Extron Electronics

INTERFACING, SWITCHING AND DISTRIBUTION

Digital Decoding

3-line adaptive
comb filter

NTSC Compatible

PAL Compatible

SECAM Comptatible

RGsB, RGBS or
RGBHV Outputs

Color, Tint, Contrast and
Horizontal Shift Controls

Auto-Switchable

Front Panel/RS-232/
Contact Closure Control

CD 800 - DIGITAL QUAD-STANDARD DECODER

SERVICE SUPPORT 3 SOLUTIONS

APPLICATION

Extron's **CD 800** is a professional-quality quad-standard decoder which is used to decode NTSC 3.58, NTSC 4.43, SECAM, and PAL composite video or S-video into RGsB, RGBS, or RGBHV. Because the CD 800's video output can actually look better than the video input, it is perfect for "cleaning up" a poor quality video signal; this virtually eliminates all chroma noise and provides a crisp, clear RGB analog signal. Using an improved decoder chip, with a three-line adaptive comb filter, the CD 800 enables a projector or monitor to display a higher quality image than that of composite video. Other applications include displaying video signals on RGB monitors and the routing of video through RGB switching and distribution systems.

The CD 800 provides both composite video and S-video inputs, which are selectable by auto-switch, front panel buttons, RS-232, or contact closure. The CD 800 outputs the analog RGB signal on five BNCs with a choice of composite sync, SOG, or separate H&V sync. For adjusting image quality, the CD 800 provides these picture controls: color, tint, contrast, and horizontal shift. The settings for these picture controls are automatically saved for each of the two inputs.

FEATURES

- **Dual input design—** Allows separate inputs for both video (NTSC, PAL, SECAM) as well as S-video (S-VHS). Input selection is either automatic or user-selectable by front panel buttons, RS-232, or contact closure. Four LEDs are used to indicate the type of input signal: NTSC 3.58, NTSC 4.43, PAL, or SECAM. Input connectors are a single BNC for composite video and a 4-pin mini-din connector for S-video.

- **Picture controls—** The color, tint, contrast, and horizontal shift controls allow the user to achieve optimum picture quality. The minimum or maximum red LED will start flashing when the minimum or maximum point is reached on any of the picture controls.

- **Memory settings—** For each of the two inputs, the settings for the picture controls are automatically saved in non-volatile memory.

- **RGB and sync output options—** Five BNCs are available. Sync can be output as separate horizontal and vertical sync, composite sync, or SOG. A toggle switch on the rear panel selects the desired sync output option.

- **RS-232 and contact closure control—** Control is available through contact closure, Extron's Simple Instruction Set™ for RS-232 programming, and Windows®-based control software for RS-232 control from a PC at a remote location.

- **DIP switch bank—** The DIP switch bank provides the following features: auto-switch enable/disable, serration pulse removal enable/disable, and selection of horizontal and vertical sync polarities and executive mode.
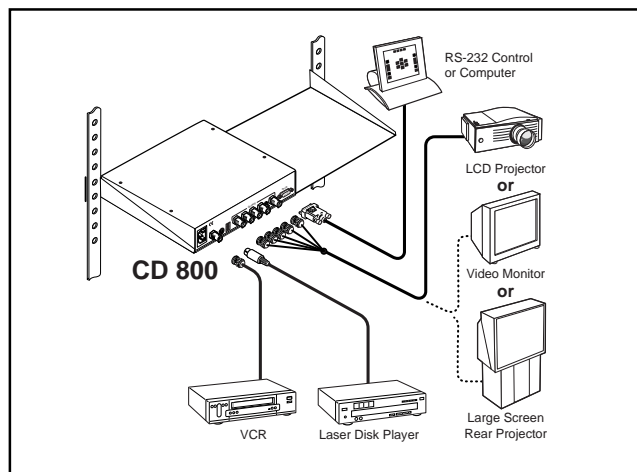
SPECIFICATIONS

Video input
  Number/type.. 1 S-video (Y/C), 1 composite video
                                                                           (switch-selectable)
  Connectors .... 1 4-pin mini-DIN female (S-video)
                                                                           1 BNC female (composite video)
  Nominal level(s) .... Analog — 0.7V to 1V p-p
  Impedance .... 75 ohms
  Horizontal frequency.............................. 15.6 kHz to 17.75 kHz
  Vertical frequency .... 50 Hz to 60 Hz

SPECIFICATIONS

Video throughput
  Gain .... Variable by adjusting contrast
  Bandwidth .... 6 MHz (-3dB)
  Differential phase error .... 1.5º, 0 to 10 MHz
  Differential gain error .... 1.5%, 0 to 10 MHz
Video output
  Number/type/format............................... 1 RGBHV, RGBS, RGsB
  Connectors .... 5 BNC female
  Nominal level .... Analog — 0.7V p-p, DC coupled
  Impedance .... 75 ohms
  DC offset .... ±0.1V maximum
Sync
  Output type .... RGBHV, RGBS, RGsB
  Standards.. NTSC 3.58, NTSC 4.43, PAL, SECAM
  Input level .... 0.3V p-p
  Output level .... TTL — 5V p-p
  Input impedance .... 75 ohms
  Output impedance .... 75 ohms
  Polarity .... RGBHV: positive or negative (switch-selectable)
                                                                           S-video: negative
                                                                           Composite video: negative
Control/Remote — decoder
  Serial control port .... RS-232, 9-pin female D connector
  Baud rate and protocol .... 9600, 8-bit, 1 stop bit, no parity
  Contact closure .... 9-pin female D connector
  Program control .... Extron's Windows® control program
                                                                           Extron's Simple Instruction Set (SIS™)
General
  Power .... 100VAC to 240VAC, 50/60 Hz, 5 Watts,
                                                                           internal, auto-switchable
  Rack mount .... Yes, with optional rack shelf, part #60-190-01
  Enclosure type .... Metal
  Enclosure dimensions .... 1.75" H x 8.75" W x 9.5" D
                                                                           4.45 cm H x 2.22 cm W x 24.13 cm D
  Shipping weight .... 5 lbs (2.3 kg)
  Vibration .... NSTA 1A in carton
  Approvals .... UL, CE
  Warranty .... 2 years parts and labor
  Part number 60-267-01

APPLICATION DIAGRAM