

Crestron C2N-DVP4DI

Digital Video Processor



The C2N-DVP4DI is an advanced multi-window digital video processor, touchpanel interface and 2-Series Ethernet control system. Ideal for multi-image displays in videoconference rooms, training rooms, command centers, sports bars, home theaters, and kiosks, the “DVP4DI” combines a unique set of features to deliver a complete presentation solution.

Digital Video Processor—The DVP4DI displays up to four simultaneous scalable video windows on a single plasma display or projector. Up to 12 video inputs and 4 RGB/computer inputs may be selectively routed to any of the four onscreen windows. A built-in 12 x 4 seamless matrix switcher accepts inputs from NTSC/PAL composite, S-Video, and component video sources. In addition, four DVI-I inputs support high-resolution analog RGB and DVI digital sources. The output of the DVP4DI may be fed to any RGB or DVI display device through a single DVI-I output.

The DVP4DI supports non-interlaced input and output resolutions up to 1600 x 1200 RGB and 1280 x 1024 DVI. The output may be formatted as either 4:3 or 16:9 aspect ratio.

Each video window is processed by a discrete video scaler with motion adaptive deinterlacing, bringing out the highest detail by minimizing visible scan lines and motion artifacts. Automatic source identification assigns the optimum deinterlacing algorithm, with 3:2 (NTSC) and 2:2 (PAL) pulldown detection.

The DVP4DI's 24-bit color depth and 8-bit alpha transparency combine with Crestron's Isys® graphics engine to enable the creation of astounding 3D graphics and dynamic text. An exclusive Synapse™ image-rendering algorithm delivers crisp, sharp anti-aliased objects and text, high-resolution images, 3D effects, animations, and more.

Video windows may be freely sized and positioned anywhere onscreen, with digital transition effects possible including pan, fade, dissolve, reveal, stretch, cut, and zoom. Translucent objects may be incorporated in combination with the video windows.

Touchpanel Interface—The DVP4DI can be used to transform a third-party touchscreen monitor or plasma display into a full-featured Isys touchpanel, unleashing a host of possibilities for special control and presentation applications such as interactive kiosks, museum or tradeshow displays, training rooms, command centers, and more.

Crestron's exclusive “Touch-the-PC” technology allows for true real-time touchscreen navigation of any connected Windows® PC. Built-in annotation capability enables presenters to draw freely over any video, computer, and other graphic background. The DVP4DI also integrates perfectly with third-party telestrators.

In lieu of a touchscreen, users may also navigate the DVP4DI's graphical interface using a pointing device like Crestron's CNWM wireless presentation remote, or a serial mouse (included).

Control System—The DVP4DI incorporates Crestron's powerful 2-Series engine, providing fully programmable control system capability compatible with Crestron's complete line of touchpanels, keypads, and other Cresnet devices. The onboard Web server delivers full e-Control® 2 XPanel support to enable complete control of the DVP4DI and any connected peripherals using a Windows® PC or PocketPC™ 2000 PDA device.

The four built-in RS-232 ports provide touch coordinate output data for up to four PC's or telestrators, or may be configured to provide direct control of display devices, DVD players, etc. Additional control ports of any type may be added easily using Cresnet expansion modules or additional 2-Series control systems. The versatile C2N-DVP4DI may be configured as a Cresnet or Ethernet master or slave as part of a larger system.

To accommodate large programs, project files, Web pages, and graphics, a memory card slot accessible on the rear panel allows for easy expansion of the DVP4DI's internal memory by up to 4 GB using any Type II Compact Flash memory card or IBM Microdrive® hard disk drive. A 32MB Compact Flash card is included.

