CE611

Mini USB DVI HDBaseT™ KVM Extender
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
Shield twisted pair (STP) cables must be used with the unit to ensure compliance with FCC & CE standards.

CE FC ☒ ⑳ Ⓒ E3914 UK CA

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)

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

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

Package Contents

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

- 1 CE611L Mini USB DVI HDBaseT™ KVM Extender (local unit)
- 1 CE611R Mini USB DVI HDBaseT™ KVM Extender (remote unit)
- 2 power adapters
- 1 user instructions

Contents

About this Manual

This User Manual is provided to help you get the most from your CE611 Mini USB DVI HDBaseT™ KVM Extender. 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 Mini USB DVI HDBaseT™ KVM Extender. Its purposes, features, and benefits are presented, and the functions of its panel components are described.

Chapter 2, Hardware Setup, describes the steps to quickly and safely set up the Mini USB DVI HDBaseT™ KVM Extender.

Chapter 3, Operation, explains the fundamental concepts involved in operating the Mini USB DVI HDBaseT™ KVM Extender.

Appendix, provides specifications and other technical information regarding the Mini USB DVI HDBaseT™ KVM Extender.

Note:

- Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or any connected devices.

- The 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/

<u>Conventions</u>

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.

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Chapter 1
Introduction

Overview

The CE611 Mini USB DVI HDBaseT KVM Extender can extend DVI, RS-232 serial, and USB 2.0 signals up to 100 meters using a single Cat 5e/6 or ATEN's tailor-made HDBaseT cable* and HDBaseT™ technology. The Mini USB DVI HDBaseT KVM Extender is equipped with USB 2.0 connectors which allow you to extend signal transmission of USB 2.0 devices. The USB functionality provides support for peripheral sharing, touch panel control and file transfers. The CE611 ensures superior video quality with 1920 x 1200 resolutions so that you get the most out of your DVI-enabled displays.

The CE611 supports the HDBaseT™ technology with which you can extend the KVM installation up to 100 meters @ 1920 x 1200 and preserve high-quality video by enhancing bit error detection and correction to resist signal interference.

The CE611 allows access to a computer system from a remote console (USB keyboard, monitor, and mouse). It is perfect for use in any type of installation where you need to place the console where it is conveniently accessible, but you want the system equipment to reside in a safe location – away from the dust and dirt of the factory floor, or the harsh environmental influence of a construction site, for example. This allows users to deploy system equipment over large distances.

The CE611 is useful for control and security purposes, where you can have the system in a secure area with the console in the most convenient location for user access. This is ideal for managing highly confidential data systems.

The CE611 is ideal for transportation centers, medical facilities, and shopping malls, industrial kiosks and for syncing files and folders between computers. Setup is as easy as can be – simply connect the computer; run the Cat 5e/6 or ATEN's tailor-made HDBaseT cable* up to 100 meters to the remote unit of the CE611 and then plug the remote console into the remote unit of CE611.

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

Features

- ◆ Supports HDBaseT™ technology

  - ◆ Extends DVI video[1], audio, USB, and RS-232 signals via a single Cat 6 / 6a or an ATEN's tailor-made HDBaseT cable[2]

  - ◆ Enhanced bit error detection and correction to resist signal interference during high-quality video transmission

  - ◆ Status detection and LED indication for HDBaseT™ signal transmission

- ◆ Long distance with superior video quality – up to 1920 x 1200 @ 100m (Cat 6 / 6a / ATEN's tailor-made HDBaseT cable[2])

- ◆ USB 2.0 high speed ports – ensures fast transmission speeds for peripherals

- ◆ Supports individual 2-channel stereo audio for high-quality audio applications

- ◆ Built-in 8KV / 15KV ESD protection (contact voltage 8KV; air voltage 15KV)

Note: 1. The CE611 does not support HDCP.

2. Please refer to the Compatible Cables section on the product page.

Requirements

Consoles

- A DVI-enabled monitor capable of the highest resolution you will be using on any computer in the installation.
- A USB keyboard
- A USB mouse
- An RS-232 serial port (optional)
- An Audio In port and Audio Out port (optional)

Computers

The following equipment must be installed on each computer that is to be connected to the system:

- A DVI port
- A USB port for the keyboard/mouse
- An RS-232 serial port (optional)
- Microphone and speaker ports (optional)

Cables

- To optimize signal stability and quality, it is recommended to use the ATEN's tailor-made HDBaseT cable*.

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

- For more information about setting up HDBaseT™ devices, refer to *ATEN HDBaseT™ Installation Guide*.

