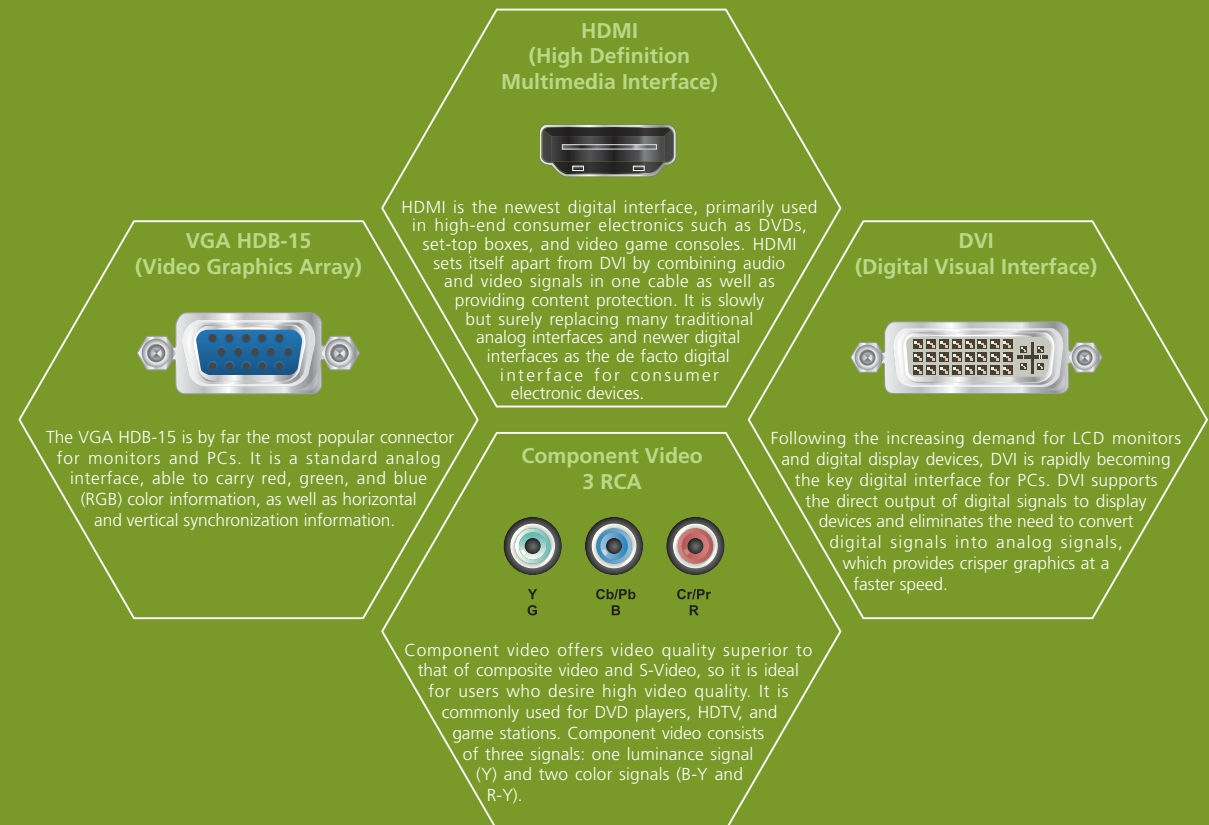Connect. Relax. Live.

Video Products *We See Your Needs*

VanCryst™

Our Vision. Your Advantage.

The VanCryst™ range of applied video solutions gives you crystal clear images from all vantage points – at home, in the office, and in the commercial, industrial, information, and entertainment fields. From switches and splitters to extenders and converters, the VanCryst™ range of video products provide you with a multitude of flexible, integrated solutions for all video-related applications. Incorporating all current video interfaces and matchless audio support, VanCryst™ products allow you to seamlessly transition to the highest resolutions. There is a VanCryst™ product to meet all your applied video needs.

**HDMI
(High Definition
Multimedia Interface)**

HDMI is the newest digital interface, primarily used in high-end consumer electronics such as DVDs, set-top boxes, and video game consoles. HDMI sets itself apart from DVI by combining audio and video signals in one cable as well as providing content protection. It is slowly but surely replacing many traditional analog interfaces and newer digital interfaces as the de facto digital interface for consumer electronic devices.

**VGA HDB-15
(Video Graphics Array)**

The VGA HDB-15 is by far the most popular connector for monitors and PCs. It is a standard analog interface, able to carry red, green, and blue (RGB) color information, as well as horizontal and vertical synchronization information.

**DVI
(Digital Visual Interface)**

Following the increasing demand for LCD monitors and digital display devices, DVI is rapidly becoming the key digital interface for PCs. DVI supports the direct output of digital signals to display devices and eliminates the need to convert digital signals into analog signals, which provides crisper graphics at a faster speed.

**Component Video
3 RCA**

Y
G

Cb/Pb
B

Cr/Pr
R

Component video offers video quality superior to that of composite video and S-Video, so it is ideal for users who desire high video quality. It is commonly used for DVD players, HDTV, and game stations. Component video consists of three signals: one luminance signal (Y) and two color signals (B-Y and R-Y).

ATEN's Complete Range of Video Solutions

Video Switch Series

ATEN video switches allow you to conveniently display the video output of 2 to 16 separate computer systems or high resolution video sources on a single monitor.

Video Matrix Switch Series

ATEN Video Matrix switches are ideal for presentations and applications where video and audio from multiple computers is being delivered to multiple destinations.

Video Splitter Series

ATEN video splitters duplicate the video signal from a single video source to up to 16 outputs. This video signal can be cascaded to accommodate numerous displays in a multitude of locations.

Video Enhancement Series

ATEN video extenders, boosters, and repeaters can increase the distance between computer systems/video source devices and high resolution display monitors to up to 150 m.

Video Synchronizer

The ATEN Video Synchronizer is designed to compensate for video signal delays over large distances. It is compatible with ATEN KVM Extenders and Video Extenders.

DVI Video Converter

ATEN DVI video converters connect VGA-based video devices to DVI digital display devices. The high video resolutions and easy-to-use features make this series a winning solution.

Integrated Applications

ATEN video product lines are designed to work together seamlessly, giving you the flexibility to integrate switches, splitters, extenders, repeaters and synchronizers in your installation. No matter whether in meeting rooms, classrooms, computer stores, and information control centers, or even at home, the compatibility of ATEN video product lines provides you with a multitude of flexible, integrated solutions to best suit your environment.

Video Extender

Cat 5e Cable

Video Switch

Video Splitter

Cat 5e Cable

Video Extender

Video Repeater

Video Synchronizer
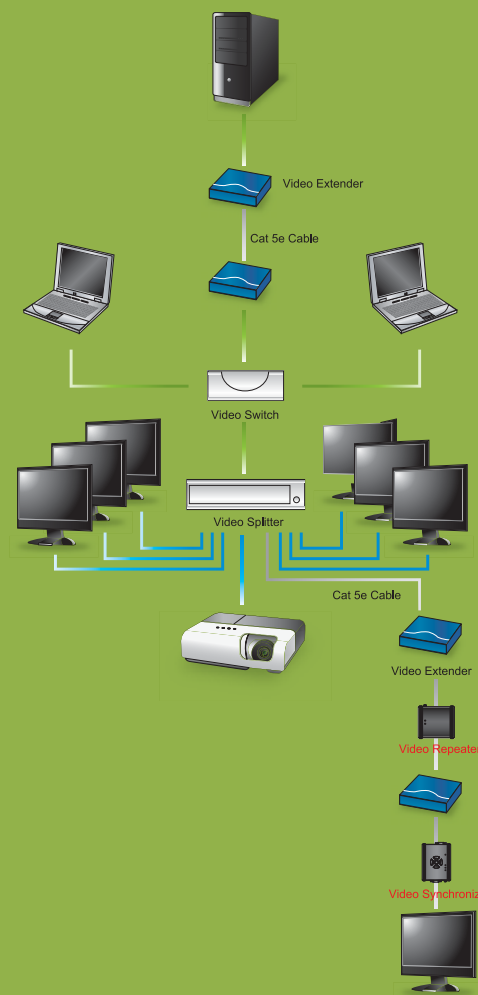
Display a Single Video Source on Thousands of Video Display Devices

ATEN video splitters allow you to add additional video splitters to increase the capacity of video outputs. By using the video output ports of a parent video splitter to connect to the video input port of the child video splitter, you can display one video source on multiple display devices.

