ATEN
Simply Better Connections

CS62KM

2-Port USB Boundless
Cable KM Switch
User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

 ◆ Reorient or relocate the receiving antenna.

 ◆ Increase the separation between the equipment and receiver.

 ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

 ◆ Consult the dealer or an experienced radio/TV technician for help.

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.

KCC Statement

유선 제품용 / B 급 기기 (가정용 방송 통신 기기)
이 기기는 가정용 (B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며 , 모든 지역에서 사용할 수 있습니다 .

RoHS
This product is RoHS compliant.

KVM+ 多電腦切換器類產品

設備名稱 Equipment Name	2 埠 USB 鍵盤 / 滑鼠無邊快切 帶線式 KM 多電腦切換器		型號（型式） Type designa- tion (Type)	CS62KM		

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
電纜線 Cable	－	○	○	○	○	○
印刷電路部件 PCBA	－	○	○	○	○	○
塑膠 / 其他部件 Plastic / Other parts	○	○	○	○	○	○
金屬部件 Metal parts	－	○	○	○	○	○

備考 1.〝超出 0.1 wt %〞及〝超出 0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。
Note 1："Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.
備考 2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2："○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.
備考 3.〝－〞係指該項限用物質為排除項目。
Note 3："–" indicates that the restricted substance corresponds to the exemption.

製造商：宏正自動科技股份有限公司
地址：新北市汐止區大同路二段 125 號三樓

最大操作環境溫度： 40° C

最大額定電壓： DC 5V

D33866
RoHS

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
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 CS62KM package consists of:

◆ 1 CS62KM 2-Port USB Boundless Cable KM Switch

◆ 1 remote port selector

◆ 1 user instructions

Contents

About this Manual

This user manual is provided to help you get the most from your CS62KM 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 CS62KM. Its purpose, features and benefits are presented, and its front and back panel components are described.

Chapter 2, Hardware Setup, describes how to set up your installation. The necessary steps are provided.

Chapter 3, Basic Operation, explains the fundamental concepts involved in operating the CS62KM.

Chapter 4, Hotkey Operation, details all of the concepts and procedures involved in the Hotkey operation of your CS62KM installation.

Chapter 5, Keyboard Emulation, provides tables that list the PC to Mac keyboard emulations mappings.

Chapter 6, The Firmware Upgrade Utility, explains how to upgrade the CS62KM's firmware with the latest version available.

Appendix, provides specifications and other technical information regarding the CS62KM.

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/

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 CS62KM is a 2-port USB Cable KM Switch that enables users to control up to 2 computers with a single keyboard and mouse. It features various innovative port selection methods. Users can switch between the connected computers via remote port selector, keyboard hotkey, mouse cursor, and mouse wheels. The mouse cursor method adopts ATEN's exclusive Boundless Switching technology, which provides an intuitive way to switch control to another computer by simply moving your mouse cursor across a screen border and onto the target computer display. Move the mouse cursor in any direction to switch the control focus without limitations.

The CS62KM's Boundless Switching function supports up to 2 monitors, expediting the process of switching between computers for a smooth and hassle-free user experience. In addition to making multitasking across two displays more efficient, this function is especially useful in emergencies that necessitate the immediate monitoring and management of computers.

Further advanced features of the CS62KM include bus-power mode which means no external power adapter is required. With a rich feature set, the CS62KM is designed to simplify administrative tasks, save space, and increase work productivity, and is especially suitable for complex multitasking applications in control rooms in any industry.

Features

- Single USB keyboard and mouse controls up to 2 computers
- Boundless Switching – simply move the mouse cursor across the display border and onto the corresponding display of the target computer to switch the keyboard/mouse operations from one computer to the next
- Computer selection via remote port selector, keyboard hotkey, mouse cursor, and mouse wheel[1]
- Supports Windows operating systems
- No software required
- Firmware upgradeable
- Supports USB hot plugging
- Bus-powered – no external power adapter required[2]
- Works with iOS, Android, macOS, and Linux operating systems[3]

Note: 1. The mouse port switching is only supported under mouse emulation mode with a USB 3-button mouse wheel.

2. The USB bus-powered design allows the switch to get power from the connected computers. It requires connection to two computers to get sufficient power supply.

3. The boundless switching is not supported on iOS, Android, macOS, and Linux operating systems.

Requirements

Console

- ◆ A USB mouse
- ◆ A USB keyboard

Computers

The following equipment must be available on each computer:

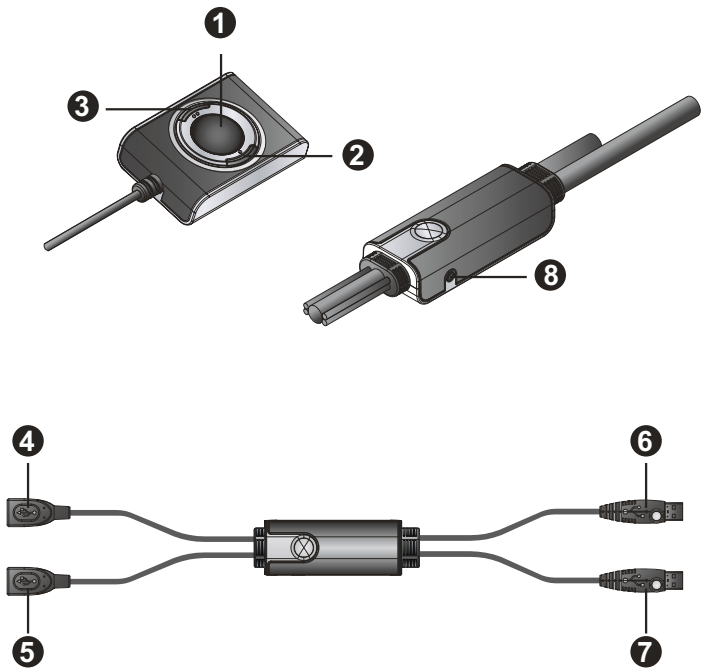- ◆ Video Display
- ◆ USB Type A port

Operating Systems

- ◆ Windows
- ◆ macOS
- ◆ iOS
- ◆ Linux
- ◆ Android

> **Note:** The boundless switching is not supported on iOS, Android, macOS, and Linux operating systems.

