



VanCryst PRO Series Guide



New VanCyrst PRO

Rich multimedia content is viewed by people every day through digital signage and video control systems all over the world. In order to deliver high quality multimedia content to single or multiple locations requires complex component setups with sophisticated installations. To meet the advanced installation requirements, ATEN offers a range of Vancyrst Pro products including- Video Matrix Switches, Video Switches, Video Splitters and Video Extenders that offer useful features and tools to help you simplify setup and make sophisticated installations easy.

ATEN Patented Video Compensation Technology

ATEN's exclusive video compensation technology, permits video signals to be transmitted over longer distances more accurately. By improving on previous designs, we've minimized inaccuracy from 10 m to just 1 m. This change in technology not only improves brightness and quality, but also achieves a high skew tolerance for all our Video Extender products.

EDID Expert

EDID Mode Selection is an exclusive ATEN technology that allows you to choose a recognition mode that optimizes the display resolution throughout your installation. Because the EDID information is transmitted over one Cat 5 cable, it allows for faster, smoother switching between displays. Three EDID Selection modes are available: Default mode uses ATEN's default EDID; Learning mode learns and stores the EDID of the locally connected display for use; Port 1 mode automatically detects the EDID of the display attached to port 1 and applies it.

FPGA Design Benefits

Implementation of a FPGA design allows TMDS signals to be rearranged when transmitting high-speed data. This technology is used by DVI and HDMI interfaces, and other digital communication interfaces to improve quality and performance. Consequently, this benefit brings our video products higher cascade compatibilities with better quality, and extends digital signals over longer distances.

RS-232 Control Tool

ATEN provides an RS-232 control AP with intuitive user interface. The application allows you to simply click icons instead of entering text for serial control commands. The RS-232 tool provides a more convenient and easy method of sending RS-232 commands to your device.



Video Matrix Switches

VM0404H

4 x 4 HDMI Matrix Switch



- FPGA design benefit brings the matrix switch better cascade compatibility, and extends digital signals over longer distances
- Connects any of four HDMI sources to any of four HDMI displays
- HDMI (3D, Deep Color); HDCP Compatible
- Long distance transmission – up to 20 m (24AWG)
- Features RS-232 serial port and Control Tool application

VM0808H

8 x 8 HDMI Matrix Switch



- FPGA design benefit brings the matrix switch better cascade compatibility, and extends digital signals over longer distances
- Connects any of eight HDMI sources to any of eight HDMI displays
- Easily switch between multiple sources and multiple displays
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- HDMI (3D, Deep Color); HDCP Compatible
- Long distance transmission – up to 20 m (24AWG)
- Features RS-232 serial port and Control Tool application

VM0808T

8 x 8 Cat 5 A/V Matrix Switch



- Connects any of 8 Cat 5 A/V inputs to any of 8 Cat 5 A/V outputs in combination with ATEN VE300 / VE500 A/V Extender system
- Independent switching of audio and video sources – any audio source can be connected to any video source for output flexibility
- Long distance transmission – up to 300 m between VE300T/VE500T transmitters and VE300R/VE300RQ/VE500R/VE500RQ receivers
- Features RS-232 serial port and Control Tool application

VM1616T

16 x 16 Cat 5 A/V Matrix Switch



- Connects any of 16 Cat 5 A/V inputs to any of 16 Cat 5 A/V outputs in combination with ATEN VE300 / VE500 A/V Extender system
- Independent switching of audio and video sources – any audio source can be connected to any video source for output flexibility
- Long distance transmission – up to 300 m between VE300T/VE500T transmitters and VE300R/VE300RQ/VE500R/VE500RQ receivers
- Features RS-232 serial port and Control Tool application

VM0404

4 x 4 Video Matrix Switch + Audio



- Connects any of 4 VGA Video & Audio inputs to any of 4 VGA Video & Audio outputs
- Independent switching of audio and video sources – each input can be independently connected to any or all outputs for flexibility
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- Long distance transmission – up to 30 m
- Features RS-232 serial port and Control Tool application

VM0808

8 x 8 Video Matrix Switch + Audio



- Connects any of 8 VGA Video & Audio inputs to any of 8 VGA Video & Audio outputs
- Independent switching of audio and video sources – each input can be independently connected to any or all outputs for flexibility
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- Long distance transmission – up to 30 m
- Features RS-232 serial port and Control Tool application

