



CODICO® E-1720/E-1710 DSNG Encoder

General

Scopus' E-1720/1710 combines encoding, modulation and up-conversion in a one rack mounted unit, making it an ideal compact platform for the workhorses of the DSNG mobile news market: up-link vans, SUVs and flyaway packages.

The E-1720/1710 standard unit provides broadcast quality of 70/140 IF and 950-2150 Mhz L-band outputs as well as a separate L-band monitoring output. Various satellite modulation schemes are supported in the form of QPSK / 8PSK / 16QAM in this rugged and user-friendly unit. Thus, ensuring the highest picture quality with a steady low power consumption.

Other standard features include Analogue and Digital A/V Inputs, pre-program set ups, SW upgrade via flash card, Encoder Cascading, specifically designed DSNG Menu System, 10Mhz Reference Clock and DC power supply for BUC, both last features can be delivered "on stream" or via external connectors.

Features and Options

- User friendly control with a specifically designed menu for DSNG operation
- DVB Scrambling: BISS Mode-1, BISS-E (Option)
- 10 Pre-programmed set-ups
- "Quick Copy" configuration download via compact flash card
- Ultra low-delay mode
- 10 MHz Reference clock (E-1720 only)
- 24v 500 mA BUC power (E-1720 only)
- Modulator and up converter controlled from front panel
- Up-to 4 audio pairs (Option)
- Dolby digital (AC-3) 2.0 Encoding
- Composite and SDI inputs
- High speed data processing
- -48V power supply
- Dolby digital (AC-3) Pass-Through

Compact: 1RU

Integrated simultaneous L-Band and IF output

Optional E-1710 unit with IF output only

Encoder cascading

4:2:2 / 4:2:0 encoding profiles

Ultra low-delay mode

QPSK / 8PSK / 16QAM

L-band monitoring

BISS mode 1 and BISS-E (DSNG-CA) support

Compact flash for re-configuration

10 pre-sets configurations

Internal and external 10Mhz clock REF

DC power for BUC

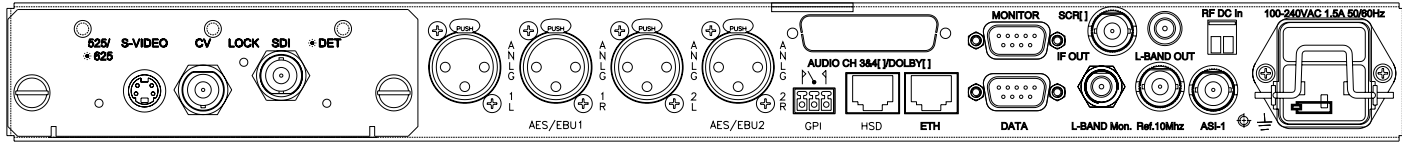
Ready for DVB-S2



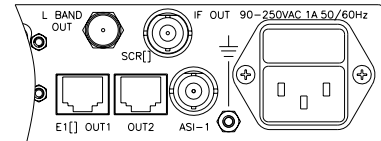
DSNG ENCODER

E-1720/1710

E-1720 outputs



E-1710 outputs



Inputs	<p>Video</p> <ul style="list-style-type: none"> • Video formats: NTSC/PAL • Digital Input: SDI (optional) • Analog Inputs: Composite, • A/D resolution: 10-bit <p>Video resolution</p> <ul style="list-style-type: none"> • Vertical: PAL-576, 288; NTSC-480, 240 • Horizontal: 720, 704, 640, 544, 528, 480, 368, 352 • Aspect Ratio: 16:9, 4:3 <p>VBI processing</p> <ul style="list-style-type: none"> • Teletext (WST 625) 	<ul style="list-style-type: none"> • CC, WSS, VITC, VPS • SMC (option on analog input) <p>Audio</p> <ul style="list-style-type: none"> • Up to 2 Stereo channels (4 Mono): Analog, AES/EBU, Embedded • Option for 4 stereo (8 Mono) • Encoding Rate: up to 384 Kbps • Sampling Rates: 32K, 44.1K, 48K • Dolby Digital (AC-3) Pass-through (optional) • Data Synchronous RS-422: up to 20 Mbps
Pre-Processing	<ul style="list-style-type: none"> • Analog TBC, Frame Synchronizer • Advanced Digital Noise Reduction (optional) 	<ul style="list-style-type: none"> • Automatic frame re-sizing
Processing	<p>Video encoding formats</p> <ul style="list-style-type: none"> • MPEG-2 4:2:0 MP@ML • MPEG-2 4:2:2 MP@ML • Variable GOP: I, P and B Frames processing 	<ul style="list-style-type: none"> • Ultra low-delay mode (4:2:0 / 4:2:2) • Built-in multiplexer for encoder cascading • Audio encoding format: MPEG I, layer II, CD Quality • Dolby Digital (AC-3) 2.0 Encoding (optional)
Control and Monitoring	<p>Local</p> <ul style="list-style-type: none"> • 6 button keys and 24 character LCD • RS-232 - Front panel control over variety of modulation and upconverter parameters - 10 pre-programmed set-ups - Configurable Hot Alarm rely (GPI) 	<p>Remote</p> <ul style="list-style-type: none"> • SNMP <p>SW upgrade</p> <ul style="list-style-type: none"> • Compact Flash Disk • Ethernet (TCP/IP) • RS-232 (CODICO E-1710 only)
Output	<p>DVB interface</p> <ul style="list-style-type: none"> • 2 x ASI • Electrical interface: 2 x RS-422 <p>Output Rate</p> <ul style="list-style-type: none"> • 1-52Mbps <p>DVB scrambling (optional)</p> <ul style="list-style-type: none"> • BISS mode 1, BISS-E 	<p>IF Output</p> <ul style="list-style-type: none"> • Built-in QPSK modulator, 1-28 Msym/sec • DVB compliant (EN 300421) • 8PSK and 16QAM mode (optional) • Roll-off 15%-35% • Frequency range: 70±18 MHz <p>L-Band Output (1720 only)</p> <ul style="list-style-type: none"> • Frequency: 950 to 2150 MHz (1KHz steps) • Output Power: -20 to SdBm (1 dB steps) • Internal DC for BUC: up to 24VDC 500mA • External DC input for BUC • 10MHz Reference clock (in-band and external) • Spurious level: -40dB
Power and Physical	<p>Dimensions</p> <ul style="list-style-type: none"> • 1RU (19" rack) • 4.4 x 48.3 x 53cm (1.75" x 19" x 21") • Weight: 5Kg /10Lbs 	<p>Power</p> <ul style="list-style-type: none"> • Voltage 90-260V, -48 DC (optional) • Power consumption: 100W Max (E-1710/1720)
Environment	<p>Temperature</p> <ul style="list-style-type: none"> • Operating 0-50 °C • Storage: -20-70 °C 	<p>Humidity</p> <ul style="list-style-type: none"> • 85% on-condensing
Compliance	<ul style="list-style-type: none"> • CE marked in accordance with EN 500821-1 and EN 55022, Class B, FCC 	
Safety	<ul style="list-style-type: none"> • In accordance with EN 60950 	

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