Components

CS62KM Hardware View

No.	Component	Description
1	port selection button	Press the port selection button to toggle the KM and focus between the two computers.
2	port 1 LED	Lights when the corresponding computer port has the KM focus.
3	port 2 LED	Lights when the corresponding computer port has the KM focus.
4	keyboard cable	Connects the keyboard here.
5	mouse cable	Connects the mouse here.
6	PC 1 USB cable	Connects the first computer here.

| No.	Component	Description
7	PC 2 USB cable	Connects the second computer here.
8	remote port selector jack	Plugs the remote port selector cable here if you choose to use the remote port selector.

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Hasrdware Setup

1. Important safety information regarding the placement of this device is provided on page 41. Please review it before proceeding.

2. To prevent damage to your installation from power surges or static electricity. It is important that all connected devices are properly grounded.

3. Make sure that power to all the devices you will be installing has been turned off. You must unplug the power cords of any computers that have the Keyboard Power On function.

4. Please operate the device with caution when under high environmental temperatures, as the surface of the device may become overheated under such conditions. For instance, the surface temperature of the device may reach 70 °C (158 °F) or higher when the environmental temperature reaches close 50 °C (122 °F).

Hardware Installation

To set up your installation, refer to the installation diagram below (the numbers in the diagram correspond to the steps below), and do the following:

Installation Diagram
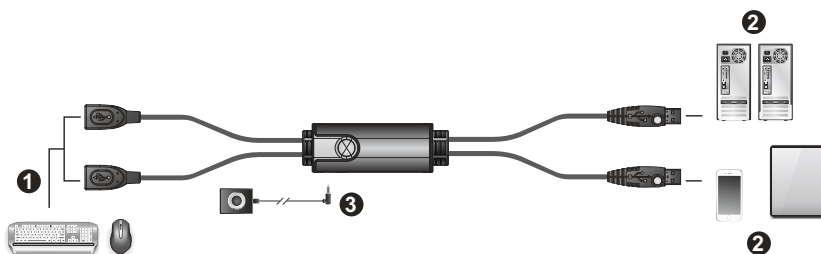
1. Plug your keyboard into the connector at the end of the keyboard cable, and plug your mouse into the connector at the end of the mouse cable.

2. Plug the PC 1 USB cable into the USB port on your first computer and/or Andorid / iOS mobile device, and plug the PC 2 USB cable into the USB port on your second computer and/or Andorid / iOS mobile device.

> **Note:** 1. A power adapter is not provided with the package as the USB bus-power allows the switch to get power from the computers. It requires connection to two computers to get a sufficient power supply.
>
> 2. Please use appropriate USB adapters when connecting your Android / iOS mobile device (e.g., USB Type-A to USB Type-C adapter for iPad Pro).

3. (Optional) If you choose to use the remote port selector, plug its cable into the remote port selector jack, located on the side of the unit.

> **Note:** The switch can be operated with hotkeys alone, so connecting the remote port selector is optional.

4. Power on the computers.

> **Note:** Make sure the computers and devices that the CS62KM connects to are also properly grounded.

Chapter 3
Basic Operation

Port Selection

There are four convenient methods to switch between the computers: Manual – by pressing the port selection button; Mouse – by double-clicking the scroll wheel; Hotkey – by entering key combinations on the keyboard; and Boundless Switching– by moving the mouse cursor across display borders.

Manual Switching

For manual port selection:

◆ Press port selection button from the remote port selector to bring the KM focus to the computer attached to its corresponding port.

Mouse Switching

For mouse port selection: Double-click the scroll wheel of your USB mouse to cycle through the ports.

Note: 1. Mouse switching is only supported by USB 3-key scroll wheel mice.

2. Mouse switching is disabled by default. See *Mouse Port Switching*, page 17, to enable mouse switching.

3. Mouse switching is only supported when Mouse Emulation is enabled. See *Mouse Emulation*, page 17.

Hotkey Switching

For Hotkey port selection: All port switches from the keyboard begin by pressing the Scroll Lock key twice. For more information on the Hotkey parameters, (see *Port Switching*, page 11).

Boundless Switching

Boundless Switching is for port selection by moving the cursor across the display borders – when the cursor appears on the next screen, the KM focus switches. Before using Boundless Switching, you must turn off mouse acceleration in the operating system and configure:

◆ The screen size of all connected displays via hotkey, for more information, see *Screen Size*, page 18.

◆ The monitor layout via hotkey, for more information see *Monitor Layout*, page 26.

Port ID Numbering

The PC 1 USB Cable is assigned a port number 1, and the PC 2 USB Cable is assigned a port number 2. The Port ID is used to specify which computer gets the KM focus with the Hotkey port selection method (See *Going Directly to a Port*, page 12 for details).

Hot Plugging

The CS62KM supports USB hot plugging – components can be removed and added back into the installation by unplugging their cables from the USB hub ports without the need to shut the unit down.

Powering Off and Restarting

If it becomes necessary to power off the CS62KM unit, before powering it back on, you must do the following:

1. Shut down all the computers that are attached to the switch.

2. Power on the computers.

Chapter 4
Hotkey Operation

The switch provides an extensive, easy-to-use, hotkey function that makes it convenient to control and configure your KM installation from the keyboard.

Port Switching

All port switches begin with tapping the **[Scroll Lock]** key twice. The tables below describe the actions that each key combination performs.

Note: If using the [Scroll Lock] key conflicts with other programs running on the computer, the [Ctrl] key can be used, instead. See *Alternate Port Switching Keys*, page 14, for details.

Cycling Through the Ports

Hotkey	Action
[Scroll Lock] [Scroll Lock] [Enter]	Brings the **KM** focus from the port that currently has it to the next port on the installation (1 to 2; 2 to 1). The KM focus all go to this port even if they were on different ports to begin with.