VS0116

VS0116
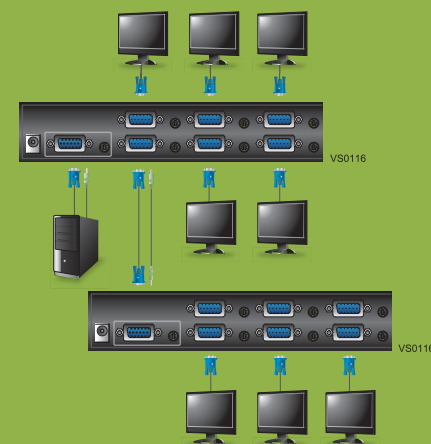
Control Color Phase and Correct Timing Errors

The line synchronizing function of the ATEN Video Synchronizer corrects color phase and timing errors that occur over long-distance transmissions. It also enables you to manually tune the R/G/B signal settings, store the settings and retrieve them later using the memory button. It is ideal for integrated applications in a video extender/repeater installation.

Extender
(Remote Unit)

Video Repeater

Extender
(Local Unit)
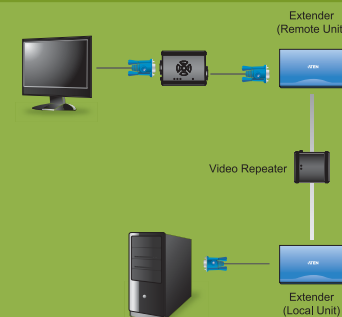
ATEN HDMI Solutions Integrate Your Visions

Whether at work or play, the ATEN HDMI product line gives you the flexibility to incorporate switches, splitters, and extenders in your HDMI installation, allowing you to integrate your vision at home, in meeting rooms, classrooms, computer stores, theaters – anywhere you need digital video and audio of the highest quality.

• The Ultimate in High Definition Home Theater

Connect multiple HDMI devices (such as an HD camcorder or satellite box, HD-DVD player, hi-def Blu-ray player, home theater PC, stand-alone streaming media player, or gaming console) to your HDMI monitor, display, projector or TV at the same time.

• Customize Your HDMI Control

To provide more application capabilities, the ATEN HDMI Switch features a serial port for high-end system control. With this serial port, you can design your own automatic software to control your system, or integrate the system into your current customized installation.

• Duplicate Your HDMI Source to a Multitude of Locations

At demo sites, computer stores, exhibitions, or theaters, you can display an A/V HDMI source on multiple HDTVs at the same time, to compare video quality among multiple displays, for example.

• Duplicate Several HDMI Sources to Different Displays

ATEN's solution is ideal for stock exchanges, banks, or any kind of information board installation where duplicating a variety of A/V information to many displays is necessary and controllers needs to be able to monitor the different HDMI outputs at the same time.

Video Splitters (Wall Mountable)

VS132
2-Port Video Splitter

- One video input to 2 video outputs
- Supports up to 350 MHz bandwidth
- Cascadable to 3 levels – provides up to 8 video signals
- Long-distance transmission – up to 65 m
- Superior video quality – 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- Compact design with convenient topside connection, lays flat on a desktop or mounts on the wall

VS102
2-Port Video Splitter

- One video input to 2 video outputs
- Supports up to 250 MHz bandwidth
- Cascadable to 3 levels – provides up to 8 video signals
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- Compact design with convenient topside connection, lays flat on a desktop or mounts on the wall

VS82 / VS84 / VS88
2/4/8-Port Video Splitter

- One video input to 2/4/8 video outputs
- Supports up to 250 MHz bandwidth
- Cascadable to 3 levels – provides up to 8/64/512 video signals
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- Compact design with convenient topside connection, lays flat on a desktop or mounts on the wall
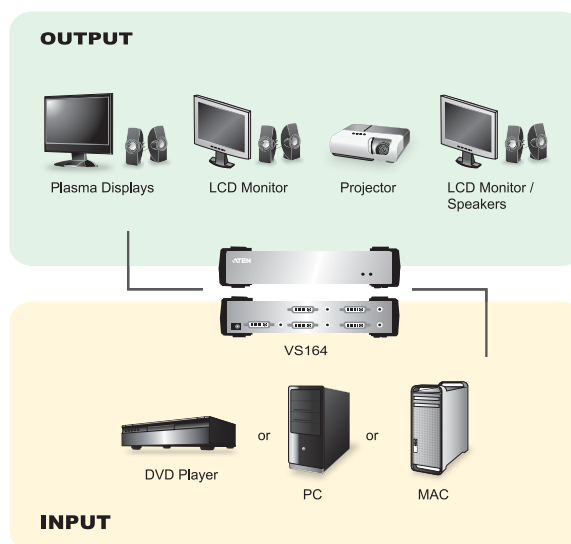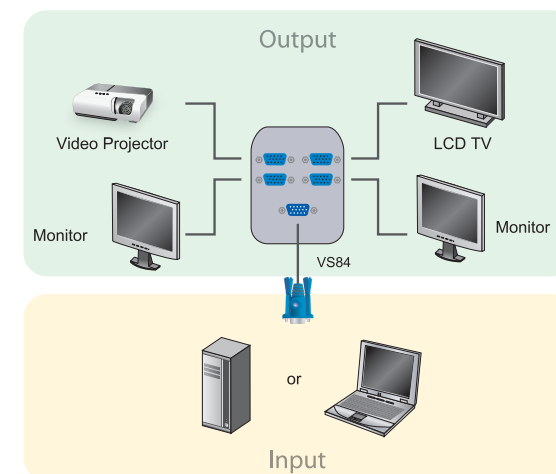
| Video In HDB-15 | Video Out HDB-15 | Expansion Cascade | Wall Mountable |

| Video In HDB-15 | Video Out HDB-15 | Expansion Cascade | Wall Mountable |

| Video In HDB-15 | Video Out HDB-15 | Expansion Cascade | Wall Mountable |

VS162 / VS164
2/4-Port DVI Video Splitter

- Connects computers with DVI graphics to multiple DVI compatible monitors or projectors
- Fully compliant with DVI-Digital and DVI-Analog
- Supports DDWG (Digital Display Working Group) standard for DVI compliant monitors
- Cascadable to 3 levels – provides up to 8/ 64 video signals
- Audio-enabled
- Superior video quality – up to 1920 x 1200
- DDC, DDC2, DDC2B compatible (Port 1 only)

Rear —

| Video In DVI | Video Out DVI | Audio Mini Stereo |

Setup (VS164)

OUTPUT

Plasma Displays   LCD Monitor   Projector   LCD Monitor / Speakers

VS164

DVD Player   or   PC   or   MAC

INPUT

Setup (VS84)

Output

Video Projector   LCD TV

Monitor   Monitor

VS84

or

Input

Accessories

1.   2.

