Rextron

with **Audio**

MY*hopper* 2/4
with Audio

KMHA2
KMHA4

2 port
4 port
KVM
switch
with
Audio

Table of Content

Please read this manual thoroughly and follow the **Installation** procedures to prevent any damage to the MyHopper or any connecting device.

---------------- *Introduction*

Overview

The MyHopper KMHA2 and KMHA4 are computer switches that allows access to two or four IBM compatible computers respectively from one PS/2 keyboard, mouse, monitor, microphone and speakers. Switching between computers is as easy as pressing the push button or entering hot-key commands from your keyboard. There is no interface card and software to install and the MyHopper is independent of the computer operating system.

Ready to run right out of the box, this Kit comes with everything you need - a switch and complete cable sets, just hook them up and go. By allowing one console to manage all your computers, the MyHopper eliminates the expense for extra consoles, the spaces for extra peripherals and the time hopping around for accessing different computers.

Features

■Unique loose-free cables included preventing keyboard or mouse connector from getting loose.

■Supports microphone and speaker.

■Supports PS/2 keyboard and mouse.

■Keyboard and mouse emulation for error-free PC boot up.

■Keyboard and mouse are hot pluggable at any time without turning either MyHopper or PCs off.

■Space-saving design - all cables are connected to the rear.

■Auto scan automatically selects computers sequentially.

■Supports M/S IntelliMouse (Pro), Explorer, Optical.

■Hot-key and push button allow easy computer access.

■Keyboard states automatically saved and restored when switching computers.

■Operating system independent, transparent to all applications.

■High VGA resolution 1920x1440.

■DDC2B compatible.

■Power-free operation - the MyHopper draws power from the attached PCs.

--------------- *Installation*

Console Connection

Turn your computers off. Connect a PS/2 keyboard to the mini-DIN-6 port marked with "Keyboard" and a PS/2 mouse to the mini-DIN-6 port marked with "Mouse". Then connect your VGA monitor cable directly to the HD-DB-15 port as shown in figure 1 for 2-port MyHopper.
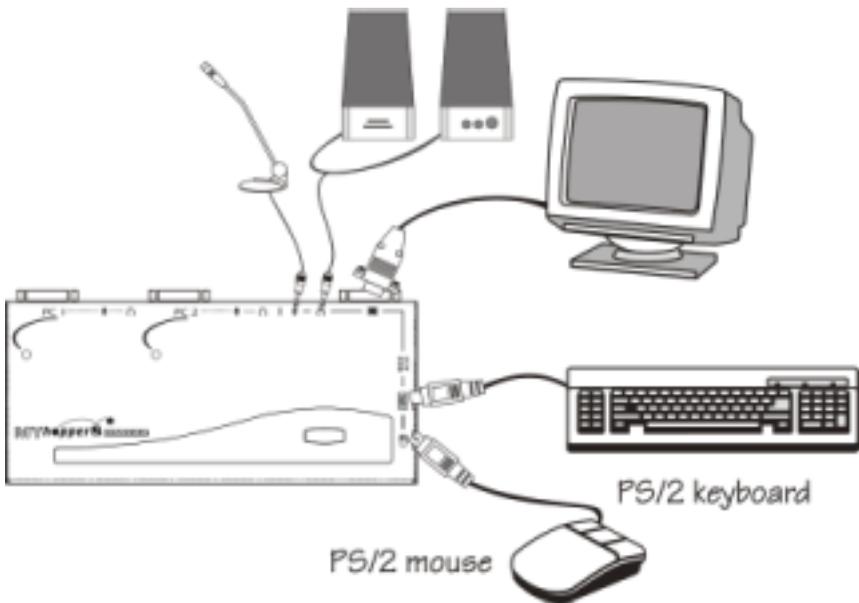