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Processor

CPU: 32-bit Motorola ColdFire® Microprocessor
Processing Speed: 257 MIPS (Dhrystone 2.1 benchmark)

Memory

Onboard: 4MB Flash, 32MB SDRAM, 256KB NVRAM, and 32MB Compact Flash card included
Expandable: Compact Flash slot up to 4 Gb (accepts standard Type II Compact Flash or IBM Microdrive®, not included)

Operating System

Real-time, preemptive, multitasking kernel, multi-threaded, FAT32 file system with long names; supports SIMPL™ Windows® and SIMPL+®

Ethernet Support

10/100BaseT, static IP or DHCP/DNS, SSL protection, auto-negotiating, full/half duplex TCP/IP, UDP/IP, SMTP, built-in Web server and e-mail client; supports Crestron e-Control 2 XPanel and RoomView applications

Graphics Engine

Isys engine, 24 Bit non-palette graphics + 8 Bit alpha (transparency) and video, 16.7 million colors, Synapse image rendering algorithm

Video Processor

Digital Sampling: 24 bits per pixel, 8 bits per color
Resolution: 24 bit video/graphics
Output Color Depth: 32 bits per pixel consisting of 24-bit color + 8-bit alpha (transparency) channel
Effects: pan, fade, dissolve, reveal, stretch, cut, zoom

Video Switcher and Scalers

Seamless Matrix Switcher: Up to 12 inputs routed to 4 scalers; accommodates versatile combinations of composite, S-Video and component sources; automatically routes signals based upon scaler availability

Scalers: (4) built-in scalers provide motion adaptive deinterlacing and line doubling of video sources and scaling of RGB sources

Connectors

VIDEO INPUT 1 - 4: (12) BNC female
(4) sets of (3) inputs, each set configurable as:
(1) Component (Y/Pb/Pr, 480i/576i) video input, or
(3) Composite (NTSC/PAL) video inputs, or
(1) S-Video (Y/C) input and (1) Composite input
Minimum/maximum levels: .5 to 1.5 Volts p-p with built-in DC restoration;
Impedance: 75 ohms
Horizontal frequency: 15.75 kHz (NTSC); 15.625 kHz (PAL)
Vertical frequency: 50-60 Hz

DVI/RGB 1 - 4: (4) DVI-I female
(4) RGB (VGA) or DVI inputs, (4) DB15HD VGA adapters included;
Analog formats: RGBHV, RGBS and RGsB
Digital formats: TMDS (DVI)
EDTV/HDTV: 480p, 720p, 1080i (requires component-to-VGA adapter, not included);
Input resolution, non-interlaced: 640 x 400 minimum to 1600 x 1200 maximum (RGB), or 1280 x 1024 maximum (DVI) [60 Hz limit at 1600 x 1200];
Minimum/maximum levels: .5 to 1.5 Volts p-p with built-in DC restoration;
Impedance: 75 ohms

Sync input type: Autodetect RGBHV, RGBS, RGsB
Sync input level: 3.0 to 5.0 Volts p-p
Sync input impedance: 1K ohms
Maximum Sync input: 5.0 Volts p-p
Horizontal frequency: 31.5 to 100 kHz (RGB); 31.5 to 64 kHz (DVI);
Vertical Frequency: 50 to 85 Hz (RGB); 60 to 75 Hz (DVI)

DVI/RGB OUTPUT: (1) DVI-I female
RGB (VGA) or DVI output, DB15HD VGA adapter included
Connects to analog (RGB/DVI-A) or digital (DVI-D) display device;

Analog formats: RGBHV, RGBS
Digital formats: TMDS (DVI)
EDTV/HDTV: 480p and 720p output as RGB
Aspect ratio: Software programmable 4:3 or 16:9
Output resolution: 800 x 600 min. to 1600 x 1200 max. (RGB) or 1280 x 1024 max. (DVI) [60 Hz limit at 1600 x 1200];
Sync output type: RGBHV, RGBS
Sync output level: TTL, 5.0 Volts p-p
Polarity: Composite sync, negative
Vertical Frequency: 60 to 85 Hz (RGB); 60 to 75 Hz (DVI) [60 Hz limit at 1600 x 1200]

COM: (4) DB9 male
(4) Bidirectional RS-232 ports
Up to 115.2k baud
Hardware and software handshaking support

TOUCHSCREEN/MOUSE: (1) DB9 female
RS-232 connection for touchscreen, touch-sensitive overlay, or pointing device; Contact Crestron to confirm compatibility

COMPUTER: (1) DB9 female
RS-232 computer console port

LAN: (1) 8-wire RJ45 with 2 LED indicators
10/100BaseT Ethernet port
Green LED indicates link status
Yellow LED indicates Ethernet activity