1. VGA Cable: 1.8 m x 1 (VS82/VS84/VS88)(Optional)
2. Power Adapters: DC5.3V x 1 (VS162/VS164)
              DC9V x 1 (VS102,VS82/VS84/VS88)
              AC9V x 1(VS132)

Optional Equipment

Type	Part No. / Spec.	Page No.	Compatible Products
DVI Cables	2L-7D02V (1.8 m)	P81-S	VS162 / VS164

At a Glance

Video Switches

Function		VS481A	VS182	VS184	VE800
Model Name		4 Port HDMI Switch	2 Port HDMI Splitter	4 Port HDMI Splitter	HDMI Extender
Video Input		4	1	1	1
Video Output		1	2	4	1
Video Resolution		1920x1200; 1080p	1920x1200; 1080p		1920x1200; 1080p
Interface	Video	HDMI			
	Audio				
Pushbutton		•			
EQ Adjustment					•
IR Remote Control		•			
Signal Range		20 m (24 AWG)	20 m (24 AWG)		
Cascade			•	•	
Outputs (Max)			8	64	
Max. Distance					60m 1080i
Power Consumption		DC5.3V, 2.4 W	DC5.3V, 3.3W	DC5.3V, 9.3W	DC5V, 1.22W (local) DC5V,0.95W (Remote)
Environment	Operating Temp.	0–50ºC			
	Storage Temp.	-20–60ºC			
	Humidity	0–80% RH, Non-condensing			
Physical Properties	Housing	Metal			
	Weight	0.47 kg	0.31kg	0.47 kg	0.16 kg
	Dimensions (L x W x H)	20.00 x 8.00 x 2.50 cm	12.50 x 8.15 x 2.50 cm	20.00 x 8.00 x 2.50 cm	9.00 x 5.50 x 2.40 cm

Video Switches

ATEN video switches allow you to conveniently display the video output of 2 to 16 computer systems or high-resolution video sources on a single monitor. All models grant users the convenience of instantly accessing signals from various sources without having to reach behind the screen. With various models supporting the full range of video standards, the ATEN series is not only ideal for presentations, but also for home theater applications.

• Easy Switching

Fast and convenient video source selection via front panel pushbuttons or IR remote control.

• External IR Receiver

External IR receiver (1.8 m) allows the switch to be located close to the projector or monitor to keep the cables shorter and preserve optimum resolution, while the operator uses the remote control unit to select the audio/video source.

• Audio Enabled

No need for a separate set of speakers for each source.

• Applications

Ideal for meeting rooms, laboratories, research centers, information management centers and home theater applications.

Not all products support these features. Please see the comparison chart on page 54 for details.

Video Switches

VS291 / VS491
2/4-Port Video Switch

- Displays the video output of two (VS291)or four (VS491) computers on a single monitor or projector
- Quick and easy switching via front panel pushbutton
- Long-distance transmission – up to 10 m
- Superior video quality – up to 1920 x 1440; DDC; DDC2; DDC2B
- Supports VGA, XGA. SVGA, UXGA and multisync monitors

VS881
8-Port Video Switch
Ideal for Meeting Rooms

- Displays the video output of eight computers on a single monitor or projector
- Stylish concentric design with logical connector layout for quick and easy access
- Quick and easy switching via front panel pushbuttons or IR remote control
- External IR receiver (1.8 m) for maximum efficiency and convenience
- Extra-thin IR handset allows easy storage in the mother unit
- Long-distance transmission – up to 10 m
- Superior video quality – up to 2048 x 1536; DDC; DDC2; DDC2B
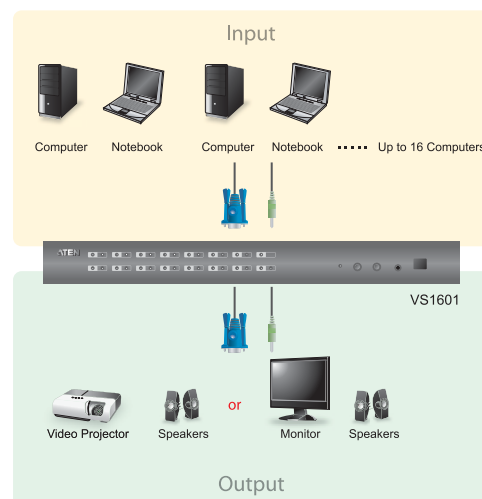- Supports VGA, XGA, SVGA, UXGA, QXGA and multisync monitors

| Video In HDB-15 | Video Out HDB-15 |

| Video In HDB-15 | Video Out HDB-15 | IR Remote Control |

VS1601
16-Port Video Switch + Audio

- Displays the video output of sixteen computers on a single monitor or projector
- Quick and easy switching via front panel pushbuttons or IR remote control
- External IR receiver (1.8 m) for maximum efficiency and convenience
- Audio-enabled
- Supports up to 250 MHz bandwidth
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440 @ 60Hz; DDC; DDC2; DDC2B
- Supports VGA, SVGA, XVGA and multisync monitors
- Designed for enterprise use – 1U in size and rack mountable

Rear

Video In	Video Out	Audio	IR Remote
HDB-15	HDB-15	Mini Stereo	Control

Setup (VS1601)

Input

Computer   Notebook   Computer   Notebook   • • • • •   Up to 16 Computers

VS1601

Video Projector   Speakers   or   Monitor   Speakers
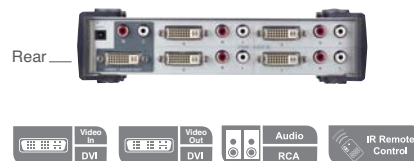
Output

Accessories

1.
2.
3.
4.
5.
6.

1. VGA/Audio Cable: 1.8 m x 1 (VS1601)
2. VGA Cable: 1.2 m x 1 (VS881)
3. IR Remote Control Unit x 1 (VS881)
4. IR Remote Control Unit x 1 (VS1601)
5. Infrared Receiver x 1 (VS881, VS1601)
6. Power Adapter:AC9V x 1 (VS881, VS1601); DC9V x 1 (VS291/VS491)

Video Switches

VS261 / VS461
2/4-Port DVI Video Switch

- Displays the video output of two or four digital devices (e.g., DVD player, computer) on a single DVI display device
- Fully compliant with DVI-Digital and DVI-Analog
- Audio-enabled
- Quick and easy switching via front panel pushbuttons or IR remote control
- Superior video quality – up to 1920 x 1200
- DDC, DDC2, DDC2B compatible
- Stackable design
- Supports PCs and Macs

VS231 / VS431
2/4-Port HDTV A/V Switch

- Displays the video output of two or four digital devices on a single high definition monitor or projector
- Audio-enabled
- Quick and easy switching via front panel pushbuttons or IR remote control
- Electronic switching for greater reliability and durability
- Superior video quality – up to 1600 x 1200
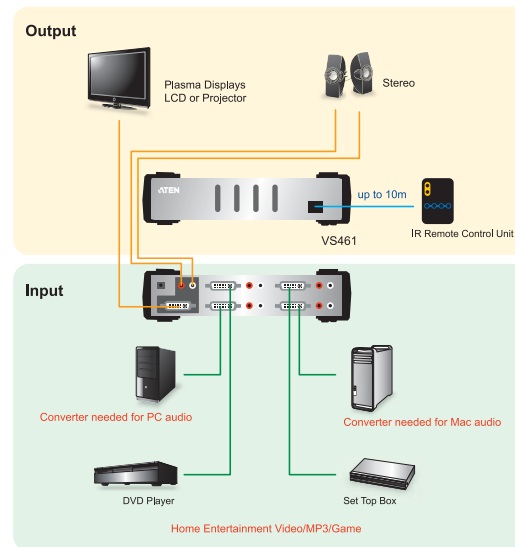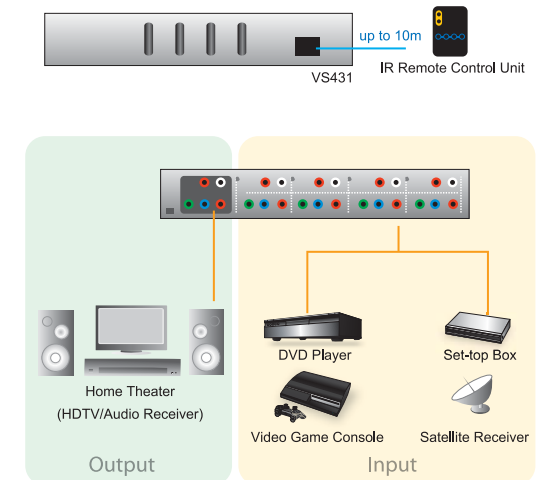- Complete home theater switching solution

