

# 7700ACO2-HD

## Dual HD/SD-SDI Smart Automatic Changeover

The 7700ACO2-HD is the industry's leading smart automatic changeover (ACO) for high definition 1.5Gb/s or standard definition 270Mb/s serial digital video signals.

This device provides:

- Dual processing paths on a single module
- Smart HD/SD-SDI automatic protection switching of both paths
- Video and Audio Proc Amp Control
- Built in Trouble Slide per ACO
- Optional IntelliGain™ Audio Loudness Processing with Dynamic Audio Range Control

These modules have dual independent processing paths providing both high density and availability of any HD-SDI or SD-SDI video inputs signals (program and back-up). These modules provides a passive loop-thru of both primary and backup input video sources and provides dual safe program outputs.

The 7700ACO2-HD incorporates Evertz® proprietary SoftSwitch™ technology for clean video and embedded audio switching. Line synchronizers on the video inputs can accommodate differences in timing of up to  $\pm 1/2$  a line on the video inputs.

### ► Features & Benefits

#### Video Inputs and Outputs

- Auto sensing of HD and SD input formats
- Smart Automatic changeover based on user programmable switch logic
- Card edge menu control for configuration of operating modes and LEDs for reporting signal presence, router state, module status
- Remote monitoring via Evertz® control panels or VistaLINK® PRO
- Bypass relay protection on main program output
- Integrated SoftSwitch technology for clean video and "popless" embedded audio switching

The 7700ACO2-HD incorporates Evertz® essential audio and video monitoring which is used to drive the real time automatic switch logic processor. Common parameters include user configurable loss of signal, freeze, and black detect.

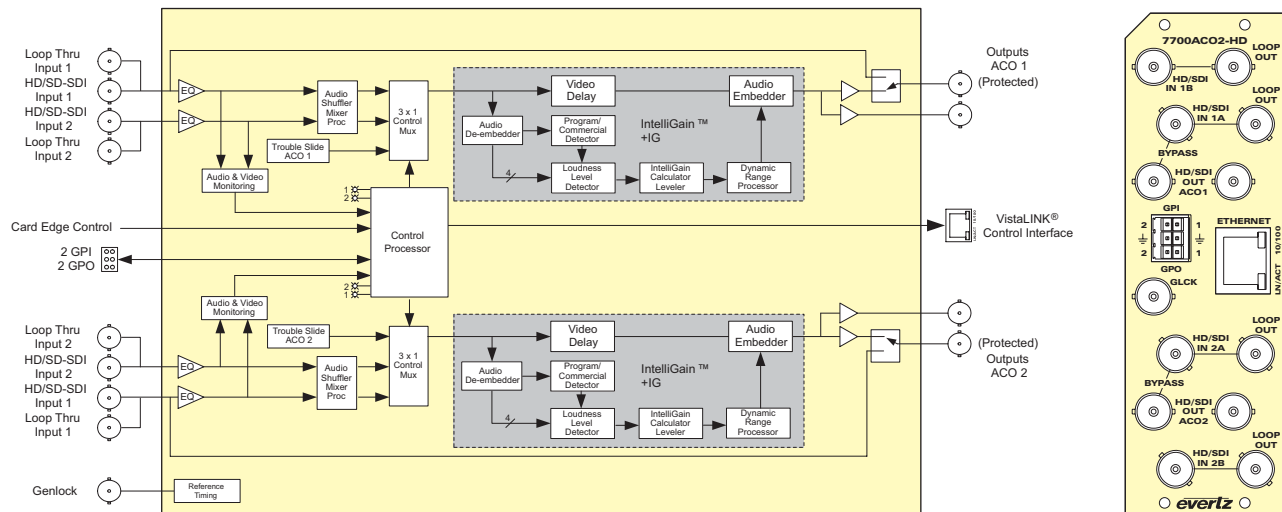
The 7700ACO2-HD can optionally be ordered with Evertz® patented IntelliGain™ Audio and Loudness Processor. The IntelliGain™ processor is designed to normalize perceived differences in audio loudness in real time for any HD/SD-SDI signal with embedded audio. This module will internally de-embed the audio signals, regulate the signal level based on a used defined target loudness level, then re-embed the corrected audio signals back into the video output.

VistaLINK® enables control and configuration capabilities via Simple Network Management Protocol (SNMP). This offers the flexibility to manage the module status monitoring and configuration from SNMP - enabled control systems such as Evertz VistaLINK® PRO locally or remotely.

The 7700ACO2-HD occupies two card slots and can be housed in the 3RU 7800FR frame which has a 15 slot capacity or the portable 3RU 350FR frame which has a 7 slot capacity.

#### IntelliGain Audio and Loudness Processor

- Consistent audio loudness levels within a channel and/or program
- Gain control within a program interval to preserve audio dynamic range
- Artifact-free transitions between program and commercials
- Elimination of drastic volume changes during commercials and interstitials
- Ideal for aggregator applications and multi-channel playout facilities (DTH, Cable, IPTV...)
- VistaLINK® controlled and monitored



### ► Specifications

#### Serial Video Input:

Standard: Auto-detects standard 1.485Gb/s SMPTE 292M (1080i/59.94, 1080i/50, 720p/59.94, 720p/50) SMPTE 260M, SMPTE 274M, SMPTE 296M, SMPTE 349M (HD or SD carrier) 270Mb/s SMPTE 259M-C (525i/59.94 or 625i/50)

Connector: 2 BNC per IEC 61169-8 Annex A

Input Equalization: Automatic 100m @ 1.5Gb/s with Belden 1694A or Equivalent cable

Return Loss: > 20dB up to 270MHz  
> 12dB up to 1.5GHz

#### Reclocked Serial Video Output:

Standard: Same as input

Number of Outputs: 2 Smart switched program outputs (Input 1 is bypass relay protected)

Connector: BNC per IEC 61169-8 Annex A

Signal Level: 800mV nominal

DC Offset: 0V  $\pm$  0.5V

Rise and Fall Time: 200ps nominal

Overshoot: < 10% of amplitude

Return Loss: > 20dB up to 270MHz  
> 15dB at 1.5Gb/s

Jitter: < 0.16 UI (HD)

#### Electrical:

Voltage: +12V DC

Power: 20W

EMI/RFI: Complies with FCC regulations for Class A devices  
Complies with EU EMC directive

#### Physical (number of slots):

350FR: 2

7700FR-C: 2

7800FR: 2

### ► Ordering Information

**7700ACO2-HD** Dual HD/SD-SDI Smart Automatic Changeover

**Ordering Options** Rear Plate must be specified at time of order  
Eg: Model +3RU

**+IG** Integrated IntelliGain™ Audio and Loudness Processor

#### Rear Plate Suffix

**+3RU** 3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe

#### Enclosures

**350FR** 3RU Portable Multiframe which holds up to 7 single slot modules

**7700FR-C** 3RU Multiframe which holds up to 15 single slot modules

**7800FR** 3RU Multiframe which holds up to 15 single slot modules