



Simply Better Connections

CE610A

DVI HDBaseT KVM Extender with
ExremeUSB®
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.



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 | 86-10-5255-0110 |
| Japan | 81-3-5615-5811 |
| Korea | 82-2-467-6789 |
| North America | 1-888-999-ATEN ext 4988 |
| United Kingdom | 44-8-4481-58923 |

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 the components are in working order. If you encounter any problem, please contact your dealer.

The CE610A package consists of:

- ◆ 1 CE610AL DVI HDBaseT KVM Extender with ExtremeUSB® (Local Unit)
- ◆ 1 CE610AR DVI HDBaseT KVM Extender with ExtremeUSB® (Remote Unit)
- ◆ 1 custom DVI 1.8 m cable
- ◆ 1 1.8 m USB cable
- ◆ 2 power adapters
- ◆ 1 mounting kit
- ◆ 1 user instructions

Contents

| | |
|-----------------------------|----|
| Compliance Statements | ii |
| User Information | iv |
| Online Registration | iv |
| Telephone Support | iv |
| User Notice | iv |
| Product Information | v |
| Package Contents | vi |
| About this Manual | ix |
| Conventions | x |

Chapter 1.**Introduction**

| | |
|---|---|
| Overview | 1 |
| Features | 2 |
| Requirements | 3 |
| Consoles | 3 |
| Computers | 3 |
| Cables | 3 |
| Operating Systems | 4 |
| Components | 5 |
| CE610AL (Local Unit) Front and Rear View | 5 |
| CE610AR (Remote Unit) Front and Rear View | 6 |

Chapter 2.**Hardware Setup**

| | |
|----------------------------|----|
| Rack Mounting | 7 |
| Installation | 9 |
| Grounding | 9 |
| Setting Up | 11 |
| Installation Diagram | 12 |

Chapter 3.**Operation**

| | |
|--|----|
| LED Display | 13 |
| CE610AL (Local Unit) and CE610AR (Remote Unit) | 13 |

Appendix

| | |
|---------------------------|----|
| Safety Instructions | 15 |
| General | 15 |
| Mounting | 17 |
| Technical Support | 18 |
| International | 18 |
| North America | 18 |
| Specifications | 19 |

| | |
|----------------------------|----|
| ATEN Warranty Policy | 20 |
|----------------------------|----|

About this Manual

This User Manual is provided to help you get the most from your system. 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 CE610A system. Its purpose, features and benefits are presented, and its front and back panel components are described.

Chapter 2, Hardware Setup, describes the steps that are necessary to quickly and safely set up your installation.

Chapter 3, Operation, explains the fundamental concepts involved in operating the CE610A.

Appendix, provides specifications and other technical information regarding the CE610A.

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/>

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

The CE610A DVI HDBaseT KVM Extender is a DVI and USB Extender that supports ExtremeUSB® and HDBaseT technology. The CE610A DVI HDBaseT KVM Extender can extend DVI and USB 2.0 signals up to 300 ft (100 m) from the source using a single Cat 5e/6 cable. The CE610A is equipped with USB connectors which allow you to extend any USB device between the units. The USB functionality provides not only peripheral sharing but also provides support for touch panel control and file transfer. The CE610A is ideal for transportation centers, medical facilities, and shopping malls, industrial kiosks and for syncing files and folders between portable and desktop computers.

The CE610A allows access to a computer system from a remote console (USB keyboard, monitor, and mouse). Because it allows access to a computer system from a remote console, the CE610A 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 CE610A is useful for control and security purposes, where you can have the system unit in a secure area at the same time that you put the console in the most convenient location for user access. This is ideal for managing highly confidential data systems.

The CE610A improves on previous designs by: 1) using inexpensive Cat 5e cable instead of bulkier, more expensive, standard DVI cables, for a much neater, more convenient, more reliable data transfer connection; and 2) featuring a custom ASIC to ensure the utmost in reliability and compatibility.

Setup is as easy as can be – simply connect the computer system box; run the Cat 5e cable up to 100 meters to the Remote Unit; and plug the remote console into the Remote Unit.

