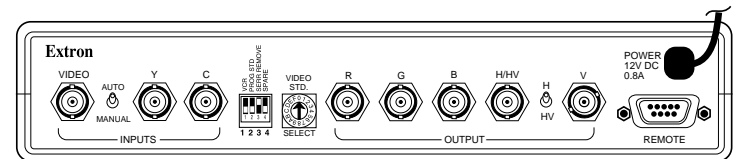
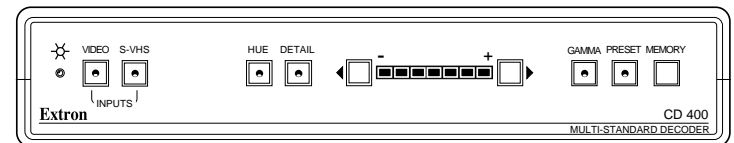


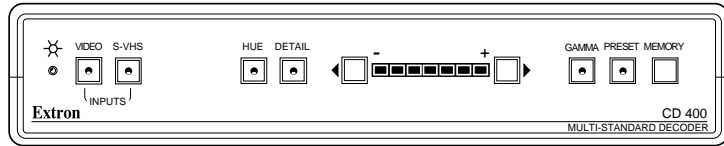
User's Guide



CD 400 Quad-Standard DECODER

Front Panel Controls and Indicators

Power Indicator LED – Indicates the unit is receiving power.



Video – Press this button to select the Composite Video input source. (See Rear Panel.) The LED will light when this input is selected.

S-VHS – Press this button to select the S-VHS input source. The LED will light when this input is selected. (See Rear Panel connectors.)

Hue – This button allows the Hue (tint) level to be adjusted. Hold the button while pressing the right or left arrow buttons, the selection will be indicated on the Range Bar (- +).

Detail – This button is used to adjust the Detail (sharpness). Hold the button while pressing the right or left arrows, the amount of range will be indicated on the Range Bar (- +).

Range Bar and +/- Buttons – This is an LED bar which indicated the minimum or maximum range scale for Hue and Detail. The (-/+) buttons are used to make adjustments.

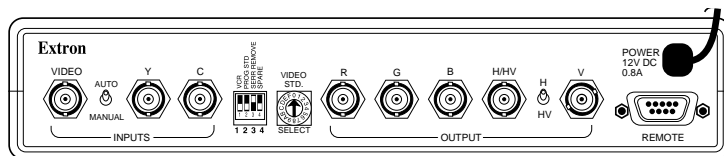
Gamma – This switch turns the Gamma (color) Correction On or Off. The LED will be lit when Gamma correction is selected. Most signals are already Gamma-corrected. Additional correction may make the picture look worse.

Preset – When the LED is lit, the Extron factory presets for Hue, Detail and Gamma are in effect. When the LED is not lit, user settings (program) are in effect.

Memory – Each input has memory to store one customized setting. This button allows those user-programmed settings for Hue, Detail and Gamma to be saved for the current selected input. This button becomes effective when it is pressed, and held, until the Hue, Detail and Gamma LEDs are lit.

Rear Panel Connectors and Controls

Video Input – This BNC connector is for a Composite Video (NTSC/PAL/SECAM) input.



S-VHS (Y/C) Input – These two BNC connectors are for a Y (luminance) and C (chroma) signal input.

Auto/Manual – When this switch is in the Auto position the CD 400 will automatically select the active input. If both inputs are active, the Video input will have priority. When the CD 400 is in the manual mode of operation the inputs may be selected via the Front Panel Input switches or by Remote control (Rear Panel).

DIP Switches– The CD 400 has four DIP switches for operation with the various video standards. Their functions are:

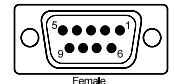
1. VCR – If the input source is a VCR this switch must be in the On position to compensate for timing variances common with VCRs.
2. Program Standard – With this switch in the On position, the user may select one of seven preset video standards (described below). If the video standard is unknown, DIP switch #2 must be Off, then the CD 400 will automatically select the video standard which most closely matches the input signal.
3. Serration Remove – Some display devices do not operate properly when serration pulses are present. When DIP switch #3 is On (up), these pulses will be removed from vertical sync interval; with the switch Off serration pulses are allowed to pass.
4. Spare (not used)

