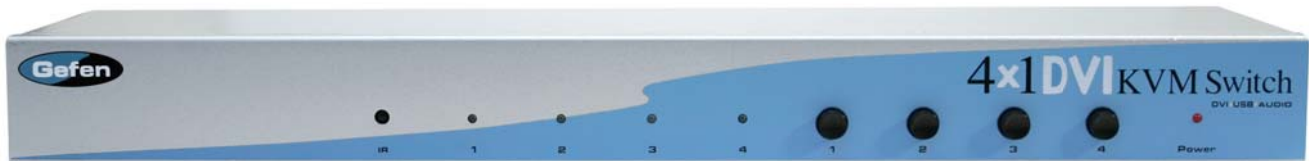# Gefen

Four Computers, One Display?
No Problem.

EXT-DVIKVM-441

Switches Between Any Four Computers Using One DVI Display

Gefen's 4x1 DVI KVM Switcher provides you with greater flexibility in integrating cross platform computer equipment easily and without networking. It enables you to switch easily and reliably between any combination of four DVI (digital visual interface) computers using one DVI display. The 4x1 DVI KVM Switcher also supports USB 2.0 for USB keyboard/mouse and other high speed peripherals. Audio is switched for each computer as well, allowing for the creation of multimedia desktop environments, and you can even choose between a Macintosh or PC keyboard/video/mouse combination. Switching can be controlled through either the included IR remote, front panel push buttons, or the optional contact closure port.

How it works

Simply plug the display, keyboard/mouse and audio peripherals directly into the 4x1 DVI KVM Switcher's outputs and connect the supplied cables to the four computers you want to control. Select the computer you want to work on using remote that comes with the unit.

Features:

- Switches easily between any four DVI computers with USB 2.0 and audio
- Maintains highest resolution single link video
- Saves space on your desktop
- Use either PC or Mac USB keyboard/mouse
- Discrete IR remote (included)
- Contact closure remote control option (RMT-4)
- Supports resolutions up to 1080p and 1920x1200
- Supports DDWG standards for DVI monitors
- Includes rack ears

Specifications:

- Video Amplifier Bandwidth: 165 MHz
- Input Video Signal: 1.2 Volts p-p
- Input DDC Signal: 5 Volts p-p (TTL)
- Single Link Range: 1080p/1920 x 1200
- DVI Connector: DVI-I 29 Pin Female (digital only)
- USB Input Connection: Type "B"
- USB Output Connection: Type "A"
- Audio Connector: 3.5mm mini Stereo
- Power Supply: 5V DC
- Power Consumption: 20 Watts (max)
- Dimensions: 17"W x 1.75"H x 4.375"D
- Rackmountable: 1U rack space
- Shipping Weight: 9 lbs.

4x1 DVIKVM Switcher

USER MANUAL

www.gefen.com

ASKING FOR ASSISTANCE

Technical Support:
Telephone   (818) 772-9100
                   (800) 545-6900

Fax   (818) 772-9120

Technical Support Hours:
8:00 AM to 5:00 PM Monday through Friday.

Write To:

Gefen Inc.
c/o Customer Service
20600 Nordhoff St
Chatsworth, CA 91311

www.gefen.com
support@gefen.com

Notice

Gefen Inc. reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

The 4x1 DVIKVM Switcher is a trademark of Gefen Inc.
Macintosh is a trademark of Apple Computer Inc.

TABLE OF CONTENTS

Thank you for purchasing Gefen' s 4x1 DVIKVM Switcher series. The 4x1 DVIKVM Switcher switches DVI, USB and audio between any combination of four computers. Now you can switch easily and reliably between any combination of four computers using one DVI display and USB keyboard and mouse. The 4x1 DVIKVM Switcher is switched using the RMT-4IR.

The 4x1 DVIKVM Switcher saves space – there's no need to work on a desk crowded with four monitors, keyboards and mouse devices. It saves time – there's no need to move from one monitor to another to access different computers. And it saves money – there's no need to purchase additional monitors, mouse devices, keyboards etc. The 4x1 DVIKVM Switcher allows you to choose between any combination of Macintosh or PC computers.

CONTENTS
The 4x1 DVIKVM Switcher system consists of:

(1) 4x1 DVIKVM Switcher
(1) RMT4-IR remote control
(1) 5 VDC power supply
(4) DVI cables (6FT)
(4) USB cables (6FT)
(4) Audio cables (6FT)
(1) User Manual

Note
• The 4x1 DVIKVM Switcher is housed in a metal box for better RF shielding.