Rear ___

Video In DVI   Video Out DVI   Audio RCA   IR Remote Control

Rear ___

A/V In RCA   A/V Out RCA   IR Remote Control
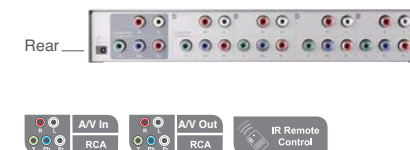
VS201
2-Port Video Switch

- Displays the video output of two computers on a single monitor or projector
- Automatic Incoming signal selection (Auto)
- Quick and easy switching via slide switch
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440; DDC; DDC2; DDC2B
- Supports VGA, XGA. SVGA, UXGA and multisync monitors

Video In HDB-15	Video Out HDB-15

Setup (VS461)

Output

Plasma Displays LCD or Projector

Stereo

VS461

up to 10m

IR Remote Control Unit

Input

Converter needed for PC audio

Converter needed for Mac audio

DVD Player

Set Top Box

Home Entertainment Video/MP3/Game

Accessories

1.	2.

1 IR Remote Control Unit x 1 (VS261/VS461, VS231/VS431)
2. Power Adapters: DC5.3V x 1 (VS261/VS461, VS231/VS431); AC9V x 1 (VS201)

Optional Equipment

Type	Part No. / Spec.	Page No.	Compatible Products
DVI Cables	2L-7D02I (1.8 m)	P81-U	VS261/ VS461

Setup (VS431)

VS431

up to 10m

IR Remote Control Unit

Home Theater (HDTV/Audio Receiver)

DVD Player

Set-top Box

Video Game Console

Satellite Receiver

Output

Input

At a Glance

Video Switches

Model No.		VS291	VS491	VS881	VS1601	VS261	VS461	VS231	VS431	VS201
Video Input		2	4	8	16	2	4	2	4	2
Video Output		1	1	1	1	1	1	1	1	1
Video Resolution		1920x1440	1920x1440	2048x1536	1920x1440	1920x1200	1920x1200	1600x1200	1600x1200	1920x1440
Audio					•	•	•	•	•	
Interface	Video	HDB-15	HDB-15	HDB-15	HDB-15	DVI	DVI	Component Video	Component Video	HDB-15
	Audio				Mini Stereo	Stereo RCA	Stereo RCA	Stereo RCA	Stereo RCA	
Pushbutton		•	•	•	•	•	•	•	•	• (Slide Switch)
IR Remote Control				•	•	•	•	•	•	
External IR Receiver				•	•					
Signal Range		10 m	10 m	10 m	65 m	5 m	5 m	5 m	5 m	65 m
Rack Mountable					•					
Power Consumption		DC9V, 0.9W (Max.)	DC9V, 1.35W (Max.)	AC9V, 4.5W	AC9V, 2.5W	DC 5.3V, 1.91W (Max.)	DC 5.3V, 4.93W (Max.)	DC 5.3V, 0.8W (Max.)		AC9V, 0.9W (Max.)
Environment	Operating Temp.	0–50°C								
	Storage Temp.	-20–60°C								
	Humidity	0–80% RH, Non-condensing								
Physical Properties	Housing	Plastic/Metal		Plastic	Metal	Metal	Metal	Metal		Metal
	Weight	0.15 kg	0.18 kg	0.45 kg	2.60 kg	0.50 kg	0.75 kg	0.65 kg	0.85 kg	0.20 kg
	Dimensions (L x W x H)	12.00 x 6.50 x 4.40 cm		17.00 x 19.00 x 4.50 cm	43.30 x 16.00 x 4.40 cm (19"/1U)	14.00 x 8.70 x 5.50 cm	21.00 x 8.70 x 5.50 cm	26.00 x 7.50 x 4.50 cm	26.00 x 7.50 x 4.50 cm	10.40 x 7.90 x 2.80 cm

Video Splitters

A video splitter not only duplicates the video/audio signal from a single source to multiple outputs, but also boosts the signal so it can be conveyed over long distances before unacceptable degradation occurs. Since the signal is boosted, video loss is kept at a minimum and multiple splitters can be cascaded to accommodate even more output displays.

- **Expandable**

  Cascadable to 3 levels – provides up to 8/64/512 and thousands of video signals.

- **Audio Enabled**

  The audio signal from a single source is duplicated to multiple outputs.

- **Long Signal Range**

  Long-distance transmission – up to 65 m.

- **Applications**

  Ideal for public broadcasting, computer stores, classrooms and training facilities.

Not all products support these features. Please see the comparison chart on page 60 for details.

Video Splitters

VanCryst™

VS132A/ VS134A/VS138A
2/4/8-Port Video Splitter

- One video input to 2/4/8 video outputs
- Supports up to 450 MHz bandwidth
- Cascadable to 3 levels – provides up to 8/64/512 video signals
- Long distance transmission – up to 65m
- Superior video quality – up to 2048 x 1536
- Supports VGA, XGA, SVGA, UXGA, QXGA and multi-sync monitors
- Built–in 1.5 GHz amplifier to ensure video system maintain excellent fidelity
- All-metal casing

VS92A / VS94A / VS98A
2/4/8-Port Video Splitter

- One video input to 2/4/8 video outputs
- Cascadable to 3 levels – provides up to 8/64/512 video signals
- Supports up to 350 MHz bandwidth
- Long-distance transmission – up to 65 m
- Superior video quality – 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
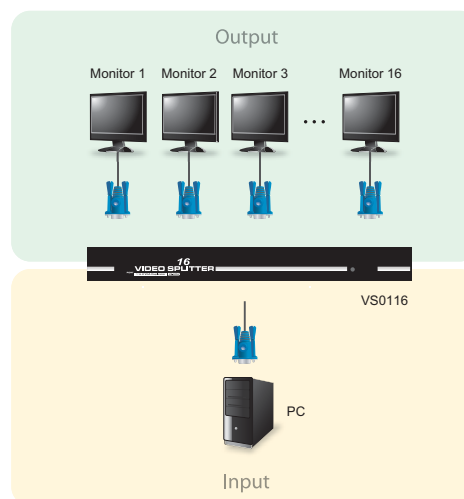- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- All metal casing

