



Simply Better Connections

VE1843A

True 4K HDMI / USB
HDBaseT 3.0 Transceiver with PoH
User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Warning

Operation of this equipment in a residential environment could cause radio interference.

Achtung

Der Gebrauch dieses Geräts in Wohnumgebung kann Funkstörungen verursachen.

Suggestion

Shielded twisted pair (STP) cables must be used with the unit to ensure compliance with FCC & CE standards.



KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)
이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이
점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로
합니다.

Industry Canada Statement

This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-003 (A) / NMB-003 (A)

HDMI Trademark Statement

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



RoHS

This product is RoHS compliant.

User Information

Online Registration

Be sure to register your product at our online support center:

International	http://eservice.aten.com
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Telephone Support

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

Package Contents

Check to make sure that all of the components are in working order. If you encounter any problem, please contact your dealer.

- ◆ 1 VE1843A True 4K HDMI / USB HDBaseT 3.0 Transceiver with PoH
- ◆ 1 power adapter and power cord
- ◆ 1 RS-232 terminal block
- ◆ 1 USB Type-B to USB Type-A cable
- ◆ 1 IR emitter
- ◆ 1 IR receiver
- ◆ 1 foot pad set (4 pcs)
- ◆ 1 user instructions

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About this Manual

This user manual is provided to help you get the most from the VE1843A unit. It covers all aspects of installation, configuration, and operation. An overview of the information found in the manual is provided below.

Chapter 1, *Introduction*, introduces you to the VE1843A system. Its purpose, features, and installation considerations are described.

Chapter 2, *Hardware Setup*, describes the panel components of the VE1843A and detail steps to quickly and safely set up your installation.

Chapter 3, *Operation*, explains how to use the Tx and Rx switch, and how to set up the input detection mode using the a pushbutton and RS-232 commands.


Appendix, provides a list of safety instructions and precautions, contact information for ATEN technical support, product specifications, and other technical information regarding the VE1843A.

Note:

- ◆ Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or any connected devices.
 - ◆ This product may be updated, with features and functions added, improved or removed since the release of this manual. For an up-to-date user manual, visit <http://www.aten.com/global/en/>
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Conventions

This manual uses the following conventions:

- Monospaced Indicates text that you should key in.
- [] Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
 - 1. Numbered lists represent procedures with sequential steps.
 - ◆ Bullet lists provide information, but do not involve sequential steps.
 - > Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start > Run means to open the *Start* menu, and then select *Run*.
 -  Indicates critical information.

Chapter 1

Introduction

Overview

Designed for AV environments with extremely high image quality requirements such as conference halls, lecture theaters, and exhibition spaces, the VE1843A is a high-performance HDBaseT 3.0 solution that integrates both transmitter and receiver functionality into a single unit. It delivers uncompressed True 4K HDMI extension with zero latency over a single Cat 6a cable.

Note: Please refer to the Compatible Cables section on the product page.

Uncompromised True 4K Precision with Zero Latency

The VE1843A leverages the latest HDBaseT 3.0 technology to extend uncompressed True 4K @ 60 Hz (4:4:4) signals up to 100 meters (and 1080P up to 150 meters) with zero latency. By supporting HDR10+, Dolby Vision, and HDCP 2.3, it ensures that high-fidelity visuals are delivered with mission-critical precision, making it the ideal choice for environments where real-time response and image integrity are non-negotiable.

Adaptive 2-in-1 Design for Maximum Deployment Flexibility

The VE1843A eliminates the need for separate hardware. Its unique 2-in-1 architecture allows a single unit to be configured as either a transmitter or a receiver to fit any AV architecture. This flexibility helps system integrators streamline inventory and reconfigure setups for point-to-point extensions or complex matrix systems with much greater agility.

Unified Single-Cable Signal Distribution for Streamlined Integration

The VE1843A consolidates uncompressed video, bi-directional IR, RS-232, Gigabit Ethernet, independent audio, power and USB 2.0 into one Cat 6a cable. This integration ensures seamless connectivity for peripherals like touchscreens and cameras, making it the perfect foundation for modern collaborative environments.