Figure 1: MyHopperA2 Console Connection

3

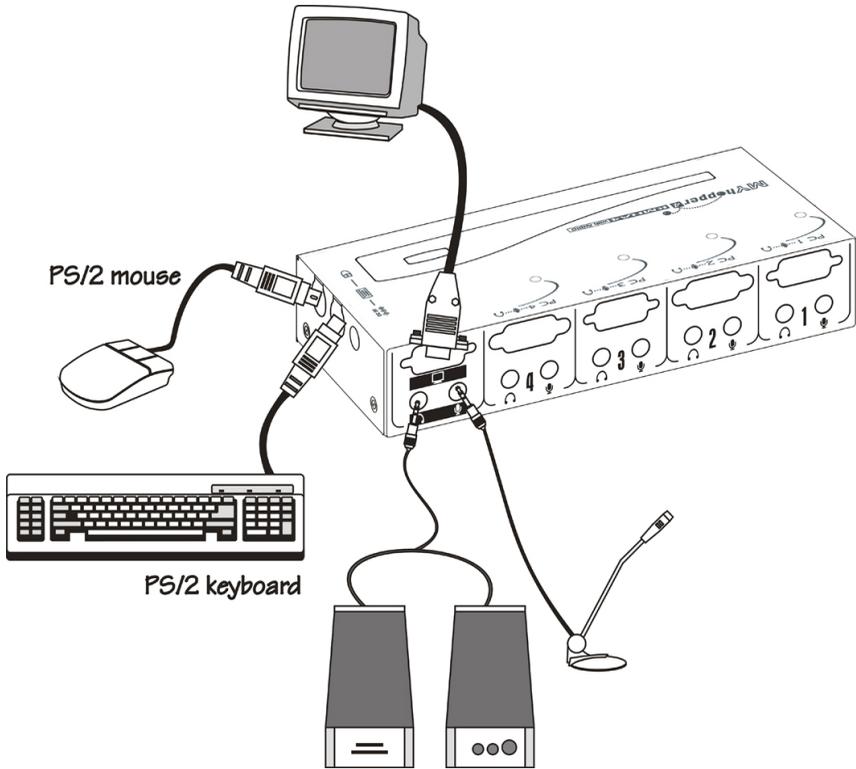The figure 2 shows 4-port MyHopper console connection.

Figure 2: MyHopperA4 Console Connection

The multi-sync monitor must be capable of synchronizing with the computer's video signal. If you are uncertain about the monitor type, please consult the monitor user's manual.

4

The MyHopper consumes negligible power and is designed to run reliably without an external power adapter.

Computers Connection

MyHopper comes with complete cable sets facilitating computer connection. One side of the cable has an HDB-15 connector and the other side has three connectors (one HDB-15 and two mini-DIN6s). The **PC 1 ~ PC 4** marks on the MyHopper are for computer connection as shown in figure 3.
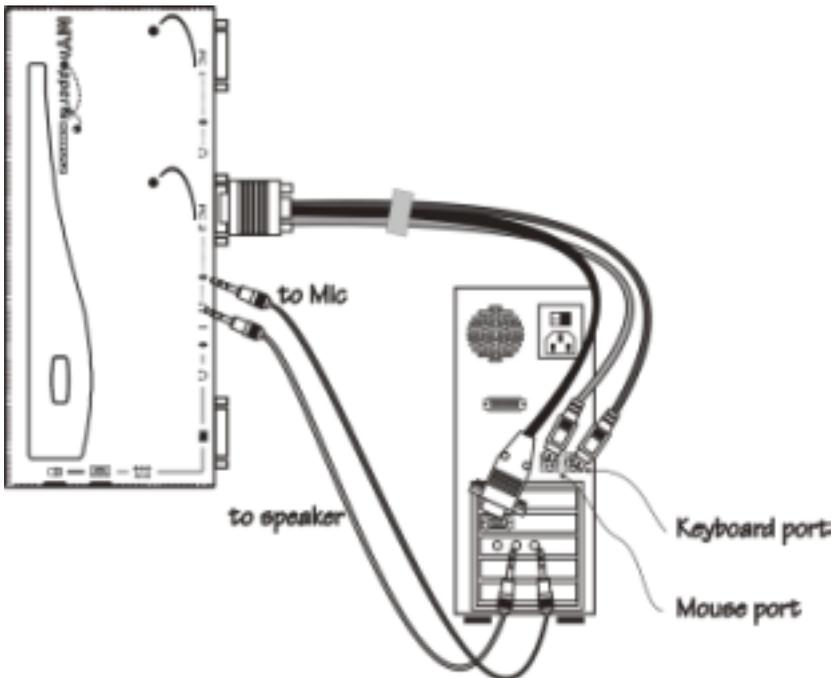

