

Thank you for purchasing Belkin Components 'OmniView' SE 4-Port keyboard/video/mouse (KVM) switch! Now, you can control multiple computers from just one keyboard, mouse and monitor. No more messy server rooms, cluttered cables, or cramped cubicles. With the OmniView, you are in complete control!

Compatible with PS/2 and AT-style computers, the **OmniView** gives the user complete flexibility. Plus, the integrated Mouse Conversion Technology allows control over a **mixture** of computers, regardless of mouse type. It also has standard connectors built-in for inexpensive cabling. Simply use standard keyboard, mouse, and VGA cables to interface to the computers. Belkin offers these cables in complete kits for even more convenience.

With the OmniView" you can boot up each computer without encountering any keyboard or mouse errors. The intelligent circuitry emulates keyboard signals to prevent aborted boot sequences or lost mouse control, often found when using manual KVM switchboxes. Furthermore, the Omniview can be cascaded for even more control, up to 64 computers!

Control, convenience, efficiency. All of which come standard with the Belkin **OmniView**.



### **Features:**

- Allows a user to control over as many as 64 computers from one keyboard, mouse and monitor
- Integrated Mouse Conversion Technology - control PCs with either serial or PS/2 mouse ports from a single PS/2 mouse • Supports both PS/2- and AT-style keyboards
- Supports VGA, SVGA and Multisync monitors
- Uses standard cables
- Pushbutton or keyboard hot-key sequence switching
- Auto scan mode and quick last/next switching modes for even more convenience
- Audible feedback when switching
- Recalls CAPS LOCK, NUM LOCK, and SCROLL LOCK keys' status for each computer automatically
- Front-panel status LEDs
- Works with Mac Adapter\*
- No software required
- One year product warranty

### **Package Contents**

4-Port OmniView" SE  
9VDC, 600mA power supply  
This manual

FID074  
FID065-PWR  
P72186

## ***Technical Specs:***

### **Console Connectors**

Keyboard: Mini-DIN-6 female  
Mouse: Mini-DIN-6 female for PS/2 mouse  
Monitor: HD-DB-15 female for VGA monitor

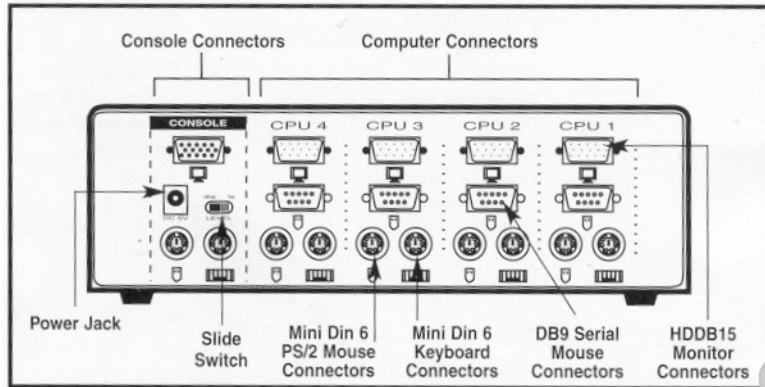
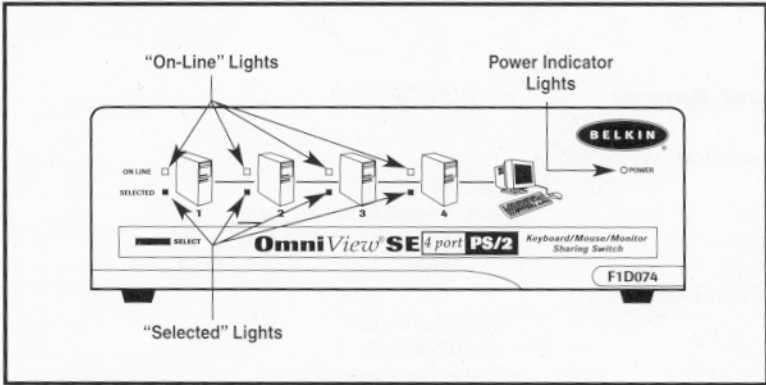
### **Computer Port Connectors**

