



# KVM SWITCH, 4-PORT, SINGLE DISPLAY, 4K, HDMI



**User Manual**  
DS-12880

## User consideration

The manufacturer has the right to modify and change the information, documents and specifications contained in the manual without prior notice. The manufacturer does not warrant, express, imply or statutorily declare its contents or specifically disclaims its merchantability and fitness for a particular purpose. Any of the manufacturer's software described in this manual that is sold and licensed. If the software program is found to be defective after purchase, the purchaser (and non-manufacturer, its distributor or its purchaser) will be responsible for all necessary services, repairs and any accidental or consequential damages caused by the software.

The manufacturer is not responsible for any unauthorized adjustments to the radio and / or television interference caused by this equipment, and the user must correct the interference.

If the operating voltage setting is not correctly selected before operation, the manufacturer will not be liable for any damage caused.

**Be sure to confirm that the voltage is set correctly before use. This product does not have a power supply. If the power supply is required in a special environment, the customer can configure it according to the product power interface (power supply socket specification 5.5 mm x 2.1 mm) and the power socket printing parameters.**

## Package Contents

The multi-computer KVM switch package includes the following:

- 1 x KVM Switch, 4-Port, Single Display, 4K, HDMI®
- 4 x KVM cable (HDMI®, USB, Audio)
- 1 x Manual

Check that all parts are in place and that they are not damaged in transit. If you encounter problems, please contact your dealer.

To prevent damage to the machine or equipment connected to the machine, please read this manual carefully and follow the instructions for installation and operation.

\* **Since the publication of this manual, there may be new product features. Please visit our website to download the latest version of the user manual.**

# Contents

<i>About manual</i> .....	4
<i>Product information</i> .....	4
<b>CHAPTER 1</b> .....	<b>5</b>
INTRODUCTION .....	5
<i>Product description</i> .....	5
<i>Product features</i> .....	5
<i>Operating system</i> .....	6
<b>CHAPTER 2</b> .....	<b>8</b>
HARDWARE INSTALLATION.....	8
<i>Cable connection and installation</i> .....	8
<b>CHAPTER 3</b> .....	<b>9</b>
BASIC OPERATION .....	9
<i>Overview</i> .....	9
<i>Manual switching method</i> .....	9
<i>Hotkey switching method</i> .....	9
<i>Power off and restart</i> .....	9
<b>CHAPTER 4</b> .....	<b>10</b>
KEYBOARD OPERATION .....	10
<i>Overview</i> .....	10
<i>Hotkey setting:</i> .....	10
<b>APPENDIX</b> .....	<b>13</b>
SAFETY INSTRUCTIONS.....	13
<i>General</i> .....	13
PRODUCT SPECIFICATION.....	15

## About manual

This User Manual will assist you in the effective use of product features, including the installation, setup, and operation of your equipment. You can find out what is included in this manual from the following:

**Chapter 1 Introduction** - This chapter describes the rack-mounted KVM device system, including its functions, features, and benefits, and describes and describes its front and rear panel components.

**Chapter 2 Hardware installation** - This section explains how to install this product.

**Chapter 3 Basic operation** - Explain the basic operational concept of the KVM switch.

**Chapter 4 Keyboard Port Operation** - Describes the keyboard's hotkey combination operations and settings.

**Appendix** - Mainly provide specifications and other technical information about the relevant KVM switch.

### Common terms:

The symbol Indicates the text information that should be entered.

[ ] The keys that need to be entered are indicated in parentheses.

For example , [ Enter ] Indicates that the Enter key is pressed. For keys that need to be entered at the same time, they are placed in the same parenthesis, and the keys are connected by a plus sign. For example: [ Ctrl ]

1. The number indicates the actual sequence number of the operation steps.
  - A diamond symbol indicates that information is provided for reference, but is not related to the operational steps.
  - The origin symbol indicates the classification sub-item information, regardless of the operation steps.

## Product information

To find out more about our KVM product information and how to use it more efficiently, you can go to our website or contact an authorized reseller for more contact information.

# Chapter 1

## Introduction

### Product description

As a KVM switch, 4 port desktop KVM Series Switcher allows users to access from a single USB keyboard, mouse and HDMI display console accesses 4 computers. As per built in USB hub, it allows each computer (one computer at a time) to access the connected peripherals.

Switcher installation is quick and easy, just plug the cable into the correct port. No software settings are required, no installation procedures and no compatibility issues. Desktop compact design, metal casing, easy to install and place to provide a variety of video interface options, to provide users with a variety of fast switching options for audio, video, USB devices, saving desktop space, is a multimedia application such as SOHO office Ideal.