Rear

Video In — HDB-15 Video Out — HDB-15 Expansion — Cascade

Rear

Video In — HDB-15 Video Out — HDB-15 Expansion — Cascade

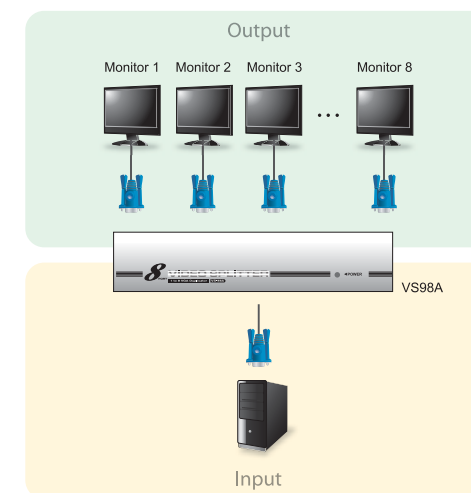## VS0116
16-Port Video Splitter + Audio

- One video input to 16 video outputs
- Supports up to 250 MHz bandwidth
- Cascadable to 3 levels – provides up to thousands of video signals
- Long-distance transmission – up to 65 m
- Audio-enabled
- Superior video quality – up to 1920 x 1440
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- DDC, DDC2, DDC2B compatible (Port 1 only)
- Designed for enterprise use – 1U in size and rack mountable

Rear ⎯

Video In HDB-15	**Video Out** HDB-15	**Audio** Mini Stereo	**Expansion** Cascade

Setup (VS0116)

Output

Monitor 1   Monitor 2   Monitor 3   · · ·   Monitor 16

VIDEO SPLITTER 16

VS0116

PC

Input

Setup (VS98A)

Output

Monitor 1   Monitor 2   Monitor 3   · · ·   Monitor 8

VS98A

Input

Accessories

1.   2.

1. VGA/Audio Cable: 1.8 m x 1 (VS0116)
2. Power Adapters: DC9V x 1 (VS92A/VS94A/VS98A)
   DC5V x 1 (VS132A/VS134A/VS138A)
   DC5.3V x 1 (VS0116)

Video Splitters (Wall Mountable)

VS132
2-Port Video Splitter

- One video input to 2 video outputs
- Supports up to 350 MHz bandwidth
- Cascadable to 3 levels – provides up to 8 video signals
- Long-distance transmission – up to 65 m
- Superior video quality – 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- Compact design with convenient topside connection, lays flat on a desktop or mounts on the wall

VS102
2-Port Video Splitter

- One video input to 2 video outputs
- Supports up to 250 MHz bandwidth
- Cascadable to 3 levels – provides up to 8 video signals
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
- Compact design with convenient topside connection, lays flat on a desktop or mounts on the wall

VS82 / VS84 / VS88
2/4/8-Port Video Splitter

- One video input to 2/4/8 video outputs
- Supports up to 250 MHz bandwidth
- Cascadable to 3 levels – provides up to 8/64/512 video signals
- Long-distance transmission – up to 65 m
- Superior video quality – up to 1920 x 1440
- DDC, DDC2, DDC2B Compatible (Port 1 only)
- Supports VGA, XGA, SVGA, UXGA and multisync monitors
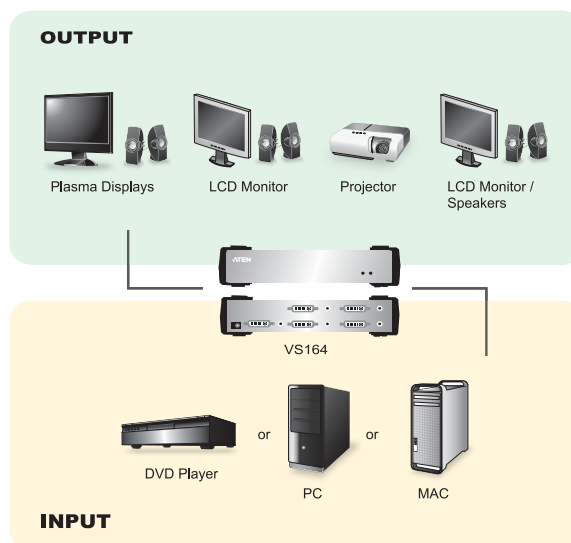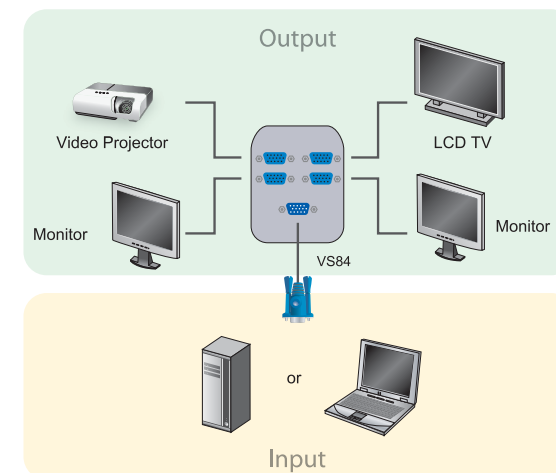- Compact design with convenient topside connection, lays flat on a desktop or mounts on the wall

| Video In HDB-15 | Video Out HDB-15 | Expansion Cascade | Wall Mountable |

| Video In HDB-15 | Video Out HDB-15 | Expansion Cascade | Wall Mountable |

| Video In HDB-15 | Video Out HDB-15 | Expansion Cascade | Wall Mountable |

VS162 / VS164
2/4-Port DVI Video Splitter

- Connects computers with DVI graphics to multiple DVI compatible monitors or projectors
- Fully compliant with DVI-Digital and DVI-Analog
- Supports DDWG (Digital Display Working Group) standard for DVI compliant monitors
- Cascadable to 3 levels – provides up to 8/ 64 video signals
- Audio-enabled
- Superior video quality – up to 1920 x 1200
- DDC, DDC2, DDC2B compatible (Port 1 only)

Rear —

| | Video In DVI | | Video Out DVI | | Audio Mini Stereo |

Setup (VS164)

OUTPUT

Plasma Displays   LCD Monitor   Projector   LCD Monitor / Speakers

VS164

DVD Player   or   PC   or   MAC

INPUT

Setup (VS84)

Output

Video Projector   LCD TV

Monitor   Monitor

VS84

or

Input

Accessories

1.   2.

1. VGA Cable: 1.8 m x 1 (VS82/VS84/VS88)(Optional)
2. Power Adapters: DC5.3V x 1 (VS162/VS164)
   DC9V x 1 (VS102,VS82/VS84/VS88)
   AC9V x 1(VS132)

Optional Equipment

Type	Part No. / Spec.	Page No.	Compatible Products
DVI Cables	2L-7D02V (1.8 m)	P81-S	VS162 / VS164

