Why Choose ATEN’s Video over IP Solution?

The VE8900 / VE8950 delivers visually lossless 1080p / 4K AV signals with low latency over long distance via a standard Gigabit network.

The solution is designed to address the challenges that system integrators encounter when implementing AV over IP solutions and provides an effective, easy-to-use, and economical digital signage solution with the following features and advantages:

**Limitless Flexibility and Scalability**
From a simple point-to-point setup, to hundreds of endpoints, the VE8900 / VE8950 offers flexibility, scalability and multi-functionality in extender, splitter, matrix switch, and video wall applications.

**Go Further for Less with Daisy Chaining**
Easily expand your AV network coverage without cable clutter or extra network switches while also lowering per-port costs.

**No Complicated IP Setup**
The VE8900 / VE8950 allows you to effortlessly switch input sources via top panel pushbuttons/ID display and offers simple configuration that requires no extensive IT experience.

**Flexible Control, Convenient Integration**
Provides an intuitive web GUI for drag and drop operation and mobile app for control on-the-go. Facilitate deployment with ATEN Gigabit network switches that are pre-configured to provide convenient integration.

**No Additional Server PCs or Software Required**
Effortlessly manage your AV over IP system by logging in to any receiver or transmitter from the web GUI.

**Implementation Guide Available**
For a problem-free VE installation experience, be sure to get the Implementation Guide.
User-centered Hardware Design

The VE8900 / VE8950 has been designed with the user in mind. With large, clear ID displays and simple pushbuttons for ID setting and switching, the units also feature I/O printing on the housing for easy port recognition, built-in brackets for convenient mounting, and LED lights for quick diagnosis. There is even a dedicated space on the unit for writing your own labels.
Limitless Scalability and Flexibility

- Extends AV connections from a simple point-to-point to a multi-point to multi-point setup via LAN without distance limitations.
- Offers multi-functionality in extender, splitter, matrix switch, video wall and daisy chain applications.
- Mix and match the latest 4K displays and 1080p screens. The built-in scaler automatically scales incoming video signals to match the maximum resolution of the connected display devices.
Matrix Switch & Video Wall Complex Setting

*Users can choose VE8900R if 1080p video source is applied

ATEN Control System App

VK Control System Family

Video Wall

Web GUI

Laptop

Cat 5e

HDMI

Network Switch

Telnet Control

(4K) Blu-ray Player

VE8950T

(1080p) Media Player

VE8900T

(4K) Set-top Box

VE8950T

VE8950R

VE8950R*

VE8950R

VE8950R x4

VK2100/VK1100 (Control Box)

ATEN Control System App

(4K) VE8950R

(1080p) VE8950R

(4K) VE8950R

(1080p) VE8950R x4

Users can choose VE8900R if 1080p video source is applied
Go Further For Less with Daisy Chaining

- Connects multiple displays through a single port to utilize every port of the network switch and maximize their value.
- Easily expandable – cabling and system deployment is easy with no huge network switches and fewer cables needed.
- Perfect for large-scale deployment covering hundreds of meters, such as hotel facilities, airports, university campuses, stations, shopping malls, and exhibition centers.

Use daisy chains to configure a video wall or expand the AV system hundreds of meters*
* Depending on your network architecture, we recommend daisy chaining up to 30 units. Please contact ATEN representatives for more details.
No Complicated IP Setup

- VE Manager can help you to assign IP addresses to each device automatically by Auto IP function. Configuration is simple. No extensive IT experience nor extra learning is required.
- Effortlessly switch among input sources via top panel pushbuttons.

Auto IP Function

Top Panel Pushbuttons

No Additional Server PCs or Software Required

- Supports web GUI (VE Manager) for device management.
- No additional server PCs, control boxes, or software/drivers are needed.
Intuitive Web GUI – VE Manager
The VE89 Series can be configured via its built-in Graphical User Interface (GUI). The system can be accessed through the intranet, operators can easily log in via most web browsers.

Real-time System Status Monitoring
Easily configure and monitor the status of each transmitter and receiver by color indicators.

- Green: Connected and active
- Orange: Standby
- Grey: Offline

Preview
Allows you to preview the video source in real-time before selecting and showing the content on each display.

Video Wall Setup
Provides maximized flexibility to manage various video wall layouts.
Profile Management
Create video wall, splitter, and matrix profiles effortlessly and manage all your profiles at the same time.

Batch Configuration
Execute settings across multiple transmitters or receivers at once for quick and efficient configuration.

Scheduling Management
Pre-plan display schedules by setting event times spanning across different dates, hours, and even minute intervals.

Backup and Restore Settings
Duplicate VE Manager settings and easily apply the same settings to different locations.
Go Mobile with the VE8900 / VE8950 Control App

Easily manage and control any VE8900 / VE8950 and streamline operations with the VE8900 / VE8950 Control App. This mobile app provides direct access to the VE Manager, which enables preview, monitor, and control of video sources, and keeps you on track with the latest display schedule and system updates.

Monitor
Check the status of receivers and all your digital signage content.
Preview
Review video sources before switching.

Control
Switch a source to multiple receivers instantly.

Calendar-based Scheduling
Check and revise the display schedule on the go.
Facilitating Setup with ATEN Network Switches

Simply connect VE8900 / VE8950 transmitters and receivers to ES0152 / ES0152P network switches to deploy your AV network without the hassles of a complicated setup. With this pre-configured solution, there is no need to install additional software or configure devices.

