



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.

There are two main complaints: Commercial Loudness and 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 17dB 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 its patented IntelliGain® as the solution.

This patented technology can be applied to a number of Evertz products, including frame synchronizers, protection switches, audio embedders and de-embedders just to name a few.

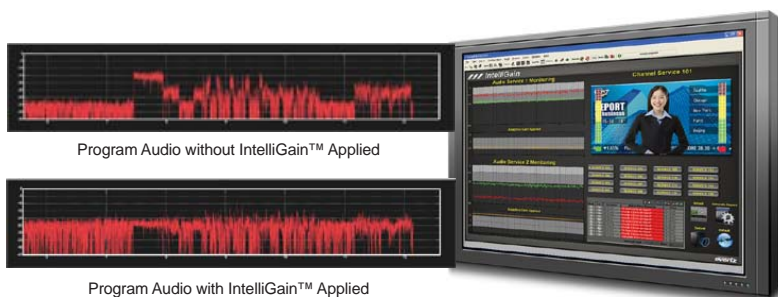
IntelliGain® Offers

- Consistent audio loudness levels within a channel and/or program
- Automatic detection and level adjust for loud commercials
- 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
- Processing produces ATSC A/85 and EBU R128 compliant audio
- 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!



IntelliGain® processes long term trends in the audio content and uses a multi-minute time coefficient, which applies a smooth attack producing the final target loudness output.

IntelliGain® processes audio programs of various or mixed configurations, such as mono, stereo, or multi-channel. When coupled with an Evertz audio product that is equipped with a Dolby® decoder, IntelliGain® can extract program configuration information from Dolby® E or AC-3 stream and configure itself accordingly to account for a multi-channel arrangement.



IntelliGain® also incorporates an onboard Compressor, Peak Limiter and Expander, also referred to as a compander, for professional Dynamic Range Processing. The use of the compander lends perfectly to many and can be locally enabled or disabled depending on the application requirement. The compander can be configured to apply different profiles based on the content type to ensure optimum dynamic range processing.

VistaLINK® enables control and configuration capabilities via Simple Network Management Protocol (SNMP). This offers the flexibility to manage the module status monitoring and configuration locally or remotely. Full audio loudness recording and graphing, including regulatory compliance reporting (such as CALM Act), can be accomplished when used with VistaLINK® PRO, VistaLINK® PRO Plus or VLPRO-IG.

Ordering Information

+IG IntelliGain®	Inter-Program and Intra-Program Loudness Control	
Notes	+IG must be specified at time of order with supporting product (Eg: [model]+IG)	7746FS-EAES8-DD-HD HD/SD-SDI 8 AES Frame Synchronizer with Dolby E/AC-3™ Decoder
Supported Products		7746FSE-IG SD-SDI Frame Synchronizer with integrated IntelliGain® Audio and Loudness Processor
500IDA9-IG	SD-SDI Intelligent 1x9 Distribution Amplifier with IntelliGain	7746FSE-IG-HD HD Frame Synchronizer with integrated IntelliGain® Audio and Loudness Processor
3025EMC	3G/HD/SD Master Control Switching & Channel Branding	7800IDA8-3G 3G/HD/SD-SDI Intelligent 1x8 Distribution Amplifier
3480DEC6-MP2HD-ASI6	High Density HD Decoder with 6 ASI Inputs	7812ARC SD to SD Aspect Ratio Converter with optional AES and/or Fiber I/O
3480DEC18-MP2SD-ASI18A	High Density SD Decoder with 18 ASI Inputs	7812HDC-3G 3G/HD Down Converter with Optional AES and/or Fiber I/O
7700ACO2	Dual SD-SDI Smart Automatic Changeover	7812HDC-HD HD Down Converter with Optional AES and/or Fiber I/O
7700ACO2-HD	Dual HD/SD-SDI Smart Automatic Changeover	7812UC-3G 3G/HD Up Converter with Optional AES and/or Fiber I/O
7700R2x2-HES	2x2 HD/SD-SDI Modular Bypass Protection Router with Softswitch™	7812UC-HD HD Up Converter with Optional AES and/or Fiber I/O
7720AD8-DD-HD	HD/SD Audio De-embedder & Dolby-E/AC-3 Decoder & Re-embedder	7812UDX-3G 3G/HD Up/Down/Cross Converter with Optional AES and/or Fiber I/O
7746FS-EAES4-IG	SD-SDI Frame Synchronizer with discrete 4 AES audio processing support and integrated IntelliGain® Audio and Loudness Processor	7812UDX-HD HD Up/Down/Cross Converter with Optional AES and/or Fiber I/O
7746FS-EAES4-IG-HD	HD Frame Synchronizer with 4 AES audio pairs and embedded audio processing & AES support and integrated IntelliGain® Audio and Loudness Processor	7812XC-3G 3G/HD Cross Converter, optional AES and/or Fiber I/O
7746FS-EAES8-DD-AC3E-HD	HD/SD-SDI 8 AES Frame Synchronizer with Dolby® Decoder and Dolby® Digital (AC-3) Encoder	7812XC-HD HD Cross Converter, optional AES or Fiber I/O
		7820IG10-IP IntelliGain® Processor for Compressed IPTV/ASI
		HD201x Series 1RU Multi-Path Video Converter/Frame Synchronizer/Decoder
		HD2020 Video PassPort™ - 1RU Multi-Path Video Converter and Frame Synchronizer