Video Standard Select – This rotary switch allows the CD 400 to select from seven video standards. Before using this switch, DIP switch #2 must be On. The switch positions are as follows:

- 0 = PAL - B/G, -H, -1, 50 Hz; 1 = PAL +N, 50 Hz;
- 2 = SECAM 50 Hz; 3 = PAL -M, 60 Hz; 4 = PAL 4.43, 60 Hz;
- 5 = NTSC, 60 Hz; 6 = NTSC, 4.43, 60 Hz

Output Sync – The CD 400 has two choices for the decoded video output. This is selected by the H/HV toggle switch located between the H/HV and V connectors. In the H position the output signal is RGBHV (separate Horizontal and Vertical Sync). In the HV position the output signal is RGBS (Composite Sync on the H/HV connector). In the HV position, the V connector is not used.

Remote – This connector allows input selections to be made by remote control. The Remote port uses a 9-pin connector located on the rear panel with a pin configuration as follows:



Pin Function	Pin Function
1 Composite Video status	2 Not used
3 Not used	4 +5 Vdc (source 50 mA)
5 Ground	6 Common
7 Composite Video select	8 S-VHS select
9 S-VHS status	

Examples are listed on the next page.

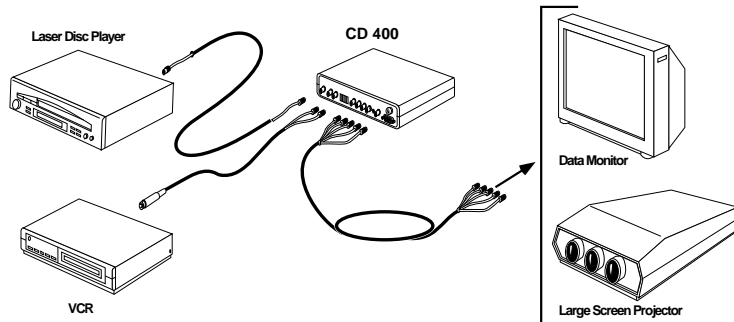
Operation and Applications

Examples of remote operation:

- To select Composite Video Input, requires momentary contact between pins #7 and #6.
- To select S-VHS, requires contact between pins #8, and #6.
- This remote control port also provides a tally output for the selected input. For example, if Composite Video is the selected input, then pin #1 (Composite Video status) will have a 4 vdc signal present.

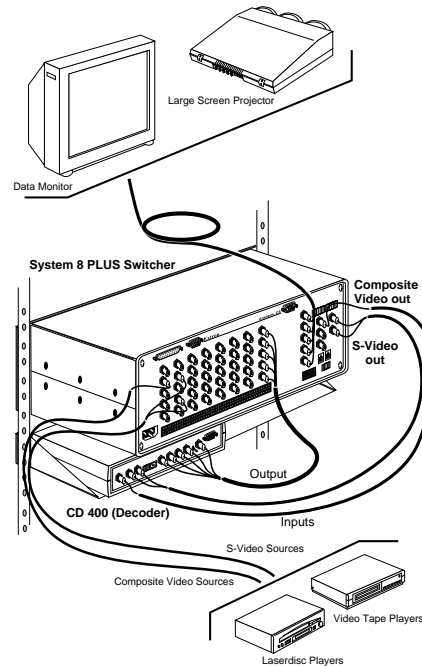
Applications

The illustration here shows a CD 400 used to decode Composite Video or S-Video from a VCR or a Laserdisc with output to a data monitor or projector.



The second illustration shows a CD 400 used in Video Loopback (VLB) mode, together with a system switcher. Details for this operation are included in Extron's System 8/10 Plus Switcher manual.

This application allows the CD 400 to decode any Video or S-Video signal that comes into the system switcher. This saves the cost of more decoders.



EXTRON ELECTRONICS
1230 South Lewis Street
Anaheim, CA 92805
(714) 491-1500 FAX (714) 491-1517
U.S.A.

EXTRON ELECTRONICS, EUROPE
Beeldschermweg 6C
3821 AH Amersfoort
+31-33-453-4040 FAX +31-33-453-4050
The Netherlands

EXTRON ELECTRONICS, ASIA
41B Kreta Ayer Road
Singapore 089003
+65-226-0015 FAX +65-226-0019
Singapore

69-05
68-119-01
Rev. D