DIGITUS®

3-Port USB-PS/2 KVM Switch with DVI and Audio

Manual

1. Introduction

Thank you for purchasing our Combo DVI KVM Switch! You now have a high quality, durable system that will enable you to control 3 Host computers and/or servers by using PS/2 and/or USB Connectors from one console (PS/2 or USB Mouse, PS/2 or USB Keyboard, and Monitor).

1.1 Features

1. Console your Keyboard/Mouse via either way of PS/2 and/or USB arbitrarily.
2. Controls 3 DVI computers from a single console (Keyboard/Mouse) over USB and/or PS/2 connections.
3. Speaker enabled.
4. Microphone enabled.
5. Supports Windows, Linux, Mac OS9/OSX, Sun Microsystems.
6. Emulates a keyboard on each PC to allow your computers to boot normally, without a keyboard error.
7. Supports hot-swap. All devices connected to the KVM can be added or removed at any time, without shutting the unit down.
8. Supports 2 types of switching: (1) Hardware Push Button, (2) Hot-Keys on PS/2 and/or USB of keyboard arbitrarily.
9. Supports Auto-Scan function to switch video automatically among computers in preset intervals sequentially.
10. Supports LED display for PC status monitoring.
11. Supports DVI UXGA resolutions up to 1600 x 1200 @ 60HZ.
12. Supports Beeper during switching enabled.
13. Self powered through USB connection.
14. Fully compliant with the USB 1.1/ 2.0 specification
15. Comply with DVII specification and support analog display devices

1.2 LED Indicators:

Selected : RED LED indicates that the KVM Switch is selected to the corresponding PC.

On-Line : GREEN LED indicates that the KVM Switch is ready to the corresponding PC.

1.3 Package Contents

The product you purchased should contain the following equipment and accessories:

1. 1 x 3-Port Combo DVI KVM Switch .
2. 2 x KVM cable sets, 1,8 m
3. 1 x User Manual.

2. Specifications

2.1 General

Specification		
Number Of Computers Controlled	3	
Selection Method	Push Button and Hot-Key (PS/2 and/or USB Keyboard)	
LEDs	Red for PC Selection Green for PC On-Line ready	
PC Connectors		
	Video	3 x DVI UXGA female
	USB	3 x USB - B type female
	Speaker	3 x audio female jacket
	Microphone	3 x audio female jacket
Console Ports	Keyboard	1 x 6 pin mini-DIN female
	Mouse	1 x 6 pin mini-DIN female
	Video	1 x DVI UXGA female
	Keyboard	1 x USB - A type female
	Mouse	1 x USB - A type female
	Speaker	1 x audio female jacket
	Microphone	1 x audio female jacket
Auto-Scan Interval	From 5 to 250 Seconds	
DDC, DDC2 DVI UXGA monitor	Up to resolution: 1600 x 1200	
Hot Swappable	Yes	
Operating systems supported	Windows 98SE/ME/2000/XP/2003 Server, Linux	
	Mac OS9/OSX and Sun Microsystems	
Device driver	No Need	
Power	By PS/2 and/or USB or External Power Adaptor (Optional)	
Cable Length	6 feet (1.80 Meter)	
Dimensions (L X W X H)	21.5 x 8.8 x 4.5 cm (5.5 X 3 X 1.7 inches)	
Unit Weight	650 g	
Housing material	Metal	
Operating Temperature	32~ 122°F (0~ 50°C)	
Humidity	0%~80%RH	

3. System Requirements

Console

DVI monitor capable of the highest resolution.

PS/2 and/or USB Keyboard/Mouse

Computer or Server

The following equipment must be equipped with each computer or server.

- Type A USB port.

- DVI connector.

Cables

The Combo DVI KVM Switch is using separate (DVI + USB/Audio) cables.

To purchase the specific cable sets, please contact your dealer.

4. Single installation

4.1 Precaution:

1. Running under OS Windows 98 , we suggest that the PC must be plugged to PS/2 ports, because of Windows 98 is not supporting installation at first time as through USB HID installation driver.

2. There are some older PCs supporting USB ports during booting, but you need to open BIOS USB setting at first.

3. The KVM switch does not support the USB keyboard which has built-in USB HUB.

4.2 The DVI KVM SWITCH Installation: (Important note)

The DVI KVM can only support the DDC2, DDC1 pass through mode for the HOST DVI VGA card, so it is important that you can not power on all the computers at the same time, otherwise it will be possible that you will get a blank screen when you switch to other hosts. The right way to power on computers is : To switch the KVM to the selected host which you want to power on, then turn on the host, after you can see the Window desktop environment shown on selected host, then you can switch to other Hosts, as same method to turn on selected host and wait for the window desktop screen show up. After all the computers have been turned on under above procedures means all of continuous operations will be working fine as well.