### Product features

- 4 port USB multiple video series KVM switch
- Single USB controls 4 of computers and peripherals USB (low speed)
- Built-in USB2.0 hub, compatible with USB2.0 protocol specification
- HDMI video maximum support resolution is 4K@30fp
- Provide keyboard hotkey switching shortcut function and device panel button two switching function selection
- Support multiple platforms for various operating systems
- BIOS level hardware connection, no need to install drivers and control software
- The front panel of the device is extended with a USB interface, which is convenient for users to connect peripheral devices such as a USB keyboard, a mouse, or a USB flash drive or a USB printer.
- Provide a variety of hotkey selection and setting functions, so that users can set their own hotkeys according to the situation.
- Automatically scans the connected computer.

## Operating system

- Operating systems supported by remote users' computers include: Windows XP and above
- The operating systems supported by the server connected to the switch are shown in the following table:

Operating system		Version
Windows		Windows 2000/XP/2003/200 8 /Vista/7/10
Linux	RedHat	9.0 or higher
	SuSE	10/11.1 or higher
	Debian	3.1/4.0
	Ubuntu	7.04/7.10
UNIX	AIX	4.3 or higher
	FreeBSD	5.5 or higher
	Sun Solaris	8 or higher
Mac		OS 9.0 to 10.6 (Snow Leopard)
Novell	Netware	6.0 or higher

# Components

## Front view

## Rear view



- ①. Power Indicator
- ②. Switch Button
- ③. Front USB interface, you can connect mouse and keyboard, U disk storage device and printer.

- ④. Power 9V DC=, optional
- ⑤. Local USB keyboard and mouse input interface
- ⑥. For HDMI video interface (Output)
- ⑦. For HDMI video interface (Input)
- ⑧. Output interface for local MIC
- ⑨. Local audio output interface
- ⑩. For the computerside B type USB connection interface
- ⑪. For the integrated audio and MIC interface, connect to KVM cable

# Chapter 2

## Hardware installation

### Cable connection and installation

KVM switches can be placed on any suitable surface, and is sufficient to safely support the weight of the device plus the additional cable; clean and make sure that no other plane debris would affect the switch ventilation and normal operation.

To install For a 4 port desktop KVM device, follow these steps:

1. Plug the USB keyboard and USB mouse into the USB console port on the rear panel of the device.
2. Plug HDMI display into the console video port on the rear panel of the device.
3. If you use a separate speaker and microphone, plug it into the console analog audio port on the rear panel of the device.
4. With a custom KVM cable set, The KVM cable connector and the included USB connector are plugged into the corresponding jacks on the rear panel of the switch.
5. Put the other end of the cable, video and plug the USB cable into the corresponding USB and graphics video interface on your computer.
6. Insert the USB peripheral into the Type A jack (one on the front panel; the other two on the rear panel)
7. Turn on the monitor.
8. KVM is powered by computer USB port. To turn on computer to activate KVM switch. (For external power supply, which is optional. Please use DC 9V power supply)
9. Turn on your computer

# Chapter 3

## Basic operation

### Overview

There are two ways for the KVM switch to access the connected computer: the combination hotkey on the USB keyboard to switch operations or the manual switch operation on the front of the KVM device.

### Manual switching method

The user only needs to press the corresponding touch button on the front panel of the KVM , and the buzzer will sound a tone indicating that the switch port is successful, and the USB , audio and video signals of the corresponding port will be switched to the corresponding port on the local port.

### Hotkey switching method

Users can use the keyboard connected to the USB interface on the KVM device to perform hotkey operation. For details, please refer to the detailed description in the following sections.

### Power off and restart

If it is necessary to turn off the power to the device, before turning the device back on, you must do the following:

1. Unplug the data cable from all the computers connected to the switch.
2. Unplug the power adapter cable from the switch if there is.
3. Wait 10 seconds, if there is power, plug the power adapter cable back into the switch.
4. Then connect the computer data cable and turn on the computer.

# Chapter 4

## Keyboard operation

### Overview

The KVM product in this desktop series offers a large number of easy hotkey operations, making it easy to set up KVM via the keyboard or to complete port switching.

