

ServSwitch™ KVM

Get the ultimate in control, convenience, and cost savings.



Put the industry's most comprehensive portfolio of KVM solutions to work for you.

- » From desktop to server room, single- or multiuser.
- » Remote management and KVM extension.
- » KVMoIP enables server control around the globe.
- » Secure network switching and specialty solutions.



KVM Extension

ServSwitch Brand USB
Micro Extender Kits, p. 23



KVM Trays

ServView V, p. 31



Desktop KVM

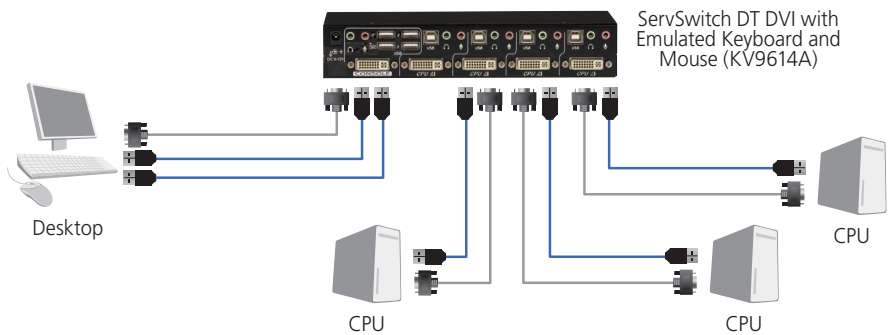
DT Series DVI with
USB & Audio, p. 7

Control, Convenience, and Cost Savings with KVM

KVM (Keyboard, Video, Mouse) switching brings control, convenience, and cost-savings to your organization by giving you access to any number of CPUs from one keyboard, monitor, and mouse setup. The ServSwitch™ line from Black Box meets needs that range from desktop switching, server room/enterprise switching, and KVM extension to KVM trays. We offer specialty KVM, most notably several KVM over Internet Protocol (KVMoIP) options,

including the ServSwitch EC with built-in IP, the ServReach™ KVMoIP family, and the ServSwitch Wizard™ IP and IP Plus, which turn any switch into an IP switch (pp. 18–21). For security switching, check out our TEMPEST-approved ServSwitch Secure units (p. 35). To make your server room more manageable, see our KVM trays, ServTray™ Complete and the ServView™ V (pp. 30–31).

K-V-M stands for keyboard, video, and mouse. A KVM switch enables you to use one keyboard, video monitor, and mouse to control anywhere from two to several hundreds—even thousands—of CPUs or servers. KVM switches save you money, time, and space, and are appropriate for use in almost any computing or IT configuration.



Black Box is your best value GUARANTEED

If you are adding to or considering upgrading your KVM technology, turn to Black Box for your best value. Put Black Box’s more than 30 years of technology experience to work for you.

ServSwitch KVM vs. the Competition	Black Box	Competitor A	Competitor B
Wide selection	✓	—	—
Desktop	✓	✓	✓
Server room/Enterprise	✓	✓	✓
IP remote connectivity	✓	—	✓
KVM extenders	✓	—	—
Copper	✓	✓	✓
Fiber	✓	—	✓
Wireless	✓	—	—
Specialty	✓	—	—
Secure KVM	✓	✓	—
Reverse KVM	✓	—	—
KVM Trays	✓	✓	✓
Free 24 x 7 x 365 American Tech Support	✓	—	—
ISO 9001:2008 Certified	✓	✓	—
World-wide distribution and support	✓	—	—
Extensive warranties	✓	—	—
Best Price Guarantee	✓	—	—
45-day no-risk returns	✓	—	—
Same-day shipping	✓	—	—

In addition to the products featured here, we provide Buyer's Guide charts to help you more exactly determine your KVM switching needs. As always, for complete technical specifications, configurations, and more, see our more than 118,000 products at www.blackbox.com.

ServReach™ KVMoIP

The ServReach family of products extends KVM switching over an IP network. Comprised of the KVMCube, KVMGate, KVMManager, and KVMMultiport (pictured **below**, top to bottom), these products work with each other and third-party KVM switches so you can access your servers from anywhere in the world, saving the time and cost of travel, downtime, and service calls.



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Analog VS. Digital KVM

Analog vs. digital KVM switching

A KVM switch enables you to control multiple servers and other equipment from one keyboard, monitor, and mouse workstation. KVM switches give you the flexibility to access servers that are down the hall or around the world. How you access your servers depends on the type of switch you use. There are two types of KVM switches: analog and digital.

How analog and digital switches work.

Analog switches were the first type of KVM switch and are still the most prevalent. Analog KVM switches work by sending analog KVM signals over dedicated cabling to specific attached servers. Digital KVM switching works using the Internet or LAN and is called KVM switching over IP (Internet Protocol), or KVMoIP. Digital switches take analog KVM signals and convert them to digital packets. These packets are compressed so they can be transmitted over the Internet or LAN.

Stay put or roam the world.

Analog KVM switches are often confined to one specific location. They are usually set up with dedicated cabling from the KVM workstation to the servers and equipment and often have distance limitations imposed by the cable. Analog KVM systems are limited in the number of user ports and are more difficult to expand.