Example

To bring the KM focus from port 1 to port 2, do the following:

1. Press **[Scroll Lock] twice**.

2. Press **[Enter]**.

Going Directly to a Port

Hotkey	Action
[Scroll Lock] [Scroll Lock] [n] [Enter]	Brings the **KM** focus to the computer attached to the port corresponding to the specified Port ID. The KM focus all go to this port even if they were on different ports to begin with.

Note: The [n] stands for the computer's Port ID number (1, or 2). See *Port ID Numbering*, page 10. Replace the [n] with the appropriate Port ID when entering hotkey combinations.

Example

To bring the KM focus from a port to a specified port number (e.g., port 2), do the following:

1. Press **[Scroll Lock] twice**.

2. Press **[2]**.

3. Press **[Enter]**.

Hotkey Setting Mode

Hotkey Setting Mode is used to configure the CS62KM. All operations begin with invoking Hotkey Setting Mode (HSM).

Invoking HSM

To invoke HSM, do the following:

1. Press and hold down the [**Num Lock**] key.

2. Press and release the **[-]** key.

3. Release the **[Num Lock]** key.

Note: 1. There is an alternate key combination to invoke HSM. See below for details.

2. The [-] must be released within one half-second, otherwise Hotkey invocation is canceled.

When HSM is active, the Caps Lock and Scroll Lock LEDs flash in succession. They stop flashing and revert to normal status when you exit HSM.

Ordinary keyboard and mouse functions are suspended – only Hotkey-compliant keystrokes and mouse clicks, described in the sections that follow, can be input.

At the conclusion of some hotkey operations, you automatically exit Hotkey mode. With some operations, you must exit manually.

To exit HSM manually, press the **[Esc]** key, or the **[Spacebar]**.

Alternate HSM Invocation Keys

An alternate set of HSM invocation keys is provided in case the default set conflicts with programs running on the computers.

To switch to the alternate HSM invocation set, do the following:

1. Invoke HSM (see page 13).

2. Press and release **[H]**.

   The HSM invocation keys become the [Ctrl] key (instead of the [Num Lock] key) and [F12] key (instead of the [-] key).

   Note: This procedure is a toggle between the tow methods. To revert back to the original HSM invocation keys, invoke HSM, then press and release the **[H]** key again.

Alternate Port Switching Keys

The port switching activation keys can be changed from tapping the [Scroll Lock] key twice to tapping the [Ctrl] key twice.

To change the port switching activation keys, do the following:

1. Invoke HSM (see page 13).

2. Press and release the **[T]**.

   Note: This procedure is a toggle between the two methods. To revert back to the original [Scroll Lock] [Scroll Lock] method, invoke HSM, then press and release the **[T]** key again.

Keyboard Operating Platform

The CS62KM's default port configuration is for a PC compatible keyboard operating platform. To set the keyboard operating platform to work under special operating system as a standard (104 key) keyboard, or automatically detect and set the keyboard operating platform, follow the steps below:

1. Bring the KM focus to the port you want to set.

2. Invoke HSM (see page 13).

3. Press and release the Function key (see table below). After completing this procedure, you automatically exit HSM.

Function Key	Operation
[F1]	Sets the SPC mode so that it can work under special operating systems as a standard (104 key) keyboard.
[F2]	Enables Mac keyboard emulation, see page 31, for details.
[F10]	Enables Windows keyboard emulation.

List Switch Settings

To see a listing of the current switch settings, do the following:

1. Open a text editor or word processor and place the cursor in the page window.

2. Invoke HSM (see page 13).

3. Press and release **[F4]** to display the settings.

USB Reset

If the USB loses focus and needs to be reset, do the following:

1. Invoke HSM (see page 13).

2. Press and release **[F5]**.

Keyboard Language

To change the keyboard language, do the following:

1. Invoke HSM (see page 13).

2. Press **[F6] [*nn*] [Enter]**.

> **Note:** *nn* is a two-digit number that represents the keyboard language code (US English: 33; French: 08; Japanese: 15; German: 09).

Port Switching Keys

To enable or disable the port switching activation keys, do the following:

1. Invoke HSM (see page 13).

2. Press **[X] [Enter]**.

> **Note:** This procedure is a toggle. To enable / disable the port switching keys, repeat step 1 and 2.

Restore Default Settings

To reset the switch to its default hotkey settings, do the following:

1. Invoke HSM (see page 13).

2. Press **[R] [Enter]**.

   All hotkey settings return to the factory default settings (See *Hotkey Default Settings*, page 46).

Firmware Upgrade Mode

To set the switch to firmware upgrade mode, do the following:

1. Invoke HSM (see page 13).

2. Key in: **[U] [P] [G] [R] [A] [D] [E]**.

3. Press **[Enter]**. The front panel LEDs flash to indicate the Firmware Upgrade Mode is in effect.

> **Note:** To exit firmware upgrade mode, you must power off the switch.

Power on Detection

With power on detection, if the focus computer is powered off, the switch will automatically switch to the next powered-on computer. Power on detection can be enabled or disabled. The default setting is enabled. To disable power on detection, do the following:

1. Invoke HSM (see page 13).

2. Press and release **[E]**.

> **Note:** This procedure is a toggle. To enable / disable the power on detection, repeat step 1 and 2.

Mouse Emulation

To enable or disable to toggle between mouse emulation, do the following:

1. Invoke HSM (see page 13).

2. Press **[M]**.

> **Note:** This procedure is a toggle. To enable / disable the mouse emulation, repeat step 1 and 2.

Mouse Port Switching

Mouse port switching allows you to use the mouse wheel button (clicked twice) to switch ports. For mouse port switching to work, Mouse emulation (above) must be enabled. To enable or disable mouse port switching, do the following:

1. Invoke HSM (see page 13).

2. Press **[W]**.

> **Note:** 1. This feature is only supported by USB 3-key scroll wheel mice. The default setting is disabled. This feature is only supported when mouse emulation is also enabled. See *Power on Detection*, above.
>
> 2. This procedure is a toggle. To enable / disable the mouse port switching, repeat step 1 and 2.

