Multi-Window Digital Video Processor and Touchpanel Interface

The C2N-DVP4DI is an advanced multi-window digital video processor and touchpanel interface. 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 an oustanding presentation solution.

Digital Video Processor

The DVP4DI displays up to four simultaneous scalable video windows on a single high-resolution monitor, projector or plasma display. 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.

Each video window is processed by a discrete video scaler with motion adaptive deinterlacing, bringing out the highest detail by stabilizing each picture and minimizing visible scan lines and motion artifacts for each video window. Automatic source identification assigns the optimum deinterlacing algorithm based upon the input for film, computer or video camera source material, with 3:2 (NTSC) and 2:2 (PAL) pulldown detection and compensation.

The DVP4DI supports non-interlaced input resolutions up to 1600×1200 RGB and 1280×1024 DVI. HDTV formats are also supported when converted to RGB (a component-to-VGA adapter

must be provided by others). The output of the DVP4DI may be formatted as either 4:3 or 16:9 aspect ratio with resolutions up to 1600 x 1200 RGB and 1280 x 1024 DVI.

The DVP4DI features Crestron's Isys® graphics engine, allowing for the creation of stunning graphics, images, text, and animations. The position and appearance of each video window can be fully customized within the total graphical interface with the ability to apply digital transition

effects including pan, fade, dissolve, reveal, stretch, cut, and zoom. With Crestron's exclusive Synapse? image-rendering

algorithm, the DVP4DI includes the same advanced graphic abilities as Crestron's lsys touchpanels, supporting crisp, sharp anti-aliased objects and text, high-resolution images, 3D effects, animations, and more. With 32-bit graphics that include an 8-bit alpha channel, translucent objects can be incorporated in the foreground or background in combination

with the video windows.

To accommodate any size or amount of high-rez image files, a

memory card slot accessible on the rear panel allows for expansion of the DVP4DI's internal memory using any Type II Compact Flash memory card up to 4 GB. A 1GB Compact Flash

card is included.

Touchpanel Interface

The DVP4DI can be used to transform a third-party touchscreen

monitor, whiteboard, or plasma display into a full-featured, large-scale Crestron Isys touchpanel. This opens a host of possibilities for special control and presentation applications such as interactive kiosks, museum or tradeshow



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through the touchscreen interface. Crestron's exclusive "Touch-the-PC" technology allows real time touchpanel navigation of any Windows® PC through a direct high-speed serial connection. Four RS-232 serial ports are provided. Users also have the flexibility to navigate the DVP4DI's graphical user interface using a pointing device like the Crestron CNWM wireless presentation remote, or a serial mouse (included).

The DVP4DI even includes a built-in telestrator, enabling finger-operated video annotation. Computer and video images can be frozen on screen to allow annotation over a still picture. Three brush sizes and eight colors are selectable on the fly. The DVP4 works equally well with third-party external telestrators like the Boeckeler Pointmaker® and Smart Technologies Sympodium?.

The DVP4DI is designed to be used as part of a complete Crestron system communicating with any 2-Series control system via Cresnet or Ethernet.

SPECIFICATIONS

Video/RGB

Inputs: (4) RGB/DVI, and up to (12) video inputs configurable for various combinations of composite, S-Video, and component

Output: Displays Control GUI with up to (4) video windows showing any combination of up to (4) DVI, RGB, or video sources, or any input source displayed full screen Color Depth: 24-bit, 16.7M colors

Scalers: (4) Scalable video windows with time base correction, gamma correction, line doubling, motion

Graphics Engine

lsys engine, 24-bit non-palette graphics + 8-bit alpha channel translucency, 16.7 million colors, Synapse image rendering algorithm, multi-mode objects, full-motion (60

adaptive deinterlacing, and reverse 3:2/2:2 pulldown

fps) animation, transition effects, color key video windowing

Processor

CPU: 32-bit Freescale ColdFire® Microprocessor

Memory

SDRAM: 32 MB NVRAM: 256 KB Flash: 4 MB

Compact Flash: 1 GB FAT16 provided; expandable up to 4 GB

Touch/Mouse Device Support

Mouse: Microsoft Serial Mouse, Kensington Serial Mouse Touchscreen / Pen Display: 3M Dynapro SC3, 3M Microtouch, DisplayMate, Elo TouchSystems, SMART Technologies, Wacom

(serial only);

Ethernet

10/100BaseT, auto-negotiating, full/half duplex, static IP or DHCP/DNS, SSL, TCP/IP, UDP/IP, CIP