Because digital switches work over IP, they give you the freedom to control servers over large networks with multiple locations. This also gives your network managers the ability to manage devices easily, no matter where they are.

Digital systems enable access to an almost unlimited number of users and are easy to expand.

Digital switches also enable you to leverage your existing cabling infrastructure and require far less cabling than analog systems do. Analog switches use a dedicated cabling system often requiring a large number of cables and a system of cable management.

In-band or out-of-band management.

Analog KVM switches have an out-of-band management system, which has a few advantages. One is network independence. If your network fails, you can still control your servers. But because digital KVM switches work through in-band management, server control is gone if the network goes down.

Out-of-band management systems offer strong security because they are physically isolated. However, in-band digital systems can use highly effective DES, SSL, and other Web browser-based security systems.

Another advantage of out-of-band management is that it provides the best video quality and mouse synchronization. Because video is compressed and converted in digital in-band management systems, video quality can be degraded. Video signals also use a lot of bandwidth, which can negatively affect video quality and network performance. Mouse latency, in which mouse control lags, often occurs, too.

Common KVM switch features

- **Platform** — The type of computer platform a KVM switch can handle. In addition to PCs, KVM products can be linked to Sun®, Mac, SGI™, RS/6000®, HP9000™, and others.
- **Number of ports** — The number of computers you can connect directly to a single KVM switch.
- **Cascading/scalability** — Many advanced KVM switches support the cascading of units to increase the number of computers to more than 1000. Control via IP is also possible with newer models.
- **Maximum resolution** — A measure of the video bandwidth supported by a KVM switch. If you use graphics- or video-intensive applications, the higher the resolution support, the better.
- **Additional features** — Emulation, distance to keyboard/monitor/ mouse and computer, on-screen menus, and number of users.

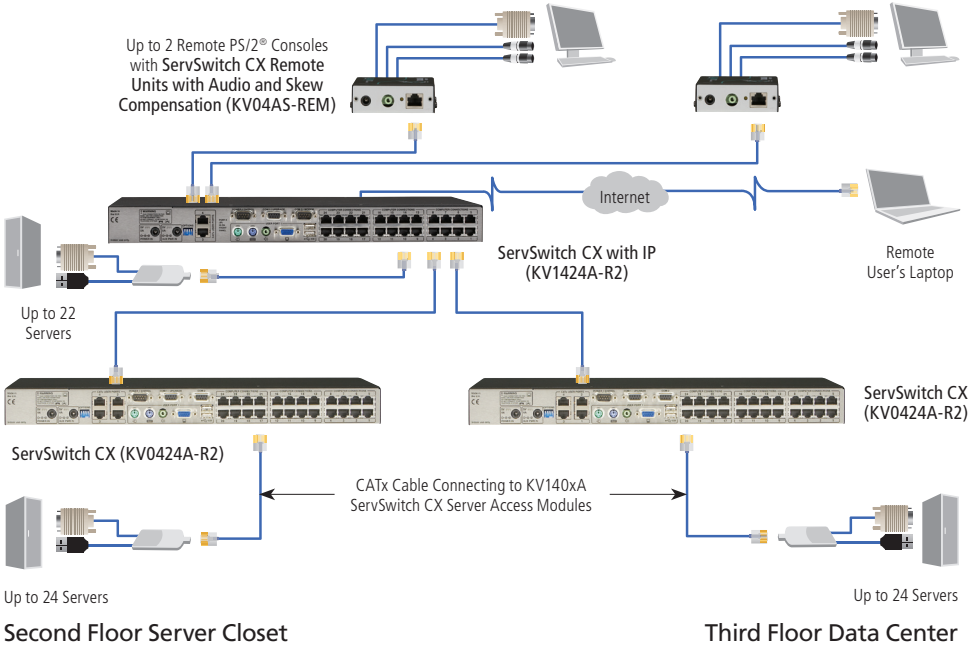
See the KVM glossary, p. 5.



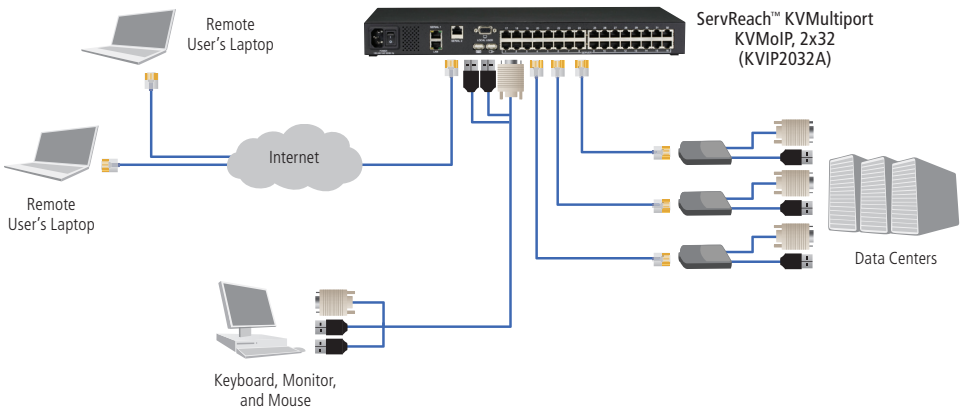
Server Room/Enterprise — Multituser Set Up

Main Server Room

Network Operations Center



KVM over IP



Before You Buy

Questions to ask before you buy a KVM switching system



Before you choose a KVM switching solution, you need to consider some important issues. Any time you have questions or need help contact Black Box's FREE, live, 24/7 Tech Support.