Features

- ◆ Uses a single Cat 5e cable to connect the local and remote units
- ◆ Allows access to a computer or KVM installation from a remote console
- ◆ Superior Video Quality – up to 1920 x 1200 @ 60 Hz at 100 m
- ◆ Supports HDBaseT connectivity technology
- ◆ Supports USB peripheral audio devices
- ◆ Transparent USB Support – supports all USB 2.0 High Speed device*
- ◆ Extends local PC Video/Keyboard/Mouse to Remote side
- ◆ Built-in 8KV/15KV ESD protection (Contact voltage 8KV; Air voltage 15KV)
- ◆ ExtremeUSB® - supports transparent USB 2.0 signals and true plug-and-play (no software or drivers required)
- ◆ USB 2.0 Support* – connects devices such as keyboard, mouse, flash drive, printer, touch panel, USB 1.1 web cameras and other USB devices which require moderate amounts of bandwidth
- ◆ Works with all major operating systems: Windows®, OS X®, and Linux®

***Note:** The CE610A supports a maximum combined USB transfer rate of 40 Mbps for attached USB devices.

Requirements

Consoles

- ◆ A DVI-D monitor capable of the highest resolution you will be using on any computer in the installation.
- ◆ A USB keyboard
- ◆ A USB mouse

Computers

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

- ◆ A DVI-D / DVI-I port
- ◆ 2 USB ports for the mouse and keyboard
- ◆ Microphone and speaker ports (optional)

Cables

- ◆ For optimal signal integrity, and to simplify the layout, we strongly recommend that you use the high quality custom DVI Cable that is provided with this package.
- ◆ Cat 5e cable is required to connect the Local and Remote CE610A Units. Cable of a lower standard will result in degrading of the video signal. We strongly recommend using Cat 5e cables.
- ◆ For better quality over longer distances, we suggest using ATEN's tailor-made HDBaseT cable*.

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

Maximum Cable Distances

| Connection | Distance |
|---|----------|
| Computer to Local Unit (CE610AL) | 1.8 m |
| Local Unit (CE610AL) to Remote Unit (CE610AR) | 100 m |
| Remote Unit (CE610AR) to monitor | 5 m |

Operating Systems

Supported operating systems are shown in the table, below:

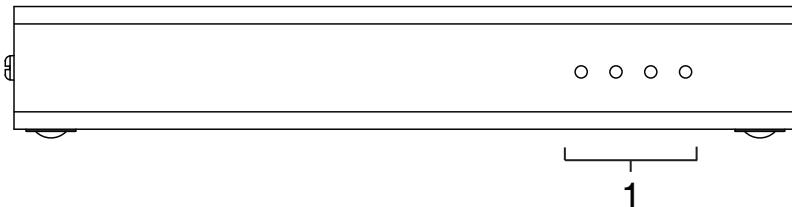
| OS | | Version |
|-----------|---------|--------------------|
| Windows | | 2000 or above |
| Linux | RedHat | 9.0 or later |
| | SuSE | 10 / 11.1 or later |
| | Debian | 3.1 / 4.0 |
| | Ubuntu | 7.04 / 7.10 |
| UNIX | FreeBSD | 5.5 / 6.1 / 6.2 |
| Novell | Netware | 6.0 or later |
| Mac | | OS 10.1 or later |

Note: The CE610A does not support OS that do not support USB.