Independent Audio Routing with Bi-Directional PoH Efficiency

The VE1843A empowers users with independent audio embedding and de-embedding, providing the freedom to route sound to match any environment. To simplify installation, bi-directional PoH allows the unit to draw power from either the source or display side, effectively removing the need for extra power outlets. Enclosed in a fanless fin heat sink for silent, stable cooling, the VE1843A is built for reliable, continuous professional use.

Features

High-Performance Video and HDBaseT™ 3.0 Capabilities

- ◆ Superior video quality – up to 4096 x 2160 @ 60 Hz (4:4:4); HDR, HDR10+, and Dolby Vision supported
- ◆ Extends uncompressed True 4K HDMI signals up to 100 m (and 1080P up to 150 m in long reach mode) over a single Cat 6a cable with zero latency

Note:

1. ATEN recommends using a Cat 6a U/FTP cable. The skewless design and inter-pair shielding of FTP help reduce near-end crosstalk (NEXT, source end) and far-end crosstalk (FEXT, receiver end), which are essential for achieving maximum performance and distance.
 2. For a list of compatible cables, refer to the Compatible Cables section on the product page.
-
- ◆ Compliant with HDBaseT 3.0 standards – transmits high-quality video, full range IR, bi-directional RS-232, Gigabit Ethernet, independent stereo audio, Power and USB 2.0 signals
 - ◆ Supports extremely high refresh rates up to 240 Hz for the connected display
 - ◆ HDMI (3D, Deep Color, 4K/60Hz) and HDCP 2.3 compliant
 - ◆ Supports HDMI local output for convenient monitoring at the local side

Versatile Integration and Management Controls

- ◆ Flexible for deployment – can be configured as a transmitter or receiver depending on the AV solution
- ◆ Supports HDMI audio embedding / de-embedding functions – allows users to flexibly adapt suitable audio/video combinations based on different environments
- ◆ Supports bi-directional PoH (Power over HDBaseT) – allows the unit to draw power from either the source or display side
- ◆ Independent stereo audio and USB 2.0 signals channel bypass
- ◆ Compliant with the USB 2.0 standard for a wide range of USB peripherals compatibility

- ◆ LED indication of HDBaseT and HDMI signal status for easier recognition
- ◆ Firmware upgradable

Industrial-Grade Reliability and Easy Installation

- ◆ Fanless fin heat sink enclosure – elevates durability and reliability by preventing overheating, fan malfunctions, and noises
- ◆ Built-in 8KV / 15KV ESD protection
- ◆ Plug-and-play – no software or driver required
- ◆ Rack-mountable – ideal for professional AV rack installations

Planning the Installation

Display

- ◆ Up to two HDMI displays capable of the highest required resolution

Source Device

- ◆ A source device with an HDMI port

Cables

- ◆ 2 HDMI cables
- ◆ To connect the VE1843A transmitter and receiver units, we recommend using cables of HDBaseT 3.0 Certified Cat 6a U/FTP cable to ensure video quality.

Note: ATEN recommends using a Cat 6a U/FTP cable. The skewless design and inter-pair shielding of FTP help reduce near-end crosstalk (NEXT, source end) and far-end crosstalk (FEXT, receiver end), which are essential for achieving maximum performance and distance.

- ◆ For better video quality, we strongly suggest using ATEN's tailor-made HDBaseT cable with zero latency.

Note: For a list of compatible cables, refer to the Compatible Cables section on the product page.

- ◆ The maximum transmission distance varies at different parts of the transmission:

Connection	Interface	Resolution	Distance
Computer to the VE1843A Transmitter	HDMI	True 4K	5 m
The VE1843A Transmitter to a VE1843A Receiver (R) or a compatible ATEN HDBaseT Receiver	<ul style="list-style-type: none"> ◆ HDBaseT 3.0 Certified Cat 6a U/FTP cable with zero latency ◆ ATEN's tailor-made HDBaseT cable 	True 4K	100 m*
VE1843A Receiver to a display	HDMI	True 4K	5 m

Note:

- ◆ When long reach mode is enabled, signal transmission can be extended up to 150 m @ 1080p using Cat6/6a or above cable.
 - ◆ To reduce interference and ensure stable, long-distance transmission, ATEN recommends using a 2A-245G Cat 6A RJ-45 connector for this setup.
-