Figure 3: KMHA2 Computer Connection

NOTE: *If your computer uses an AT style keyboard, you will need an "AT-to-PS/2 keyboard adapter" at the computer keyboard port.*
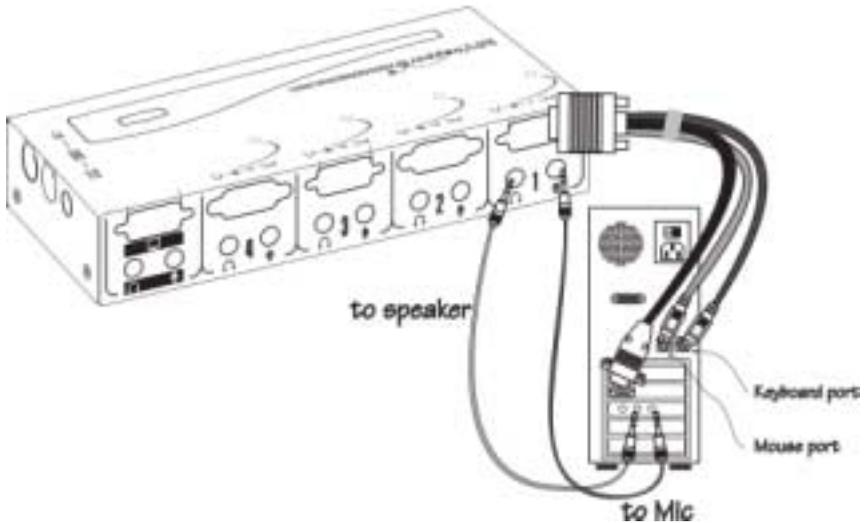
Figure 4: KMHA4 Computer Connection

Initial Power-up

Make sure all computers and the MyHopper are powered down during installation. You may power up the computers after installation,. The MyHopper can be powered from the computers. This procedure ensures the MyHopper receive computer settings correctly when computer boots.

NOTE: You may hot plug any additional powered-down computer to the MyHopper at any time after the initial power up.

-------------- *Operations*

Front Panel operation

You may switch to a different computer by pressing the front panel push-button directly or by issuing hot-key commands. The front-panel LED illuminates indicating the active port. The LED flashes while in either Auto Scan or Manual Scan mode.

Should you encounter any keyboard or mouse problem, press and hold down the push-button for 3 seconds to initialize the keyboard and mouse.

Hot-key commands

Hot-key command is a short keyboard sequence to select a computer or to activate computer scanning. MyHopper interprets keystrokes for hot-keys all the time. A hot-key sequence starts with two left *Ctrl* keystrokes followed by one or two more keystrokes.

- To select a computer:
    left *Ctrl* + left *Ctrl* + *1*
    Selects the computer at **PC 1**.
    left *Ctrl* + left *Ctrl* + *2*
    Selects the computer at **PC 2**.

9

left *Ctrl* + left *Ctrl* + *3*
> Selects the computer at **PC 3** (for KMHA4 only).

left *Ctrl* + left *Ctrl* + *4*
> Selects the computer at **PC 4** (for KMHA4 only).

NOTE: Do not use the keypad at the right side of the keyboard for hot key commands.

● To start *Auto Scan*, automatically scans all ports one by one at a fixed interval:
> left *Ctrl* + left *Ctrl* + *F 1*

To abort the *Auto Scan* mode, press the left *Ctrl* key twice. Keyboard and mouse are both operational during *Auto Scan*. When it detects any keyboard or mouse activity, it suspends *Auto Scan* until the activity stops; it then resumes with the next computer in sequence. The length of the *Auto Scan* interval (*Scan Rate)* is adjustable, see below. LED flashes during *Auto Scan* for KMHA4 only.