Screen Size

Sets the screen size of each monitor so that the CS62KM knows to switch computers when the mouse cursor moves from one computer's screen to the next. The screen size configuration is required for the boundless switching to work. To set the screen size, do the following:

Setting the Screen Size

1. Bring the KM focus to the port you want to set up.

2. Invoke HSM (see page 13).

3. Press **[L]** [**1**].

4. In the upper left corner of the display, click the left mouse button and hold it down while you move the cursor to the bottom right corner of the display, and then release.

5. Repeat this procedure for each monitor connected to your installation.

Setting the Screen Resolution

1. Bring the KM focus to the port you want to set up.

2. Invoke HSM (see page 13).

3. Press **[L] [2] [Resolution** (e.g., 3840x2160)**] [Enter]**. For a list of available resolutions supported by the CS62KM, see *Supported Resolutions*, page 19.

4. Repeat this procedure for each monitor connected to your installation.

Supported Resolutions

Horizontal	Vertical
640	350
640	400
640	480
720	288
720	400
720	480
720	756
768	480
800	600
840	480
854	480
960	540
960	640
1024	576
1024	600
1920	1080
1024	768
1152	864
1176	774
1280	600
1280	720
1280	768
1280	800
1280	960
1280	1024
1360	768

Horizontal	Vertical
1366	768
1400	1050
1440	756
1440	900
1600	1024
1600	1200
1680	720
1680	1050
1768	992
1776	1000
1792	1344
1856	1392
1920	1200
1920	1440
1920	2160
2048	1152
2048	1536
2560	1080
2560	1440
2560	1600
2560	2048
3200	2048
3200	1800
3200	2400
3440	1440
3840	2160
3840	2400

Horizontal	Vertical
4090	2160
4096	2160
4096	3072
350	640
400	640
480	640
288	720
400	720
480	720
756	720
480	768
600	800
480	840
480	854
540	960
640	960
576	1024
600	1024
1080	1920
768	1024
864	1152
774	1176
600	1280
720	1280
768	1280
800	1280
960	1280

Horizontal	Vertical
1024	1280
768	1360
768	1366
1050	1400
756	1440
900	1440
1024	1600
1200	1600
720	1680
1050	1680
992	1768
1000	1776
1344	1792
1392	1856
1200	1920
1440	1920
2160	1920
1152	2048
1536	2048
1080	2560
1440	2560
1600	2560
2048	2560
2048	3200
1800	3200
2400	3200
1440	3440

Horizontal	Vertical
2160	3840
2400	3840
2160	4090
3072	4096
1720	1440
1440	1720
3440	1440

Boundless Switching

Boundless Switching Normal Mode

To enable or disable to toggle between the boundless switching normal mode, do the following:

1. Invoke HSM (see page 13).

2. Press **[Y] [Enter]**.

Note: 1. This procedure is a toggle. To enable / disable the boundless switching normal mode, repeat step 1 and 2.

2. This hotkey is only supported by CS62KM using firmware version v1.1.101 or later.

3. The mouse emulation must be enabled for the boundless switching normal and combo modes to work, see *Mouse Emulation*, page 17.

4. The screen size (page 18) and monitor layout (page 26) configurations are required for the boundless switching normal and combo modes to work.

5. You can switch between boundless switching normal and combo modes by entering the corresponding hotkeys.

6. The boundless switching normal mode will also be disabled when you disable the boundless switching combo mode.

Boundless Switching Combo Mode

When the boundless switching combo mode is enabled, you are required to press and hold the [Ctrl] key and then move the cursor across the display borders to switch port. To enable or disable to toggle between the boundless switching combo mode, do the following:

1. Invoke HSM (see page 13).

2. Press **[Y] [1] [Enter]**.

Note: 1. This procedure is a toggle. To enable / disable the boundless switching combo mode, repeat step 1 and 2.

2. This hotkey is only supported by CS62KM using firmware version v1.1.104 or later.

3. The mouse emulation must be enabled for the boundless switching normal and combo modes to work, see *Mouse Emulation*, page 17.

4. The screen size (page 18) and monitor layout (page 26) configurations are required for the boundless switching normal and combo modes to work.

5. You can switch between boundless switching normal and combo modes by entering the corresponding hotkeys.

6. The boundless switching normal mode will also be disabled when you disable the boundless switching combo mode.

Cycle Port Switching

The cycle port switching allows the boundless switching to switch port to the next available port before the mouse cursor reach to the edge of the display. To enable or disable to toggle between the cycle port switching, do the following:

1. Invoke HSM (see page 13).

2. a) Press **[C]** if your CS62KM is using firmware version between v1.1.101 and v1.1.105.

   b) Press **[C] [Enter]** if your CS62KM is using firmware version v1.1.105 or later.

Note: 1. This procedure is a toggle. To enable / disable the cycle port switching, repeat step 1 and 2.

2. This hotkey is only supported by CS62KM using firmware version v1.1.101 or later.

Example

Moving the mouse cursor to the far right of monitor 2 to switch port to monitor 1.
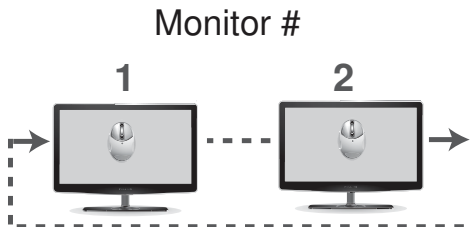
Monitor Layout

Sets the physical layout of the monitors allowing the CS62KM to switch to the correct computer when the mouse cursor moves off a screen to the right, left, up, or down. Before using boundless switching you must first configure the screen size of each display via hotkey (*Screen Size*, page 18).

Note: Make sure the boundless switching (see page 23) is enabled before you can make configuration to the monitor layout.

You must disable mouse acceleration in the Windows Control Panel for Boundless Switching to work.

