

VIDEO COMMAND CENTER MODULES

Controller

The controller includes a serial control interface that has multiple RS-485 links for individual groups of processor modules. Each control link connects to the first module of a group, and then serial control is cascaded to each additional module in the same group. The standard controller is equipped to control up to 4 groups of modules. The optional Expansion Bundle is required to control from 5 to 8 groups. A multiple monitor graphics output provides graphic elements for up to 8 groups of modules. Information can be processed and displayed (such as tally) from external devices through contact closure over twisted pair with optional digital I/O cards in the controller. The controller can display time, which may be calibrated to a house clock using data obtained through a LAN or from time code delivered to a factory installed optional VITC or LTC.

Outputs: Display to single Control Monitor –1024x768, 1280x1024 on HD-15 connector
Display to 4 module groups –Selectable (1024x768, 1280x1024) on DVI connector

Control: I/O to 4 module groups – (4) RS-485 on DB-9 connectors

Other Equipment: Keyboard, mouse, FD, CD-ROM, dual HD system, and hot-swappable power supplies

Options: Expansion Bundle- Additional 4 Display DVI output and 4 Control I/O RS-485 (VCC-CXU)
Contact closure 2, 4, or 6 I/O on 24 bit terminal panels (VCC-DIOn)
VITC Interface Board (VITC-X)

Dimensions: 4 RU, 17 inches deep

VCC-4



Video Modules

Stand-alone VCC modules operate as traditional quad-split devices when used without a controller. Attached to the controller serial control, they create 4 scalable video windows with a full-screen computer image foreground supplied from the controller's DVI output. Modules can display not only video windows, but also ID labels, borders, clocks and user created graphic elements. RS-232 communications for stand-alone operation are available.

VCC-4eDVI - 4 NTSC or PAL analog composite loop through inputs
VCC-4dDVI - 4 CCIR-601 SDI digital loop through inputs
VCC-4hDVI - 4 HDTV (1080i or 720p) digital loop through inputs
VCC-2hDVI - 2 HDTV (1080i or 720p) digital loop through inputs

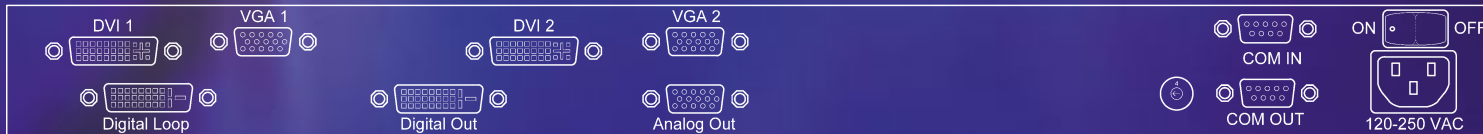
Inputs: 4 (or 2) video inputs with loop through on BNC connectors.

Outputs: 1 Analog RGBHV (XGA or SXGA) on DB-15 connector
1 DVI (XGA or SXGA)

Control: RS-485 COM IN and COM OUT on DB-9 connectors

Dimensions: 1 RU, 10 inches deep

VCC-2v



Computer Module

The VCC-2vDVI module has inputs to display two scaled computer sources. Its dual processors support both RGBHV and DVI signals compatible with various display devices. Supported resolutions include 640x480, 800x600, 1024x768, and 1280x1024. 1600x1200 is RGBHV only.

Inputs: 2 DVI
2 RGBHV on DB-15 connector

Outputs: 1 Analog RGBHV (XGA or SXGA) on DB-15 connector
1 DVI (XGA or SXGA)

Control: RS-485 COM IN and COM OUT on DB-9 connectors

Dimensions: 1 RU, 10 inches deep

ACC-16



Audio Modules

ACC audio modules provide multiple inputs with support for stereo analog, stereo AES/EBU or CCIR 601 with embedded AES/EBU (stereo & SAP). Audio appears as VU meters on the appropriate group display screen and may be attached to either side of the corresponding video window. Audio is sent from the ACC modules through the control link to the controller, which then sends VU meter information to each display through the DVI interface out to the video modules. Any audio input can be routed to an AES/EBU output speaker monitor. A separate AES/EBU input is provided for cascading multiple ACC modules for audio monitoring purposes.