- VE8900 / VE8950 device auto detection
- Supports IGMP Snooping, Fast Leave, Flow Control
- Supports IGMP v1/v2/v3 Snooping and IGMP v1/v2 Querier
- Supports 48 Gigabit Ethernet ports and 4 SFP uplink ports (10Gbps)
- High-performance Gigabit Ethernet L2 access switch with 176 Gbps switching capacity
More features

Lightweight Compression with Ultra-low Latency
• Delivers visually lossless high-quality video up to 1080p @ 60 Hz (VE8900) / 4096 x 2160 @ 30 Hz 4:4:4 (VE8950).
• Ensures stunning quality video using ATEN advanced video compression technology.
• EDID Expert™ selects the optimum EDID settings for smooth power-up, high-quality display and the best video resolution across different screens.

Embedded / De-embedded Audio Support
• For VE8900T / VE8950T – separate audio signal can be embedded into the HDMI stream.
• For VE8900R / VE8950R – audio stream can be extracted from the HDMI stream and delivered as a separate audio signal.

Multiple Control Channels
• Multiple control methods – the system can be managed via Ethernet or top-panel pushbuttons.
• USB Connectivity – USB port (USB 2.0) allows for connection of devices such as keyboard, mouse, flash drive, printer, and other USB peripherals.
• Bi-directional IR Channel – full range (30K~56KHz) IR transmission is processed one way at a time.
• RS-232 Channel – bi-directional RS-232 serial port allows for connection of peripherals such as touch screens and bar code scanners.
## Specifications

<table>
<thead>
<tr>
<th>Function</th>
<th>VE8900R</th>
<th>VE8950R</th>
<th>VE8900T</th>
<th>VE8950T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Input</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>N/A</td>
<td></td>
<td>1 x HDMI Type A Female (Black)</td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td>N/A</td>
<td></td>
<td>100 Ω</td>
<td></td>
</tr>
<tr>
<td>Max. Distance</td>
<td>N/A</td>
<td></td>
<td>1.8 m</td>
<td></td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td></td>
<td>1 x HDMI Type A Female (Black)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td></td>
<td>100 Ω</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. Data Rate</td>
<td></td>
<td>Average: 150 ~ 500Mbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>HDMI HDCP Compatible</td>
<td>HDMI (4K) HDCP Compatible</td>
<td>HDMI HDCP Compatible</td>
<td>HDMI (4K) HDCP Compatible</td>
</tr>
<tr>
<td>Max. Resolutions / Distance</td>
<td>Up to 1080p @ 100 m (Cat 5e / 6, point to point)</td>
<td>Up to 4K @ 100 m (Cat 5e / 6, point to point)</td>
<td>Up to 1080p @ 100 m (Cat 5e / 6, point to point)</td>
<td>Up to 4K @ 100 m (Cat 5e / 6, point to point)</td>
</tr>
<tr>
<td>*4K supported: 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)</td>
<td>*4K supported: 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0)</td>
<td>*4K supported: 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>N/A</td>
<td></td>
<td>1 x HDMI Type A Female (Black)</td>
<td>1 x HDMI Type A Female (Black)</td>
</tr>
<tr>
<td>Output</td>
<td>1 x HDMI Type A Female (Black)</td>
<td>1 x Mini Stereo Jack Female (Green)</td>
<td>1 x Mini Stereo Jack Female (Green)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
## Specifications

<table>
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<tr>
<th>Function</th>
<th>VE8900R</th>
<th>VE8950R</th>
<th>VE8900T</th>
<th>VE8950T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit to Unit</td>
<td>2 x RJ-45 Female</td>
<td></td>
<td>1 x RJ-45 Female</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR</td>
<td>1 x Mini Stereo Jack Female (Black)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>RS-232</td>
<td>Connector: 1 x Terminal Block, 3 pole Baud Rate: 19200, Data Bits:8, Stop Bits: 1, no parity and flow control</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>USB</td>
<td>2 x USB Type A Female (Black)</td>
<td>1 x USB Type B Female (White)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectors</td>
<td>1 x DC Jack (Black) with locking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>DC 5V, 4.2W (without USB peripheral device loading)</td>
<td>DC 5V, 4.6W (without USB peripheral device loading)</td>
<td>DC 5V, 3.2W</td>
<td>DC 5V, 3.3W</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 - 40 °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20 - 60 °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td>0 - 80% RH, Non-Condensing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Physical Properties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>0.49 kg (1.08 lb)</td>
<td></td>
<td>0.50 kg (1.1 lb)</td>
<td></td>
</tr>
<tr>
<td>Dimensions (L x W x H) with bracket</td>
<td>14.02 x 12.30 x 3.06 cm (5.52 x 4.84 x 1.2 in.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (L x W x H) without bracket</td>
<td>13.60 x 10.10 x 2.96 cm (5.35 x 3.98 x 1.17 in.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Applications

VE8900 / VE8950 is perfect for large-scale deployments covering hundreds of meters, such as university campuses, stations, shopping malls, and exhibition centers.

Airports

Convention Centers

Shopping Malls
Create video wall via daisy chain to display a single source, or connect multiple VE8950R to the network switch and display multiple video sources.
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