What type of connection does the controlling keyboard, video display, and mouse have?

Depending on whether they are PS/2®, USB, or some combination of both, your connections determine what type of cabling you need.

If you are using USB devices, like keyboards and mice, make sure to purchase a KVM switch with USB support. Older KVMs usually only support PS/2® connections, but Black Box has KVM switches that support both USB and PS/2, as well as USB-only models.

Do your CPUs require keyboard or keyboard and mouse emulation?

Keyboard emulation and keyboard and mouse emulation (see our Glossary on the **facing page**) are enhanced features of most KVM switches. They enable each CPU to communicate with the switch as if it were directly attached to the controlling keyboard or mouse.

What operating system (OS) software do your computers use?

Are all your computers running the same OS? Or, like many organizations, do you have multiple CPUs running different OSs? With the right KVM switch, interconnecting multiple CPUs running different OSs is easy. Black Box offers several multiplatform KVM switches.

How close are your users to your servers?

If servers and users are physically close to each other, an analog KVM system will meet your needs. On the other hand, if users require access from remote locations because they travel or if an IT manager needs to manage a distant data center, a KVM over IP (KVMoIP) system is going to be the best fit for your organization.

How many ports do you need? What will your future needs be?

It is advisable to purchase a KVM switch with more ports than you currently need. This way, when you expand your server room or add users, you do not need to completely replace a small KVM switch with a larger one with more ports. Also, although many KVM switches are cascadable, a KVMoIP system simplifies configuration, usually requiring the addition of IP addresses and updating the authentication database. KVMoIP makes adding servers fast and free of complications.

What are your security needs?

Network security must never be compromised, yet authorized personnel need access. KVM switches use a combination of user authentication, an operating system's internal security, and Secure Socket Layer (SSL) encryption—among other security features—to ensure that users receive access to those devices to which they are allowed.

Glossary of KVM terms

Bandwidth — The capacity of a device to carry high-frequency signals through it. A device with higher bandwidth will pass clearer and higher resolution video. The horizontal resolution multiplied by the vertical resolution multiplied by the frame rate gives the approximate frequency of the pixel clock. The bandwidth of the video is one half of the pixel clock.

Boot — The start-up sequence of a computer. During this time, the computer attempts to detect the keyboard-video-mouse. A KVM switch should emulate the KVM signals so the computer boots up normally.

Bus Expansion — A method of interconnecting KVM switches with multiple video buses, which go to all switches. Any switch can connect a computer to a video bus output or can connect a video bus input to a user port. Each switch has a dedicated input bus port and output bus port. The bus output of one switch is connected to the bus input of the next switch.

Cascading — A method of interconnecting KVM switches by connecting the computer port of several other KVM switches.

CAT5 — Category 5 UTP cable is usually used for connecting LANs. It is comprised of two to four twisted pairs of copper wire terminated by RJ-45 connectors. ServSwitch KVM extenders use this cabling to carry video and data up to 1000 feet.

Converters — Devices that convert KVM signals from one type of platform to KVM signals for another type of platform, for example from PC to Sun®.

DVI (Digital Visual Interface) — A high-performance interface between a computer and a display device that uses transition-minimized differential signaling (TMDS) for improved video signal accuracy. DVI-D is a digital-only connector; DVI-I integrates both digital and analog connections.

Emulation — The intelligence in a switch that imitates (emulates) signals that enable a computer to think it is attached directly to a keyboard-video-mouse. (See Boot.)

Ethernet — A local area network (LAN) developed by Xerox®, Digital Equipment Corp., and Intel®, and now recognized as the industry standard. Ethernet connects up to 1024 nodes at 10 MHz, 100 MHz, or 1-Gigabit speeds, over UTP, coax, and fiber optic cable.

HDMI (High-Definition Multimedia Interface) — This is the first digital interface to combine uncompressed high-definition video, multichannel audio, and intelligent format and command data in a single cable. Use to connect audio/video equipment over a single cable. Supports standard, enhanced, and high-definition video. Has a bandwidth of up to 5 Gigabytes so it supports all HDTV standards and has bandwidth to spare for future applications.

Flash Memory — A memory chip that holds its content without power but must be erased in fixed blocks rather than in single bytes. Flash memory provides a way to change or upgrade product functionality by sending data to change its internal firmware.

IP (Internet Protocol) — The protocol used in gateways to connect networks at the OSI Network

Level (Layer 3) and above. IP routes a message across networks.

Keyboard Mode — A standard PS/2® keyboard can operate in Mode 1, Mode 2, or Mode 3. Mode 2 is used by the majority of PCs. Mode 1 was formerly used by IBM® but is now obsolete; Mode 3 is common for UNIX® workstations.

KVM — Stands for keyboard, video, mouse. May refer to physical KVM or to the corresponding computer ports.

KVM Extenders — Enable you to increase the distance between the KVM and CPU or the KVM and the switch. KVM extenders convert KVM signals to travel over CATx UTP or single- or multimode fiber optic cable. Distances range from 75 feet (CAT5 UTP) to up to 6.2 miles (fiber optic single-mode).