### Hotkey setting:

This series of products provides 4 combinations of hotkeys for user selection and setting. The **default hotkey** is “LEFT” [ CTL ] [ CTL ] to switch to the next online port, [ CTL ] + [ SHIFT ] [ 1 ] or [ 2 ] or [ 3 ] or [ 4 ] Switch to the specified port. The following table is a description of the four hotkey combinations, please check the settings when using the user:

#### 1. [ CTL ] + [ SHIFT ] mode

Hotkey combination	Description
[ CTL ] [ CTL ]	Press twice to switch to the next device online port
[ CTL ] + [ SHIFT ] [ 1 ] or [ 2 ] or [ 3 ] or [ 4 ]	Switch to the computer corresponding to the port of [ 1 ] [ 2 ] [ 3 ] [ 4 ]
[ CTL ] + [ SHIFT ] [ → ] or [ ↓ ]	Switch to the next computer
[ CTL ] + [ SHIFT ] [ ← ] or [ ↑ ]	Switch to the previous computer
[ CTL ] + [ SHIFT ] [ B ]	Buzzer on or off
[ CTL ] + [ SHIFT ] [ S ]	Automatic switching mode, the default is 5seconds, press [ ESC ] to exit
[ CTL ] + [ SHIFT ] [ S ] [ N ]	Set the automatic switching mode interval, press [ ESC ] to exit
[ CTL ] + [ SHIFT ] [ SCROLL ]	Switch to [ SCROLL ] + [ SCROLL ] hotkey combination mode
[ CTL ] + [ SHIFT ] [ NUM ]	Switch to [ NUM ] + [ NUM ] hotkey combination mode
[ CTL ] + [ SHIFT ] [ CAPS ]	Switch to [ CAPS ] + [ CAPS ] hotkey combination mode

## 2. [ SCROLL ] + [ SCROLL ] mode

Hotkey combination	Description
[ SCROLL ] [ SCROLL ] [ 1 ] or [ 2 ] or [ 3 ] or [ 4 ]	Switch to the computer corresponding to the port of [ 1 ] [ 2 ] [ 3 ] [ 4 ]
[ SCROLL ] [ SCROLL ] [ → ] or [ ↓ ]	Switch to the next computer
[ SCROLL ] [ SCROLL ] [ ← ] or [ ↑ ]	Switch to the previous computer
[ SCROLL ] [ SCROLL ] [ B ]	Buzzer on or off
[ SCROLL ] [ SCROLL ] [ S ]	Automatic switching mode, the default is 5seconds, press [ ESC ] to exit
[ SCROLL ] [ SCROLL ] [ S ] [ N ]	Set the automatic switching mode interval, press [ ESC ] to exit
[ SCROLL ] [ SCROLL ] [ CTL ]	Switch to [ CTL ] + [ CTL ] hotkey combination mode
[ SCROLL ] [ SCROLL ] [ NUM ]	Switch to [ NUM ] + [ NUM ] hotkey combination mode
[ SCROLL ] [ SCROLL ] [ CAPS ]	Switch to [ CAPS ] + [ CAPS ] hotkey combination mode

## 3. [ NUM ] + [ NUM ] mode

Hotkey combination	Description
[ NUM ] [ NUM ] [ 1 ] or [ 2 ] or [ 3 ] or [ 4 ]	Switch to the computer corresponding to the port of [ 1 ] [ 2 ] [ 3 ] [ 4 ]
[ NUM ] [ NUM ] [ → ] or [ ↓ ]	Switch to the next computer
[ NUM ] [ NUM ] [ ← ] or [ ↑ ]	Switch to the previous computer
[ NUM ] [ NUM ] [ B ]	Buzzer on or off
[ NUM ] [ NUM ] [ S ]	Automatic switching mode, the default is 5seconds, press [ ESC ] to exit
[ NUM ] [ NUM ] [ S ] [ N ]	Set the automatic switching mode interval, press [ ESC ] to exit
[ NUM ] [ NUM ] [ SCROLL ]	Switch to [ SCROLL ] [ SCROLL ] hotkey combination mode
[ NUM ] [ NUM ] [ CTL ]	Switch to [ CTL ] [ CTL ] hotkey combination mode

#### 4. [ CAPS ] + [ CAPS ] mode

Hotkey combination	Description
[ CAPS ] [ CAPS ] [ 1 ] or [ 2 ] or [ 3 ] or [ 4 ]	Switch to the computer corresponding to the port of [ 1 ] [ 2 ] [ 3 ] [ 4 ]
[ CAPS ] [ CAPS ] [ → ] or [ ↓ ]	Switch to the next computer
[ CAPS ] [ CAPS ] [ ← ] or [ ↑ ]	Switch to the previous computer
[ CAPS ] [ CAPS ] [ B ]	Buzzer on or off
[ CAPS ] [ CAPS ] [ S ]	Automatic switching mode, the default is 5seconds, press [ ESC ] to exit
[ CAPS ] [ CAPS ] [ S ] [ N ]	Set the automatic switching mode interval, press [ ESC ] to exit
[ CAPS ] [ CAPS ] [ SCROLL ]	Switch to [ SCROLL ] [ SCROLL ] hotkey combination mode
[ CAPS ] [ CAPS ] [ NUM ]	Switch to [ NUM ] [ NUM ] hotkey combination mode
[ CAPS ] [ CAPS ] [ CTL ]	Switch to [ CTL ] [ CTL ] hotkey combination mode

