



# SEC-492

Closed Caption Encoder for  
3G/HD/SD-SDI



The SCE-492 is a closed caption encoder that will accept 3GB/HD/SD-SDI transport streams and give three closed caption encoded outputs of the same format as the input with the option of one of them being decoded for quality monitoring.

The SCE-492 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 and 3G level B it will encode the caption data packet. It has RAM that is reserved for XDS packets, the packets are inserted into CEA-608 field 2 based on XDS packet priority and field 2 availability. 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.

The SCE-492 has four communication ports; two serial RS-232 ports, both with adjustable baud rates, and two IP ports that are tunneled through the Ethernet connector. Up to four captioners can be connected to the unit and swap control of the encoder just by initializing it. It can also redirect or resend the Ethernet data out of one of its serial ports, allowing a captioner to be remotely connected to two encoders at the same time. All four communication ports are always active so they do not have to be turned on or off.

The SCE-492 allows the user to customize their captioned broadcast. VANC line selection lets the user choose where to place the Caption Distribution Packet (CDP) based on system requirements. CEA-608 to CEA-708 channel conversion allows the user to convert two of the four CEA-608 channels into CEA-708 services allowing primary and secondary languages on CEA-708 services. A re-clocking output synchronizes the incoming caption data and creates an SDI eye-pattern that helps analyze the quality of the SDI stream.

A GPI remote is used to activate a bypass within the unit. This bypass can enable a "legalizer" that will lift the caption lines above information at the bottom of the screen that would otherwise be covered by the captions. A menu in the unit allows you to select the number of lines to be lifted. You can raise the lower 4 caption lines up 2, 3, or 4 lines or raise all caption lines to the top 4 lines. The SCE-492 has a decoded output for quality monitoring. The decoded output provides open captions for CEA-608 channels CC1-CC4 or CEA-708 services S1-S6, one channel at a time. This allows the user to monitor the encoded (closed captioned) outputs of the selected channel. It also includes a black screen output which will change the decoded output to have a black screen instead of the active video.

## Exceptional Technical Support

The SCE-492 is backed by a 10-year warranty and 24/7 free customer support from Link Electronics' engineering team. It meets the innovative, high performance, flexibility, and reliability requirements of all products manufactured and supported by Link Electronics.

## Features

- 3G/HD/SD-SDI
- XDS ram
- V-Chip/TSID
- Data Recovery
- GPI Remote
- CEA-608 to CEA-708 conversion

- Field Upgradeable
- VANC Line Selection
- Optional Dual power supplies

- IP captioning
- Power-off bypass
- Re-clocked output
- IP to Serial rerouting
- Black screen decoded output
- Test Modes



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## 3G/HD/SD Video Input:

SMPTTE: ..... S274 (1080P, 1080I, 1080S), S296 (720P), and S259 (NTSC & PAL)  
Number of Inputs: ..... One  
Connectors: ..... BNC True 75 Ohm  
Equalization: ..... Automatic, Approx. 100 feet at 1.5 Gb/s, Approx. 500 feet at 270 Mb/s

## 3G/HD/HD Video Outputs:

Standard: ..... Same as input  
Number of Output: ..... Three, One Power off Bypass Protected  
Connectors: ..... BNC True 75 Ohm  
Signal Level: ..... 800 mV, Nominal  
DC Offset: ..... 0 Volts, +/- 0.5 V  
Rise Time: ..... 200ps, Nominal  
Overshoot: ..... <10%  
Timing Jitter: ..... <1.0U  
Wideband Jitter: ..... <0.2UI

## 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:

Height: ..... 1.75 Inches  
Width: ..... 19 Inches  
Depth: ..... 10.5 Inches  
Weight: ..... 4 Lbs.

## Power Supply (PWT-400):

Input: ..... Auto Detection 100 to 240 VAC at 50/60Hz  
Output: ..... 5VDC 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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