Connectors

VIDEO INPUT 1 - 4: (4) sets of (3) BNC female; Signal Types: Each set dynamically configurable under system control as:

- (1) Component (YPbPr) video input, or
- (3) Composite (NTSC/PAL) video inputs, or •(1) S-Video (Y/C) input and (1) Composite input Formats: SDTV 480i (NTSC) & 576i (PAL):

Minimum/Maximum Levels: 0.5 to 1.5 Vp-p with built-in DC restoration;

Input Impedance: 75 ohms;

Horizontal Frequency: 15.75 kHz (NTSC); 15.625 kHz (PAL); DVI/RGB 1 - 4: (4) DVI-I female comprising (4) RGB (VGA) or DVI video inputs, (4) DB15HD VGA adapters included;



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Analog Formats: RGBHV, RGBS and RGsB (Supports EDTV

480p/576p and HDTV 720p/1080i using component-to-VGA

adapter, not included);

Digital Formats: TMDS (DVI);

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: 0.5 to 1.5 Vp-p with built-in DC

restoration;

Input Impedance: 75 ohms;

Sync Input Type: Autodetect RGBHV, RGBS, RGsB;

Sync Input Level: 3 to 5 Vp-p; Sync Input Impedance: 1k ohms;

Horizontal Frequency: 31.5 to 100 kHz (RGB); 31.5 to 64 kHz

(DVI);

DVI/RGB OUTPUT: (1) DVI-I female comprising (1) RGB (VGA)

or DVI video output, DB15HD VGA adapter included;

Analog Formats: RGBHV, RGBS (Supports EDTV 480p and HDTV

720p output as RGBHV);

Digital Formats: TMDS (DVI);

Aspect Ratio: Software configurable 4:3, 15:9, or 16:9;

Output Resolution: 800 x 600 minimum to 1600 x 1200 maximum

(RGB), or 1280 x 1024 maximum (DVI); 60 Hz limit at 1600 x

1200;

Sync Output Type: RGBHV, RGBS;

Sync Output Level: TTL, 5 Vp-p;

Polarity: Composite sync, negative

COM 1 - 4: (4) DB9 male, bidirectional RS-232 ports;

TOUCHSCREEN/MOUSE:

(1) DB9 female:

Bidirectional RS-232 port for touch/mouse input;

Up to 115.2k baud; hardware and software handshaking

support

COMPUTER: (1) DB9 female;

Bidirectional RS-232 port for computer console;

LAN: (1) 8-wire RJ45 with 2 LED indicators;

Green LED indicates link status;

NET: (1) 4-pin 5mm detachable terminal block;

G: (1) 6-32 screw, chassis ground lug

MEMORY EXPANSION: (1) Type II Compact Flash card slot;

LED Indicators

PWR: (green) indicates 24 Volts DC is applied to the NET

por

NET: (yellow) indicates communication with the Cresnet

network

Power Requirements

Cresnet Power Usage: 50 Watts (2.0 Amps @ 24 Volts DC)

Requires dedicated <u>CNPWS-75</u> or dedicated channel of

C2N-SPWS300

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: 19.00 in (48.26 cm) with ears, 17.03 in (43.24 cm)

without ears

Depth: 12.10 in (30.74 cm)

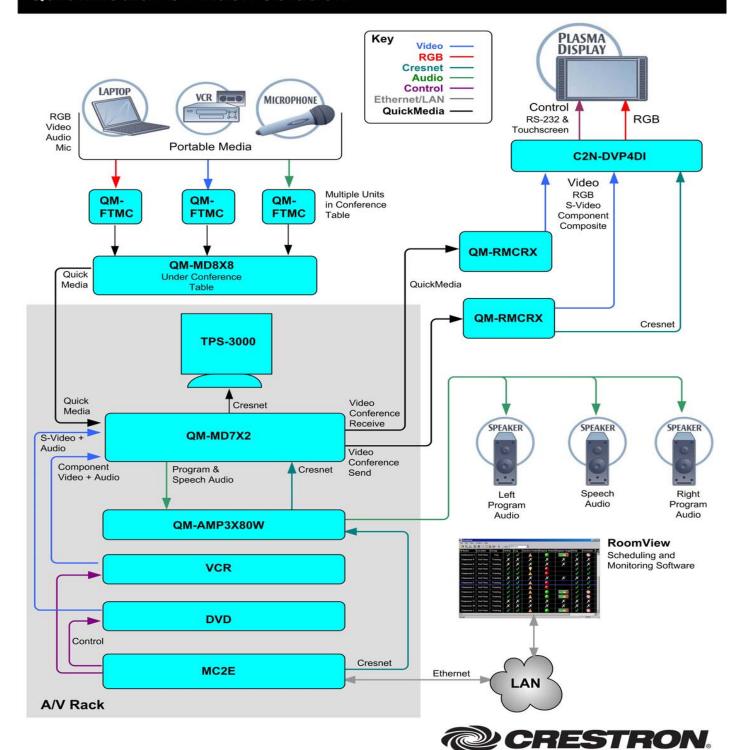
Weight

7.8 lb (3.5 kg)