At a Glance

Video Splitters

Model No.		VS132A	VS134A	VS138A	VS92A	VS94A	VS98A	VS0116	VS132	VS102	VS82	VS84	VS88	VS162	VS164
Video Input		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Video Output		2	4	8	2	4	8	16	2	2	2	4	8	2	4
Video Resolution		2048 X 1536 @ 60Hz	2048 X 1536 @ 60Hz	2048 X 1536 @ 60Hz	1920x1440 @ 60Hz	1920x1440 @ 60Hz	1920x1440 @ 60Hz	1920x1440 @ 60Hz	1920x1440 @ 75Hz	1920x1440 @ 60Hz	1920x1440 @ 60Hz	1920x1440 @ 60Hz	1600x1200 @ 60Hz	1920x1200 @ 60Hz	1920x1200 @ 60Hz
Audio								•						•	•
Interface	Video	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	HDB-15	DVI	DVI
	Audio							Mini Stereo						Mini Stereo	Mini Stereo
VGA Bandwidth		450 MHz	450 MHz	450 MHz	350 MHz	350 MHz	350 MHz	250 MHz	350 MHz	250 MHz	250 MHz	250 MHz	200 MHz	165 MHz	165 MHz
Signal Range		65m	65 m	65 m	65 m	65 m	65 m	65 m	65 m	65 m	65 m	65 m	65 m	5 m	5 m
Cascade		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Outputs (Max.)		8	64	512	8	64	512	4,096	8	8	8	64	512	8	64
Rack Mountable								•							
Power Consumption		DC5V, 0.78W	DC5V, 0.95W	DC5V, 2.25W	DC 9V, 0.85W	DC 9V, 2.43W	DC 9V, 3.6W	DC5.3V, 3.3W	AC9V, 1.08W	DC 9V, 1.89W	DC9V, 1.35W	DC 9V, 2.25W	DC 9V, 2.5W	DC5.3V, 3.4W	DC5.3V, 4.8W
Environment	Operating Temp.	0–50°C													
	Storage Temp.	-20–60°C													
	Humidity	0–80% RH, Non-condensing													
Physical Properties	Housing	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Plastic	Plastic	Plastic	Metal	Metal
	Weight	0.42 kg	0.61 kg	0.69 kg	0.32 kg	0.45 kg	0.53 kg	2.80 kg	0.19 kg	0.19 kg	0.14 kg	0.15 kg	0.22 kg	0.62 kg	0.72 kg
	Dimensions (L x W x H)	13.00 x 7.50 x 4.50 cm	20.00 x 7.50 x 4.50 cm	20.00 x 7.50 x 4.50 cm	13.00 x 7.50 x 4.50 cm	20.00 x 7.50 x 4.50 cm		43.30 x 16.00 x 4.40 cm (19"/1U)	10.40 x 7.80 x 2.80 cm	10.00 x 7.90 x 2.80 cm	11.45 x 8.75 x 3.33 cm		15.59 x 9.79 x 3.33 cm	22.40 x 15.20 x 5.20 cm	

Video Matrix Switches

ATEN Video Matrix Switches route video/audio signals from multiple sources to multiple destinations, such as screens and projectors. Video Matrix Switches also act as distribution amplifiers, boosting the signal output and thereby allowing you to extend the operating distance up to 65 meters while maintaining excellent video quality. Further increasing the number of outputs is also supported by cascading the Video Matrix Switches with a regular video splitter.

• Easy Switching

Front panel pushbuttons select the combination of video input to video output.

• Long Signal Range

Duplicates and enhances video signals up to 65 m (max.).

• Expandable

Cascade to ATEN video splitters to support hundreds of video displays.

• Applications

Ideal for presentations and applications where information from multiple computers is being delivered to multiple displays, such as Information Control Centers or Customer Service Centers.

Video Matrix Switches

Output — Video Projector | Speakers | Video Projector | Speakers

Notebook

VS0204

PC

Input — Flat Screen Monitor | Speakers | Monitor | Speakers

Accessories

1. VGA/Audio Cable: 1.8 m x 1 (VS0202/VS0204/VS0404)
2. Power Adapter: DC5.3V x 1 (VS0202/VS0204/VS0404)

VS0202
Video Matrix Switch + Audio
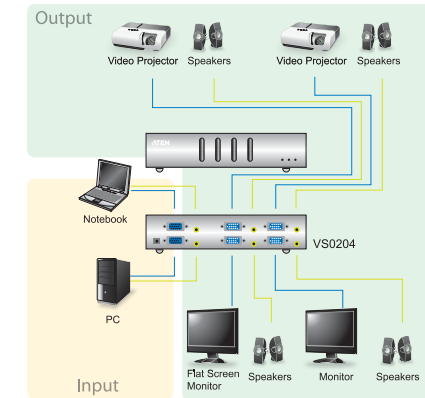2 Inputs, 2 Outputs, Flexible Display

- Each of the 2 video outs can toggle between Source 1 and Source 2 using front panel pushbuttons
- Expandable – Cascade to ATEN's video splitters to support hundreds of video displays
- Audio-enabled
- With up to 300 MHz Video Bandwidth
- Duplicate and enhance video signals up to 65 m
- Superior video quality – up to 1920 x 1440

VS0204
Video Matrix Switch + Audio
2 Inputs, 4 Outputs, Flexible Display

- Each of the 4 video outs can toggle between Source 1 and Source 2 using front panel pushbuttons
- Expandable – Cascade to ATEN's video splitters to support hundreds of video displays
- Audio-enabled
- With up to 300 MHz Video Bandwidth
- Duplicate and enhance video signals up to 65 m
- Superior video quality – up to 1920 x 1440

VS0404
Video Matrix Switch + Audio
4 Inputs, 4 Outputs, Flexible Display

- Each of the 4 video outs can toggle between Source 1 and Source 4 using front panel pushbuttons
- Expandable – Cascade to ATEN's video splitters to support hundreds of video displays
- Audio-enabled
- With up to 300 MHz Video Bandwidth
- Duplicate and enhance video signals up to 65 m
- Superior video quality – up to 1920 x 1440

Rear — Video In HDB-15 | Video Out HDB-15 | Audio Mini Stereo | Expansion Cascade

Rear — Video In HDB-15 | Video Out HDB-15 | Audio Mini Stereo | Expansion Cascade

Rear — Video In HDB-15 | Video Out HDB-15 | Audio Mini Stereo | Expansion Cascade

At a Glance

Video Matrix Switches

Model No.		VS0202	VS0204	VS0404
Video Input		2	2	4
Video Output		2	4	4
Video Resolution		1920x1440@ 60Hz	1920x1440@ 60Hz	1920x1440@ 60Hz
Audio		•	•	•
Interface	Video	HDB-15	HDB-15	HDB-15
	Audio	Mini Stereo	Mini Stereo	Mini Stereo
Pushbutton Switch		•	•	•
VGA Bandwidth		300 MHz	300 MHz	300 MHz
Expandable		•	•	•
Signal Range		65 m	65 m	65 m
Power Consumption		DC5.3V, 2.39W	DC5.3V, 3.02W	DC5.3V, 7.16W
Environment	Operating Temp.	0-50°C		
	Storage Temp.	-20-60°C		
	Humidity	0-80% RH, Non-condensing		
Physical Properties	Housing	Metal		
	Weight	0.47 kg	0.69 kg	0.89 kg
	Dimensions (L x W x H)	13.00 x 7.50 x 4.50 cm	20.00 x 7.50 x 4.50 cm	26.00 x 7.50 x 4.50 cm

Video Extenders

ATEN provides various Video Extender models to support either VGA (Analog) or DVI (Digital) video signals. Video Extenders allow you to extend the distance between computer systems and display devices up to 150 m. Video Extenders are ideal for applications where remote video displays are required, such as placing computers in a secure location or where they are protected from harsh environmental conditions, or simply when the display device needs to be at a distance from the source device.

ATEN also offers the Video Repeater, a video signal extension device that is compatible with ATEN KVM Extenders and Video Extenders. It extends video transmission range to up to twice the original distance over Cat 5e cables. Furthermore, in some long distance installations where video signals may degrade, the VE550 can be used in conjunction with the VE510 Video Synchronizer to compensate for video signal delay and video color bleeding.

• Audio Enabled
Many models extend the audio signal over long distances in addition to the video signal.

• VGA and DVI compatible
ATEN offers either VGA (Analog) or DVI (Digital) video interfaces to meet your expanding needs.