Chapter 2

Hardware Setup



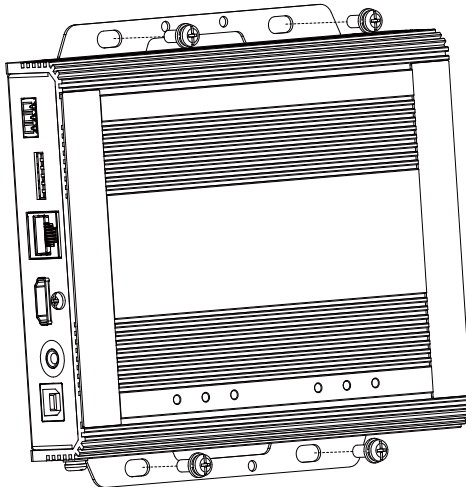
1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 25.
2. Do not power on the VE1843A until all the necessary hardware is connected.

Mounting the VE1843A Unit

You can mount the VE1843A to the wall or on a rack.

Wall Mounting

Secure or hang the VE1843A unit to the wall using the built-in mounting brackets.

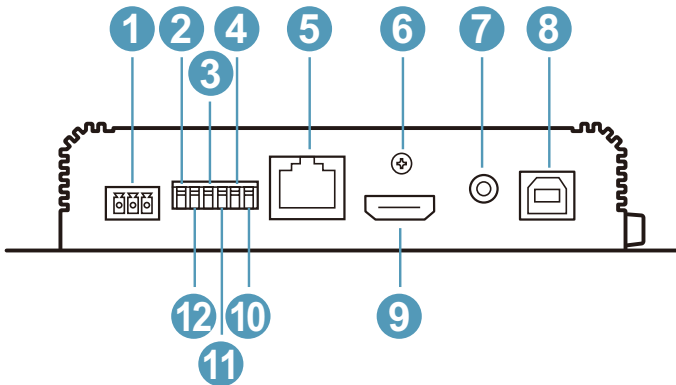


Rack Mounting

Use the VE-RMK 1U Rack Mount Kit to rack mount the VE1843A. For more information about this accessory, go to <https://www.aten.com/global/en/products/professional-audiovideo/accessories/ve-rmk1u/>