KVM Sharing — Access to a single computer by more than one user. Access can be controlled by keyboard command or by timer.

KVM Switches — Connects one or more keyboard, monitor, and mouse sets to two or more CPUs. Users can switch via front-panel switches or keyboard commands.

Multiplatform — Able to run more than one type of operating system.

Non-blocking Access — A user on a matrix switch that can connect to any computer without restriction; this user has exclusive use of the video bus.

On-Screen Display (OSD) — For a KVM switch, an OSD enables users to configure and control the switch using a visual computer interface, and displays information regarding which computer is currently connected.

Platform — Operating system. Platforms include PC, Sun, Apple® (Mac®), and UNIX workstations.

Port — A physical interface on a device, which goes to a connector.

PS/2 — The keyboard and mouse standard by IBM that was the industry standard on most PCs and UNIX workstations. PS/2 keyboards and mice have 6-pin mini DIN connectors.

Resolution — Number of pixels displayed horizontally and vertically on a video monitor; value determines the sharpness of the image.

Scan Rate — The time interval that a KVM switch takes to switch between ports. Usually a programmable value (15 seconds, 30 seconds), and can be enabled or disabled.

Server Access Module (SAM) — Dongle-type device that connects CATx cable to KVM interface connectors.

Single-User — A KVM switch with only one point of KVM access to attached CPUs or servers.

USB (Universal Serial Bus) — Serial 4-wire bus architecture for peripheral I/O ports, that autosenses up to 127 peripherals at a distance of 5 meters (16.4 ft.). Version 1.1 supports 1.5- and 12-Mbps data rates. Version 2.0 is backward compatible with Version 1.1 speeds and also supports 480-Mbps data rates.

User — A KVM workstation attached to a KVM switch; it receives video and sends keyboard and mouse information. Can also refer to the port on the KVM switch or the person accessing the workstation.

Desktop KVM

KVM technology brings the green to small spaces.

- Choose from 2- and 4-port KVM switches for small office or home office use; see charts on pp. 6–9 for complete price details.
- Manage two or four computers from just one keyboard, monitor, and mouse.
- Save on the cost of purchasing, maintaining, and operating multiple video displays.
- Reduce office clutter, energy costs, and waste with KVM.
- Improve productivity by utilizing several CPUs for multiple projects at once.
- Don’t compromise on video and audio quality.
- Plug-and-play with no software to install.

ServSwitch DT Basic with Audio

Compact and designed for multimedia environments.

- Clear video resolution up to 2048 x 1536.
 - Features built-in speaker and microphone jacks.
 - Keyboard and mouse emulation to prevent lockups.
- Easy to set up with no drivers or software to load.
 - ♦♦ **WARRANTY** — 1 Year



Solutions as low as \$79.95

ServSwitch DT Pro II

Simple, efficient, and reliable.

- Supports 2048 x 1536 maximum resolution and crystal-clear audio.
 - Supports three switching layers: KVM, audio, and USB peripherals. Switch layers together or independently.
 - Integral LEDs on push buttons show port activity.
 - Enables USB 2.0 peripheral switching.
 - Works with Windows 98/Me/XP, Windows 2000, Windows NT®, Linux®, NetWare®, and Mac® OS operating systems.
- ♦♦ **WARRANTY** — 1 Year



Top: KV7021A, front view;
bottom: KV7021A, rear view

Starting at \$179.95

Buyer’s Guide | Desktop KVM

				CPU Platform							
		No. of Users	No. of CPUs	Console/User		User Console		Video	Keyboard/Mouse		Video
				PS/2®	USB	Single	Dual	Quad	PS/2	USB	VGA DVI
2-Port	1	2	•	—	•	—	—	•	—	•	—
	1	2	—	•	•	—	—	•	•	•	—
	1	2	•	—	•	—	—	•	—	—	•
	1	4	•	—	—	•	—	•	—	•	—
4-Port	1	4	—	•	•	—	—	•	•	•	—
	1	4	•	—	•	—	—	•	—	—	•
	1	4	—	•	•	—	—	•	—	—	•

ServSwitch DT Series DVI

ServSwitch space-saving convenience *plus* DVI quality!



Top: KV9502A (2-port): front view;
middle: KV9504A (4-port): front view;
bottom: KV9504A: rear view

- Control two or four PS/2 computers with just one PS/2 keyboard, PS/2 mouse, and DVI monitor.
 - Supports all standard VESA resolutions from 640 x 480 to 1600 x 1200.
 - Brings DVI sharpness and clarity to your KVM switching applications.
 - Operating system independent, making it transparent to all applications and hardware.
 - Saves the keyboard states for each channel as you switch between CPUs—a real time-saver when you're managing several CPUs at once.
 - Supports Microsoft® IntelliMouse®.
 - Provides keyboard and mouse emulation for preventing lockups.
 - ♦♦ **WARRANTY** — 1 Year
- Starting at \$189.95

ServSwitch DT Series DVI with USB and Audio

Keep it clear by switching PCs with single-link DVI-I video.



