

# Making Networked AV Easy

ATE

KHOM

HDMI over IP Series - VE8950 / VE8900

## Why 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.



## 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.



## 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 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.



## **Applications**

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



## 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.

**Splitter Setting** 



### Extender Setting

## Matrix Switch & Video Wall Complex Setting



## 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

## 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 from anywhere over a network or the Internet, operators can easily log in via any web browser.

## 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.



### Various Profiles Management

Create video wall, splitters, and matrix profiles effortlessly and manage all your profiles at the same time from a single, intuitive web GUI.





## Backup and Restore Settings for Your Convenience

Easily duplicate your VE Manager settings, including the transmitter and receiver layouts and the login ID, and quickly apply the same settings to different locations.



## **More features**

## Lightweight Compression with Ultra-low Latency

- Delivers visually lossless high-quality video up to 1080p @ 60 Hz (VE8900) / 4K @ 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 / 8950T separate audio signal can be embedded into the HDMI stream.
- For VE8900R / 8950R 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

Function	VE8900R	VE8950R	VE8900T	VE8950T	
Video Input					
Interfaces	N/A		1 x HDMI Type A Female (Black)		
Impedance	N/A		100 Ώ		
Max. Distance	N	N/A		1.8 m	
Video Output					
Interfaces	1 x HDMI Type A Female (Black)		N/A		
Impedance	10	100 Ώ		N/A	
Video					
Max. Data Rate	Average: 150 ~ 500Mbps				
Compliance	HDMI HDCP Compatible	HDMI (4K) HDCP Compatible	HDMI HDCP Compatible	HDMI (4K) HDCP Compatible	
Max. Resolutions / Distance	Up to 1080p @ 100 m (Cat 5e / 6, point to point)	Up to 4K @ 100 m (Cat 5e / 6, point to point) *4K supported: 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	Up to 1080p @ 100 m (Cat 5e / 6, point to point)	Up to 4K @ 100 m (Cat 5e / 6, point to point) *4K supported: 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0) 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)	
Audio		'			
Input	N/A		1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)		
Output	1 x HDMI Type A Female (Black) 1 x Mini Stereo Jack Female (Green)		N/A		

## **Specifications**

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



#### **Corporate Headquarters**

#### ATEN International Co., Ltd.

3F., No.125, Sec. 2, Datung Rd., Sijhih District., New Taipei City 221, Taiwan Phone: +886-2-8692-6789 Fax: +886-2-8692-6767 http://www.aten.com/global/en/ E-mail: marketing@aten.com

#### **America Region:**

#### ATEN Technology Inc. 15365 Barranca Parkway, Irvine, CA 92618, U.S.A Phone: +1-949-428-1111 Fax: +1-949-428-1100 http://www.aten.com/us/en/ E-mail: sales@aten-usa.com

#### **ATEN New Jersey Inc.**

220 Davidson Avenue, Suite 404, Somerset, NJ 08873, U.S.A Phone: +1-732-356-1703 Fax: +1-732-356-1639 http://www.aten.com/us/en/ E-mail: sales@aten-usa.com

#### **EMEA Region**:

#### **ATEN Infotech N.V.**

Mijnwerkerslaan 34, 3550 Heusden-Zolder, Belgium Phone: +32-11-531543 Fax: +32-11-531544 http://www.aten.com/eu/en/ E-mail: sales@aten.be

#### ATEN U.K. Limited

466 Malton Avenue, Slough SL1 4QU, U.K. Phone: +44-1753-539-121 Fax: +44-1753-215-253 http://www.aten.com/gb/en/ E-mail: sales@aten.co.uk

#### ATEN Poland Sp. z o. o. ul. Daimlera 2, 02-460 Warszawa, Poland Phone: +48-669-062-112 http://www.aten.com/pl/pl/ E-mail: tomasz.kruszynski@pl.aten.cc

#### ATEN Russia

Office 14212, No.14 Sereblyakova proezd, Moscow, Russia. Phone: +7-495-134-2808 http://www.aten.com/ru/ru/ E-mail: russia@aten.com

#### ATEN Info lletisim Ltd.

Beştepe Mah.Yaşam Cad. 13-A / 76 Yenimahalle Ankara, Turkey Phone: +90-312-284-00-27 E-mail: turkey@aten.com

#### **Oceania Region:**

ATEN ANZ Pty Ltd. Suite 3. 19, 32 Delhi Road, North Ryde, NSW 2113, Australia Phone: +61-2-9114-9933 Fax: +61-2-8072-3723 http://www.aten.com/au/en/ E-mail: sales@au.aten.com

#### **Asia Pacific Region:**

#### ATEN China Co., Ltd.

18/F, Tower A, Horizon International Tower, No.6, Zhichun Road, Haidian District, Beijing, China 100088 Phone: +86-10-5255-0110 Fax: +86-10-8296-1318 http://www.aten.com/cn/zh/ E-mail: sales@aten.com.cn

#### ATEN Japan Co., Ltd.

Tokyo Headquarters ATEN Bldg. 8-4, Minami-senjyu 3-chome, Arakawa-ku, Tokyo 116-003, Japan Phone: +81-3-5615-5810 Fax: +81-3-3891-3810 http://www.aten.com/jp/ja/ E-mail: info@atenjapan.jp

#### **Osaka Branch**

Awajimachi Dai-Building 3F 3-1-9, Awajimachi, Chuo-ku, Osaka-shi, 541-0047, Japan Phone: +81-6-6229-5810 Fax: +81-6-6229-8810 http://www.aten.com/jp/ja/ E-mail: info@atenjapan.jp

#### ATEN Korea Co., Ltd.

B-303, Gabeul Great Valley, 60-5, Gasan-dong, Geumcheon-gu, Seoul, Korea, 153-801 Phone: +82-2-467-6789 Fax: +82-2-467-9876 http://www.aten.com/kr/ko/ E-mail: sales@aten.co.kr

#### Atech PeriphSerals, Inc.

6F., No.133, Sec. 2, Datung Rd., Sijhih District., New Taipei City 221, Taiwan Phone: +886-2-8692-6969 Fax: +886-2-8692-6926 http://www.aten.com/tw/zh/ E-mail: taiwan@aten.com

#### **ATEN India Rep. Office**

Unit 406, 4th Floor, Barton Center, M.G. Roac Bangalore - 560001, India Phone: +91-80-48517231 E-mail: South-Asia@aten.com