5. Operations

The 3-Port Combo Free DVI KVM Switch has the ability to switch the keyboard, video, mouse simultaneously

Note: When using the two-step Hot Key sequences, the keys must be pressed within 5 seconds; otherwise the Hot Key action will be terminated.

5.1 Push Button on front panel

5.2 Hotkey Selection (USB and/or PS/2 keyboard)

Note:
If your keyboard is without < Scroll Lock > button,
please press < Caps Lock > or <Num Lock > instead of Scroll Lock (ref. 5.2.0).

5.2.0 Instead hotkey Selection

Hot Key:
[Ctrl] → [Ctrl] → [Caps Lock] → [Enter] : The hotkey changed to [Caps Lock]
[Ctrl] → [Ctrl] → [Num Lock] → [Enter] : The hotkey changed to [Num Lock]
[Ctrl] → [Ctrl] → [Scroll Lock]→ [Enter] : The hotkey reversed to [Scroll Lock]

Note : The default hotkey setting is <Scroll Lock> button as if you chang the hotkey default setting, the new setting will effect on the KVM switch until power off or reset.

5.2.1 PCs Selection

Hot Key:
[Scroll] → [Scroll] → [1] → [Enter]   or
[Scroll] → [Scroll] → [2] → [Enter]   or
[Scroll] → [Scroll] → [3] → [Enter]

You can synchronize the PC selection, by using the following two-step Hot Key sequence. To send commands to the Combo Free DVI KVM Switch, press the [Scroll] key twice (Step 1), then press key [1] or [2] or [3] and [Enter] (step 2) to assign the PC to a particular PC. (If you press key [1] or [2] or [3] on the number pad, the keyboard, mouse & video will also be switched synchronously)

5.2.2 Auto-Scan Function

Hot Key:
[Scroll] → [Scroll] → [S] → [Enter] to **BEGIN**.

[Scroll] → [Scroll] → [S], → [Enter] to **STOP**.

You can activate the Auto-Scan function by using the following two-step Hot Key sequence. To send commands to the Combo Free DVI KVM Switch, press the [Scroll] key twice (Step 1), then press [S] and then press [Enter] (Step 2). When you press the Auto-Scan hot key sequence, the Combo Free DVI KVM Switch alternates between the three PCs and displays them on the monitor.
Each PC is display one of time interval from 5 ~ 250 seconds (The interval is adjustable) before switching to the next. When you press the Auto-Scan Hot Key sequence again, the Auto-Scan will stop and the monitor screen will jump back to the original PC.
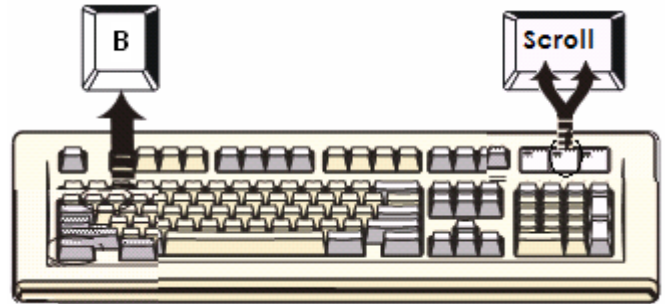
Adjustable scan time interval setting (5 ~ 250 sec.)

Hot-key: Pressing the <Scroll >, <Scroll > then <S> and <10 ~250 > <Enter>

5.2.3 Beeper Enable

Hot Key:

[Scroll] → [Scroll] → [B] → [Enter] to **Disable**

[Scroll] → [Scroll] → [B] → [Enter] to **Enable**

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The Speaker/Beeper's default setting is "Enable". While the switching connections are activated and Speaker/Beeper is in "Enable" status, the beeper has a short beeping sound.