KV9604A

- Control four computers with just one USB keyboard, USB mouse, and DVI monitor, plus audio.
 - Supports resolutions up to 1600 x 1200.
 - Supports USB 2.0 peripherals with built-in hub.
 - Saves the keyboard states for each channel as you switch between CPUs—saving you time when you're managing several CPUs at once.
 - Audio can be switched independently or together with KVM.
 - Supports Microsoft IntelliMouse.
 - For hotkey switching, use KV9614A.
 - ♦♦ **WARRANTY** — 1 Year
- Solutions as low as \$219.95

Switching Method		List Price	Product Code	Product Name
Hotkey Command	Autoscan			
•	•	\$79.95	KV7004A	ServSwitch™ DT Basic with Audio
•	•	\$179.95	KV7020A	ServSwitch DT Pro II
•	•	\$189.95	KV9502A	ServSwitch DT Series DVI
•	•	\$109.95	KV7005A	ServSwitch DT Basic with Audio
•	•	\$219.95	KV7021A	ServSwitch DT Pro II
•	•	\$249.95	KV9504A	ServSwitch DT Series DVI
•	•	\$219.95	KV9604A	ServSwitch DT Series DVI with USB and Audio

KVM Buyer’s Guide

Desktop KVM

- 1 All desktop solutions support one user.
- 2 Select number of CPUs to manage: 2-port or 4-port.
- 3 Select user interface: PS/2® or USB.
- 4 Select CPU keyboard, mouse, and video platforms. Some models also support audio.

Buyer’s Guide | Desktop KVM

		1	2	3		4					
		No. of Users	No. of CPUs	Console/User PS/2®	USB	CPU Platform Keyboard/Mouse PS/2 USB		Video VGA DVI		Audio	
MICRO	1	2	•	—	•	—	•	—	—		
	1	2	•	—	—	•	•	—	—		
	1	2	•	—	Leg A*	Leg B*	•	—	—		
	1	2	—	•	—	•	•	—	—		
	1	2	•	—	•	—	•	—	•		
	1	2	•	—	—	•	•	—	•		
	1	2	•	—	Leg A*	Leg B*	•	—	•		
	1	2	—	•	—	•	•	—	•		
DT	1	2	•	•	•	•	•	—	•		
	1	4	•	•	•	•	•	—	•		
	1	4	—	•	—	•	—	•	•		
	1	4	—	•	—	•	—	•	•		
	1	2	•	—	•	—	—	•	—		
	1	4	•	—	•	—	—	•	—		
SERVSWITCH WIZARD	1	2	•	—	•	•	•	—	—		
	1	4	•	—	•	•	•	—	—		
	1	2	—	•	—	•	•	—	—		
	1	4	—	•	—	•	•	—	—		
	1	2	•	•	—	•	•	—	—		
	1	4	•	•	—	•	•	—	—		

- 5 If multi-head video card support is required, select user console video.

Buyer’s Guide | Desktop KVM

1		2		3		4				5			
No. of Users		No. of CPUs	Console/ User		CPU Platform				User Console Video				
			PS/2	USB	Keyboard/Mouse		Video						
					PS/2	USB	VGA	DVI	Single	Dual	Quad		
DT	1	2	—	•	—	•	—	•	—	•	—		
	1	4	—	•	—	•	—	•	—	•	—		
WIZARD	1	2	•	—	•	—	—	•	•	—	—		
	1	4	•	—	•	—	—	•	•	—	—		
	1	2	•	—	•	—	—	•	—	•	—		
	1	4	•	—	•	—	—	•	—	•	—		
	1	2	•	—	•	—	—	•	—	—	•		
	1	4	•	—	•	—	—	•	—	—	•		
	1	4	—	•	—	•	—	•	•	—	—		
	1	8	—	•	—	•	—	•	•	—	—		
MULTIHEAD	1	2	•	•	•	•	•	—	—	•	—		
	1	2	•	•	•	•	•	—	—	—	•		
	1	4	•	•	•	•	•	—	—	•	—		
	1	4	•	•	•	•	•	—	—	—	•		

Switching Method			List Price	Product Code	Product Name
Front Panel	Hotkey Command	Autoscan			
—	•	•	\$39.95	KV401A	ServSwitch Micro™
—	•	•	\$39.95	KV402A	
—	•	•	\$39.95	KV403A	
—	•	•	\$49.95	KV407A	
—	•	•	\$49.95	KV404A	ServSwitch Micro with Audio
—	•	•	\$49.95	KV405A	
—	•	•	\$49.95	KV406A	
—	•	•	\$59.95	KV408A	
•	•	•	\$179.95	KV7020A	ServSwitch DT Pro II
•	•	•	\$219.95	KV7021A	
•	•	•	\$75.95	KV7022A	ServSwitch DT Basic II
•	•	•	\$95.95	KV7024A	
•	—	•	\$219.95	KV9604A	ServSwitch DT DVI
•	•	•	\$259.95	KV9614A	
•	•	•	\$189.95	KV9502A	ServSwitch DT Series DVI
•	•	•	\$249.95	KV9504A	
•	•	•	\$299.95	SW651A	ServSwitch Wizard™
•	•	•	\$349.95	SW652A	
•	—	•	\$399.95	KV812A	ServSwitch USB
•	—	•	\$449.95	KV814A	
•	•	•	\$429.95	KV822A	ServSwitch USB Plus
•	•	•	\$499.95	KV824A	

* One cable (Leg A) connects to a PS/2 CPU, and the other cable (Leg B) connects to a USB CPU.

