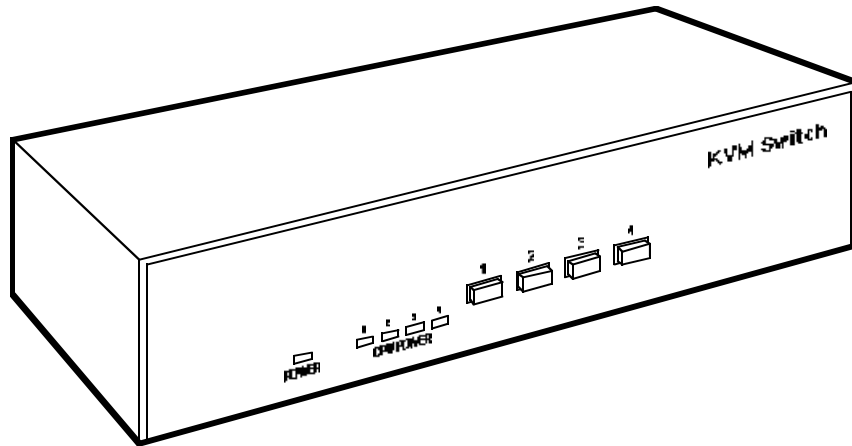# BLACK BOX®
NETWORK SERVICES

KVM Switch

Low-cost KVM switches for your PC, Mac, or Sun CPU.

Key Features

▶ *Access two or four CPUs with one keyboard, monitor, and mouse.*

▶ *Available in six different models for three different platforms.*

▶ *PC and Sun models: Emulates keyboard and mouse functions for automatic boot-up.*

▶ *With front-panel pushbuttons, you can switch directly to your desired CPU without cycling through other CPUs (as you would with a rotary-knob type of switch).*

▶ *Has its own printed circuit board for maximum reliability.*

The KVM Switch lets you share 2 or 4 CPUs with one keyboard, monitor, and mouse. Models are available for PC, Mac®, and Sun computers. All are designed for plug-and-play operation.

Front-panel pushbuttons let you switch directly to your desired CPU.

Diagnostic LEDs let you easily monitor switch activity. There's an LED for power and LEDs for selected CPU and its power-on state.

The KVM Switch supports all video resolutions up to 1280 x 1024 noninterlaced (Sun models) or 1024 x 768 noninterlaced (PC and Mac models).

PC models support the functions and modes of AT compatible keyboards and serial mice.

Mac and Sun models can be set to either pass through or override monitor ID bits to each CPU.

And the Switch requires no external power supply; its low-power circuitry uses power from CPUs.

The power to the keyboard and mouse is maintained during switching for trouble-free operation.
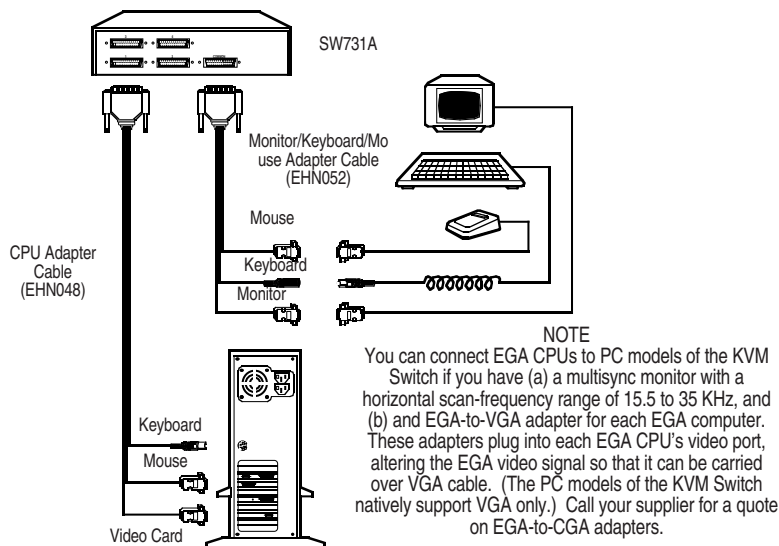
Adapter cables (ordered separately) that merge keyboard, video, and mouse signals onto single DB25 simplify cable management.

A 19" rackmount kit is available (ordered separately).

Typical Application

Access 2 or 4 PC, Mac, or Sun CPUs with one keyboard, monitor, and mouse.