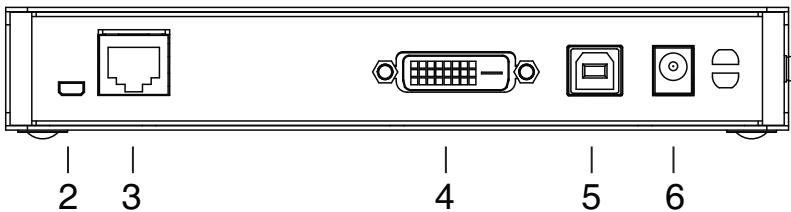
Components

CE610AL (Local Unit) Front and Rear View

Front View



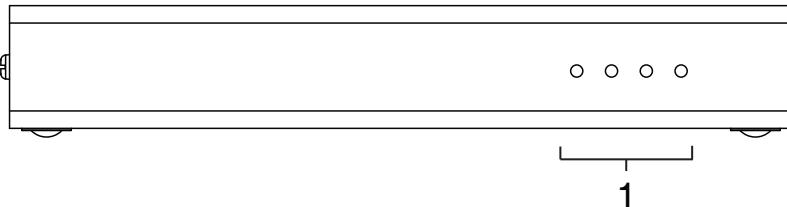
Rear View



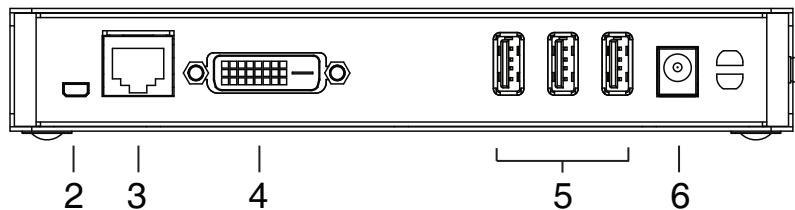
| No. | Component | Description |
|-----|-----------------------|--|
| 1 | LEDs | The CE610AL has four LEDs to indicate operating status – power, link, USB, and video. |
| 2 | firmware upgrade port | The firmware upgrade port is reserved for technical support. If you would like to upgrade the unit's firmware yourself, please contact your ATEN dealer. |
| 3 | unit to unit port | The Cat 5e cable that connects the local and remote units plugs in here. |
| 4 | DVI-D in port | Connect a DVI cable from a computer to this port. |
| 5 | USB Type-B input | The USB cable from your computer or USB hub plugs in here. |
| 6 | power jack | The cable from the power adapter connects here. |

CE610AR (Remote Unit) Front and Rear View

Front View



Rear View



| No. | Component | Description |
|-----|-----------------------|--|
| 1 | LEDs | The CE610AR has four LEDs to indicate operating status – power, link, USB, and video. |
| 2 | firmware upgrade port | The firmware upgrade port is reserved for technical support. If you would like to upgrade the unit's firmware yourself, please contact your ATEN dealer. |
| 3 | unit to unit port | The Cat 5e cable that connects the local and remote units plugs in here. |
| 4 | DVI-D out port | Connect a DVI monitor to this port. |
| 5 | USB Type-A ports | Your USB 2.0 devices plug in here. |
| 6 | power jack | The cable from the power adapter connects here. |

Chapter 2

Hardware Setup

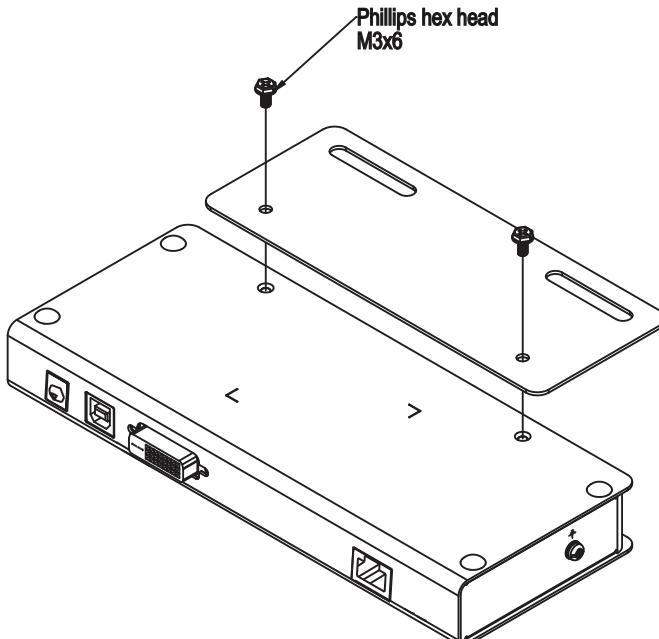


1. Important safety information regarding the placement of this device is provided on page 15. Please review it before proceeding.
2. Make sure that the power to all devices connected to the installation are turned off. You must unplug the power cords of any computers that have the Keyboard Power On function.