Switching Method		List Price	Product Code	Product Name
Hotkey Command	Autoscan			
•	•	\$249.95	KV9622A	ServSwitch DT Dual-Head DVI USB
•	•	\$375.95	KV9624A	
•	•	\$949.95	KV1002A-R2	ServSwitch Wizard DVI
•	•	\$1049.95	KV1004A-R2	
•	•	\$1799.95	KV1022A-R2	
•	•	\$1899.95	KV1024A-R2	
•	•	\$2799.95	KV1042A-R2	
•	•	\$3399.95	KV1044A-R2	
•	•	\$489.95	KV2004A	ServSwitch Wizard DVI Dual Link (USB)
•	•	\$1299.95	KV2008A	
•	•	\$549.95	SW614A	Multihead ServSwitch
•	•	\$849.95	SW616A	
•	•	\$749.95	SW617A	
•	•	\$1049.95	SW619A	

ServSwitch EC

Control up to 16 PS/2 *and/or* USB servers right from your desktop.



KV9008A: top: front; bottom: rear

- Choose from three versions.
 - Manage up to 16 PS/2® servers and consoles from a single PS/2 KVM console.
 - Manage up to 16 PS/2 and USB servers from a single PS/2 KVM console.
 - Manage up to 16 PS/2 and USB servers from a PS/2 or USB console.
- Supports resolutions up to 1920 x 1440.
- Cascade up to 136 servers.
- Save rack space— only 1U high.
- Supports Microsoft® IntelliMouse® Pro.
- Operating system independent and transparent to all applications.
- Switch manually or use autoscans, which selects servers sequentially.
- Assign unique names to servers.
- Save and store keyboard settings while switching.
- On screen display.
- Hot-pluggable keyboard/mouse ports.
- Password protected.
- Plug-and-play configuration.
- DDC2B compatible.
- ♦♦ **WARRANTY** — 1 Year

For your CPU connections, order...

ServSwitch EC Server Cable			
PS/2	6-ft.	(1.8-m)	EHN70001-0006
	10-ft.	(3.0-m)	EHN70001-0010
	15-ft.	(4.5-m)	EHN9000P-0015
	30-ft.	(9.1-m)	EHN9000P-0030
USB	6-ft.	(1.8-m)	EHN9000U-0006
	10-ft.	(3.0-m)	EHN9000U-0010
	15-ft.	(4.5-m)	EHN9000U-0015

Starting at \$202.95

Black Box Explains

The Types of KVM Connections.

Native: Standard cables that connect a keyboard, monitor, and mouse to a CPU, usually a VGA, 6-pin DIN, or a DVI/USB cable. Connect by unplugging the keyboard, mouse, and monitor from the CPU and reconnect them to the KVM switch. Plug additionally purchased cables from switch into the CPUs.

Integrated all-in-one cable: A high-density connector (e.g. DB25, DB15) is present on the KVM switch. The all-in-one cable breaks out into multi-pronged keyboard, monitor, and mouse connections. All ports are connected with this specialty cable.

Server Access Module (SAM): Use CAT5 or CATx cable between the KVM switch and the server location, and use a SAM for connections. A SAM is a modular adaptor with video, keyboard, and mouse connectors for VGA, PS/2, DVI, or USB that plugs into CPUs or servers. These are ideal in high-density applications such as a server room, or other places where space is at a premium.

ServSelect III

Simple switching: Multiplatform access and control for up to eight servers over CAT5 cable.



KV21008A-R2: top: front; bottom: rear

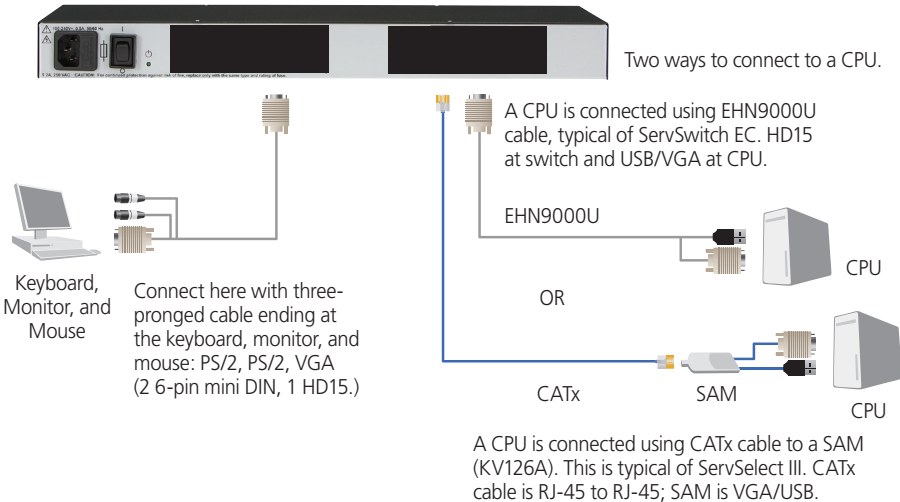
- Optimal 1600 x 1280 resolution with a 10-ft. (3-m) cable.
- Daisychain multiple units to control up to 128 servers!
- Maximum distance between computer and switch is 98.4 feet (30 m).
- Switch between, troubleshoot, and reboot all connected servers and other ServSwitch units from your control station.
- Two operation modes: Scan and Broadcast.
- Scan mode displays the status of up to 16 servers on-screen.
- Broadcast mode ensures selected servers receive the same input.
- Mouse- or keyboard-controlled On Screen Display.
- Perfect for small legal and medical offices.
- Built-in password protection and keep-alive functionality.
- You will need ServSelect Server Access Modules. For USB, order KV126A; for PS/2, order KV125A; for VT100, order KV123A.
- CE Approval — Yes
- ♦♦ **WARRANTY** — 1 Year

