

Nielsen Watermarks Encoder

High quality insertion of Nielsen Watermarks into embedded and / or AES3 digital audio.

The NWE-3G is the ideal solution for inserting Nielsen Watermarks into the audio for television programming. The timestamp structured watermarks make use of the “SID” (Source Identifier), which is a serial number used by Nielsen and the television industry to uniquely identify program content, to ensure proper crediting of viewing.

The NWE-3G accepts an SDI input (3 Gbit/s, 1.5 Gbit/s, or 270 Mbit/s) and 4 AES-3id digital audio inputs. It applies the watermark to up to 16 PCM audio channels selected from the 16 embedded and 8 AES channels. Embedded audio signals that are watermarked are re-embedded into the same location in the SDI output. AES audio signals that are watermarked are re-encoded into the same AES output.

The module can be configured to support a variety of audio configurations, from a single stereo pair up to two 5.1 surround groups plus two stereo pairs.

The NWE-3G includes a video frame delay, to ensure proper audio-video synchronization. The companion rear connector module provides relay bypass of the video and AES signals, allowing the NWE-3G module to be inserted or extracted without interrupting the program path.

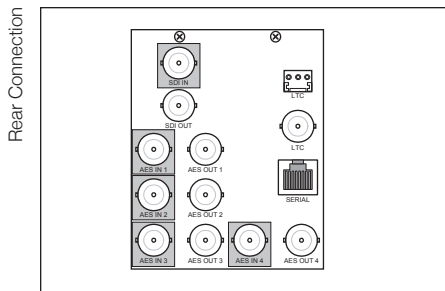
The timestamp included in the watermark data can be synchronized to either SMPTE 12M LTC (both balanced and unbalanced inputs are provided) or network time obtained by the frame from an NTP server.

Nielsen Overview

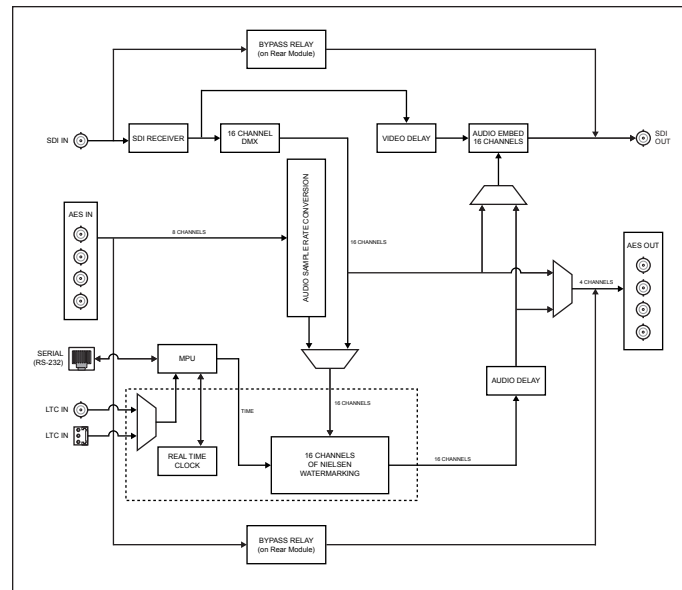
Nielsen is the preeminent global provider of consumer and audience measurement services. Nielsen knows what consumers watch – and what they buy – and more significantly they provide intelligence to help their clients understand these behaviors in relation to their business. Nielsen is dedicated to innovative methodologies and technologies, allowing them to be at the forefront of how they capture consumer behavior, which is integral to their clients’ business growth.

Features

- 3GHz video path, with bypass relay protection
- Handles all popular SD and HD video formats, up to 1080p/59.97
- Four AES-3id paths, with bypass relay protection
- Transparent to VANC and HVANC data
- Both video and audio are delayed by one video frame time (two frames for 59.97 Hz progressive formats)
- Up to 5 NWE-3G modules can be installed in a single 2RU frame; alternatively, one NWE-3G can be installed with up to 16 other cards
- RS232 port for external / automation control and monitoring
- DashBoard control, with selectable alarming on video, audio and time inputs
- 5-year transferable warranty



Functional Block Diagram



Remote Control and Monitoring

- Ethernet 10/100 Mbit network control
- SNMP support
- Compliant with DataSafe™