• Long Distance Transition
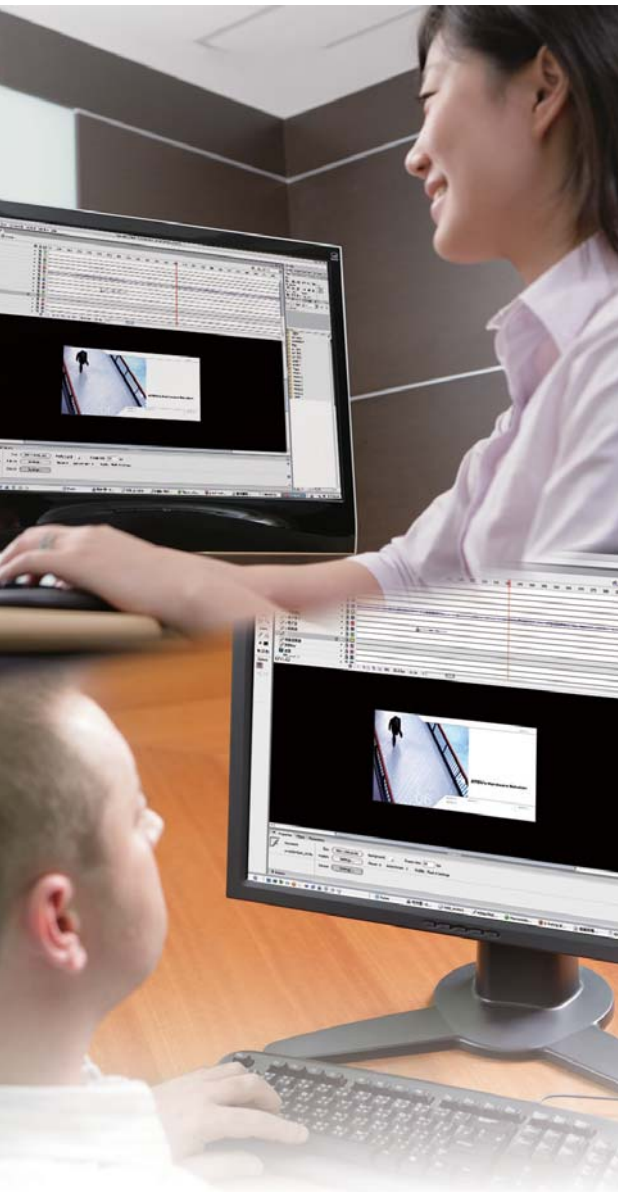Requires only one Cat 5e cable to extend the video/audio signal up to 150 m.

• Dual Display
Supports a local and a remote display.

• Video Gain Control
Compensation switch is provided to adjust video gain control to compensate for distance.

Not all products support these features. Please see the comparison chart on page 67 for details.

Video Extenders

NEW

VE200
Audio/Video Extender
Dual Audio/Video Output

- Uses Cat 5e cable to connect the local and remote units
- Supports one local and two remote displays
- Transmission distance up to 150 m*
- Multiplatform support – Windows, Mac, and Linux
- Superior video quality – up to 1920 x 1200 @ 60 Hz at 50m, 1600 x 1200@60 Hz at 150m, 1280 x 1024 @ 60 Hz at 200m
- Two gain control modes for sharpest video
- IR remote control for screen on/off at remote site
- Provides two RS-232 channels for selection
- Follows VESA FDMI mount standard
- Supports VGA, SVGA, XGA, SXGA, UXGA and multisync monitors – Local monitor supports DDC

* When combined in an installation with ATEN's VB552 (VGA Over Cat5 Repeater + Audio) can extend distance up to 450 m

VE150
Video Extender

- Uses Cat 5e cable to connect the local and remote units
- Supports one local and one remote displays
- Transmission distance up to 150 m
- Easy installation
- 16-position adjustable video gain control to compensate for distance
- Superior video quality – up to 1280 x 1024
- Supports VGA, SVGA, XGA, SXGA and multisync monitors – Local monitor supports DDC

VE120
Video Extender

- Uses Cat 5e cable to connect the local and remote units
- Supports one local and one remote displays
- Transmission distance up to 130 m
- Easy installation
- Picture compensation improves video quality over long distances
- Superior video quality – up to1024 x 768
- Supports VGA, SVGA, XGA, SXGA and multisync monitors – Local monitor supports DDC

Rear —

| Video In HDB-15 | Video Out HDB-15 | Extension 150 meters | Audio Speaker |
| RS-232 | | | |

| Video In HDB-15 | Video Out HDB-15 | Extension 150 meters |

| Video In HDB-15 | Video Out HDB-15 | Extension 130 meters |

Video Synchronizer & Converter

VE510
Video Synchronizer
Synchronize Video Signals for Perfect Pictures

- Connects VGA-based video devices to VGA displays and enhances the video quality in long distance installations
- Compensates for a delay and synchronizes signal delays
- RGB delay tuner – manually synchronizes the RGB signals via pushbuttons
- Skew equalization
- Memory set button – allows storing and recalling of user settings
- LED display for status monitoring
- Easy installation
- Hot pluggable
- Compact Size – Din Rail and Wall mountable
- Compatible with ATEN KVM Extenders, Video Extenders and KVM Switches

VC160
VGA to DVI Converter

- 1 VGA input, 1 DVI-D output
- Connects VGA-based video devices to DVI digital monitors or DVI-equipped projectors
- Superior video quality – up to 1600 x 1200
- Memory set button – allows storing and selecting user settings
- Easy installation

Video In HDB-15	Video Out HDB-15

Video In HDB-15	Video Out DVI

Setup (VE200)
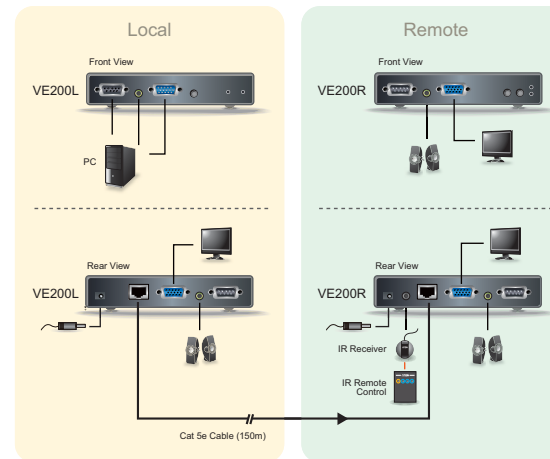
Accessories

1. VGA Cable: 1.8 m x 1 (VE120, VE150, VE510, VC160)
2. VGA/Audio Cable: 1.8 m x 1 (VE200)
3. Power Transfer Cable x 1 (VE510)
4. IR Remote Control Unit x 1 (VE200)
5. Infrared Receiver x 1 (VE200)
6. Mounting Kit x 1 (VE510, VC160)
7. Grounding Wire x 1 (VE510)
8. Power Adapters: AC9V x 2 (VE120); DC5.3V x 2 (VE150, VE200); DC5.3V x 1 (VC160)

Optional Equipment

Type	Part No. / Spec.	Compatible Product
Video Synchronizer	VE510	VE120, VE150 (p.64)

Media Distribution Solution

Complete Video Over Cat 5 + Audio Solution

Audio/Video Over Cat 5+Serial
Distribute high quality audio/video content to multiple displays in real time

ATEN's complete Video Over Cat 5 + Audio solution is the quickest and most efficient way to move multimedia content from input source to multiple displays.

A one-to-many, point-to-multipoint system for transmission of high quality video and audio, the complete Video Over Cat 5 + Audio solution transmits rich multimedia content in real time from any type of player/computer to multiple display devices over Cat 5e cable. Cascadable to three levels, the complete Video Over Cat 5 + Audio solution can support thousands of displays. The solution also provides screen controls at the remote site and RS-232 connectivity so devices such as touchscreens and barcode scanners can be included in the installation.

The complete Video Over Cat 5 + Audio solution provides the flexibility you need for a customized digital signage or video display installation, allowing you to set up your display device up to 450 m (1500 ft) from the source device. Displays can be mounted strategically in public view, while the hardware needed to run the multimedia content is kept behind closed doors and out of public reach.