NOTE: 13W3 Sun® video connections require an ACD002-R2 adapter.

NOTE: The VT100 Style Server Access Module (KV123A) requires a power supply (PS123A).

Only \$869.95

KVM Switch (representative of ServSelect III or ServSwitch EC)



Buyer’s Guide | Server Room/Enterprise KVM

	No. of Users	No. of IP Users	No. of Servers	Console			Server Interfaces Supported			
				PS/2®	USB	Sun® 8-Pin	PS/2	USB	Sun 8-Pin	Serial
SINGLE-USER	1	—	16	•	—	—	•	•	•	—
	1	—	8	—	•	—	•	•	•	—
	1	—	4	•	—	—	•	—	—	—
	1	—	8	•	—	—	•	—	—	—
	1	—	16	•	—	—	•	—	—	—
	1	—	4	•	—	—	•	•	—	—
	1	—	8	•	—	—	•	•	—	—
	1	—	16	•	—	—	•	•	—	—
	1	—	4	•	•	—	•	•	—	—
	1	—	8	•	•	—	•	•	—	—
	1	—	16	•	•	—	•	•	—	—
	1	1	4	•	—	—	•	•	—	•
	1	1	8	•	—	—	•	•	—	•
	1	1	16	•	—	—	•	•	—	•
	1	1	4	—	•	—	•	•	—	•
	1	1	8	—	•	—	•	•	—	•
	1	1	16	—	•	—	•	•	—	•
	1	—	2	•	•	—	•	•	—	—
	1	—	4	•	•	—	•	•	—	—
	1	—	4	•	•	—	•	•	—	—
	1	—	8	•	•	—	•	•	—	—
	1	—	8	•	•	—	•	•	—	—
	1	—	12	•	•	—	•	•	—	—
	1	—	16	•	•	—	•	•	—	—
	1	—	8	•	—	—	•	•	—	—
	1	—	16	•	—	—	•	•	—	—
	1	—	8	•	•	—	•	•	•	•

Buyer’s Guide | Server Room/Enterprise KVM

	No. of Users	No. of IP Users	No. of Servers	Console			Server Interfaces Supported				CATx Cable & SAM
				PS/2	USB	Sun	PS/2	USB	Sun	Serial	
MULTI-USER	4	—	16	•	•	—	•	•	•	—	•
	4	—	24	•	•	—	•	•	•	—	•
	4	1	16	•	•	—	•	•	•	—	•
	4	1	24	•	•	—	•	•	•	—	•
	1	1	16	•	—	—	•	•	—	—	•
	3	2	16	—	•	—	•	•	—	—	•
	3	2	32	—	•	—	•	•	—	—	•
	2	—	8	•	•	—	•	•	•	•	•
	2	—	16	•	•	—	•	•	•	•	•
	2	—	16	•	•	—	•	•	•	•	•
	2	2	16	•	•	—	•	•	•	•	•
	4	4	16	•	•	—	•	•	•	•	•
	2	—	4	•	—	—	•	•	•	—	—
	2	—	8	•	—	—	•	•	•	—	—
	2	—	12	•	—	—	•	•	•	—	—
	2	—	16	•	—	—	•	•	•	—	—
	2	—	8	—	•	—	•	•	•	—	—
	2	—	16	—	•	—	•	•	•	—	—
	4	—	16	•	—	—	•	•	•	—	—
	2	—	4	•	•	—	•	•	—	—	—
	2	—	8	•	•	—	•	•	—	—	—
	2	—	16	•	•	—	•	•	—	—	—
	4	—	4	•	•	—	•	•	—	—	—
	4	—	8	•	•	—	•	•	—	—	—
	4	—	16	•	•	—	•	•	—	—	—

