

VTW 5080

digital media system

Digital Media Processing for Live Video, Storage, and Playback



Up to five Video Sources

Connect five video sources supporting either NTSC/PAL or 720p SDI or IP cameras for H.264 encoding

Up to eight Audio Inputs

Via an eight port XLR break-out cable, include up to 8 audio sources per module

HDMI Multiviewer Output

HDMI output allows up to four video inputs to be displayed in a quad split display

HDMI Display Output

HDMI output for full screen display from any of the live video feeds or from connected IP cameras.

Audio Line Outputs

Connect up to two line level audio outputs on the rear panel with XLR and one front panel output with headphone jack

ASIO

Providing a low-latency and high fidelity interface between the VTW-5080 and a computer sound card via a USB connection

Directshow

Allows media playback and capture over USB connections when connected to a PC with WMP installed.

High Definition

Performance

Superior video performance over coax cable lets you fully exploit cost-effective cabling without degrading video quality

The Panax Video Twist (VTW) 5080 Digital Media System is a comprehensive package for digital media distribution, live event recording and unhampered on-demand playback of pre-recorded high definition video and audio content. The VTW 5080 has revolutionized IP audio and video management by combining performance with a powerful software management package – all in an ultra-compact form factor at an affordable price. The VTW 5080-DMS was designed to support the most rigorous applications for recording, playback, and distribution of critical audio and video signals in educational systems, court systems, homeland defense, and rapid deployment flight packs for medical and emergency first responders. With VTW 5080 Media Solution software, you can record any source, apply metadata, and deliver live or recorded content on demand.

Until now, deploying digital media in mixed formats has typically required complex integration of multiple components and multiple vendors resulting in higher maintenance cost and limited scalability. With the VTW 5080, all your hardware devices are integrated into a single audio/video system, regardless of the format type. This degree of integration eliminates multiple accessory devices and cards, greatly reduces cabling and minimizes the need for sophisticated latency and timing hardware for audio synchronization.

With VTW 5080, organizations have a single solution to deliver and record rich media content to audiences on site or in remote locations across a LAN or WAN network. Integration into fixed network systems is easy to deploy and manage. With a local HDMI output and network connection, operators have the ability to stream live content over IP with H.264 while simultaneously outputting live digital content to a quad-view display and full screen display.

The VTW 5080 supports capturing and streaming high-resolution sources simultaneously, such as 720p SDI cameras, NTSC/PAL devices, and H.264 encoded cameras. The VTW 5080 prepares high bandwidth broadcast streams (MPEG-2/H.264) for enterprise distribution and archive. During live viewing or replay of an "event", the streams remain associated and synchronized. Through a simple, user-friendly computer software package operators can set up their multi-channel session, initiate simultaneous streaming and recording, and automatically make content available for on-demand viewing.

The VTW 5080 software package is a complete multi-tiered A/V capture workflow system that provides automated real time or on-demand redundancy to a server and an a suite of management utilities. The Server Appliance allows you to record in multiple locations and have all of your audio, video and recording information automatically stored in a central repository and can be easily searched and shared.



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Features

Five independent video input processing channels and six output processing channels

Simultaneous capture of H.264 IP Camera streams and baseband analog video

(NTSC/PAL) and SDI Digital Video up to 720p60 resolution

Synchronization of discrete audio inputs to discrete video and IP video inputs

Ability to simultaneously stream up to six video output streams over IP, one for each individual selected source and one quad view composed of four selected video sources

Ability to accept streaming video from IP Video cameras and mix with discrete microphone sources

Ability to stream audio and video outputs on USB with Directshow compatibility

Up to eight discrete line level audio inputs on XLR connectors

Uncompressed ASIO audio outputs on USB

Two line level XLR audio output connections and one, front mounted, standard 1/4" headphone jack

HDMI output for quad view display (any selected four of five video sources)

HDMI output for full screen view of single selected video output

Dual RJ-45 for Gig-E network connections

Support s RTP, RTCP and RTSP protocols

Specifications

VIDEO INPUTS

Number	5
Type	Standard 75 Ohm, self-terminating
Formats	NSTC/PAL and SMPTE 292C (720p60)
Return Loss	≥15dB 1MHz to 1.5GHz; ≥10dB, 1.5GHz to 3GHz.
Equalization	300m auto-equalization Belden 1694A or equivalent at 270Mbps.; 100m auto-equalization Belden 1694A or equivalent at 1.5Gbps;
Level	800mVpp, ±10%

SIGNAL SPECIFICATIONS

Rise/Fall	≤ 600ps +/-10% SD SMPTE259M; ≤ 270ps HD SMPTE292M; ≤ 135ps 3G SMPTE424M.
Overshoot	≤ 10% of amplitude max.
Alignment Jitter	≤ 0.2 UI from 100kHz to 150MHz SMPTE259M or SMPTE292M;
Timing Jitter	≤ 1.0 UI from 10Hz to 100kHz SMPTE259M or SMPTE292M;
Data Rates	143Mbps to 1.5Gbps

VIDEO OUTPUTS

Number	2 (HDMI)
Formats	1 HDMI as Quadview output and 1 as full screen output
Resolutions	Up to 720p60

AUDIO INPUTS

Number	8
Type	25 Pin D connector with XLR breakout cable for 8 connections
Format	Stereo Audio
Audio Line Level	Microphone or line-level inputs with Phantom Power
Gain Adjustment	+12dB to -40dB

AUDIO OUTPUTS

Number	3 (Two XLR line level and one Audio Headphone Jack)
Type	USB - AAC (mix of all channels) ASIO - uncompressed independent channels

NETWORK CONNECTIONS

Number	2 RJ-45
Type	Gig-E (100/1000)
Transport Protocol	RTP, RTCP, RTSP
Compression	H.264 Video

OTHER CONNECTIONS

USB	2 - ASIO and Directshow
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MECHANICAL

Form Factor	1RU
Mechanical	19.00W X 1.75H X 10.50 D 482.6 mm X 44.45 mm X 266.7 mm
Weight	10lbs

ENVIROMENTAL and MISCELLANEOUS

Control	Ethernet
Control Connection	RJ-45
AC Input Connections	IEC 320C6 socket (accepts IEC 320 C5 line cord)
Input Voltage	90-260 VAC, 47-63Hz
Operational Temp	0-40 degrees C
Operational Humidity	90% Non-condensing