- Maximum Cable Distances

Connection	Distance
Computer to CE611L	1.8 m
CE611L to CE611R	100 m*
CE611R to the DVI-enabled monitor	10 m

    Note: The maximum transmission distance using a Cat 5e/6 or ATEN's tailor-made HDBaseT cable is 100m.

CE611L

CE611L Front View   **CE611L Rear View**
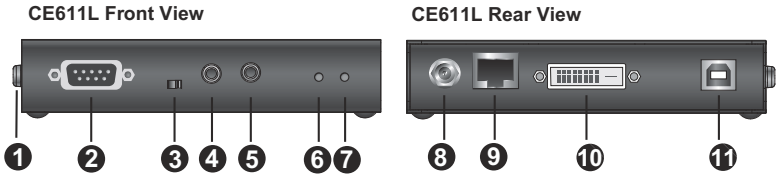
No.	Component	Description
1	grounding terminal	Grounds the CE611L to prevent damages from power surge or static electricity.
2	RS-232 serial port	Receives an RS-232 serial cable which connects to a local computer.
3	firmware upgrade switch	This function is reserved for ATEN Technical Support. If you would like upgrade the firmware, please contact your dealer.
4	audio out	Connects to a local computer using a speaker cable.
5	audio in	Connects to a local computer using a microphone cable.
6	link LED	Lights on to indicate that the CE611L and CE611R are connected.
7	power LED	Lights on to indicate that the CE611L is receiving power.
8	power jack	Receives the power adapter cable.
9	HDBaseT out port	Receives a Cat 5e/6 cable or an ATEN's tailor-made HDBaseT cable* which connects the CE611L and the CE611R. **Note:** Please refer to the Compatible Cables section on the product page.
10	DVI in port	Receives a DVI cable which connects to a local computer.
11	USB Type-B port	Receives a USB cable which connects to the local computer.

CE611R

CE611R Front View   **CE611R Rear View**
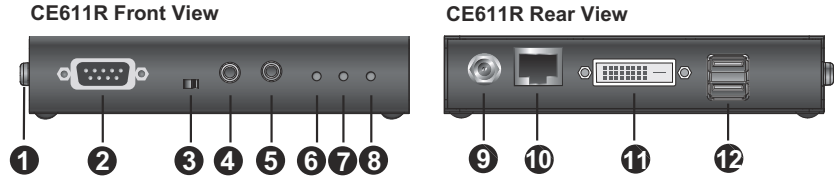
| No.	Component	Description
1	grounding terminal	Grounds the CE611R to prevent damages from power surge or static electricity.
2	RS-232 serial port	Receives an RS-232 serial cable which connects to a hardware controller or a PC installed with a software controller.
3	firmware upgrade switch	This function is reserved for ATEN Technical Support. If you would like upgrade the firmware, please contact your dealer.
4	audio out	Connects to a speaker.
5	audio in	Connects to a microphone.
6	video out LED	Lights on to indicate that video is displaying normally.
7	link LED	Lights on to indicate that the CE611L and CE611R are connected.
8	power LED	Lights on to indicate that the CE611R is receiving power.
9	power jack	Receives the power adapter cable.
10	HDBaseT in port	Receives a Cat 5e/6 cable or an ATEN's tailor-made HDBaseT cable* which connects the CE611L and the CE611R. **Note:** Please refer to the Compatible Cables section on the product page.
11	DVI out port	Receives a DVI cable which connects to a display device.
12	USB Type-A port	Receives a keyboard, mouse, or USB drive that is compliant to USB 2.0.

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Hardware Setup

1. Important safety information regarding the placement of this device is provided on page 9. Please review it before proceeding.

2. Make sure that the power to all devices connected to the installation are turned off. You must unplug the power cords of any computers that have the Keyboard Power On function.

Installation

Make sure that all equipment to be connected is powered off, and then follow the steps below to safely install the CE611 units.
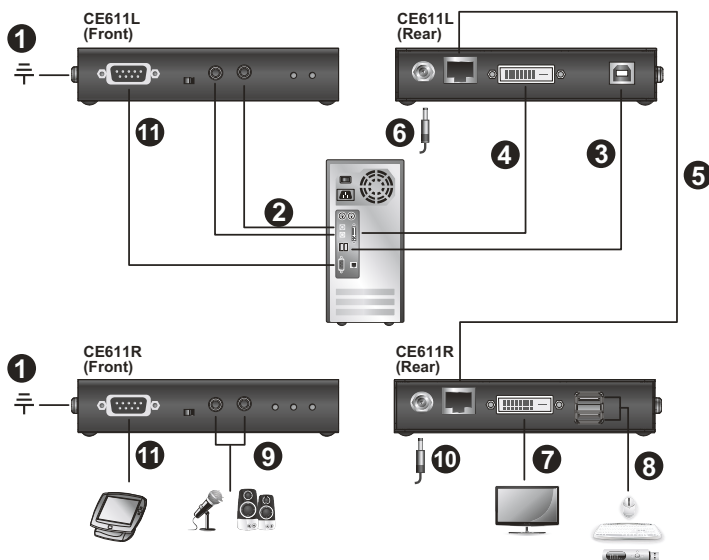
1. Use a grounding wire to ground the CE611L by connecting one end to the unit and the other end to a suitable grounded object. Follow the same procedure to ground the CE611R.

