



# TelVue Princeton™ B3000-PRO

## Multi-channel HD-SDI Digital Broadcaster

### Experience crisp HD broadcast output.

Now you can upgrade your broadcast operations to a complete HD-SDI digital file-based workflow without breaking the bank. The B3000-PRO will provide the quality, reliability and functionality you demand at a price your station can afford.

The B3000-PRO is equipped with up to four independent, professional High Definition playout channels with digital HD-SDI outputs. The TelVue B3000-PRO HD Digital Broadcast server also includes a sophisticated playout scheduling interface, content and server management, and content validation all controlled through our intuitive browser-based user interface. Each channel supports configurable output modes, including HD, SD, 16x9 and 4x3 aspect ratios, 1080p, 1080i, 720p, 480i, NTSC and PAL.

The B3000-PRO server was engineered for high availability with efficient redundant power supplies and RAID6 for storage protection and performance.

With its integrated content management and broadcast automation application, the B3000-PRO server is a true all-in-one, high-definition playback solution. Programming your B3000-PRO is a snap with the intuitive web browser based drag and drop user interface. Or take advantage of our powerful API and third party traffic integration to manage your server. Each B3000-PRO output channel supports up to a 70Mbps MPEG-2 transport stream or a 45Mbps MPEG-2 program stream. Professional features include support for 4:2:0 and 4:2:2 MPEG-2 files, external genlock, Dolby bypass, 8 channel AES audio and an automatic HD/SD up and down conversion. Each channel simulcasts on HD-SDI, SD-SDI and Analog (Composite/Component).

The B3000-PRO is a broadcast powerhouse which enables you to program your station, anywhere and anytime. Transform your station to High Definition and HD/SD simulcast with the TelVue Princeton B3000-PRO digital broadcast server.



Intuitive Content Management System



Drag and Drop Scheduling

### APPLICATIONS

- High Definition Broadcast Television
- HD/SD Simulcast Broadcasting
- Local HD Channel Origination
- PEG channels future proofing with HD-SDI/SD-SDI outputs
- Satellite TV Broadcasting
- HD Digital Cinema & Entertainment Channels
- Emergency restoration systems

### FEATURES

- Broadcast 4:2:0 and 4:2:2 MPEG-2 Video
- Up and down conversion (mix of SD and HD)
- Simulcast on HD-SDI, SD-SDI, Composite/Component
- Up to 4TB of internal RAID6 storage
- Integrated SD-SDI encoder or ASI capture (optional)
- Decodes TS up to 70Mbps and PS up to 45 Mbps
- CableLabs™ and ATSC compatible
- 8 channel AES audio on breakout
- Genlock & Dolby Bypass
- Configurable Output Modes from 480i to 1080p
- IT-Friendly, supports FTP, SMB, HTTP & NTP
- Integrated content and schedule management
- Virtual trims, auto-fade & continuity
- Controls external video switchers
- Content and schedule API
- Third party traffic system integration

### BENEFITS

- HD/SD simulcast up to four channels
- Simplifies operations with intuitive user interface
- Increased availability with RAID6 data redundancy
- Saves time by auto publishing program guide to web
- XMLTV EPG support
- High efficiency power supplies
- Easily store hundreds of hours of video
- Designed for 24 x 7 reliability

# B3000-PRO Specifications

The TelVue Princeton B3000-PRO HD-SDI digital video broadcast server is a great way to upgrade your station's operations to high definition digital workflow. The B3000-PRO can be outfitted with up to four separate channels, each configurable from 480i to 1080p, with up and down conversion and simulcast. The B3000-PRO can store hundreds of hours of high quality MPEG-2 video when equipped with up to 4TB of internal RAID6 storage. The B3000-PRO can be ready for full operation in just a few hours, with many important features built in: content management, content analysis & validation, advanced web-based layout and capture scheduling, support for external video switcher control and devices. When your station is ready to go HD, all digital or needs HD/SD simulcast, the TelVue Princeton™ B3000-PRO is the perfect solution.

Video Playback	
Video Output	HD-SDI, SD-SDI, Composite/Component
Audio Output	Digital Embedded, 8 channel AES, Analog unbalanced

Program Scheduling	
Interface	Integrated HTML browser-based
Playlists	Scheduled time-based program layouts
Recurring	Scheduled recurring layouts
Station Timing	Locked to NTP standard
Continuity	Auto-play default content or auto-switch on program gaps
Events	Video, capture, switch, device
Import	CSV, Generic Digital Protocol
Export	XMLTV, TV Guide X-List, CSV, As Run

Storage	
Capacity	2TB Usable Standard (up to 4TB optional)
Drives	8 x 500GB SATA II Standard (8x750GB optional)
RAID Levels	RAID6
High Availability	RAID1 for system partition and RAID6 for media partition
External	Integrates with standard NAS/SAN

Options	
Encoder	SD-SDI MPEG-2 encoder
ASI Input	MPEG-2 TS Capture to file
Video Switch	Control Knox, Sigma, Sierra and more via RS-232
Device Control	8 IR, 2 - RS-232/422, 4 -Contact Closures per Ethernet-enabled Controller

Physical	
Power	100 - 240VAC / 760 Watts Redundant Power Supply
Dimension	17.2" x 5.25" x 25.2" (W x H x D)
Weight	60 lbs
Form Factors	3RU Standard

Content	
Formats	MPEG-1/2 CBR & VBR, DVD, CableLabs™, ATSC, 4:2:0, 4:2:2
	MPEG-1 Layer II, AC-3, Linear PCM Audio
Bit Rates	TS: Up to 70 Mbps, PS: Up to 45 Mbps
High Availability	Content Analysis & Validation

Content Introduction	
Protocols	FTP & SMB
Throughput	Up to 150 Mbps
Interface	10/100/1000BT

Network Management	
Interfaces	Web Browser
Protocols	SMB, HTTP, NTP
	Remote management and software upgrades
Features	Environment monitoring
High Availability	Linux, RAID

Software	
OS	Linux
Device Drivers	All standard drivers
Application	Schedule Playback, Switch, Encoder, Device events
	Drag and Drop scheduling, event recur and ripple
	Content management
	Custom, searchable metadata and categories; Thumbnails
	Integrated drag and drop DVD ingest
	Website program guide automatic generation
	Playlist import/export
	Integrated network firewall
	XML-TV / TV Guide metadata
	GOP Traffic
	VDCP

External Interfaces & Connections (Typically Used)	
Front Panel	CD-ROM, USB
	Power/Fail/Drive LEDs, Power/Reset Switch
Rear Panel	Dual 10/100BT/1000BT, Link/Data LEDs
Output A/V	HD-SDI (SDI 1 BNC), SD-SDI (SDI 2 BNC) with embedded audio
	8 channel AES (XLR), Composite/Component (BNC), unbal audio (RCA)

Note: Specifications are subject to change without notice.

**TelVue Corporation** is a broadcast technology innovator and leader in community and hyperlocal television broadcast delivery. TelVue's professional quality equipment and services, including digital video servers, live internet streaming and Video on Demand (VOD) services, and web-based bulletin board applications enable our customers to dramatically streamline and enhance channel programming and delivery, reduce costs, and be better positioned to meet the new challenges of a rapidly evolving industry.