ACC-na - 4, 8, 12, or 16 unbalanced analog stereo inputs
ACC-nd - 4, 8, 12, or 16 unbalanced pair AES/EBU digital inputs
ACC-nsdi - 4, 8, 12, or 16 CCIR 601 with embedded AES/EBU digital audio inputs

Inputs: 4, 8, 12, 16 unbalanced pairs on BNC connectors

Outputs: 1 AES/EBU unbalanced for monitoring or looping on BNC connector

Control: RS-485 COM IN and COM OUT on DB-9 connectors

Dimensions: 1.5 RU, 10 inches deep



VIRTUAL MONITOR WALL SYSTEMS

Master/Production Control Cable/Satellite Head-End Mobile Production
Video Conferencing Electronic Classrooms Traffic Monitoring
Broadband Distribution Electronic Signage Security
Public Information Displays



VIDEO COMMAND CENTER FEATURES

- High Quality and Performance that Presents a Superior Image Display Experience
- Modular Distributed Processing Provides Both Maximum System Reliability to Safeguard from Catastrophic Failure and Better Hardware Configuration
- Open System Architecture Supplies Scalable, Flexible, and Adaptable Monitoring Systems that Grow with Changing Needs and Environments
- Easy to Use Setup and Control with a Windows-Based User Interface for Optimal Operational Efficiency



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- For environments needing more than 8 displays, multiple controllers can be networked allowing for unlimited configuration and expansion.
- To accommodate additional video windows beyond the number of inputs in an initial installation, single modules can simply be added to an existing group of modules.

Simple Configuration and Control

For operators to set up and interact with their virtual monitor wall systems, Video Command Center includes an easy to use Microsoft® Windows® 2000/ Windows® XP software application and GUI that comes pre-installed on the system controller. External computers and other control devices attached via LAN or serial connection can send commands and other pertinent information to the virtual monitor wall system.

- Standard Microsoft® Windows® conventions provide tools to define layouts, scale/ move windows, and define inputs and graphic elements.
- Graphic elements such as clocks, counters, 3D borders, ID labels, tally indicators, and logos as well as user created graphics can be displayed on screen.
- Audio VU meters can be incorporated with video windows—both stereo and SAP.
- Multiple user set-ups can be defined, saved, and recalled at any time.
- Triggers can be initiated so that an affected input will pop up its corresponding window to a prominent position on the display.
- Control interfaces include TCP/IP, GPI, and RS-485/422.

Maximum Reliability

In a critical 24/7 environment, a monitoring system must be extremely dependable. Video Command Center is designed with no single point of failure.

- Features redundant power supplies on the controller.
- As the system is based on distributed processing, video will be passed through even in the unlikely event of a controller failure.