● *Manual Scan* enables you to manually switch back and forth between computers.
> left *Ctrl* + left *Ctrl* + *F2*

Press ↑ or ↓ to select the previous or the next

computer in sequence.   And, press any other key to abort the *Manual Scan*   LED flashes during *Manual Scan* for KMHA4 only.

● To adjust *Scan Rate* which sets the duration before switching to the next computer in *Auto Scan*:

left ***Ctrl*** + left ***Ctrl*** + ***F3***
There are four options: ***3***, ***8***, ***15*** and ***30*** seconds.
NOTE: *Scan Rate is set to default of 3 seconds after MyHopper loses power, i.e., all connected computers are turned off.*

● To adjust keyboard typematic rate (characters/sec), this setting over-rides that of BIOS and any operating system:
left ***Ctrl*** + left ***Ctrl*** + ***F4***
There are four options: ***10***, ***15***, ***20*** and ***30*** characters/sec.
NOTE: *The keyboard typematic Rate is set to default of 10 characters/sec when MyHopper loses all power sources, i.e., all connected computers are turned off.*

Appendices

Specifications

Specification	KMHA2	KMHA4
Console port number	1	
Computer port number	2	4
Port selection push button	1	
Hot plug-and-play	Yes	
Hot-key control	Yes	
VGA	1920 x 1440, DDC2B	
Computer connector	HDB15 x 2 Stereo jack x 4	HDB15 x 4 Stereo jack x 8
Console connector Keyboard Mouse Monitor	PS/2 PS/2 HDB15	
Speaker/Mic	Stereo jack x 2	Stereo jack x 2
Automatic scan interval	3, 8, 15, 30 seconds	
KVM Cable length	1.8m x 2	1.8m x 4
Audio Cable length	1.8m x 4	1.8m x 8
H x W x D (mm)	20 x 70 x 155	35 x 85 x 180
Power-free operation	Yes	

Troubleshooting

Ensure that all cables are well seated. Check that keyboard/mouse cables are not swapped. Label the cables for each computer to avoid confusion when connected to the MyHopper.

Symptom   Causes   Solutions

Symptom	Causes	Solutions
Keyboard or mouse does not work	Improper power-up sequence. Keyboard or mouse not properly initialized.	Press and hold down the push button for 3 seconds, the MyHopper will re-initialize the keyboard and mouse. If problem persists, unplug the keyboard or mouse, wait for few seconds then plug it back.
Keyboard error on boot	Loose keyboard connection.	Make sure keyboard cables are well seated.
Keyboard strokes shifted	The computer was in shifted state when last switched	Press both SHIFT keys.
The MyHopper fails to function occasionally.	Computers do not supply enough power.	Add a power adapter with minimum of DC 9V 500mA output rating to the SPARE power jack.
Computer can not use serial mouse.		The MyHopper does not support serial mouse.

Scan Rate was set to 30 sec and becomes 3 sec.	All connecting computers are powered off. MyHopper resets.	Set the Scan Time again and keep at least one computer on all the time.

Other KVM Switches

Other high-performance KVM switches

Model/Part Number List				
Console	Computer	No OSD	OSD model	Rack-mount kit
1-port	2-port	KNV102		
1-port	4-port	KNV104	KNV104D	RMK04
1-port	4-port	KNV108	KNV108D	RMK08
2-port	8-port		KNV2108D	RMK08
1-port	16-port		KNV116D	RMK16
2-port	16-port		KNV2116D	RMK16
1-port	2-port	KMH2*		
1-port	4-port	KMH4*		

-OSD: advanced On-Screen Display interface enabling you to assign PC names, access PCs by the names. Other features include programmable scan pattern, password security, etc.

-Rack-mount: industry-standard 19-inch rack-mount kit.

* Cables included. No audio support.

15

Package Contents:

■ The complete KMHA2 contains:

2-Port KVM Switch (KMHA2)	x	1
Custom cable set 1.8M(6ft)	x	2
Audio cable set 1.8M(6ft)	x	4
User's manual	x	1

■ The complete KMHA4 contains:

4-Port KVM Switch (KMHA4)	x	1
Custom cable set 1.8M(6ft)	x	4
Audio cable set 1.8M(6ft)	x	8
User's manual	x	1

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