

7800IDA8-3G+IG

3G/HD/SD-SDI Intelligent Distribution Amplifier (1x8) with IntelliGain™

Audio Loudness problems are nothing new. For years broadcasters have had the challenge of providing audio and video content to their target audience while minimizing complaints about the drastic variations in audio loudness between program and commercial.

The 7800IDA8-3G+IG IntelliGain™ processor is designed to normalize perceived differences in audio loudness in real time for any 3G/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.

The 7800IDA8-3G modules are VistaLINK™ Pro capable, offering remote monitoring, control and configuration via Simple Network Management Protocol (SNMP).

The 7800IDA8-3G occupies one module slot within the 7000 series 3RU frames, which will hold up to 15 modules or the 7701FR 1RU frame, which will hold up to three modules.

There are two main complaints:

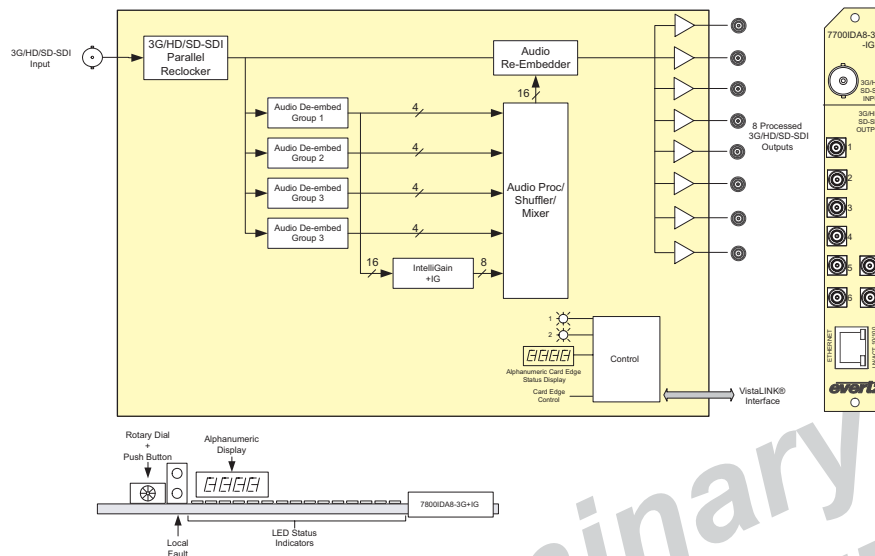
1. Commercial Loudness
2. Channel to Channel loudness variation.

As more and more channels with inconsistent audio levels are distributed to the home, public annoyance has increased. Some recent studies have shown up to a 17 dB deviation in perceived loudness of programming between channels. Home listeners have had to tolerate this problem by either muting the commercials or adjusting the volume as they watch their programs.

Evertz has recognized this dilemma and presents IntelliGain™ (patent pending) as the solution.

IntelliGain™ Offers:

- Consistent audio loudness levels applying the ITU-R BS.1770 algorithm
- 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
- Fully Integrated Dynamic Range Processor, also referred to as a compander
- Ideal for aggregator applications and multi-channel playout facilities (DTH, Cable, IPTV..)
- VistaLINK™ controlled and monitored!



Specifications

Serial Video Input:

Standard: Auto-detects standard 3Gb/s SMPTE 424M, 1.5Gb/sec SMPTE 292M, 270Mb/s SMPTE 259M-C (525i/59.94 or 625i/50)

Connector: 1 BNC per IEC 60169-8 Amendment 2

Input Equalization: Automatic to 100m @ 3Gb/s, 140m @ 1.5Gb/s & 350m @ 270Mb/s

Return Loss: > 20dB up to 270Mb/s

> 15dB up to 1.5Gb/s

> 10dB up to 3Gb/s

Serial Video Outputs:

Standard: Same as input

Number of Outputs: 8

Connector: Mini Din 1.0/2.3 connector

Signal Level: 800mV nominal

DC Offset: 0V ±0.5V

Rise and Fall Time: 200ps nominal for 3G/HD-SDI

900ps nominal for SD-SDI

< 10% of amplitude

> 20dB up to 270MHz

> 15dB at 1.5Gb/s

< 0.20 UI

Jitter:

< 0.20 UI

Electrical:

Voltage: +12V DC

Power: 9W

EMI/RFI: Complies with FCC regulations

for class A devices

Complies with EU EMC directive

Physical:

Number of slots: 1

Ordering Options

7800IDA8-3G+IG 3G/HD/SD-SDI Intelligent Distribution Amplifier (1x8) with IntelliGain™

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

Rear Plate Suffix

+B-D+3RU 3RU Rear Plate with standard BNC input and Mini Din BNC outputs for use with 7700FR-C Multiframe

+B-D+1RU 1RU Rear Plate with standard BNC input and Mini Din BNC outputs for use with 7701FR Multiframe

+B-D+SA Standalone Enclosure Rear Plate with standard BNC input and Mini Din BNC outputs

Enclosures

7700FR-C

7800FR

7701FR

S7701FR

3RU Multiframe which holds up to 15 single slot modules

3RU Multiframe which holds up to 15 single slot modules

1RU Multiframe which holds up to 3 single or dual slot modules

Standalone enclosure