Video Switches & Splitter & Extender

VS482

4-Port Dual View HDMI Switch



- Allows up to four HDMI A/V sources to be connected to two HDMI displays
- Instant switching between HDMI input sources via front panel pushbuttons or RS-232 port
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- HDMI (3D, Audio Return Channel and Deep Color)
- Long distance transmission – up to 20 m (24AWG)
- Features RS-232 serial port and Control Tool application

VS0801H

8-Port HDMI Switch



- Allows eight HDMI A/V sources to be connected to one HDMI display
- Quick and easy switching between HDMI sources via front panel pushbuttons, RS-232 port, or IR remote control
- HDMI (3D, Deep Color)
- Long distance transmission – up to 20 m (24AWG)
- Features RS-232 serial port and Control Tool application

VS0201/VS0401/VS0801

2/4/8-Port VGA Switch with Audio



- Independently display the video output of two (VS0201) or four (VS0401) or eight (VS0801) computers on a single monitor or projector
 - Quick and easy switching between VGA/Audio sources via front panel pushbuttons, RS-232 port, or IR remote control*
 - Long Distance transmission – up to 65 m
 - Features RS-232 serial port and Control Tool application (VS0201/VS0401)
- * IR Remote control sold separately.

VS172/VS174

2/4-Port DVI Dual Link Splitter with Audio



- One video input to 2/4 video outputs
- Superior video quality – up to 2560 x 1600 @ 60Hz including 2K-resolution (2048 x 2048 @ 60Hz)
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- Features RS-232 serial port and Control Tool application

VS0102/VS0104/VS0108

2/4/8-Port VGA Splitter with Audio



- One video input to 2/4/8 video outputs
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- Features RS-232 serial port and Control Tool application

VE882/VE892

HDMI Optical Extender



- HDMI (3D, Deep Color), HDCP compatible – signaling up to 3.125 Gbits
- Very long transmission distance – up to 600 m for VE882, up to 20 km for VE892
- Uses a robust LC-to-LC singlemode fiber optic cable for connections

VE814

HDMI Extender over single Cat 5 with Dual Display



- Uses a single Cat 5 cable to connect transmitter to receiver
- EDID Expert – selects the optimum EDID settings for smooth power-up and highest quality display resolution
- HDMI (3D, Deep Color, 4kx2k)
- Long distance transmission – up to 100 m
- Extends Ethernet communication with pass-through port
- Features RS-232 serial port for connecting peripheral devices such as touchscreens and barcode scanners

Video Extenders

VE300T/VE300R/VE300RQ

A/V Over Cat 5 Transmitter/Receiver



- Supports one local and one remote display
- Long distance transmission – up to 300 m (1280 x 1024)
- Superior RGB deskew function (VE300RQ) – automatically synchronizes the time delay of RGB signals to compensate for distance
- Audio enabled (stereo)
- Automatic and adjustable gain control – adjust signal strength to compensate for distance

VE500T/VE500R/VE500RQ

A/V Over Cat 5 Transmitter/Receiver



- Supports one local and one remote display
- Long distance transmission – up to 300 m (1280 x 1024)
- Superior RGB deskew function (VE500RQ) – automatically synchronizes the time delay of RGB signals to compensate for distance
- Audio enabled (stereo and balanced)
- Features RS-232 serial port for connecting peripheral devices such as touchscreens and barcode scanners

VE200L/VE200R

Audio / Video Extender Transmitter/Receiver



- Supports one local and two remote displays
- Long distance transmission – up to 200 m (1280 x 1024)
- Features RS-232 serial port for connecting peripheral devices such as touchscreens and barcode scanners

VE170T/VE170R/VE170RQ

A/V Over Cat 5 Extender Transmitter/Receiver



- Supports one local and one remote display
- Long distance transmission – up to 300 m (1280 x 1024)
- Superior RGB deskew function (VE170RQ) – automatically synchronizes the time delay of RGB signals to compensate for distance
- Audio enabled (mono)