#### Note:

1. The detection time of each hotkey is 5 seconds. If you press [ CTL ] after 5 seconds after pressing [ CTL ] for the first time , this key combination will be invalid input.
2. In the combination key, [ N ] represents the number key [ 1 ] ---- [ 9 ], the number of seconds in the time interval can be set, as shown in the following table:

Automatic switching interval	
N	second
1	5
2	10
3	15
4	20
5	25
6	30
7	35
8	40
9	60

# Appendix

## Safety Instructions

### General

- This product is for indoor use only.
- Please read all instructions and use them for future reference.
- Please follow all warnings and instructions on the device.
- Do not place the device on any uneven surface (such as a cart, shelf, table, etc.). If the device is dropped, it will be made.
  - Serious damage.
- Do not use the device near water.
- Do not place this unit near or above the radiator or heating unit.
- The device housing is equipped with slots for heat dissipation and ventilation. To prevent overheating during operation, do not block or cover the openings.
- This device should not be placed on a soft surface (such as a bed, sofa, blanket, etc.), which would block the fan opening and should not be placed in a sealed environment unless proper ventilation has been provided.
- Do not spill any liquid on the device.
- The power of this unit must be removed from the wall outlet before cleaning. Do not use any liquid or foamy cleaning agent. Please use a damp cloth to clean it.
- Please use the device according to the type of power supply on the label. If you are not sure if the power type is available, please contact your dealer or local power company.
- This equipment is designed for IT power distribution systems with phase-to-phase voltages from 100V to 230V .
- To prevent damage to your device, it is important that all equipment is properly grounded.
- Do not place anything on the power cord or cable, and arrange the power cord and cable routing to avoid tripping over it.
- If the device uses an extension cord, make sure that the total charge of all products using the cord does not exceed the current carrying capacity of the cord. Ensure that the total of all products plugged into the wall outlet is not more than 15 A.

- Use a surge suppressor, regulator, or uninterruptible power system ( UPS ) to help protect your system from sudden, transient increases and decreases in power.
- Please properly fix the system cable and power cord to ensure that nothing is pressed against the cable.
- Do not insert any objects into the machine through the slots in the casing. There is a risk of contact with dangerous voltage points or short-circuiting parts that could result in fire or electric shock.
- Do not attempt to repair this equipment yourself. Please find a qualified service person to obtain support services.
- If the following conditions occur, unplug the unit from the wall outlet and have it handed over to a qualified service person for repair.
  - Damaged or worn power cord or plug
  - Liquid is spilled into the device
  - The device is drenched by rain and water.
  - The device has been dropped or the casing has been damaged.
  - Significant changes in the functionality of this device
  - The device does not operate normally after following the operating instructions.
- Adjustments are only made to the control functions covered in the operating instructions, and other improper operations may cause damage, so that a larger work of qualified personnel is required to repair.

# Product specification

Features		DS-12880	
Computer connections		4	
Port selection		Front panel buttons/Hotkey	
Connector	Control port	monitor	1 x HDMI Type A female
		keyboard	1 x USB Type A female
		mouse	1 x USB Type A female
		speaker	1 x Mini stereo jack female(green)
		microphone	1 x Mini stereo jack female(pink)
	Computer port	monitor	4 x HDMI Type A female (black)
		keyboard and mouse	4 x USB Type B female (black)
		speaker & microphone	4 x Mini stereo jack female (black)
	power		1 x DC socket ( Optional Power)
Toggle switch	KVM switch button	4 x button	
LED's	online	4 x red	
	Selected	4 x green	
Analog mode	Keyboard and mouse	USB	
Maximum resolution video		4K @ 30 HZ (3840 x 2160 @ 30 HZ)	
Default Hotkey		[CTL] [CTL]	
Operating environment	Operating temperature	0-50 °C	
	Storage temperature	-20-60 °C	
	Humidity	0-80% RH , no condensation	
Housing	House	Metal, Black	
	Size	202 x 110 x44 mm	
	Weight	780 g	

Hereby Assmann Electronic GmbH, declares that the Declaration of Conformity is part of the shipping content. If the Declaration of Conformity is missing, you can request it by post under the below mentioned manufacturer address.

**www.assmann.com**  
Assmann Electronic GmbH  
Auf dem Schüffel 3  
58513 Lüdenscheid  
Germany