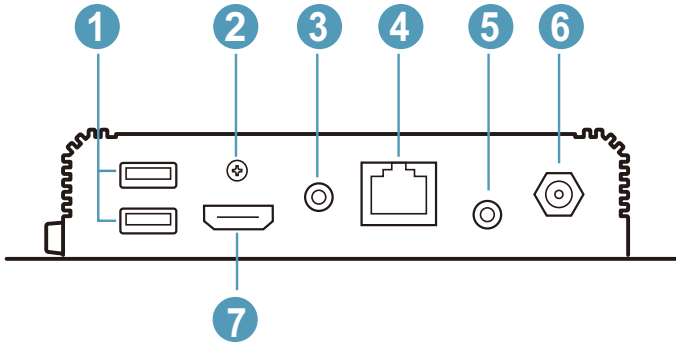
Hardware Overview

VE1843A Front View

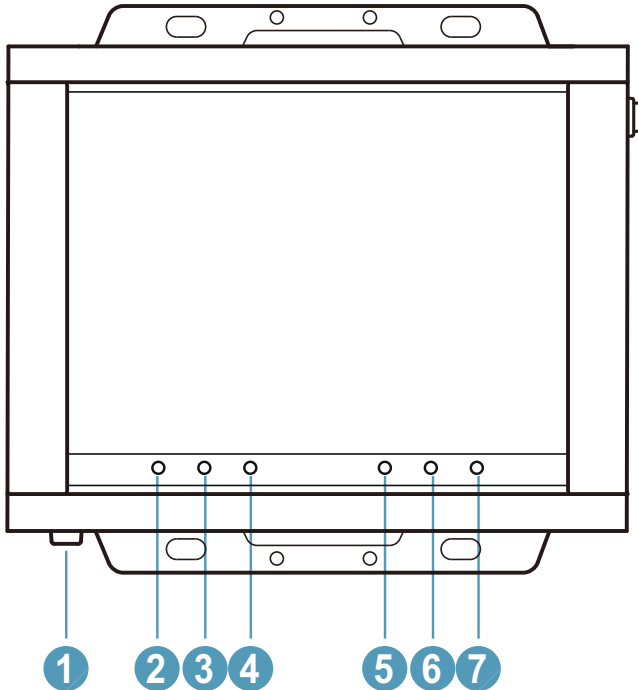


No.	Component	Description
1	RS-232 port	Connects to an RS-232 serial controller, such as a PC or a control system.
2	RS-232 mode switch	Selects whether RS-232 operates in bypass mode or command mode.
3	firmware upgrade switch	This switch is reserved for ATEN Technical Support. If you would like to do a firmware upgrade yourself, please contact your dealer.
4	Tx / Rx switch	Sets to define the unit as a transmitter or a receiver.
5	HDBaseT port	Connects to an HDBaseT 3.0 Certified Cat 6a cable with zero latency to transmit HDMI and control signals to the connected receiver if the unit is set to a transmitter.
6	cable lock screw for ATEN LockPro™ (HDMI cable lock)	Universal HDMI cable lock that provides the easiest way to secure an HDMI cable to most HDMI devices.

No.	Component	Description
7	audio in	Connects to an audio source device, such as a PC.
8	USB Type-B port	Connects to source device, such as a PC.
9	HDMI in	Connects to an HDMI video source device using an HDMI cable.
10	PoH PD/PSE switch	Configures the unit as either a powered device (PD) or PoE power sourcing equipment (PSE) based on the Ethernet connection.
11	HDBaseT long reach mode switch	Sets to enable the long reach mode. When long reach mode is enabled, signal transmission can be extended up to 150 m @ 1080p.
12	HDMI audio switch	Sets to enable the embed and de-embed functions. See <i>Tx and Rx Switch</i> , page 21.

VE1843A Rear View

No.	Component	Description
1	USB Type-A port	Connects to a peripheral device, such as a keyboard or mouse.
2	cable lock screw for ATEN LockPro™	Universal HDMI cable lock that provides the easiest way to secure an HDMI cable to most HDMI devices.
3	audio out	Connects to an audio output device, such as a set of speakers.
4	Ethernet port	Connects to a network switch to provide Internet access for the connected source device using an RJ-45 cable.
5	IR port	Connects to an IR emitter or IR receiver for remotely control using an IR remote control.
6	power jack	Connects to a power adapter for power supply.
7	HDMI out	Connects to a HDMI display device using an HDMI cable.

VE1843A Top View

No.	Component	Description	
1	grounding terminal	Grounds the unit to a suitable grounded object.	
Transmitter LEDs			
2	DC-in power LED	Green, solid	The unit is powered by an external DC power source.
		Off	The unit is powered off.

No.	Component	Description	
3	PoH / link LED	orange, solid	<ul style="list-style-type: none"> ◆ The unit is powered by PoH. ◆ The transmission between the transmitter and receiver is stable.
		yellow-green, solid	<ul style="list-style-type: none"> ◆ The unit is powered by an external DC power source. PoH is inactive. ◆ The transmission between the transmitter and receiver is stable.
		orange, blink	<ul style="list-style-type: none"> ◆ The unit is powered by PoH. ◆ The transmission between the transmitter and receiver is unstable.
		yellow-green, blink	<ul style="list-style-type: none"> ◆ The unit is powered by an external DC power source. PoH is inactive. ◆ The transmission between the transmitter and receiver is unstable.
		off	<ul style="list-style-type: none"> ◆ PoH is inactive. ◆ There is no transmission between the transmitter and receiver.
4	HDMI in LED	orange, solid	The video signal is stable with the HDCP key.
		orange, blink	The video signal is stable without the HDCP key.
		off	There is no video signal.

No.	Component	Description	
Receiver LEDs			
5	HDMI out LED	orange, solid	The video signal is stable with the HDCP key.
		orange, blink	The video signal is stable without the HDCP key.
		off	There is no video signal.
6	PoH / link LED	orange, solid	<ul style="list-style-type: none"> ◆ The unit is powered by PoH. ◆ The transmission between the transmitter and receiver is stable.
		yellow-green, solid	<ul style="list-style-type: none"> ◆ The unit is powered by an external DC power source. PoH is inactive. ◆ The transmission between the transmitter and receiver is stable.
		orange, blink	<ul style="list-style-type: none"> ◆ The unit is powered by PoH. ◆ The transmission between the transmitter and receiver is unstable.
		yellow-green, blink	<ul style="list-style-type: none"> ◆ The unit is powered by an external DC power source. PoH is inactive. ◆ The transmission between the transmitter and receiver is unstable.
		off	<ul style="list-style-type: none"> ◆ PoH is inactive. ◆ There is no transmission between the transmitter and receiver.