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

2. Connect the CE611L's Audio In and Audio Out port to a local computer using a microphone and a speaker cable.

3. Connect the CE611L's USB Type-B port to the local computer's USB Type-A port using a USB cable.

4. Connect the CE611L's DVI In port to the local computer.

5. Connect the CE611L's HDBaseT Out port to the CE611R's HDBaseT In port using a Cat 5e, Cat 6 or ATEN's tailor-made HDBaseT cable depending on your video resolution.

> **Note:**
> - Use a Cat 5e cable to display a video of 1080p @60Hz up to 100 m.
> - Use a Cat 6 or ATEN's tailor-made HDBaseT cable to display video of 1920 x 1200 / 1600 x 1200 @ 60Hz up to 100 m.
> - Please refer to the Compatible Cables section on the product page.

6. Plug one of the supplied power adapters into a power source, and then plug the power cable into the CE611L's Power Jack.

7. Connect a DVI-enabled monitor to the CE611R's DVI Out port using a DVI cable.

8. Plug USB devices (mouse, keyboard, etc.) into the USB ports on the CE611R.

9. Plug speakers and a microphone into their respective audio ports on the CE611R.

10. Plug the second power adapter into a power source, and then plug the power cable into the CE611R's Power Jack.

11. To remotely control the computer via RS-232 serial commands, connect the computer's serial port to the CE611L's RS-232 Serial port via a serial cable, and then connect a hardware controller or a PC (installed with a software controller) to the CE611R's RS-232 port.

Rack Mounting

The CE611 can be mounted on system racks using VE-RMK1U Rack Mount Kit. For detailed setup instruction, see *VE-RMK1U Installation Guide*.

Appendix

Safety Instructions

General

- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- This product is for indoor use only.
- 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.

Mounting

- Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.

- Always load the rack from the bottom up, and load the heaviest item in the rack first.

- Make sure that the rack is level and stable before extending a device from the rack.

- Use caution when pressing the device rail release latches and sliding a device into or out of a rack; the slide rails can pinch your fingers.

- After a device is inserted into the rack, carefully extend the rail into a locking position, and then slide the device into the rack.

- Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.

- Make sure that all equipment used on the rack – including power strips and other electrical connectors – is properly grounded.

- Ensure that proper airflow is provided to devices in the rack.

- Ensure that the operating ambient temperature of the rack environment does not exceed the maximum ambient temperature specified for the equipment by the manufacturer.

- Do not step on or stand on any device when servicing other devices in a rack.

Technical Support

International

◆ For online technical support – including troubleshooting, documentation, and software updates: **http://eservice.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	CE611L	CE611R
Connectors		
KVM Ports	1 x DVI-D Female (White) 1 x USB Type-B Female (White) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	N/A
Console Ports	N/A	1 x DVI-D Female (White) 2 x USB Type-A Female 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
RS-232	1 x DB-9 Female (Black); Type: DTE	
Power	1 x DC Jack with locking	
Unit to Unit	1 x RJ-45 Female (Black)	
LEDs		
Power	1 (Green)	
Link	1 (Orange)	
Video Output	N/A	1 (Orange)
Switches		
Firmware Upgrade	1 x Slide Switch	
Video	Up to 1600 x 1200 & 1920 x 1200@90m (Cat 5e) Up to 1600 x 1200 & 1920 x 1200@100m (Cat 6 / 6a or ATEN's tailor-made HDBaseT cable*) Up to 1920 x 1080@100m (Cat 5e / 6 / 6a) **Note:** Please refer to the Compatible Cables section on the product page.	
Power Consumption	DC5V:2.494W:16BTU/h	DC5V:4.816W:27BTU/h
	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.	
Environmental		
Operating Temp	0–40º C	
Storage Temp.	-20–60º C	
Humidity	0–80% RH, non-condensing	
Physical Properties		
Housing	Metal	
Weight	0.35 kg (0.77 lb)	0.34 kg (0.75 lb)
Dimension (L x W x H)	12.80 x 8.69 x 2.50 cm (5.04 x 3.42 x 0.98 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 counties/regions and then go to the Support Center, or contact your local ATEN sales representative for further assistance.