Keyboard: Mini-DIN-6 female  
**Mouse:** Mini-DIN-6 female  
DB-9 female for serial mouse HD-  
D&15 male for VGA monitor  
Monitor:

### **Power Supply**

**9VDC, 600mA**

Dimensions:  
Width: 8.5 inches (21.6 cm)  
Height (with feet): 2.75 inches (7.00 cm)  
Depth: 6.25 inches (15.88 cm)  
Weight: 2.5 lbs. (1.1. kg)  
Operating Temperature: 0-40 dg. C  
Storage Temperature: -20-60 dg. C  
Humidity: 0-80% RH, non-condensing





Make sure you have the right cables!

Before attempting to connect anything to the OmniView' or the computers, make sure you have the appropriate cables and adapters (if necessary):

PS/2 mouse or PS/2 keyboard cable

Mini-DIN-6 male to male

Part # F2N036-XX

Serial mouse cable

DB-9 male to female, with thumbscrews

Part # F2N209-XX-T

Standard VGA cable

HD-DB-15 Male to female, with thumbscrews

Part # F2N025 XX-T

High-resolution / long distance VGA cable

Double-shielded, coaxial; HD-DB-15 male to female, with thumbscrews

Part # A3H981-XX-T

AT to PS/2 keyboard adapter DIN-5 female to

Mini-DIN-6 male

Part # F2N017, F2N017-XX

NOTE The '-XX' in the part number denotes cable length in feet.

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## OmniView Cable Kits

Belkin also offers complete OmniView™ Cable Kits. These include one keyboard, one mouse and the VGA cable for convenience.

Select the appropriate one based on the type of mouse your computer uses. If the keyboard cable does not match with the port, simply attach one of the keyboard adapters mentioned above.

### OmniView' PS/2 Cable Kit

(for computers that use a PS/2 mouse)

Part # A3X982

\* 2 x PS/2 male to male cables for keyboard and mouse (Part # F2NO36-06)

\* 1 x HD-DB-15 male to female cable with thumbscrews for VGA (Part # F2NO25-06-T)

### OmniView' AT Cable Kit

(for computers that use a serial mouse)

Part # A3X939

\* 1 x DIN-5 male to male cable for keyboard (Part # F3A510-06)

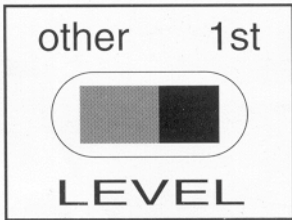
\* 1 x DB-9 male to female with thumbscrews for serial mouse (Part # F2N209-WT)

\* 1 x HD-DB-15 male to female cable with thumbscrews for VGA (Part # F2NO25-06-T)

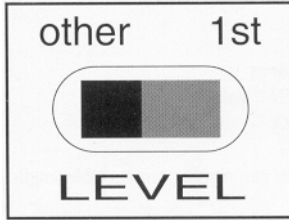
\* 1 x DIN-5 female to PS/2 male keyboard adapter (Part # F2N017)

2. Turn off all the computers, the monitor, and make sure the OmniView is not powered up before connecting or disconnecting any cables.

**DANGER:** Attaching or disconnecting keyboards from computers when powered may trip the "pico fuse", thereby permanently losing all keyboard control on the computer. If your OmniView™ is NOT cascaded (you are using only one OmniView™), the slide switch should be set for first.



