

# Cobalt Digital 9902-UDX-DSP 3G/HD/SD-SDI Up-Down-Cross Converter/Frame Sync/Audio Embed/De-Embed w DSP Support

This listing is for 9902-UDX-DSP\* Converter only. Use description below as a general reference.

## \*3G/HD/SD-SDI Up-Down-Cross Converter / Frame Sync / Audio Embed/De-Embed with DSP Audio Options Support

The Cobalt® 9902-UDX-DSP 3G/HD/SD-SDI Up-Down-Cross Converter / Frame Sync / Audio Embed/De-Embed with DSP Audio Options Support provides a high-density card-based solution that offers unprecedented multi-input support and flexibility. The 9902-UDX-DSP offers a DSP-based platform that supports multiple audio DSP options. When optioned with various audio processing options, the DSP-based processing core (which supports numerous simultaneous processing engines) uses license “credits” which allows flexible tailoring of multiple proc function instances. The 9902-UDX-DSP provides much more flexibility than other audio processors that used fixed processing assets (for example, this flexibility allows “trading” credits for more Dolby encoders while backing out of loudness processors or other engine assets).p>

The up/down/cross convert scaler is specifically designed for broadcast video progressive and interlaced formats, with full ARC control suitable for conversions to or from 4:3 and 16:9 aspect ratios. 3:2 pulldown optimization allows A-frame to use alignment correlated to received timecode or 6 Hz external input over GPI. AFD processing can detect an incoming AFD code and correspondingly set scaling to track with AFD. The 9902-UDX-DSP also provides analog CVBS video inputs and outputs, and AES/analog audio embedding and de-embedding.

Audio proc options include Dolby® Real-Time Loudness Leveling automatic loudness processing, Dolby® encode/decode, and Linear Acoustic® UPMAX™ automatic upmixing. DSP options can be ordered with new-card purchase, or field-installed as software option upgrades without removing the card from its frame. Included as standard features are downmixing, flex mixing, and full AES and balanced analog audio embed/de-embed. Also included standard is bulk and per-channel audio delay controls that easily address lip-sync issues. Option +TTS provides high-quality Text-To-Speech synthesis, directly converting EAS text to digital audio speech with no baseband signal breakouts or add-ons.

Quality Check option +QC checks for and acts upon user-configurable criteria such as black/frozen frame, audio silence or CC absence.

Preset save/load allows saving custom card settings while allowing one-button revert to factory settings. Layered presets allow invoking changes related only to a specific area of concern (audio routing, for example) while not changing any other processing settings or aspects. Full user DashBoard™ or Remote Control Panel remote control allows full status and control access locally or across a standard Ethernet network. GPIO allows direct input routing control and status monitoring.

### Features:

- DSP-based platform supports multiple audio DSP options, with multiple instances available using allocatable license “credits” – our largest DSP capacity to date
- Dolby encoding/decoding, Dolby Real-Time Loudness Leveling (RTLL) loudness leveling with full parametric control setup, and Linear Acoustic UPMAX™ DSP audio options available
- Full audio crosspoint with 5.1-to-stereo downmix (standard) available for all audio outputs
- CVBS analog video I/O and analog/AES embed / de-embed available
- Moving-box/motion insertion enable serves as a dynamic raster confidence check even in cases where the input video image is static. Dual-string character/timecode burn-in.
- Advanced audio processing allows routing, gain, smooth delay, and flexible mixing as standard features
- High-density design
- Remote control/monitoring via Dashboard™ software, OGCP-9000 remote control panels, integrated HTML5 web interface, SNMP, or Cobalt’s RESTful-based Reflex protocol
- Five year warranty