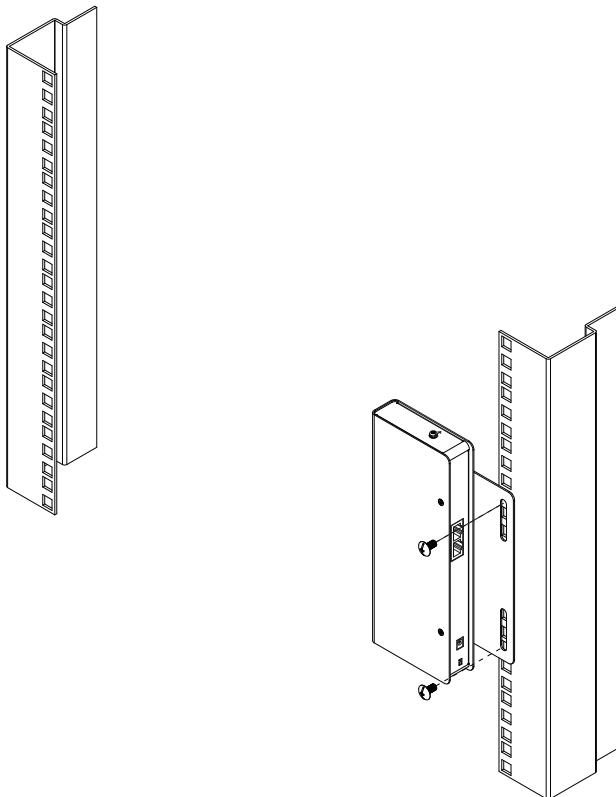
Rack Mounting

For convenience and flexibility, the CE610A can be mounted on system racks. To rack mount a unit do the following:

1. Using the screws provided in the Mounting Kit, screw the mounting bracket into the top or bottom of the unit as show in the diagram below:



2. Screw the bracket into any convenient location on the rack.



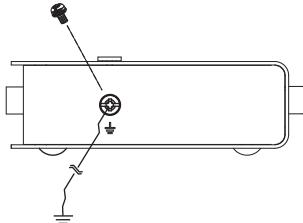
Note: These screws are not provided. We recommend that you use M5 x 12 Phillips Type I cross, recessed type screws.

Installation

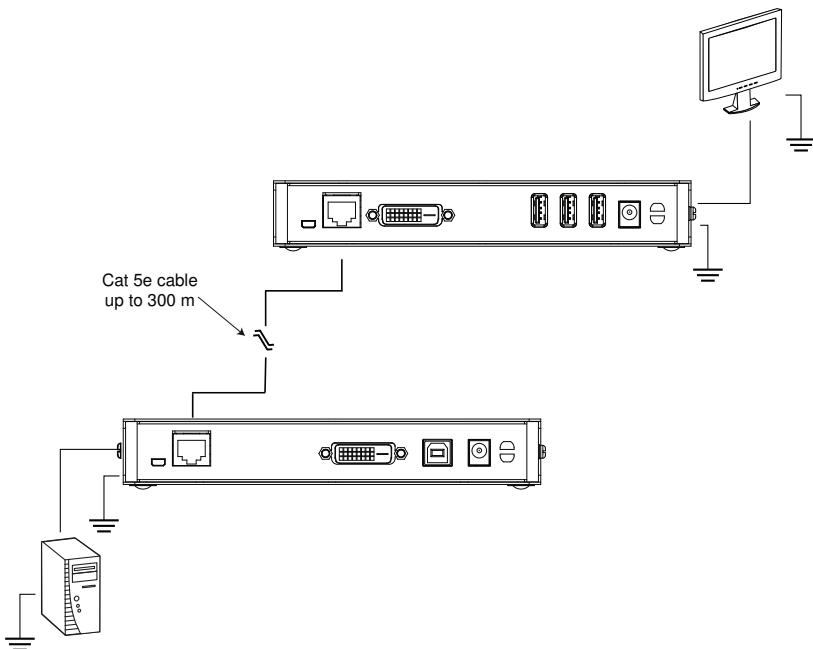
Grounding

To prevent damage to your installation it is important that all devices are properly grounded.

1. Use a grounding wire to ground both units by connecting one end of the wire to the grounding terminal, and the other end of the wire to a suitable grounded object.