Video Converters

VC880

HDMI Repeater Plus Audio De-embedder



- Extracts HDMI audio signal and outputs as additional audio source
- HDMI (3D); HDCP compatible
- Supports optical / coaxial digital audio and analog stereo audio

VC1080

Universal A/V to HDMI Switch with Scaler



- Converts multiple analog/digital audio/video signals to an HDMI output
- EDID Expert – selects optimum EDID settings for smooth power-up and the highest quality display resolution
- HDMI and HDCP compatible
- RS-232 serial port control for switching ports and setting system configurations

VC010/ VC060/VC080

VGA/DVI/HDMI EDID Emulator



- EDID Expert – selects optimum EDID settings for smooth power-up and the highest quality display resolution
- HDMI (3D, Deep Color), HDCP compatible (VC080)
- Features RS-232 serial port control

PRO Series Products At a Glance

Video Matrix Switches						
Model	VM0404H	VM0808H	VM0808T**	VM1616T**	VM0404	VM0808
Interface	HDMI	HDMI	VGA (RJ-45)	VGA (RJ-45)	VGA	VGA
Input to Outputs	4 to 4	8 to 8	8 to 8	16 to 16	4 to 4	8 to 8
Video Resolution	1080p	1080p	1920 x 1200	1920 x 1200	1920 x 1440	1920 x 1440
Distance	20 m (24AWG)	20 m (24AWG)	300 m*	300 m*	30 m	30 m
Audio	• (HDMI)	• (HDMI)	•	•	•	•
RS-232 Control	•	•	•	•	•	•
EDID Selection		•			•	•
Max. Bandwidth	225 MHz	225 MHz			350 MHz	500 MHz

* The maximum transmission distance between transmitter and receiver is 300 m. The VM0808T and VM1616T can be located anywhere within 300 m.

** VM0808T supports additional local input and local display; VM1616T supports additional local display

Video Switches / Video Splitter										
Model	VS482	VS0801H	VS0201	VS0401	VS0801	VS172	VS174	VS0102	VS0104	VS0108
Interface	HDMI	HDMI	VGA	VGA	VGA	DVI	DVI	VGA	VGA	VGA
Input to Outputs	4 to 2	8 to 1	2 to 1	4 to 1	8 to 1	1 to 2	1 to 4	1 to 2	1 to 4	1 to 8
Video Resolution	1080p	1080p	1920 x 1440	1920 x 1440	2048 x 1536	2560 x 1600	2560 x 1600	1920 x 1440	1920 x 1440	1920 x 1440
Distance	20 m (24AWG)	20 m (24AWG)	65 m*	65 m*	65 m*	5 m	5 m	65 m*	65 m*	65 m*
Audio	• (HDMI)	• (HDMI)	•	•	•	•	•	•	•	•
RS-232 Control	•	•	•	•	•	•	•	•	•	•
EDID Selection	•					•	•	•	•	•
IR Remote Control	•	•	•	•	•					

* Video content sent over very long distance using a VGA cable might result in slight degradation of the video signal and quality.

Video Extender							
Model	VE882	VE892	VE814	VE300	VE500	VE200	VE170
Interface	HDMI	HDMI	HDMI	VGA	VGA	VGA	VGA
Input to Outputs	1 to 1	1 to 1	1 to 2	1 to 1	1 to 1	1 to 2	1 to 1
Video Resolution	1080p	1080p	4k x 2k; 1080p	1920 x 1200	1920 x 1200	1920 x 1200	1920 x 1200
Distance	600 m	20 km	100 m	300 m	300 m	200 m	300 m
Audio	• (HDMI)	• (HDMI)	• (HDMI)	•	•	•	•
RS-232 Channel	•	•	•			•	
EDID Selection			•				
Video Compensations				•	•		
IR Remote Control						•	

Video Converter					
Model	VC880	VC1080	VC010	VC060	VC080
Interface	HDMI	HDMI	VGA	DVI	HDMI
Input to Outputs	1 to 1	Multiple to 1*	1 to 1	1 to 1	1 to 1
Video Resolution	1080p	1080p	1920 x 1200	1920 x 1200	1080p
Distance	15 m	15 m (24AWG)			
Audio	•	•			• (HDMI)
RS-232 Control		•	•	•	•

* Multiple input devices (Component, Composite, S-video, VGA and HDMI)



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