The diagram at right shows a typical system setup for a 4-port PC model (SW731A).

SW731A

Monitor/Keyboard/Mouse Adapter Cable (EHN052)

Mouse

Keyboard

Monitor

CPU Adapter Cable (EHN048)

NOTE
You can connect EGA CPUs to PC models of the KVM Switch if you have (a) a multisync monitor with a horizontal scan-frequency range of 15.5 to 35 KHz, and (b) and EGA-to-VGA adapter for each EGA computer. These adapters plug into each EGA CPU's video port, altering the EGA video signal so that it can be carried over VGA cable. (The PC models of the KVM Switch natively support VGA only.) Call your supplier for a quote on EGA-to-CGA adapters.

Keyboard

Mouse

Video Card

Technically Speaking

Mac and Sun models only: Setting the ID-Bit Jumpers

The KVM Switch normally passes all ID bits through from the monitor to the connected Macintosh or Sun CPUs. If you would like your monitor to share a monitor (such as a PC VGA monitor) that doesn't support ID bits, you can hardwire the KVM Switch to provide the ID bits. To do this, you set four ID-bit jumpers inside the Switch.

The ID-bit jumpers, located next to the COMMON connector on the board, are labeled as follows:

• JP20 (controls ID0)

• JP21 (controls ID1)

• JP22 (controls ID2)

• JP23 (controls ID3)

To force an ID bit low, move the jumper to the left-hand position (this connects the lead to ground); to force an ID bit high, move the jumper to the open position (one leg of a jumper on a post, the other not connected to anything).

Specifications

System Hardware Required—SW730A, SW731A: IBM AT or PS/2 or compatible computers, IBM AT keyboard (PS/2 keyboard works with additional adapter), RS-232 serial mouse, and VGA monitor; SW732A, SW733A: Apple Macintosh computers, keyboard, mouse, and monitor; SW734A, SW735A: Sun workstations, keyboard, mouse, and monitor

Compliance—FCC Class A, DOC Class/MDC classe A

Standards—SW730A, SW731A: VGA video (EGA/CGA video with additional adapters); SW732A, SW733A: Macintosh video; SW734A, SW735A: Sun video

Interfaces—Proprietary composites: SW730A, SW731A: IBM AT keyboard, RS-232 (for serial mouse), and VGA video; SW732A, SW733A: Macintosh video and Apple Desktop Bus™ (for keyboard and mouse); SW734A, SW735A: Sun keyboard/mouse and video

Maximum Resolution—SW730A, SW731A, SW734A, SW735A: 1280 X 1024 noninterlaced; SW732A, SW733A (with standard cables): 1024 x 768 noninterlaced

Maximum Distance—21 ft. (6.4 m) of total cable from any CPU to keyboard, monitor, and mouse

User Controls—Front-mounted pushbuttons for switching between CPUs: (2) on SW730A, SW732A, and SW734A; (4) on SW731A, SW733A, and SW735A

Indicators—Front-mounted LEDs: (1) Power, (1 for each port) CPU Power

Connectors—Rear-mounted DB25 female: (1) (labeled COMMON) to monitor/keyboard/mouse; (1 for each port) (numbered) to CPUs

Power—From CPU ports; approximately 50 mA at 5 volts

Size—5.7H x 22.4W x 12.4D cm

Weight—Net: 1.4 kg; Shipping: 1.8 kg

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
KVM Switch 2P	SW730A
KVM Switch 4P	SW731A
KVM Switch for Mac 2M	SW732A
KVM Switch for Mac 4M	SW733A
KVM Switch for Sun 4S	SW735A
Mac Switch to keyboard, monitor, mouse 5-ft. (1.5-m), 10-ft. (3-m) or 20-ft. (6-m)	EHN104
Mac Switch to CPU, 5-ft. (1.5-m), 10-ft. (3-m) or 20-ft. (6-m)	EHN105
Sun Switch to keyboard, monitor, mouse	EHN102
Sun Switch to CPU, 5-ft.(1.5-m),10-ft.(3-m) or 20-ft.(6-m)	EHN103
PC Switch to keyboard, monitor, mouse VGA/AT/Serial	EHN052-0001
EGA/AT/Serial	EHN053-0001
PC Switch to CPU, 5-ft.(1.5-m),10-ft.(3-m), or 20-ft. (6-m) VGA/AT/Serial	EHN048
EGA/AT/Serial	EHN049