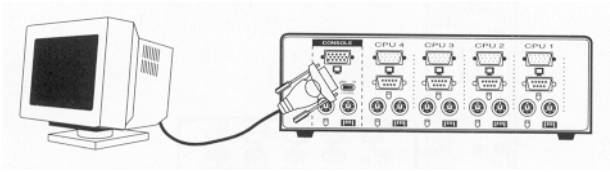
Slide Switch setting  
for Top-Level (or  
single) OmniView™



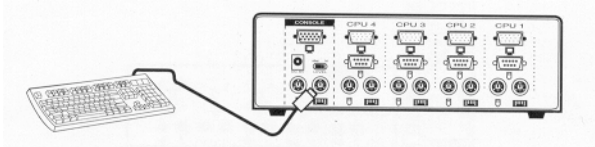
Slide Switch setting  
for Cascade  
(2nd or 3rd level)  
OmniView™



3. Connect the monitor to the OmniView. Using the cable that is attached or is included with the monitor, attach it to the HD-DB-15 female port on the console section of the OmniView.

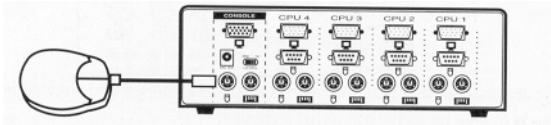


4. Connect the keyboard to the OmniView. Using the cable that is attached or is included with the keyboard, attach it to the Mini-DIN-6 connector. If you have an AT-style keyboard, simply use an F2N017 keyboard adapter.

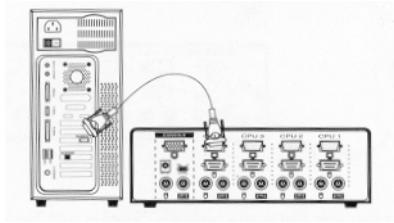


5. Connect your PS/2 mouse to the OmniView. Simply attach the mouse cable into the PS/2 port on the console section of the OmniView.

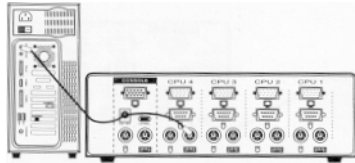
NOTE: You can only use a PS/2 mouse to control all your computers. There is no serial mouse connection on the console. However, the OmniView's Integrated Mouse Conversion Technology allows you to connect computers with serial mouse ports to the *OmniView*, and be controlled from your PS/2 mouse.



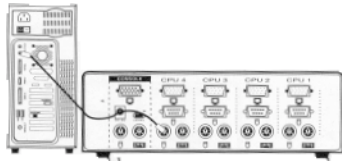
6. Connect a computer to the OmniView".  
Attach the female end of the VGA cable into the computer's HD-DB  
15 port, and the female end into a HD-DB-15 port on the  
OmniView".



\* Attach the keyboard cable (either PS/2 or AT-style) into the keyboard port of the computer. Plug in the opposite end into the appropriate port on the **OmniView'**.



\* Attach the mouse cable into the mouse port of the computer and into the OmniView', as below. If the computer is using a serial mouse, connect the male end of the cable into a DB-9 serial port on the computer, and plug in the female end into the serial mouse port on the OmniView'. **DO NOT** use combo mouse adapters on the mouse cable, as doing so would not work and may cause data corruption when the computers are running. This is because PS/2 and serial mouse signals are completely different and incompatible with each other.



\* Double check all the cabling and make sure that all the cables are securely inserted and screwed in where possible.  
Power up the OmniView", then you are ready to boot up all the connected computers!

