

## EN520 HDTV Smart Server IV

High Definition ATSC EIA-708B Encoder/Transcoder used to create and insert caption services for HDTV.

The Model EN520 HDTV Smart Server IV provides the means for captioning an HDTV program using standard EIA-608 captioning software. It will also transcode and translate EIA-608 closed caption data from previously encoded video into EIA-708 format. The serial output contains a complete EIA-708 data stream. This data is inserted into the ATSC video stream by the ATSC video encoder. The EN520 has three RS232 Data Ports and one RS422 Port. The user may configure these Data ports according to his operational needs. The EN520 comes with one built in Modem with provision for a second internal Modem. The modems can be used as alternate ports in addition to the three RS232 ports.

### ENCODER DIGITAL INPUT VIDEO CHARACTERISTICS

Format	270 Mbits/s component. Complies with SMPTE 259M and CCIR 656.
Video Input Level	800 mV p-p $\pm$ 10%, Out 1 bypass protected
Input Impedance	75 Ohms
Input Return Loss	$\geq$ 18dB, 1-270 MHz
Input S/N Ratio	Unit will function down to 25 dB ratio (CCIR weighted) with typically one error per row at that level

### ENCODER INPUT VIDEO CHARACTERISTICS

Video Input Level	1.0v p-p, Back Porch nominally at Ground
Video Input Circuit	Terminated except in by-pass mode
Input Impedance	75 Ohms
Input Return Loss	$\geq$ 40dB to 5 MHz.

### DATA INPUT CHARACTERISTICS

Data Ports	Three Ports via RJ 11 jacks
Serial Data Format	RS232C, settable between 1200-38400 Baud, typically 7 data bits, odd parity, 1 stop bit.
Modem	Provision for 2 modems, full duplex operation over PSTN per WECO 212A.

### FRONT PANEL CONTROLS & DISPLAY

Display	2 x 24 LCD, back-lit display showing unit operating conditions.
Power (On/Off)	Push-button switch with integral circuit breaker. White band indicates Off state.
Encoder ON	Push-button switch controls bypass state. LED lit for non-bypassed state.
Reset	Flush Push-button switch, resets the encoder.

### REAR PANEL CONNECTORS

SDI In	BNC connector, internal 75 Ohm termination.
Analog In	BNC connector, internal 75 Ohm termination.
Data	Six RJ 11 Jacks for P1, P2, P3, Ma, Mb and VTR Control
Power	Standard captive 3-wire line cord, 5 feet long.

### PHYSICAL CHARACTERISTICS

Height	1.75 inches (4.4 cm)
Width	19 inches (48.3 cm)
Depth	10 inches (25.4 cm)
Mounting	Designed for rack mounting with or without chassis slides.
Weight	9 lbs. (4.1kg)
Ambient Operating Temp	0 $\theta$ C, +50 $\theta$ C

### POWER REQUIREMENTS

Line Frequency	50/60 Hz
Line Voltage	117 VAC 10%
Line Current	0.3 A maximum
Input Power	36 W
Circuit Protection	Internal to On/Off switch, 0.4 A.