**EGO** Website

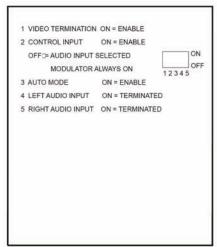
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## **Digital BTSC Encoder**

Model Number: 101







## **Details**

EGO Systems Inc. produces custom designed electronics for the Cable, Broadcast, and Telephony markets specializing in switching and automation products. The Digital BTSC Encoder is a compact low power solution for low maintenance high density installation requirements. The mating Encoder Chassis houses twelve encoders with redundant power supplies and relay bypass for a HOT Plug-able On-Air operation with out service interuption.

## **Specifications**

OPERATING TEMPERATURE RANGE 0° - 70° Celsius POWER CONSUMPTION **AUDIO INPUT LEVEL** AUDIO INPUT IMPEADENCE

**SEPARATION** DYNAMIC RANGE INPUT SIGNAL AT 400Hz THD-N

**VIDEO** PILOT FREQUENCY 5 Watts (-15) - (+15) DBV Adjustable 600 Ohms Terminated 10,000 Ohms Unterminated 50 Khz – 14.5 Khz 40 dB Typical  $85 \, dB \, Typical \, (Max \, L = R)$ 50 Hz - 15 KHz UNWHTED .07% - .5% (100Hz - 10KHz) Input 75 K or 10 K Ohms Switched +/- 3 Hz Locked to (FH)

## Features/Benefits

The Digital 4.5 MHz BTSC encoder switch will BTSC encode discrete Stereo audio and then switch the encoded audio source with 4.5 MHz audio feed while automatically matching RF levels. The switch control will be through standard GPI interface of either TTL high pulled low or contact closure, all de-bounce circuitry will be within switch control. The system is modular in design with plug-in BTSC switches into a relay bypassed back plane supplying power and control logic.

The BTSC encoding system is a Digital BTSC Audio System (DBAS) encoder. The system inputs are discrete stereo audio or Dual mono (for synthesized stereo audio), external video source for Pilot and subcarrier synchronization. The output delivers a composite BTSC analog output including the L+R signal, the AM-DSB-SC L-R signal, and a pilot signal locked to an external video signal at the horizontal scanning frequency (fh). This signal is then supplied to a digital 4.5 MHz modulator locked to the video input's subcarrier for either switched or direct operation.

There are two primary modes of operation that of a stand alone Digital BTSC encoder or that of Alternate switched 4.5 MHz BTSC source encoder.