To set the layout, do the following:

1. Invoke HSM (see page 13).

2. Type in the layout using the parameters below:

Parameter	Row	Monitor
P	A	1, 2
	B	1, 2

Parameter refers to the letter "P" which all commands must begin with (PA12). **Row** refers to a group of displays aligned together, each letter represents a row: A, B. **Monitor** refers to a display in each row: 1, 2. Enter the number in order as it appears in the layout, left-to-right, beginning with Row A. The number represents the computer connected to a port # on the CS62KM.

Note: Monitor 1 refers to the monitor connected to Port 1; Monitor 2 refers to the monitor connected to Port 2 respectively.

Examples are provided below with different layouts and arrows showing where the mouse cursor can cross display borders to switch computers.

Example 1

To key in a layout, enter "P" followed by "A" and a number for each display. If you have two displays in one row, type: **PA12 [Enter]**. The monitor 1 and 2 are fixed on the left and right in a row monitor layout.

1 x 2 Monitor Layout
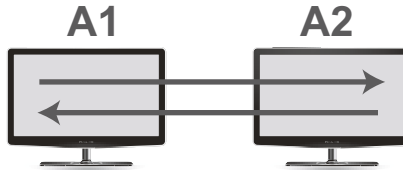
Example 2

To key in a layout, enter "P" followed by "A" and a number for each display. If you have one display in each row, type: **PA1B2 [Enter]**. The monitor 1 and 2 are fixed on the top and bottom in a tier monitor layout.

2 x 1 Monitor Layout
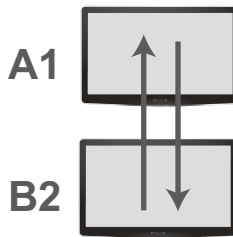
Boundless Switch Mouse Focus

To enable or disable to toggle between the boundless switch mouse focus, do the following:

1. Invoke HSM (see page 13).

2. a) Press **[Q]** if your CS62KM is using firmware version between v1.1.103 and v1.1.105

   b) Press **[Q] [Enter]** if your CS62KM is using firmware version v1.1.105 or later.

Note: 1. This procedure is a toggle. To enable / disable the boundless switching, repeat step 1 and 2.

   2. This hotkey is only supported by CS62KM using firmware version v1.1.103 or later.

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3. When the boundless switching is enabled and the cursor is moved across the display borders to switch port, a mouse properties pop-up message appears for you to adjust the mouse properties,
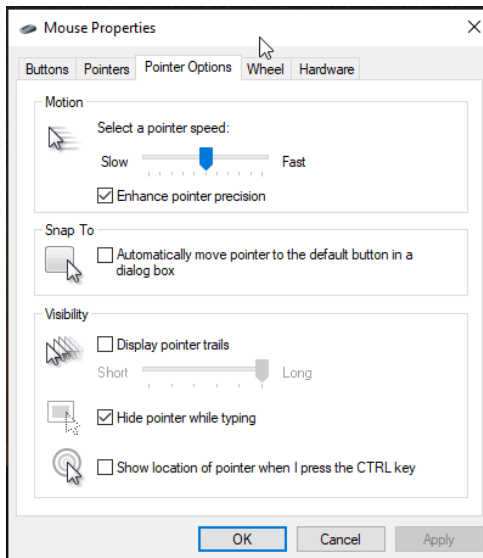
HSM Summary Table

After invoking HSM (see page 13), key in one of the following keys to perform the corresponding function:

Key	Function
[C] [Enter] / [C]	Enables / disables the cycle port switching. ◆ Press **[C]** if your CS62KM is using firmware version between v1.1.101 and v1.1.105. ◆ Press **[C] [Enter]** if your CS62KM is using firmware version v1.1.105 or later. **Note:** This hotkey is only supported by CS62KM using firmware version v1.1.101 or later.
[E]	Enables / disables the power on detection feature.
[H]	Toggles between the default and alternate HSM invocation keys.
[L] [n]	n = 1, sets the screen size of your monitor. **Note:** The screen size configuration is required for the boundless switching to work.
[L] [n] [Resolution] [Enter]	n = 2, sets the resolution of your monitor. **Note:** The screen size configuration is required for the boundless switching to work.
[M]	Enables / disables mouse emulation.
[P] [m] [n] [Enter]	Configures the physical monitor layout for boundless switching. m: A, B, refers to the row number. n: 1, 2, refers to the monitor's column number. **Note:** Make sure the boundless switching (see page 23) is enabled before you can make configuration to the monitor layout.
[Q] [Enter] / [Q]	Enables / disables the boundless switch mouse focus. ◆ Press **[Q]** if your CS62KM is using firmware version between v1.1.103 and v1.1.105. ◆ Press **[Q] [Enter]** if your CS62KM is using firmware version v1.1.105 or later. **Note:** This hotkey is only supported by CS62KM using firmware version v1.1.103 or later.
[R] [Enter]	Resets the hotkey settings to their default setting.

Key	Function
[T]	Toggles between the default ([Scroll Lock] [Scroll Lock]) and alternate ([Ctrl] [Ctrl]) port switching keys.
[U][P][G][R][A][D][E] [Enter]	Invokes firmware upgrade mode.
[W]	Enables / disables mouse port switching.
[X] [Enter]	Enables / disables the port switching keys.
[Y] [Enter]	Enables / disables the boundless switching normal mode. **Note:** 1. This hotkey is only supported by CS62KM using firmware version v1.1.101 or later. 2. The screen size (page 18) and monitor layout (page 26) configurations are required for the boundless switching normal and combo modes to work.
[Y] [1] [Enter]	Enables / disables the boundless switching combo mode. **Note:** 1. This hotkey is only supported by CS62KM using firmware version v1.1.101 or later. 2. The screen size (page 18) and monitor layout (page 26) configurations are required for the boundless switching normal and combo modes to work.
[F1]	Allows the keyboard and mouse to work under special operating system as a standard (104 key) keyboard/mouse.
[F2]	Enables Mac keyboard emulation.
[F4]	Prints the switch's current settings via a text editor or word processor.
[F5]	Performs a reset on all USB devices.
[F6] [*nn*] [Enter]	Sets the keyboard language. *nn* represents one of the following keyboard language codes: US English: 33; French: 08; Japanese: 15; German: 09.
[F10]	Automatically detects keyboard operating platform.