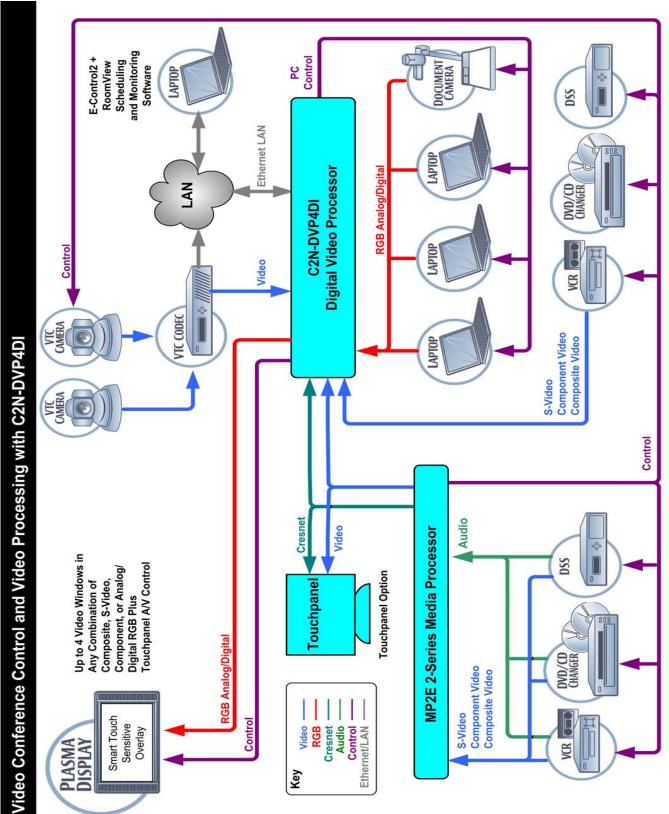
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QuickMedia A/V Rack Solution



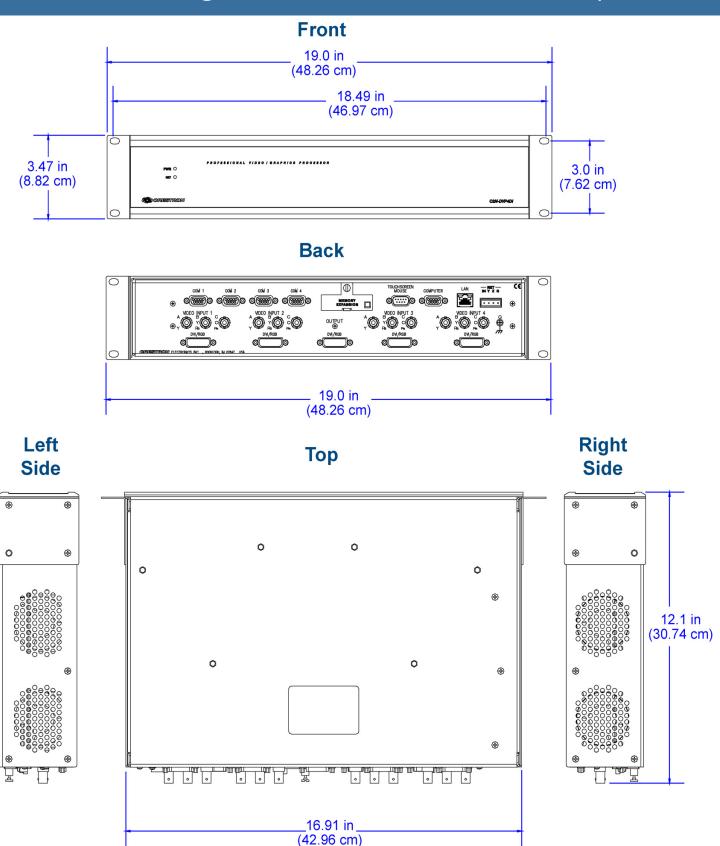


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