No.	Component	Description	
7	DC-in power LED	Green, solid	The unit is powered by an external DC power source.

LED Indicator

Once the unit is powered on, the Tx power LED—either the DC-in power LED or the PoH LED—lights up to indicate the unit is set as a transmitter, while the Rx power LED lights up to indicate the unit is set as a receiver.

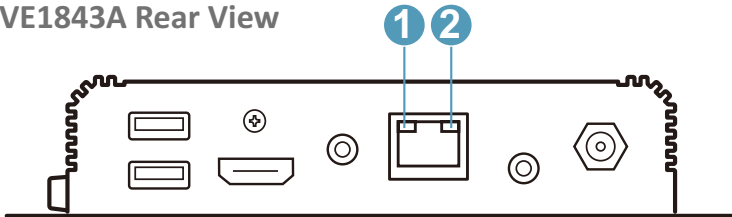
If both the DC-in power LED and the PoH LED are lit, it means power redundancy is enabled.

LED Indicator	Status Description
TX power LED (DC-in / PoH LED)	Unit is in transmitter mode.
Rx power LED (DC-in / PoH LED)	Unit is in receiver mode.
DC-in power LED + PoH LED	Power redundancy is enabled.

Ethernet Port LED Indicator

The Ethernet port located on the rear side of the unit has 2 status LEDs that deliver the following information:

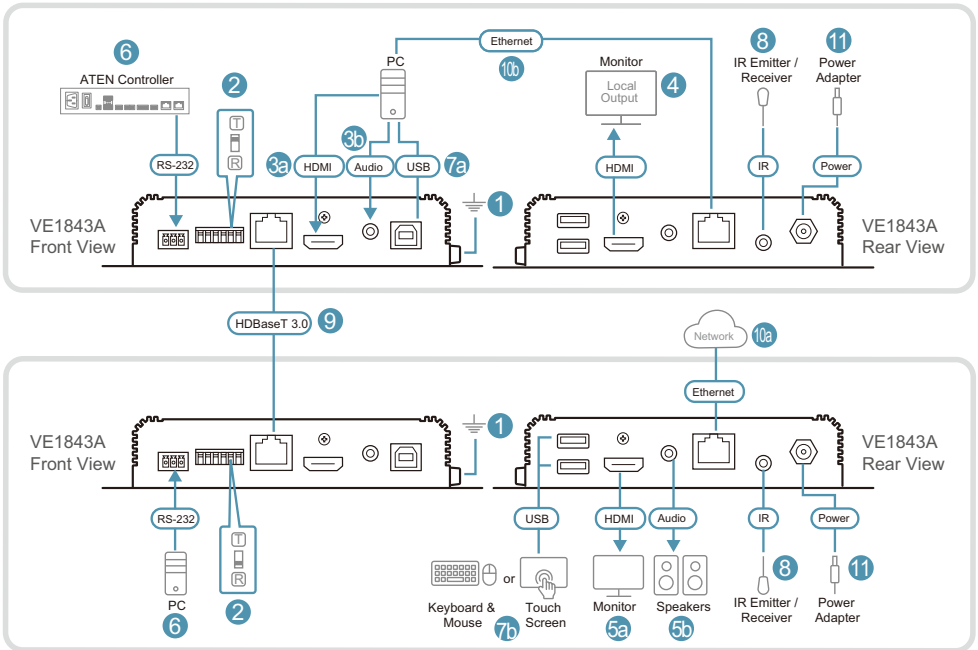
VE1843A Rear View



No.	LED	Cplor	Description
1	link LED indicator (Speed)	orange, solid	The Ethernet link speed is 100Mbps.
		green, solid	The Ethernet link speed is 1Gbps.
		off	The Ethernet link speed is 10Mbps or the link is not established.
2	activity LED indicator (data)	green, solid	Active connection is established.
		green, blink	Transmitting or receiving activity.
		off	No connection is established.

