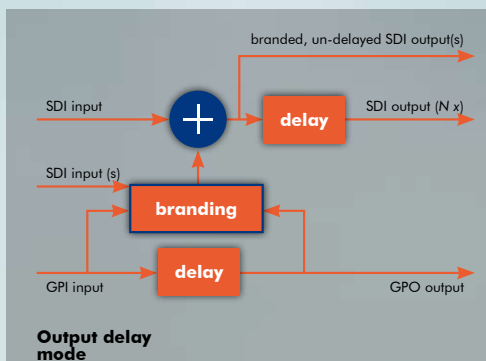
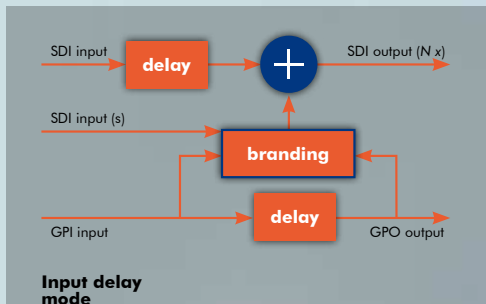
### Key features

- Time Delay up to 1 Hour uncompressed 270Mbit SDI
- Time Delays up to 24 hours MPEG2 at 4:2:2 50Mbit/sec I-frame or Long GOP encoding
- Delays are configured in single frame accuracy
- Uncompressed and uncompromised native VBI, HBI delay
- Multi-channel audio support (16 channel)
- Graphic, animation, audio and video overlays
- designed for 24/7 unattended payout
- Live video overlay option
- 100% Solid state storage for maximum performance and reliability
- HD upgradeable

### Typical Applications

- +1 hour delay
- Timezone corrections
- Re-scheduling programs
- Obscenity delays
- Ofcom compliancy
- Ad-insertion

the 'past', allowing obscenity and censorship functionality on audio and video. The combined flexibility in branding and output delaying within the depicted input and output delay modes make **NEXUS-vds** a truly unique and flexible video, audio and control delay system.



### Control and configuration

The **NEXUS-vds** can be controlled manually or by automation via GPI, VBI, manual triggers or ethernet API. The controls themselves can be delayed as well and will be played out in sync with the delayed SDI output. A web GUI offers a simple interface to configuring and controlling the **NEXUS-vds**. GPI inputs can be linked to specific branding actions and delayed to GPO pins. Additional web buttons allow real-time manual control and testing of the functionality.

### Redundancy and Reliability

State-of-the-art multi-core processor technology has enabled deterministic and high performance behaviour based on 12 years proven technology with the PubliTronic predecessors of the **NEXUS** server family. **NEXUS-vds** is designed for broadcast; solid state technology provides optimal resilience. **NEXUS IP-manager**, using a separate processor, manages the status and health of the **NEXUS** unit and provides SNMP and remote management tools for unmanned and remote playout sites.

## Technical Details

DELAY CAPABILITIES	
Uncompressed delay	10 secs – 1.5 hour (SSD option only)
Compressed delay	10 secs – 33 hours (@50Mbit/sec)
	10 secs – 165 hours (@10Mbit/sec)
	SSD option: 10 secs – 8 hours (@50Mbit/sec)
	4:2:2 MPEG2, 10Mbit/s – 50Mbitsec, I-frame or Long-GOP
VBI & HBI	Always uncompressed
GPIO	8 bi-directional input and output pins (expandable)
BRANDING CAPABILITIES	
<i>depending on options</i>	
Clip playback	MPEG2 (PS, TS, long-GOP, I-frame only), D1030, D1050, IMX, DV, Quicktime, AVI, MXF, h263, h264, MPEG4, WMV
Audio	16 channels
DVE	2D and 3D, multiple
Layers	unlimited
Animations	streaming, multiple
Text rendering	multiple, anti-aliased truetype TTF
Tickers, crawls	multiple
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)	440 x 44 x 620 mm / 17.3" x 1.7" x 24.4" (excl. connectors & panels)
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

## Options

BASE CONFIGURATION	
ON-NX-112	NEXUS-vds, 250GB SSD storage, static logo on/off
ON-NX-113	NEXUS-vds, 1TB RAID1 HDD storage, static logo on/off
OPTIONS	
ON-NX-243	NEXUS-vds option: capabilities 1; audio silence, stills/logos
ON-NX-244	NEXUS-vds option: capabilities 2; audio silence, stills/logos, animations
ON-NX-245	NEXUS-vds option: capabilities 3; audio silence, stills/logos, animations, tickers
ON-NX-246	NEXUS-vds option: capabilities 4; audio silence, stills/logos, animations, tickers, video clips, audio clips
ON-NX-241	GPI control/delay
ON-NX-242	VBI control/delay
ON-NX-251	HD option
ON-ED-033	iPanel, glass cockpit operator panel
ON-ED-026	TemplatoR, free form template design tool

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!

**PubliTronic**  
 The Netherlands  
 Phone: +31 55 360 4344  
 Fax: +31 55 360 4113  
 e-mail: sales@publitrionic.com  
 website: www.publitrionic.com