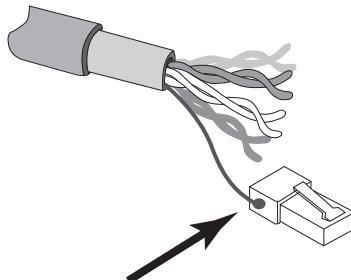


2. Make sure that the computer that the Local Unit connects to and the monitor that the Remote Unit connects to are properly grounded.

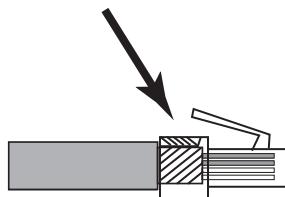


3. For increased grounding protection, use STP (shielded twisted pair) cable to connect the Local and Remote Units. There are two methods that can be used:

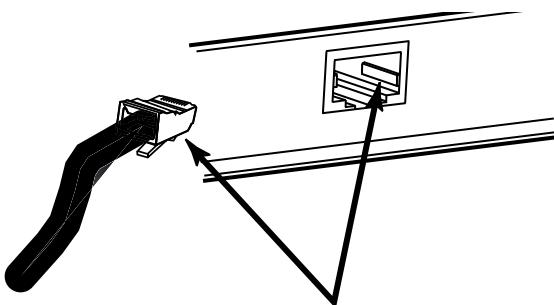
a) In addition to the eight paired wires, STP cable also contains a grounding wire. Solder this wire to the RJ-45 connector as shown in the diagram below:



b) The second method is to use the STP cable shielding for grounding. In this case, make sure that the shielding makes tight contact with the top inside of the RJ-45 connector as shown in the diagram below:



In either case, make sure that the sides of the RJ-45 connector make tight contact with the grounding contacts on the sides of the RJ-45 socket as shown in the diagram below:



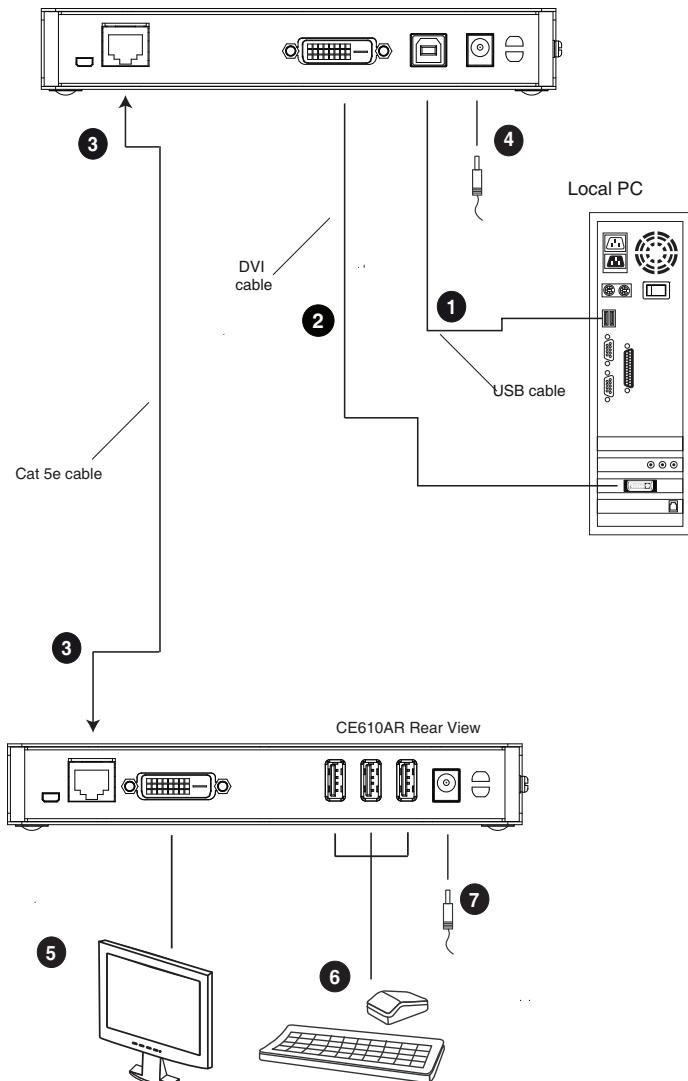
Setting Up

Setting up the CE610A DVI KVM Extender system is simply a matter of plugging in the cables. Make sure that all the equipment to be connected are powered off. Refer to the installation diagram on the following page and do the following:

1. Connect the USB cable supplied with the package to the **USB Type-B port** on the local unit (CE610AL). Plug the other end of the cable into a USB Type-A port on the local computer.
2. Connect the DVI-D cable supplied with the package to the **DVI-D input port** located on the local unit (CE610AL). Plug the other end of the cable into the DVI port on the local computer.
3. Plug either end of the Cat 5e cable into the CE610A's unit to unit **R-J45 port**. Plug the other end of the Cat 5e cable into the unit to unit **RJ-45 port** of the remote unit (CE610AR).
4. Plug one of the power adapters (supplied with this package) into a power source; plug the adapter's power cable into the CE610AL's **power jack**.
5. Use a DVI cable to connect the **DVI-D output port** on the remote unit (CE610AR) to your monitor.
6. Plug the cables from the remote USB devices (mouse, keyboard, etc.), into their respective **USB ports** on the remote unit CE610AR.
7. Plug the second power adapter (supplied with this package) into a power source; plug the adapter's power cable into the CE610AR's **power jack**.

Installation Diagram

CE610AL Rear View



Chapter 3

Operation

LED Display

The CE610A Local and Remote Units have front panel LEDs to indicate their operating status, as shown in the tables, following:

CE610AL (Local Unit) and CE610AR (Remote Unit)

| LED | Indication |
|---------------|--|
| Power (Green) | Lights steadily to indicate that the system is receiving power. |
| Link (Green) | <ul style="list-style-type: none">◆ Lights steadily to indicate that the connection to the Local and Remote units is ok.◆ OFF when there is a problem with the connection. |
| USB (Green) | <ul style="list-style-type: none">◆ Lights to indicate that the USB connection to the host computer is working.◆ Flashes green to indicate that the host is in suspend mode.◆ OFF indicates that the link is inactive. |
| Video (Green) | <ul style="list-style-type: none">◆ Flashes to indicate normal video activity.◆ Lights steadily to indicate HDCP video activity.◆ OFF indicates that there is no video activity. |

This Page Intentionally Left Blank

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, *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 | | CE610AL | CE610AR |
|---------------------|------------------------|--|-------------------------------|
| Connectors | DVI In | 1 x DVI-D Female (White) | N/A |
| | DVI Out | N/A | 1 x DVI-D Female (White) |
| | USB | 1 x USB Type B Female (White) | 3 x USB Type A Female (White) |
| | Power | 1 x DC Jack | |
| | F/W Upgrade | 1 x Mini-USB | |
| | Unit to Unit | 1 x RJ-45 Female (Black) | |
| LEDs | Power | 1 (Green) | 1 (Green) |
| | Link | 1 (Green) | 1 (Green) |
| | USB | 1 (Green) | 1 (Green) |
| | Video | 1 (Green) | 1 (Green) |
| USB | Transfer Rate | USB 2.0 (Transfer Rate: Up to 40 Mbps) | |
| Video | | 1920 x 1200 @ 60Hz (100 m) | |
| Power Consumption | | DC5V:1.99W:4.1BTU/h | DC5V:3.95W:5.0BTU/h |
| | | 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. | |
| Environment | Operating Temp. | 0–40°C | |
| | Storage Temp | -20–60°C | |
| | Humidity | 0–80% RH, Non-condensing | |
| Physical Properties | Housing | Metal | |
| | Weight | 0.62 kg (1.37 lb) | |
| | Dimensions (L x W x H) | 18.20 x 11.79 x 2.87 cm (7.17 x 4.64 x 1.13 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.

© Copyright 2025 ATEN® International Co., Ltd.
Released: 2025-04-25

ATEN and the ATEN logo are registered trademarks of ATEN International Co., Ltd. All rights reserved.
All other brand names and trademarks are the registered property of their respective owners.