Hardware Installation

Follow the steps below to safely install the VE1843A to a source, a display device, and other devices as required.



Note:

- ◆ The illustrated diagram is based on two VE1843A units.
- ◆ Make sure all the equipment you are connecting to the unit is turned off and disconnected from the power source.

1. Ground the VE1843A by connecting one end of a grounding wire to the grounding terminal and the other end to a suitable grounded object.

Note: Do not omit this step. Proper grounding helps to prevent damage to the unit from power surges or static electricity.

2. Use the Tx / Rx switch to set the unit's mode.
3. To use the unit as a transmitter:
 - a) Connect your video source device to the HDMI input port using an HDMI cable.
 - b) (Optional) Connect your audio source device to the audio input port using an appropriate audio cable. To embed this audio input to the HDMI output, set the HDMI audio switch (on Tx) to **ON**.
4. Connect an HDMI-enabled display device to the transmitter using an HDMI cable.
5. To use the unit as a receiver:
 - a) Connect your video display device to the HDMI output port using an HDMI cable.
 - b) (Optional) Connect your audio output device to the audio output port using an appropriate audio cable. To de-embed this HDMI audio from the HDMI output, set the HDMI audio switch (on Rx) to **ON**.
6. (Optional) To remotely control a PC through serial controller, connect the RS-232 port of the transmitter to a serial controller, and then connect the RS-232 port of the receiver to a PC, and vice versa.
7. (Optional) To connect a USB host and USB devices:
 - a) Connect a USB host (e.g. PC) to the transmitter's USB Type-B port.
 - b) Connect USB peripherals such as keyboard and mouse to the receiver's USB Type-A ports.
8. (Optional) To remotely control a device connected to the receiver, for example, a TV, connect an IR emitter to the IR port of the receiver, and an IR receiver to the IR port of the transmitter, and vice versa.

Note: The unit supports bi-directional IR transmission.

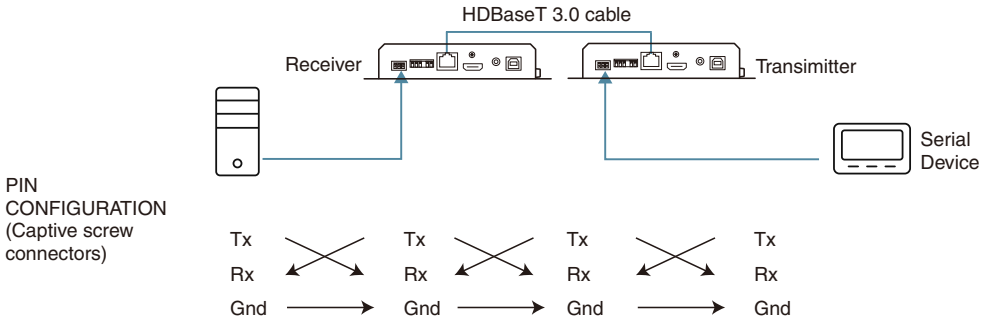
9. Connect the HDBaseT ports of the transmitter and receiver with an HDBaseT 3.0 certificated Cat 6A cable or an ATEN's tailor-made HDBaseT cable (see product page for more details).

10. (Optional) To provide network connectivity to your PC:
 - a) Connect the receiver to a network switch.
 - b) Connect the Ethernet port on the transmitter to your PC.
11. Connect the supplied power adapter to the unit's power jack after powering on all other connected equipment.

Note: To enable power redundancy, set the unit as a power sourcing equipment (PSE) using the PoH PD/PSE switch, and connect the unit with the supplied power adapter.