The complete Video Over Cat 5 + Audio solution is ideal for any installation that requires multimedia content to be delivered to multiple destinations, such as:
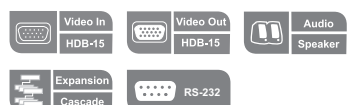
- In-store and tradeshow digital signage
- Broadcasting information to public locations (news, airline and train schedules, etc.
- Movie theaters, customer service centers
- Traffic, information control centers
- Sporting events, gyms, bowling alleys
- Trading floors, banks
- Classrooms, lecture theater overflow rooms
- Meeting rooms, seminars, company training facilities

VS1504 / VS1508
4/8-Port Cat 5 Audio/ Video Splitter

- One video input to 4/8 video outputs
- Cascadable to three levels – provides up to thousands of video signals when combined in an installation with ATEN repeaters*
- Audio and serial enabled
- Uses Cat 5e (or higher) cable to extend displays up to 150 m
- Superior video quality – supports 1920 x 1200 @ 60 Hz at 30m, 1600 x 1200@60 Hz at 150m, 1280 x 1024 @ 60 Hz at 200m
- Two gain control modes for sharpest picture quality – adjustable by OSD
- Group screens off/on function
- Provides two RS-232 channels for selection
- Follows VESA FDMI mount standard

* When combined in an installation with ATEN's VB552 (VGA Over Cat5 Repeater + Audio) can extend displays up to 450 m
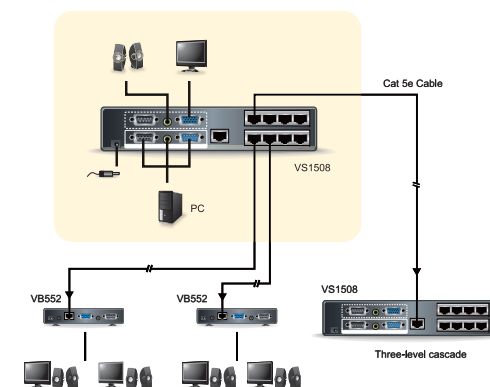
IT'S VERY WELL MADE IN TAIWAN

Rear —

| Video In HDB-15 | Video Out HDB-15 | Audio Speaker |
| Expansion Cascade | RS-232 | |

VB552
VGA Over Cat 5 Repeater + Audio
Dual Audio/Video Output

- Uses Cat 5e cable to extend audio/video signal
- Extends the transmission range an extra 150m
- Superior video quality – supports 1920 x 1200 @ 60 Hz at 30m, 1600 x 1200@60 Hz at 150m, 1280 x 1024 @ 60 Hz at 200m
- Audio and serial enabled
- Two gain control modes for sharpest picture quality
- Video gain and compensation adjustable via OSD
- IR receiver for quick and easy video quality adjustment
- IR remote control for screen on/off and video adjustment at remote site
- Provides two RS-232 channels for selection
- Follows VESA FDMI mount standard
- Supports VGA, SVGA, XGA, SXGA, UXGA and multisync monitors – Local monitor supports DDC

Rear —

| Video In HDB-15 | Video Out HDB-15 | Extension 150 meters |
| Expansion Cascade | Audio Speaker | RS-232 |

Setup

Cat 5e Cable

VS1508

PC

VB552   VB552   VS1508

Three-level cascade

Accessories

1.

2.

3.

1. VGA/Audio Cable: 1.8 m x 1 (VS1504/VS1508, VB552)
2. Power Adapter: DC5.3V x 1 (VS1504/VS1508, VB552)
3. IR Remote Control Unit x 1 (VB552)

Optional Equipment

Type	Part No. / Spec.	Page No.	Compatible Product
VGA Over Cat 5 Repeater	VB552	P66	VS1504/VS1508
Audio/Video Extender	VE200	P64	VS1504/VS1508, VB552
Video Splitter via Cat 5 with Audio	VS1504/VS1508	P66	VB552

At a Glance

Video Extenders, Media Distribution Solution

Model No.		VE200	VE150	VE120	VE550	VB552	VS1504	VS1508
Model Name		Audio / Video Extender	Video Extender	Video Extender	VGA Over Cat 5 Repeater		4-Port Cat 5 Audio/Video Splitter	8-Port Cat 5 Audio/Video Splitter
Video Input		1	1	1	1	1	1	1
Video Output		2	1	1	1	2	1or 25*	1or 49*
Audio		2				2	•	•
RS-232		2				2	•	•
Interface	In	HDB-15	HDB-15	HDB-15	RJ-45	HDB-15	HDB-15	HDB-15
	Out	HDB-15	HDB-15	HDB-15	RJ-45	HDB-15	HDB-15/RJ-45 x 4	HDB-15/RJ-45 x 8
	Audio	Mini Stereo x 2				Mini Stereo x 2	Mini Stereo	Mini Stereo
	RS-232	DB-9 x 2				DB-9 x 2	DB-9	DB-9
Max. Distance		450 m**	150 m	130 m	Up to twice the original distance	Up to twice the original distance	450 m**	450 m*
Unit to Unit Connection		Cat 5e		Cat 5e	Cat 5e	Cat 5e	Cat 5e	Cat 5e
Video Resolution		1920 x 1200 @ 60 Hz at 30m, 1600 x 1200@60 Hz at 150m, 1280 x 1024 @ 60 Hz at 200m	1280x1024	1024x768		1920 x 1200 @ 60 Hz at 30m, 1600 x 1200 @ 60 Hz at 150m, 1280 x 1024 @ 60 Hz at 200m	1920 x 1200 @ 60 Hz at 30m, 1600 x 1200 @ 60 Hz at 150m, 1280 x 1024 @ 60 Hz at 200m	
Video Adjustment		Range Switch	16 Position Adjustable		Range Switch	Range Switch		
Power Consumption (L/R)		DC5.3V, 3.9W (Max)	DC5.3V, 1.2W	AC9V, 1.62W (Max)	DC 5.3V, 2.52W	DC5.3V, 4.77W	DC5.3V, 4.7W	DC5.3V, 6.9W
Environment	Operating Temp.	0–50℃						
	Storage Temp.	-20–60℃						
	Humidity	0–80% RH, Non-condensing						
Physical Properties	Housing	Metal						
	Weight	0.34 kg	0.25 kg	0.24 kg	0.14 kg	0.35 kg	0.75 kg	0.76 kg
	Dimension (L x W x H)	13.90 x 8.30 x 2.86 cm	11.90 x 8.60 x 2.30 cm	11.90 x 8.60 x 2.30 cm	7.38 x 7.90 x 2.44 cm	13.90 x 8.03 x 2.86 cm	21.00 x 8.80 x 5.50 cm	

* Video/Audio outputs depend on installation type
** In combination with VB552

Model No.		VE510	VC160
Connectors	Video In	1 x HDB-15 (M)	1 x HDB-15 (M)
	Video Out	1 x HDB-15 (F)	1 x DVI-D (F)
	Power Jack 1	1 x DC 5V Jack	1 x DC Jack
	Power Jack 2	1 x DC 5.3V Jack	N/A
Switches		R/G/B Selection, R/G/B Delay Tuner, Memory/Setting/Recall/ Reset	Direction Adjustment, Memory
LEDs		Power, Red, Green, Blue	Power / Memory
Video Resolution		N/A	1600 x 1200 @ 60Hz; DDC2B
Power Consumption		DC 5.3V 1.48 W ; DC 5V 1.48W	DC 5.3V 3W
Environment	Operating Temp.	0–50°C	0–50°C
	Storage Temp.	-20–60°C	-20–60°C
	Humidity	0–80% RH, Non-condensing	0–80% RH, Non-condensing
Physical Properties	Housing	Metal	
	Weight	0.21 kg	
	Dimensions (L x W x H)	11.02 x 7.90 x 2.44 cm	11.06 x 7.90 x 2.44 cm