Power LED

1-4 Selector Buttons

1-4 Indicator LED

Infrared Eye

AUDIO OUT

AUDIO INPUTS 1 - 4

USB INPUTS 1-4

Contact Closure
RJ-45 Connector
For RMT-4 Wired
Remote

External IR
Remote Extender
Input For
EXT-RMT-EXTIR

USB OUT

DVI OUT

DVI IN 4

DVI IN 3

DVI IN 2

DVI IN 1

POWER
INPUT

HOW TO CONNECT THE 4x1 DVIKVM SWITCHER

1   Connect your computers DVI, USB, and audio to the 4x1 DVIKVM Switcher inputs using the supplied cables.

2   Connect your DVI display to the DVI output of the 4x1 DVIKVM Switcher.

3   Connect your USB and audio devices to the USB and audio outputs.

4   Connect the RMT-4 remote control (if applicable).

5   Connect the External IR Extender to the RJ-45 port (if applicable).

6   Plug the 5VDC power supply into the 4x1 DVIKVM Switcher.

Your computers must be turned on one at a time and the switcher must be selected to the computer that is booting up. After one computer completes the startup process, you can boot up the second computer and repeat the process with the remaining computers.

1. Remove battery cover from the back of the RMT4-IR remote.

2. Verify that dip switches 1 & 2 are in the down (OFF) position.

3. Insert the battery, hold the battery so that you can see the positive side facing up. The side that is not marked must be facing down.

4. Test the RMT4-IR remote by pressing ONLY one button at a time. The indicator light on the remote will flash once each time you press a button. WARNING: Do not press multiple buttons simultaneously and do NOT press buttons rapidly. These actions will cause the remote to reset and steps 1-4 will have to be repeated.

Note: The RMT4-IR ships with two batteries. One battery is required for operation, the second battery is complimentary.

How to Operate the IR Extender Eye (optional)

Plug in the IR extender eye to the extender port on the back of the switcher. As soon as the IR extender eye is plugged in you can extend your IR signal. The IR extender eye does not come included in the package.

IR CODE CONFLICTS

How to Resolve IR Code Conflicts

There are matching pairs of dip switches underneath the Switcher unit and under the remote battery cover. Switch 1 & 2 on the Remote and Switch 3 & 4 underneath the unit are the matching switches. These switches need to be matched for the remote to communicate with the switcher. There are 4 possible sets of IR codes and at least one of these sets should be able to resolve any IR conflicts with other home theater devices.
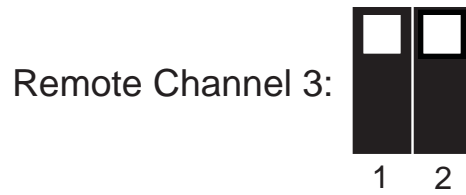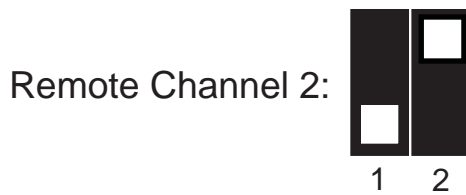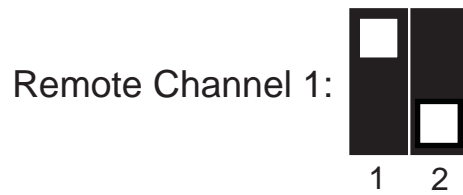
IR CODES

In the event of IR conflicts, please do the following:

1. Remove the battery cover from the back of the RMT4-IR remote.

2. Locate the Dip Switches above the batteries.

3. Switch the Dip Switches on the RMT4-IR to any of the combinations pictured below.

4. Dip Switches 1 and 2 in the RMT4-IR correspond with Dip Switches 3 and 4 on the bottom of the 4x1 DVI Switch respectively. Switch the switches on the bottom of the 4x1 DVI Switch to match the dip switches on the RMT4-IR. The 4x1 DVI Switcher is now set to a new IR Code.

Remote Channel 0:   Remote Channel 1:

Remote Channel 2:   Remote Channel 3:

OPERATION NOTES & TROUBLESHOOTING
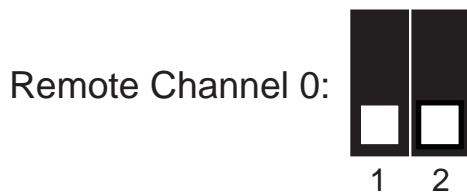
USB

If your USB stops functioning correctly, you can manually re-intialize the USB hub in the switch by pushing twice on the channel select button, that corresponds with the channel that the switcher is pointed at, on the front of the unit. This will cause the channel selected LED to blink once letting you know the USB hub has been re-initialized.

To have the USB re-initialize automatically every time you switch, look under the 4x1 DVI Switcher and locate the blank sticker. Peel it off to reveal a bank of four dip switches. Find the dip switch labeled "4" and flip it to the ON position. Now every time you switch the hub will re-initialize itself.

Video

When turning on or rebooting your computers, the 4x1 DVI DL Switcher must be selected to the computer that is booting until the computer completes the boot cycle. This step can be eliminated using the Gefen DVI Detective.