RS-232 Channel Transmission

You can manage the connected devices via RS-232 serial devices, such as computers or bar code scanners. The RS-232 signal transmission flow can be illustrated as follows:



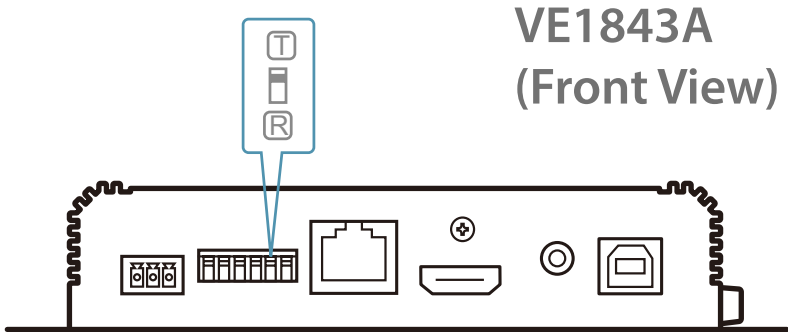
The general concept here is that a RS-232 signal can be transmitted (Tx) to the receiving (Rx) end of a unit. The received signal can then be transmitted (Tx) to the receiving (Rx) end of another unit. The RS-232 signals can be transmitted back the other way.

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Chapter 3 Operation

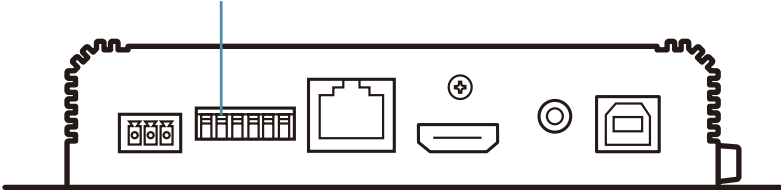
Tx and Rx Switch

Use the Tx / Rx switch to set the unit as a transmitter or receiver as needed.



HDMI Audio Switch

VE1843A (Front View)



Tx / Rx Switch	HDMI Audio Switch	Mode	Function
Tx	On	Embed Mode	The transmitter embeds the stereo audio input with HDMI video input to the receiver.
	Off	Bypass Mode	The transmitter transmits both the stereo audio and HDMI audio inputs to the receiver.
Rx	On	De-embedded Mode	The transmitter sends both the HDMI audio and stereo audio to the receiver. The stereo audio can be separately extracted (de-embedded) for external output.
	Off	Bypass Mode	The receiver receives both the HDMI and stereo audio directly from the transmitter without processing.

Audio Embedding

To embed the audio signals, follow the steps below.

1. Set the HDMI audio switch on the VE1843A transmitter to **On**.
2. Set the HDMI audio switch on the VE1843A receiver to **Off**.

Audio De-embedding

To de-embed the audio signals, follow the steps below.

1. Set the HDMI audio switch on the VE1843A transmitter to **Off**.
2. Set the HDMI audio switch on the VE1843A receiver to **On**.

Bypassing Audio Signals

To bypass the audio signals, follow the steps below.

1. Set the HDMI audio switch on the VE1843A transmitter to **Off**.
2. Set the HDMI audio switch on the VE1843A receiver to **Off**.

Note: By default, the HDMI audio switch on the VE1843A is set to **Off**.

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Safety Instructions

General

- ◆ This product is for indoor use only.
- ◆ Read all of these instructions. Save them for future reference.
- ◆ Follow all warnings and instructions marked on the device.
- ◆ Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- ◆ Do not use the device near water.
- ◆ Do not place the device near, or over, radiators or heat registers.
- ◆ The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- ◆ The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- ◆ Never spill liquid of any kind on the device.
- ◆ Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- ◆ The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- ◆ To prevent damage to your installation it is important that all devices are properly grounded.
- ◆ Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- ◆ Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- ◆ Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.

- ◆ Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- ◆ If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - ◆ The power cord or plug has become damaged or frayed.
 - ◆ Liquid has been spilled into the device.
 - ◆ The device has been exposed to rain or water.
 - ◆ The device has been dropped, or the cabinet has been damaged.
 - ◆ The device exhibits a distinct change in performance, indicating a need for service.
 - ◆ The device does not operate normally when the operating instructions are followed.
- ◆ Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

Technical Support

International

- ◆ For online technical support – including troubleshooting, documentation, and software updates: <http://support.aten.com>
- ◆ For telephone support, see *Telephone Support*, page iv.