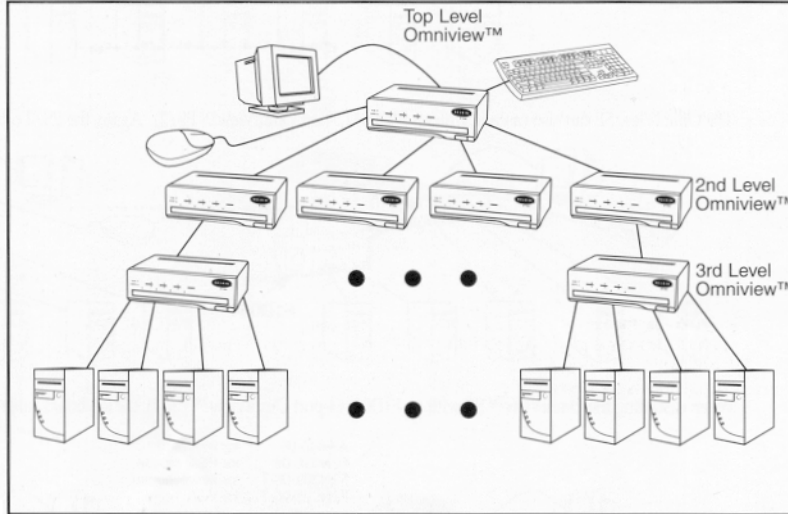




## Cascading OmniViews

OmniView's can be cascaded for control over more than 4 computers. The table below shows how many computers can be controlled from one keyboard, mouse and monitor using OmniView" PS/2 4-Port units.

Number of OmniViews*	Number of Computers
1	1 to 4
2	5 to 7
3	8 to 10
4	11 to 13
5	14 to 16
6	17 to 19
7	20 to 22
8	23 to 25
9	26 to 28
10	29 to 31
11	32 to 34
12	35 to 37
13	38 to 40
14	41 to 43
15	44 to 46
16	47 to 49
17	50 to 52
18	53 to 55
19	56 to 58
20	59 to 61
21	62 to 64

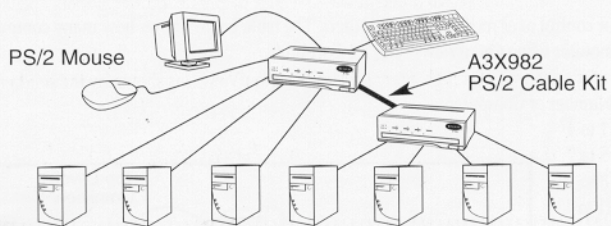


When Omniview are cascaded, they should follow a tree configuration, no having more than three levels deep. The console (keyboard, mouse and monitor) is connected to the singular, top-level Omniview. See the *figure* below for more information:

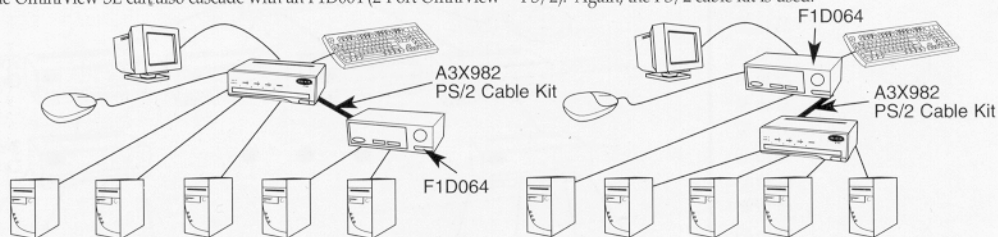
NOTE: **OmniViews** on the second and third level must have the slide switch set to "other"



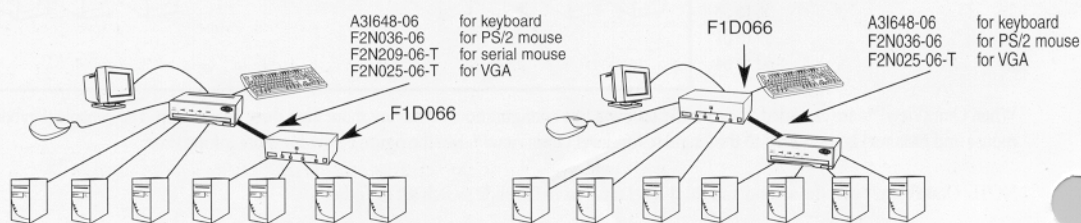
The OmniView™ SE requires nothing more than the PS/2 Cable Kit to cascade to another OmniView™ SE.



The OmniView SE can also cascade with an F1D064 (2-Port OmniView™ PS/2). Again, the PS/2 cable kit is used.