5.3 Audio (Speaker + Microphone) Selection

5.3.1 (PC+Audio) Combination Selection

Hot Key:
[Scroll] → [Scroll] → [F1]→[Enter]   or
[Scroll] → [Scroll] → [F2]→[Enter]   or
[Scroll] → [Scroll] → [F3]→[Enter]

5.3.2 Single Audio (Speaker + Microphone) Selection

Hot Key:

[Scroll] → [Scroll] → [A] →[Enter] to enable or disable the audio auto switch mode

[Scroll] → [Scroll] → [A] → [1]→ [Enter] to select PC1 Speaker and Microphone
[Scroll] → [Scroll] → [A] → [2]→ [Enter] to select PC2 Speaker and Microphone
[Scroll] → [Scroll] → [A] → [3]→ [Enter] to select PC3 Speaker and Microphone

Note 1: Audio auto switch mode, the default setting of KVM switch is enabled,
means when you used the push button, the PCs and Audio will be switched
at the same time. In case of the Audio auto switch mode is disabled, then the
push button only switch PCs.

Note 2: One long sound – Audio auto switch disabled
Two short sound – Audio auto switch enabled

Hot Key definition table

Step 1	Step 2	Action
[Scroll] + [Scroll]	[1] + [Enter]	Switch the active connection to PC 1
[Scroll] + [Scroll]	[2] + [Enter]	Switch the active connection to PC 2
[Scroll] + [Scroll]	[3] + [Enter]	Switch the active connection to PC 3
[Scroll] + [Scroll]	[A] + [Enter]	Disable or enable the Audio auto switch mode
[Scroll] + [Scroll]	[F1] + [Enter]	Combined switching (PC+Audio) to PC 1
[Scroll] + [Scroll]	[F2]+ [Enter]	Combined switching (PC+Audio) to PC 2
[Scroll] + [Scroll]	[F3] + [Enter]	Combined switching (PC+Audio) to PC 3
[Scroll] + [Scroll]	[A] + [1] + [Enter]	Single switching the active audio to PC 1
[Scroll] + [Scroll]	[A] + [2] + [Enter]	Single switching the active audio to PC 2
[Scroll] + [Scroll]	[A] + [3] + [Enter]	Single switching the active audio to PC 3
[Scroll] + [Scroll]	[B] + [Enter]	Disable or enable beeper
[Scroll] + [Scroll]	[S] + [Enter]	Activate the Auto-Scan mode, default 5 sec.
[Scroll] + [Scroll]	[S] + [5 -250] + [Enter]	Select the Auto-Scan interval from 5 to 250 Sec.

Sun Microsystems Function Key Emulation:

There are 16 special functions on the Sun Microsystems keyboard, the Combo Free DVI KVM Switch can emulate these function keys via the PS/2 and/or USB keyboard. Here is the mapping table for these functions operation. To active these emulation on the PS/2 and/or USB keyboard, you have to press the LEFT Window KEY first (this key usually is located between the left [Ctrl] and left [Alt]), then choice the second relative key.

Sun Micro System Function Key	PS/2 Keyboard
Stop	L_Win & L_Alt
Props	L_Win & L_Ctrl
Compose	L_Win & L_Shift
Front	L_Win & F1
Open	L_Win & F2
Find	L_Win & F3
Again	L_Win & F4
Undo	L_Win & F5
Copy	L_Win & F6
Paste	L_Win & F7
Cut	L_Win & F8
Help	L_Win & F11
Power	L_Win & F12
Mute	L_Win & 1
Volume Down	L_Win & 2
Volume UP	L_Win & 3

FCC Statement

This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer 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.

Safety Information:
This device may only be operated in enclosed, dry rooms. To prevent the risk of fire or electrical shock, the device must be protected from moisture. In the event of a defective power plug, please contact an authorized retailer. In the event of damage to the housing or the power plug, do not operate. Do not open the device. Repairs may only be performed by an authorized retailer.

Note:
In the event of incorrect installation and improper use in a residential area, the device may cause disruptions in radio devices and other electronic devices. Proper use means that the device is operated with shielded connector cables as far as possible, for network products also with shielded cables of category 5e and higher. The device was tested and lies within the limits for computer accessories of class A according to the requirements of EN 55022.

Warning:
This is a class A device. This device can cause radio interference in residential areas; in this case, the operator may be required to perform and bear the costs for appropriate measures.

Conformity Declaration:
The device fulfils the EMC requirements of EN 55022 class A for ITE and EN 55024. Devices with external or built-in power supply also fulfil the requirements of EN 61000-3-2 and EN 61000-3-3. The basic protection requirements of the "EMC Directive" 89/336/EEC are therefore fulfilled. The CE conformity has been certified. The corresponding declarations are available from the manufacturer.

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