Chapter 5
Keyboard Emulation

Mac Keyboard

The PC compatible (101/104 key) keyboard can emulate the functions of the Mac keyboard. The emulation mappings are listed in the table below.

PC Keyboard	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
⊞	⌘
[Ctrl] [1]	🔇
[Ctrl] [2]	🔉
[Ctrl] [3]	🔊
[Ctrl] [4]	⏏
[Alt]	Alt
[Print Screen]	F13
[Scroll Lock]	F14
🗒	=
[Enter]	Return
[Backspace]	Delete
[Insert]	Help
[Ctrl] ⊞	F15

Note: When using key combinations, press and release the first key (Ctrl), then press and release the activation key.

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Chapter 6
The Firmware Upgrade Utility

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The Windows-based Firmware Upgrade Utility (FWUpgrade.exe) provides a smooth, automated process for upgrading the switch's firmware. The Utility comes as part of a Firmware Upgrade Package that is specific for each device. Check the web site regularly to find the latest packages and information relating to them: `http://www.aten.com/download/download_fw.php`

Before you Begin

1. From a computer that is not part of your KM installation, go to our Support & Download → Downloads site and choose the model name that relates to your device (CS62KM) to get a list of available Firmware Upgrade Packages.

2. Choose the Firmware Upgrade Package you want to install (usually the most recent), and download it to your computer.

3. Disconnect the CS62KM from your KM installation and remove all cable connections.
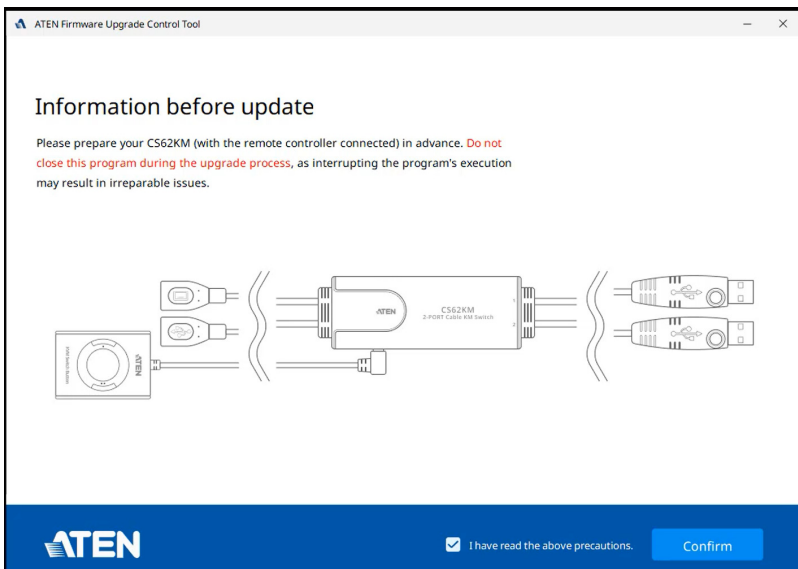
Starting the Upgrade

1. Run the downloaded Firmware Upgrade Package file – either by double clicking the file icon, or using a command line to enter the full path.
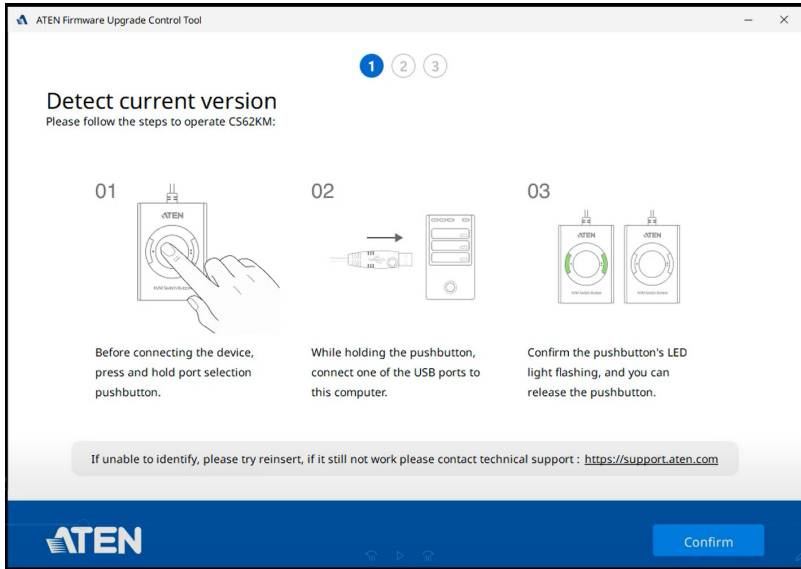
   The *Firmware Upgrade Utility* Welcome screen appears and click **Start**.
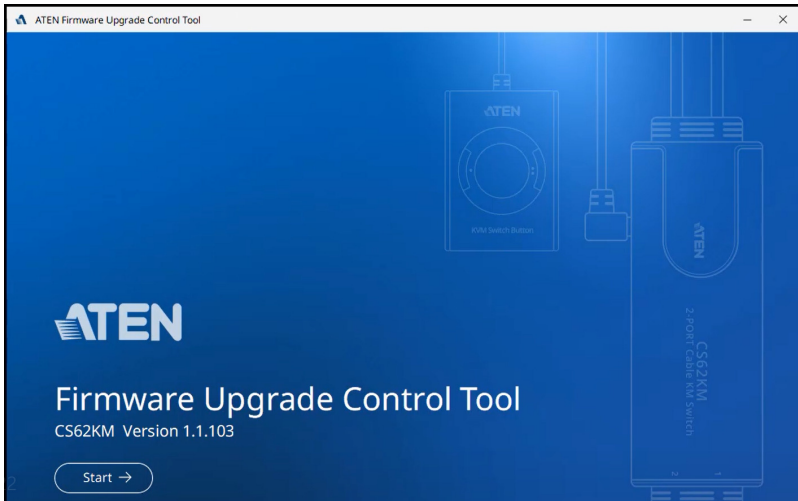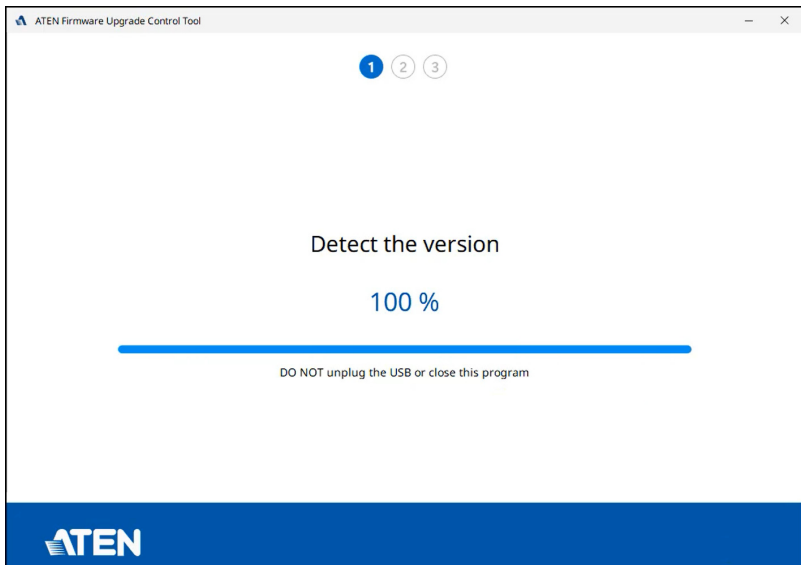