When cascading the OmniView™ SE with an F1D066 (4-port OmniView™ PS/2), the keyboard cable must be the A3I648-06.

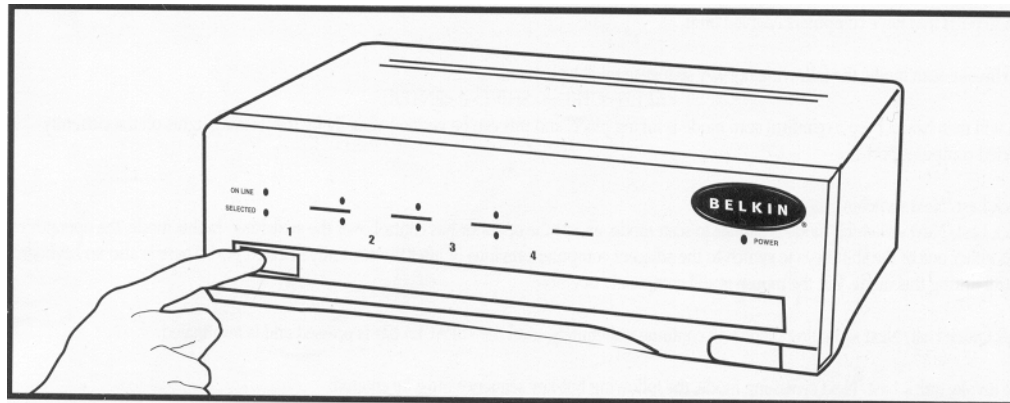


### Usage:

Selecting which computer to operate can be done in two different ways - either by pressing the front-panel pushbutton, or by entering the hot-key sequence.

\* Pressing the pushbutton in front simply cycles through every port on the OmniView™, as shown by the solid green light on any of the 'PC Ports' 1 through 4.

To select a computer on cascaded OmniViews™ press the button to select the port where the cascaded OmniView™ is connected. Then, select the port on the cascaded OmniView™ where the desired computer is connected..



Entering the hot-key sequence allows direct port access from the keyboard, even through cascaded OmniViews™. The procedure is very simple, and easy to remember:

1. Press <ALT>+<CTRL>+<SHIFr> all at the same time, then release.
2. Press the port number of the computer you wish to control. If you have cascaded OmniViews™, you will have to press two (or three) numbers, x y z, where x is the port m the top level OmniView™, y is the port on the second level (or keys in succession), then release.
3. Press <ENTER>, then release.



You should hear a beep to confirm the OmniView<sup>®</sup> has switched to the desired port. For example, pressing <ALT>+<CRRL>+<SHIFT> 1 2 3 <ENTER> selects Port 1 on the top level OmniView, Port 2 on the second level OmniView<sup>®</sup>, and Port 3 on the third level *OmniView*. The OmniView<sup>®</sup> filters out the hot-key sequences, preventing unwanted characters from appearing in the computer's applications.

### **Scan Mode**

The OmniView can be sent for automatic scan mode. In scan mode, the OmniView<sup>®</sup> switches from one computer to the next in 10-second intervals. When the *OmniView* is in scan mode, there is no keyboard control passed to the displayed computer. This is necessary because switching is handled by the OmniView<sup>®</sup>, not the operator.

Note: Scan Mode will continue indefinitely, until the <SPACE> bar is pressed and scan mode is terminated. Also, the OmniView<sup>®</sup> will only scan to ports that have computers enabled on it.

\* To invoke scan mode, the following hot-key sequence must be entered:  
<ALT>+<CTRL>+<SHIFT> 0 <ENTER>

You will then hear a beep to confirm scan mode is taking place, and this can be verified visually by the flashing lights on the currently selected computer port.

### **Quick Last/Next switching mode**

Quick Last/Next switching mode is similar to scan mode, except the operator has control over the switching. In this mode, the operator can press either one of the shift keys to switch to the adjacent computer previous or after the currently selected port. There is also no keyboard control during this mode, but the mouse is still completely operable.