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4988

When you contact us, please have the following information ready beforehand:

- ◆ Product model number, serial number, and date of purchase
- ◆ Your computer configuration, including operating system, revision level, expansion cards, and software
- ◆ Any error messages displayed at the time the error occurred
- ◆ The sequence of operations that led up to the error
- ◆ Any other information you feel may be of help

Specifications

Function	VE1843A
Video Input	
Interfaces	1 × HDMI Type-A Female (Black)
Impedance	100 Ω
Max. Distance	5 m
Video Output	
Interfaces	1 × HDMI Type-A Female (Black)
Impedance	100 Ω
Max. Distance	5 m
Video	
Max. Data Rate	18 Gbps (6 Gbps per Lane)
Max. Pixel Clock	600 MHz
Compliance	HDMI (3D, Deep Color, 4K / 60Hz); 4K HDR HDCP 2.2/2.3 Compatible Consumer Electronics Control (CEC) Note: The CEC signals are only bypassed from the transmitter unit to the receiver unit and do not support local output.
Max. Resolutions	4096 × 2160 @ 60Hz (4:4:4) 3840 × 2160 @ 60Hz (4:4:4)
Max. Resolutions / Distances	<ul style="list-style-type: none"> ◆ Up to 4K × 2K @ 60Hz (4:4:4) @ 100 m (HDBaseT 3.0 Certified Cat 6a U/FTP cable / ATEN's tailor-made HDBaseT cable) Note: For a list of compatible cables, refer to the Compatible Cables section on the product page. ◆ Up to 1080P@150m @Long reach mode (Cat 6/ 6a or above cable)

Function	VE1843A
Audio	
Input	1 × HDMI Type-A Female (Black) 1 × Stereo Audio (Mini Stereo Jack Female Green)
Output	1 × HDMI Type-A Female (Black) 1 × Stereo Audio (Mini Stereo Jack Female Green)
Connectors	
Unit to Unit	1 × RJ-45 Female
Power	1 × DC Jack with locking (Black) with locking 1 × RJ-45 Female, PoH PD & PSE supported
Control	
RS-232 Channel	Connector: 1 × Terminal Block, 3 Pole Baud Rate: 19200 Data Bits: 8 Stop Bits: 1, no parity and flow control
IR Channel	1 × Mini Stereo Jack Female (Bi-directional, Black) 30K–56KHz full range transmission
Ethernet Channel	1 × GbE RJ-45 Female
USB Channel	1 × USB 2.0 Type-B Female (White, Host) 1 × USB 2.0 Type-A Female (White, Device) Transmission data bandwidth: Up to 300Mbps
Power Consumption	DC12V; 5.66W Note: ♦ The measurement in Watts indicates the typical power consumption of the device with no external loading. ♦ The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.

Function	VE1843A
Power over Ethernet (PoE)	DC12V; 6.13W Note: <ul style="list-style-type: none"> ◆ The measurement in Watts indicates the typical power consumption of the device with no external loading. ◆ The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.

Switches

Selection	1 × slide switch – Tx (be a transmitter) / Rx (be a receiver) selection
Mode Selection	1 × slide switch – HDMI audio embed or de-embed ON/OFF selection 1 × slide switch – PoH PD or PSE selection 1 × slide switch – RS-232 Command or Bypass mode selection
Firmware Upgrade	1 × Slide Switch - ON/OFF
Long Reach Mode	1 × Slide Switch - ON/OFF

LEDs

Power	Tx: 1 × DC-in power supplied (green), 1 × PoH power supplied (orange) Rx: 1 × DC-in power supplied (green), 1 × PoH power supplied (orange) Note: The Tx or Rx LED lights to indicate which role the VE1843A is set to by DC Power or PoH.
Link	1 × Tx link status LED (transmitter, yellow-green) 1 × Rx link status LED (receiver, yellow-green)
Video Output	1 × Rx HDMI OUT status LED (receiver, orange)
Video Input	1 × Tx HDMI IN status LED (transmitter, orange)

Environmental

Operating Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 to 80% RH, Non-Condensing

Function	VE1843A
Physical Properties	
Housing	Metal
Weight	0.64 kg (1.41 lb)
Dimensions (L x W x H)	17.15 × 15.09 × 3.00 cm (6.75 × 5.94 × 1.18 in)

ATEN Warranty Policy

The warranty policy may vary by product category and region of purchase. For details, please visit ATEN's official website, select your purchase countries/ regions and then go to the Support Center, or contact your local ATEN sales representative for further assistance.

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