



AIP-494

SDI Closed Caption Encoder with Audio and Captions Over IP



The AIP-494 is a three gigabits level B, high definition, or standard definition serial digital interface closed caption encoder (3GB/HD/SD-SDI CC Encoder) with audio and captions over IP. It accepts 3GB/HD/SD-SDI transport streams, and gives three closed caption encoded outputs of the same format as the input, with the option of one of them being decoded. The SDI outputs are re-clocked, making the SDI output eye pattern generally better than the input. It is a better re-clocker than most re-clocking Distribution Amplifiers (DA). The unit will pass ANC data untouched including audio to the output.

IP Audio and Captioning

The AIP-494 will take the user selected channel pair of AES that is embedded on the SDI input and send that audio to a Captioner via IP. A free audio over IP player is provided to monitor the audio. The streaming audio is low latency and low bandwidth so no special Internet services are required. The unit will also receive caption data via IP from the Captioner. This allows the removal of the traditional two phone line setup without having to be connected to a captioning server. This device allows true IP captioning.

XDS RAM/ V-Chip

The AIP-494 will encode line 21/22 CEA-608 waveform and/or encodes SMPTE 334 Caption Data Packet (CDP) for SD. The Caption Data Packet will contain a header, CEA-608 data, CEA-708 data, caption service descriptor, and a footer. For HD it will encode the caption data packet. It has RAM that is reserved for XDS packets, the packets will be inserted into CEA-608 field 2 based on XDS packet priority and field 2 availabilities. The unit also has XDS menus for Parental Guidelines (V-Chip) and Transmission Station Identification (TSID) packets. The RAM can be filled using V-Chip software.

GPI Remote “Legalizer”

The AIP-494 has a menu that allows you to select, resend, or redirect data from the Ethernet port to the serial ports. It has a GPI remote activated Legalizer, also called Weather Lift, with a menu that allows you to select the amount of lines to be lifted. Recently, the FCC has mandated that captions are not to be displayed over things like people’s names, school closings, and so on. This has become a major issue with broadcasters. It also has a decoded output and caption data recovery for quality monitoring.

Exceptional Technical Support

The AIP-494 SDI CC Encoder is backed by the Link Electronics standard 10-year warranty and 24/7 free customer support. It meets the innovative, high performance, flexibility, and reliability requirements of all Link Electronics products.

Features

- 3GB/HD/SD-SDI
 - XDS RAM (V-Chip)
 - Data Recovery
 - GPI Remote “Legalizer”
 - 2 CEA-708 Services
- Converted from 608

- VBI and/or VANC for SD
- Field Upgradeable
- VANC Line Selection
- IP Audio with Channel Pair Selection

- IP Captioning
- Power Off Bypass
- Decodes CC1-CC4 or S1-S6



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3G/HD/SD-SDI Video Input:

Connectors: One 75 Ohm BNC
Embedded Audio: AES 48 kHz (20 or 24 bit) SMPTE ST 299-1 (HD) or SMPTE ST 272 (SD)
SMPTE: ST 274 (1080P, 1080I, 1080S), ST 296 (720P), and ST 259 (NTSC & PAL)
Equalization: Automatic, Approx. 100 feet at 1.5 Gb/s, Approx. 500 feet at 270 Mb/s

3G/HD/SD-SDI Video Outputs:

Connectors: Three 75 Ohm BNC's, One Power Off Bypassed
Standard: Same as input
Signal Level: 800 mV, Nominal
DC Offset: +/- 0.5 V
Rise Time: 200 ps, Nominal
Overshoot: < 10%
Timing Jitter: < 1.0 U
Wideband Jitter: < 0.2 UI

Communications/Other Connectors:

General Purpose Interface (GPI): One Open/Closed Dry Contact
Serial Ports: Two RS-232 DE-9 One Male and One Female
Ethernet: One, 8P8C modular connector, IEEE
External Modem(s): Optional

Environmental:

Temperature: 0 to 50 C ambient
Humidity: 10% to 90% non-condensing

Mechanical:

Depth: 10.5 Inches
Height: 1.75 Inches
Width: 19 Inches
Weight: 4 Pounds

Power Supply (PWT-400):

Input: Auto Detection 100 to 240 VAC at 50/60 Hz
Output: 5 VDC up to 3.2 A
Compliance: UL Approved
Dual Supplies: Optional



The manufacture reserves the right to change specifications without notice

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