Note: Quick Last/Next switching mode will continue indefinitely, until the <SPACE> bar is pressed and is terminated.

\* To invoke quick Last/Next switching mode, the following hot-key sequence must be entered:  
<ALT>+<CTRL>+<SHIFT> 9 <ENTER>

You will then hear a beep to confirm quick Last/Next switching mode is taking place, and this can be verified visually by the slow blinking light on the currently selected computer port.

To select the next adjacent computer, press the RIGHT side <SHIFT> key.  
To select the previous adjacent computer, press the LEFT side <SHIFT> key.

### **WARNING!**

Make sure that all equipment is turned off when connecting or disconnecting any cables. Plugging and unplugging cables while the computer or OmniView are powered could potentially damage the computer, the OmniView, or both.

### **Video**

Q: What are the technical specs for the video section of the OmniView<sup>®</sup>?

- \* Compatible with VGA, SVGA and Multisync monitors
- \* Monitor Support: RGB Analog, Horizontal Sync, Vertical Sync
- \* VGA Bandwidth: 180 MHz
- \* VGA Resolution max: 1280 x 1024

Q: The monitor is fuzzy or I am getting ghosting or shadowing. What do I do?

- \* Check cable connections
- \* If shadowing only happens from one computer, try swapping the cables
- \* If possible, try a lower video resolution and/or refresh rate
- \* For high resolutions and/or long distances use A3H981-XX-T cable, where '-XX' denotes the length of the cable in feet.

Q: I have a Monochrome monitor and it is not working. Why not?

- \* The OmniView<sup>®</sup> supports SVGA, VGA, and Multisync monitors only

### **Keyboard**

Q: The Keyboard is not detected, or a keyboard error is received during boot-up. o Check cable connections

- \* Make sure the keyboard works when it is connected directly to the computer s Make sure you are using the correct power supply, it should be 9VDC 600 mA. Try a different keyboard
- \* When cascading to an FID066, are A31648-06 keyboard cable.



Q: I am unable to select ports on the OmniView' using the keyboard combinations.

\* For Cascaded OmniViews' make sure that all slide switch is set to "other". For single or top-level OmniView", slide switch must be on '1st'.

Q- I have some computers that are AT-style keyboards and some that are PS/2 style keyboard, can I connect them both to the OmniView" ?

\* Yes. The A3X939 AT cable kit will have a keyboard adapter included.

Q: I am trying to cascade OmniViews" but the lower level OmniView" are not working and/or are not responding to the port selections or 'Hot Keys'.

\* Make sure that the slide switch on the top-level OmniView is at to '1st', and that the lower-level OmniView are on "other".

\* When cascading to an FID066, use A31648-06 keyboard cable.

Q: I have the OmniView" in scan mode and it skips ports that do not have anything connected to it.

, That is connect the OmniView will only scan ports that have computers connected to it. It knows that something is connected to it by the power coming from the keyboard port.

## Mouse

Q: How do I control several computers if some use serial mice and others use P5/2?

\* The **OmniView**' SE has Integrated Mouse Conversion Technology. This allows the user to control computers with either PS/2 or serial mouse ports from a single PS/2 mouse.

Q: The mouse is not detected upon boot-up or the mouse is lost or acts erratically when switching ports.

- Check all cable connections.
- Do not move the mouse when switching and also give it a second or two after switching before moving the mouse.
- Check slide switch settings.
- Check the mouse driver. Make sure you have the latest version.
- Make sure you are using the correct power supply, it should be 9VDC 600mA.
- For Cascaded **OmniView**'s make sure that all slide switch is set to "other". For single or top-level *OmniView*, slide switch must be on '1st'. • If you are using Windows95 or Windows3.1, remove any unnecessary mouse drivers from DOS configuration files (config.sys and autoexec.bat).
- If the problem continues, try a different mouse.
- Boot up the computer with the ports selected on the OmniView'