2. Read the Information before update message, click the *I have read the above precaution* radio button and click **Confirm**.

3. Follow the on-screen instruction, wait for the Confirm button to become available (turns to blue from grey) and then click **Confirm**.
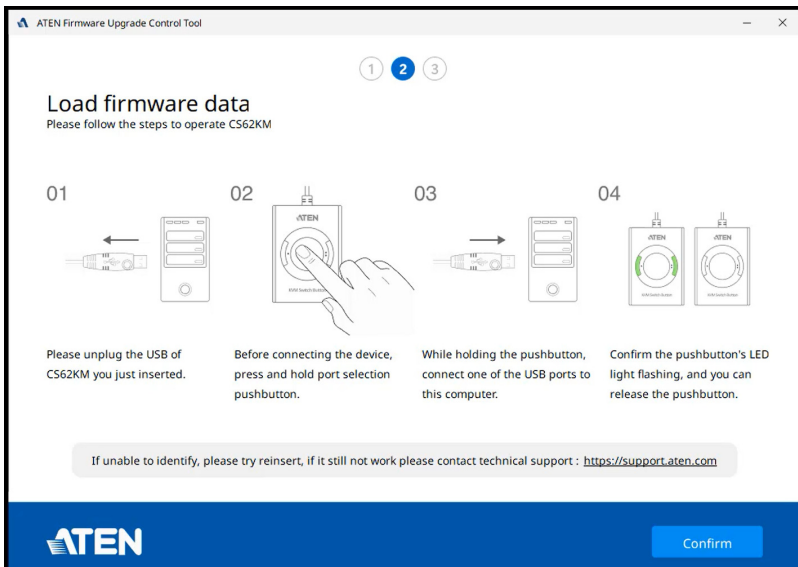

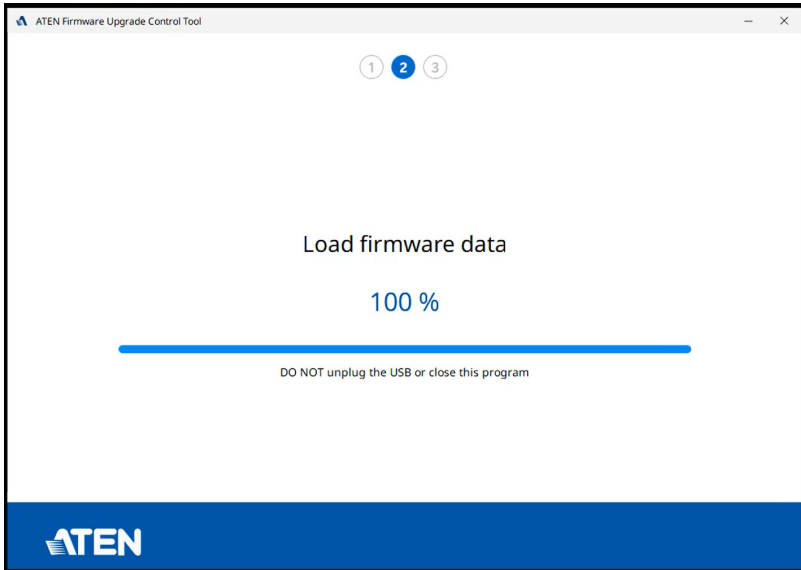4. The below screen appears. Wait for the CS62KM to detect the firmware version.

5. The below screen appears when the detection is finished. Follow the on-screen instructions to enter the Firmware Upgrade Mode. Once the Firmware Upgrade Mode is in effect, the Confirm button becomes available (turns to blue from grey) and then click **Confirm**.

Note: While the CS62KM is in Firmware Upgrade Mode, normal keyboard and mouse functions are suspended. You must complete the firmware upgrade or exit Firmware Upgrade Mode to regain normal control of the console.


6. Wait for the firmware upgrade process to complete.

7. The below screen appears when the upgrade has completed. Follow the on-screen instructions to load firmware data to the CS62KM. Once the firmware data is loaded, the Confirm button becomes available (turns to blue from grey) and then click **Confirm**.

