

Crystal Vision

ENDAC

Encoding Converter

Straightforward, low cost, high performance. That's ENDAC. The 12 bit broadcast encoding converter is just what you need to convert your SDI into flexible combinations of analogue: all composite, or a mixture of composite with Y/C, YUV or RGB.

Select the four analogue outputs by adjusting on board jumper links and piano switches. Choose exactly what you need for your application: four composite, two composite with one Y/C, or one composite with YUV or RGB.

The SDI input is reclocked and provided as an additional output, aiding system integration.

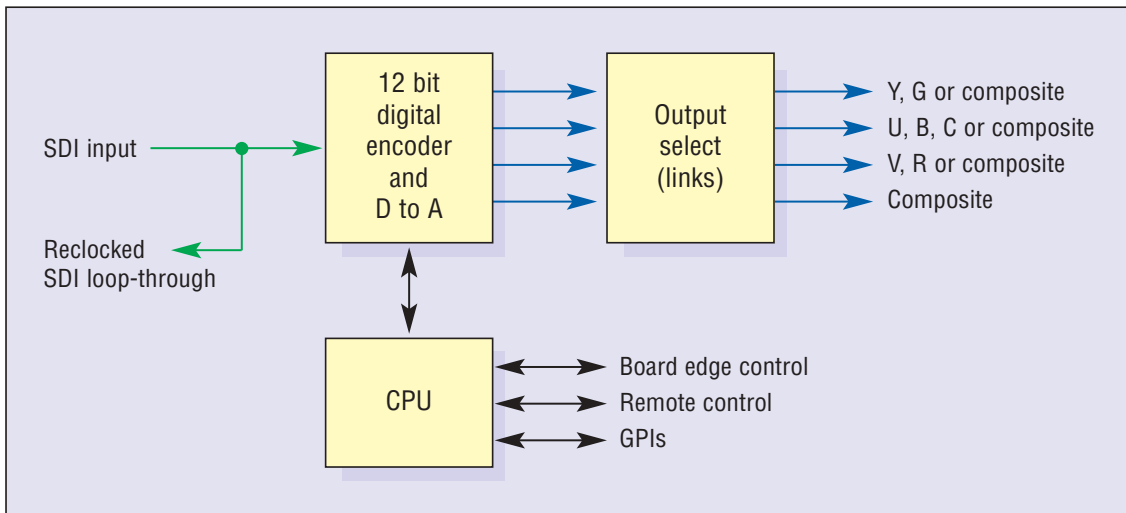
Setup on the Y output can be selected in 525 line applications, allowing ENDAC to output the US (NTSC-M) and Japanese (NTSC-J) standards. The ability to select Betacam chrominance levels for YUV outputs - giving 700mV for 75% colour bars instead of the standard 700mV for 100% bars - increases the range of systems it can be used with.

Housed in the standard frames, the 100mm x 266mm module can be easily integrated with any of the interface and keyers, saving you space by allowing 24 boards in 4U, 12 in 2U, six in 1U or two in a desk top box. Using it with the RM01 frame rear module gives the maximum signals. Control can be by board edge, an active front panel on the frame, a remote control panel or the Statesman PC Control System.

Use ENDAC for all broadcast applications where you do not need to time the sub-carrier reference, or a TBC. These applications could include monitoring in RGB or composite on a plasma or large display, high quality recording from an SDI source or analogue transmissions.



- 12 bit broadcast encoding converter
- Converts SDI into flexible combinations of analogue
- Exceptional performance at low cost
- Configure the four outputs as composite, Y/C, YUV or RGB
- Reclocked SDI loop-through
- Ideal for all applications which do not require timing the sub-carrier or a TBC
- Space-saving: 100mm x 266mm module allows 12 ENDACs in 2U (24 in 4U, six in 1U and two in desk top box)
- Flexible control, including PC software



SPECIFICATION

MECHANICAL

Standard Crystal Vision module 266mm x 100mm
Weight: 150g
Power consumption: 6 Watts

VIDEO INPUT

One SDI input
SDI 270Mbit to EBU 3267-E and SMPTE 259M
Cable equalisation >200m Belden 8281 or equivalent
Auto or manual 625/525 line selection

VIDEO OUTPUTS

1 Volt with syncs
NTSC-M, NTSC-J, PAL, Y/C, RGB or YUV
Four analogue outputs using RM01 frame rear module. Configured using on board links as either four composite, two composite with one Y/C or one composite with YUV or RGB (board edge piano switch selects YUV or RGB)
Switchable Betacam levels on YUV output

SDI LOOP-THROUGH

One relocked SDI loop-through output
SDI 270Mbit to EBU 3267-E and SMPTE 259M

ANALOGUE PERFORMANCE

Sampling: 12 bit precision
Frequency response: +/-0.5dB 0 to 5.5 MHz
Differential phase: <1.5°
Differential gain: <1.5%
Signal to Noise: <-60dB

GPI OUTPUT LEVELS

Active: connect to ground, 220Ohm current limit resistors. Pulled up to +5V through 10kOhm

GPI OUTPUT

Input absent

LED INDICATION OF:

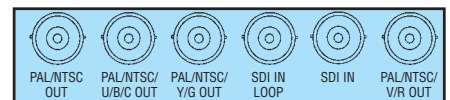
Power supplies on board
Input present

LOCAL CONTROL

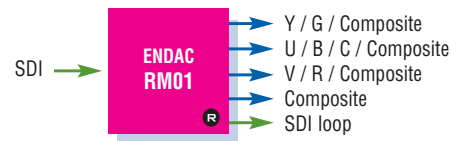
On board links configure analogue outputs
Piano switches select YUV/RGB, PAL/NTSC, pedestal on/off, normal/Betacam levels (YUV only), board edge/remote control

REMOTE CONTROL

RS422/485
19200 baud, 8 bits, 1 stop no parity
Control from frame active front panel and remote panel
Statesman allows control from any PC on a network



RM01



ORDERING INFORMATION

ENDAC	12 bit broadcast encoding converter
Indigo 4	4U frame with passive front panel for up to 24 Crystal Vision modules
Indigo 4S	4U frame with passive front panel fitted with Statesman CPU for up to 24 Crystal Vision modules
Indigo 2	2U frame with passive front panel for up to 12 Crystal Vision modules
Indigo 2A	2U frame with active front panel for up to 12 Crystal Vision modules
Indigo 2S	2U frame with passive front panel fitted with Statesman CPU for up to 12 Crystal Vision modules
Indigo 1	1U frame with passive front panel for up to six Crystal Vision modules
Indigo 1A	1U frame with active front panel for up to six Crystal Vision modules
Indigo 1S	1U frame with passive front panel fitted with Statesman CPU for up to six Crystal Vision modules
Indigo DT	Desk top box with passive front panel for up to two Crystal Vision modules
Indigo DTA	Desk top box with active front panel for up to two Crystal Vision modules
Indigo DTS	Desk top box with passive front panel fitted with Statesman CPU for up to two Crystal Vision modules
RM01	Single slot frame rear module. Allows maximum number of ENDACs in frame (24 in 4U, 12 in 2U, six in 1U, two in desk top box). Gives access to four analogue outputs (four composite, two composite with Y/C or one composite with YUV or RGB) and an active relocked SDI loop-through
REMIN	19" remote control panel
Statesman	PC Control System

Crystal Vision Ltd.

Lion Technology Park,
Station Road East, Whittlesford,
Cambridge CB2 4NL, England.

Tel: +44 (0)1223 497049

Fax: +44 (0)1223 497059

E-mail: sales@crystalvision.tv

www.crystalvision.tv