Modular Architecture

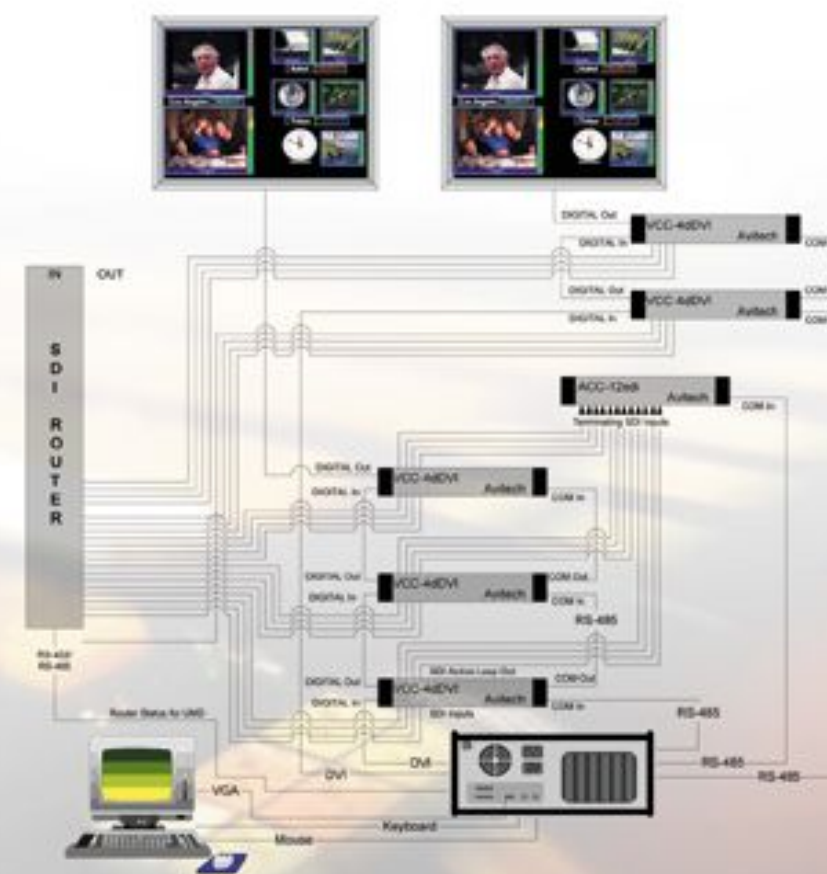
Instead of an all-in-one-box, one-screen approach, Video Command Center uses a new architecture model that is better suited for operation in mission critical and dynamic control center environments. A variety of input modules can be mixed and matched to meet the precise requirements of any environment. The output of a group of modules is shown on one display device, typically a plasma display panel, rear projection cube, or projector.

- The system utilizes separate, stand-alone, and cascading video modules that can be combined in numerous ways. The various modules support either 4 HDTV, SDI, or NTSC/PAL composite analog (16:9 and 4:3 aspect ratio) inputs.
- System control comes from a computer controller. A single controller will manage up to 8 groups of cascaded (up to 15 per group) modules. Therefore, up to 8 high-resolution display devices can be controlled as required.
- With up to 15 processor modules per display device, the system is capable of providing up to 60 (15x4) scalable video windows depending on the number of modules used.
- A computer input module supports dual SXGA or DVI signals that can be displayed in scalable windows along with the video windows.
- Audio modules provide displayable audio VU meters. Multiple meters per video stream can be simultaneously displayed from analog, AES/EBU, and embedded AES/EBU sources.

Scalable System Configuration

The modular design of Video Command Center means that facilities can optimize system designs for present and near term use, and economically add capabilities as increased future monitoring needs demand.

- As needs change, processor modules (up to 15) can simply be added on to a single controller. With up to 60 real-time video windows per display, and up to 8 displays per controller, one point of control can manage up to 480 sources.



AVITECH FOCUS

Avitech's primary business is video monitoring systems. We have an established track record of delivering virtual monitor wall systems into the most demanding of broadcast and command center environments. Customers include:

Broadcasters

- ABC
- CBS
- ESPN
- Scripps Howard
- NBC
- PBS
- USA Network

Communications

- PanAmSat
- Williams Comm.
- TVN Entertainment

Mobile Broadcast

- Core Digital
- NS Microwave
- Broadcast Sports

Dept(s) of Transportation

- Arizona
- Connecticut
- Florida
- New York

Gaming

- Bellagio
- Caesar's Palace
- Mandalay Bay
- Foxwood

Government

- FBI
- US Army
- US Navy
- US Dept of Defense
- City of Baltimore
- City of New York
- District of Columbia

Others

- e-Trade
- Yahoo
- New York Stock Exchange
- Xilinx
- World Streaming Network