NET: (1) 4-pin 5mm detachable terminal block
Cresnet port, Master/Slave selectable
Expandable via C2N-NPA8 Network Poll Accelerator
24 Volt DC power input

LED Indicators

PWR: (green) indicates 24 Volts DC is applied to the unit
NET: (yellow) indicates communication with Cresnet network

Power Requirements

50 Watts (2.0 Amps @ 24 Volts DC) - CNPWS-75 or C2N-SPWS300 power supply required (sold separately)
Available Cresnet power: 0 Watts

Environmental

Temperature: 41° to 113°F (5° to 45°C)
Humidity: 10% to 90% RH (non-condensing)

Enclosure

Black metal, 2U 19" rack mountable (rack ears included)

Dimensions

Height: 3.47 in (8.82 cm)
Width: 19.0 in (48.26 cm) with ears, 17.03 in (43.24 cm) without ears;
Depth: 12.10 in (30.74 cm)

Weight

7.8 lbs (3.5 kg)

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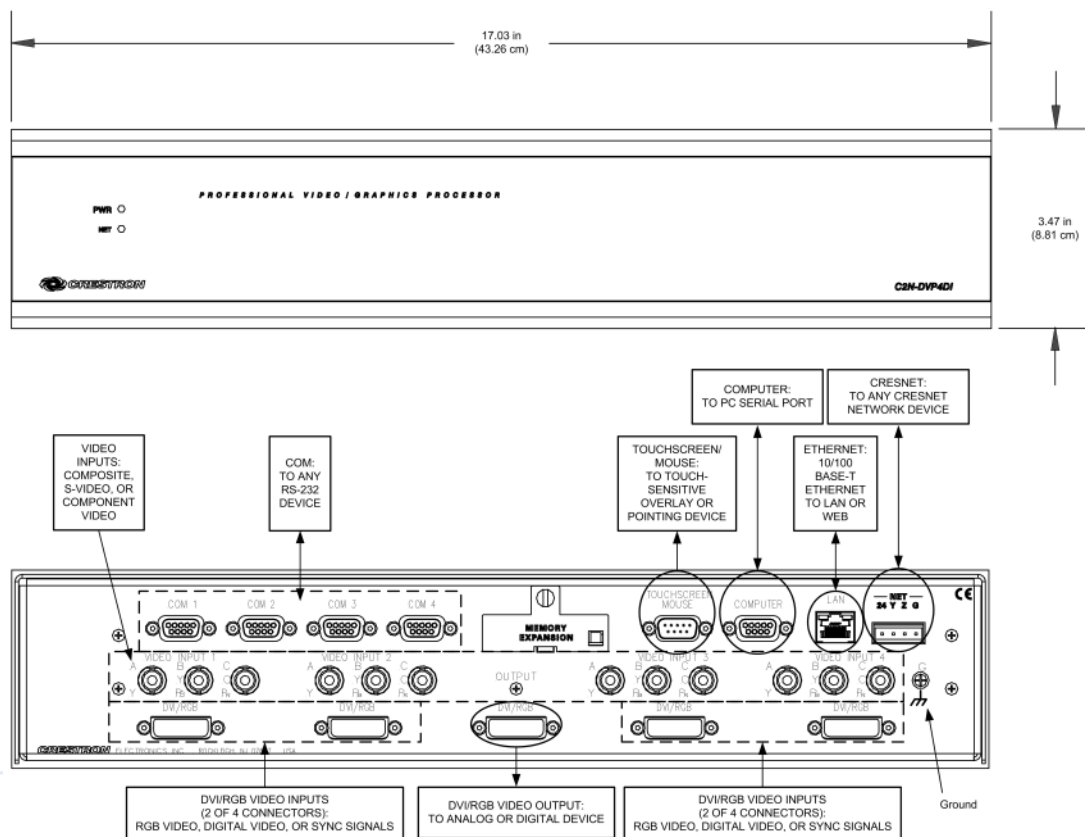


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AVAILABLE ACCESSORIES

- CNPWS-75**
75 Watt Cresnet Power Supply
- C2N-SPWS300**
300 Watt Cresnet Power Supply

- C2N-HBLOCK**
Cresnet Network Distribution Block
- CNSP-XX**
Custom Serial Interface Cable



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