If you loose your picture when you switch between sources you will need a DVI Detective.

To switch between Dual Link and Single Link sources, a Single Link cable (sold separately) must be used for each Single Link source connected to the switcher.

DVI

Audio

DVI, USB & Audio

DVI, USB & Audio

DVI, USB & Audio

DVI, USB & Audio

USB Out

4x1 DVI KVM Switch
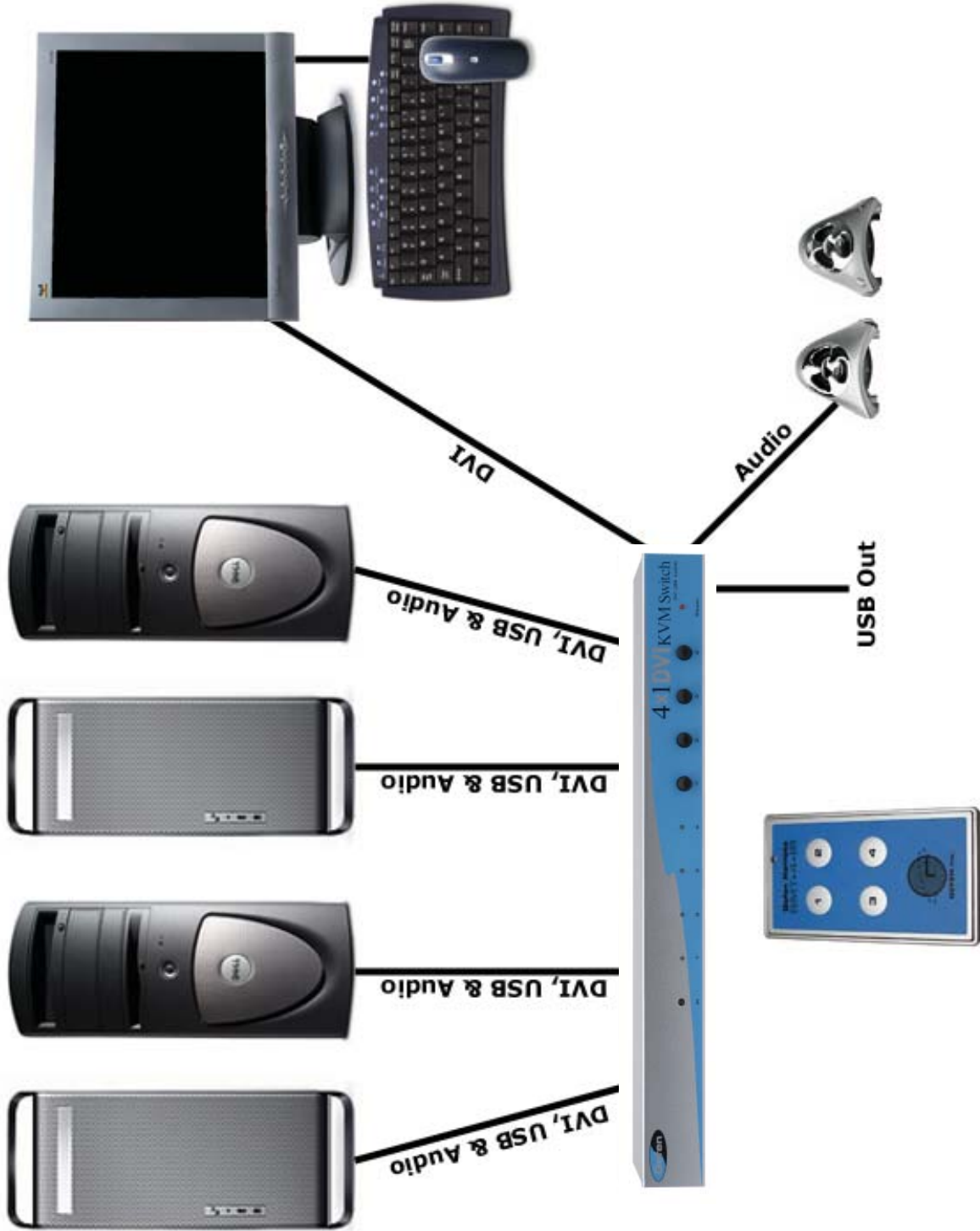
SPECIFICATIONS

Video Amplifier Bandwidth .... 1.65 GHz

Single Link Range .... 1920 x 1200

Vertical Frequency Range .... 60 Hz

DVI Input/Output Connector Type .... DVI-I (digital only)

USB Input Connector .... Type "B"

USB Output Connector .... Type "A"

Power Consumption .... 15 Watts (max.)

Power Supply 5VDC

Dimensions .... 17"W x 1.75"H x 4"D

Rackmountable .... 1 Rack Space

Shipping Weight .... 10 Lbs