Note: If the Confirm button stays grey, please contact the technical support for assistance.
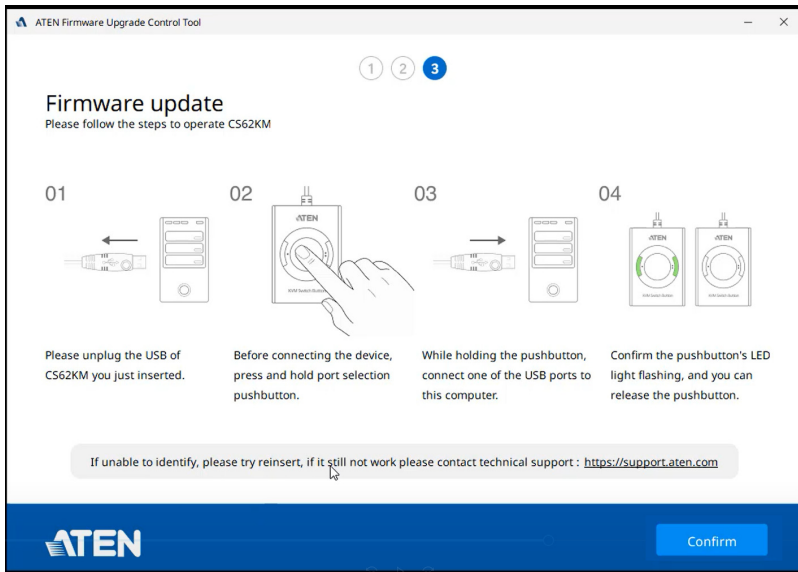
8. An upgrade successful screen appears, click **Finish** to close the Firmware Upgrade Utility. After a successful completion, the CS62KM exits Firmware Upgrade Mode, and resets itself.

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Appendix
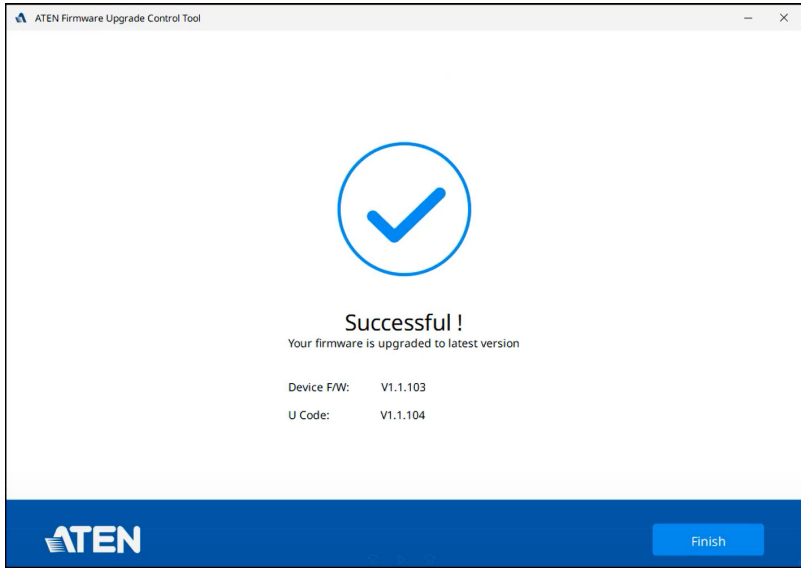
Safety Instructions

- Read all of these instructions. Save them for future reference.

- This device is for indoor use only.

- 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.

- Avoid circuit overloads. Before connecting equipment to a circuit, know the power supply's limit and never exceed it. Always review the electrical specifications of a circuit to ensure that you are not creating a dangerous condition or that one doesn't already exist. Circuit overloads can cause a fire and destroy equipment.

- 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://eservice.aten.com**

◆ For telephone support, see *Telephone Support* on page iv.

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://eservice.aten.com
Telephone Support		1-888-999-ATEN ext 4988
		1-949-428-1111

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		CS62KM
Computer Connections		2
Port Selection		Hotkey, Mouse Wheel*, Mouse Cursor, Remote Port Selector
Connectors	Console Ports	2 x USB Type A Female
	KVM (Computer) Ports	2 x USB Type A Male
	Remote Port Selector	1 x 2.5mm Audio Jack Female
LEDs	Selected	2 (Green)
Cable Length	Consle	0.15 m
	Computer	2 x 1.2 m
	Remote Port Selector	1.8 m
Emulation	Keyboard / Mouse	USB
Power Consumption		DC5V:0.74W:7.7BTU/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.
Environment	Operating Temp.	0–40º C
	Storage Temp.	-20–60º C
	Humidity	0–80% RH, Non-condensing
Physical Properties	Housing	Plastic
	Weight	0.12 kg (0.26 lb)
	Dimensions (L x W x H)	8.45 x 3.4 x 2.21 cm (3.33 x 1.34 x 0.87 in)

Note: Port switching only works with 3-key USB mouse wheel in emulation mode.

Troubleshooting

Operation problems can be due to a variety of causes. The first step in solving them is to make sure that all cables are securely attached and seated completely in their sockets.

In addition, updating the product's firmware may solve problems that have been discovered and resolved since the prior version was released. If your product is not running the latest firmware version, we strongly recommend that you upgrade. See *The Firmware Upgrade Utility*, page 33, for upgrade details.

Symptom	Possible Cause	Action
Erratic behavior.	Keyboard and/or mouse need to be reset.	Unplug the cable(s) from the console port(s), then plug it/them back in.
	No connection to the computer.	Check the cable from the switch to the computer to make sure it is properly connected.
	KM switch needs to be reset.	Power off all devices on the installation; power off the KM switch; wait five seconds; then power up.
USB devices not responding.	USB ports need to be reset.	Unplug the device's USB cable from the USB port on the switch's rear panel, then plug it back in.
		Use the USB Reset hotkey combination (see page 15), to reset the USB ports.

Hotkey Default Settings

The hotkey factory default settings are as follows:

Setting	Default
Port Switching	[Scroll Lock] [Scroll Lock]
Invoking HSM	[Num Lock] [-]
Mouse Emulation	Enabled
Keyboard Language	English
Keyboard Mapping	Auto Detect
Boundless Switching Normal Mode	Disabled
Boundless Switching Combo Mode	Disabled
Power on Detection	Enabled
Power Switching keys	Enabled
Mouse Wheel Switching	Disabled
Boundless Switch Mouse Focus	Disabled

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.