CATx Cable & SAM	On-Screen	SYSLOG	List Price	Product Code	Product Name
—	•	—	\$1199.95	KV6016FA-R2	ServSwitch™ Uno™
—	•	—	\$965.95	KV6508SA	ServSwitch Uno USB
—	•	—	\$202.95	KV9004A	ServSwitch EC for PS/2 Servers and Consoles
—	•	—	\$356.95	KV9008A	
—	•	—	\$599.95	KV9016A	
—	•	—	\$254.95	KV9104A	
—	•	—	\$407.95	KV9108A	ServSwitch EC for PS/2 and USB Servers and PS/2 Consoles
—	•	—	\$664.95	KV9116A	
—	•	—	\$305.95	KV9204A	
—	•	—	\$459.95	KV9208A	ServSwitch EC for PS/2 and USB Servers and PS/2 or USB Consoles
—	•	—	\$674.95	KV9216A	
—	•	•	\$999.95	KV9304A-R2	
—	•	•	\$1099.95	KV9308A-R2	ServSwitch EC with Built-In IP for PS/2 and USB Servers and PS/2 Consoles
—	•	•	\$1299.95	KV9316A-R2	
—	•	•	\$1099.95	KV9404A	
—	•	•	\$1199.95	KV9408A	ServSwitch EC with Built-In IP for USB and USB Consoles
—	•	•	\$1399.95	KV9416A	
—	•	—	\$403.95	SW721A-R5	ServSwitch
—	•	—	\$504.95	KV3104MA-R5	
—	•	—	\$504.95	SW722A-R5	
—	•	—	\$679.95	KV3108SA-R5	
—	•	—	\$709.95	SW723A-R5	
—	•	—	\$949.95	SW724A-R5	
—	•	—	\$1299.95	SW725A-R5	
•	•	—	\$395.95	KV1108A	ServSwitch Panther™
•	•	—	\$595.95	KV1116A	
•	•	—	\$869.95	KV21008A-R2	

	On-Screen	IP Connect Method			List Price	Product Code	Product Name
		VNC	Browser	Unit Software			
	•	—	—	—	\$1499.95	KV0416A-R2	ServSwitch CX™
	•	—	—	—	\$1799.95	KV0424A-R2	
	•	•	•	—	\$2239.95	KV1416A-R2	ServSwitch CX with IP
	•	•	•	—	\$2549.95	KV1424A-R2	
	•	—	•	—	\$1499.95	KVIP1016A	ServReach™ KVMultiport
	•	—	•	—	\$2595.95	KVIP2016A	
	•	—	•	—	\$3495.95	KVIP2032A	
	•	—	—	—	\$969.95	KV22008A	ServSelect™ III
	•	—	—	—	\$1121.95	KV22016A-R2	
	•	—	—	—	\$443.95	KV0216A	ServSelect III VM
	•	—	•	•	\$4789.95	KV2116A	ServSelect IP VM
	•	—	•	•	\$6629.95	KV4116A	
	•	—	—	—	\$863.95	KV6104SA-R2	ServSwitch Duo™
	•	—	—	—	\$1219.95	KV6108SA-R2	
	•	—	—	—	\$1839.95	KV6112FA-R2	
	•	—	—	—	\$2239.95	KV6116FA-R2	
	•	—	—	—	\$1014.95	KV6608SA	
	•	—	—	—	\$1529.95	KV6616FA	ServSwitch Duo USB
	•	—	—	—	\$2349.95	KV6416FA-R2	ServSwitch Quadro™
	•	—	—	—	\$949.95	SW741A-R3	Matrix ServSwitch
	•	—	—	—	\$1139.95	SW742A-R3	
	•	—	—	—	\$2279.95	SW743A-R3	
	•	—	—	—	\$1829.95	SW764A-R3	
	•	—	—	—	\$2299.95	SW765A-R3	
	•	—	—	—	\$3229.95	SW766A-R3	

Server Room/Enterprise—Multiuser

ServSwitch Multiuser KVM Switch

Two users can control up to 16 or 32 servers simultaneously for easy server management.



KVM2016A: top: front view;
bottom: rear view

- Enables two local users to have access to and control of up to 16 or up to 32 servers.
- Compatible with PS/2®, USB, or multiplatform servers.
- Space-saving unit is 1U and rackmountable, and directly connects the switch to each computer in the server room over CAT5 cable.
- Two local users can easily and simultaneously troubleshoot, manage, configure, and reboot servers.
- Place servers up to 100 feet (30 m) from the switch.
- You will need to order Server Access Modules. For USB, order KV1121A; for PS/2, order KV1120A.
- Cost-effective and scalable.
- ♦♦ **WARRANTY** — 3 Years

Starting at \$989.95

ServSwitch CX

Multiuser KVM switch over CATx cable is a money- and space-saver.



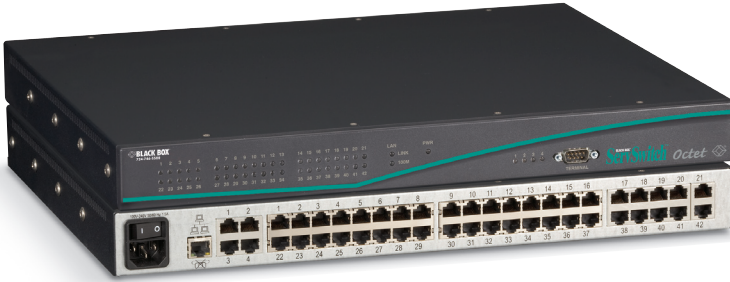
KV0416A-R2: top: front view; bottom: rear view

- Multi-user KVM switch for connecting to, switching between, and accessing 16 or 24 computer CPUs or servers.
- Enables you to set up KVM user stations as far as 982.4 feet (300 m) away from CPUs over CAT5, CAT5e, or CAT6 cable.
- Supports resolutions up to 1920 x 1440.
- Cascade switches to control up to 128 servers.
- Features a four-user architecture.
- Use the power control port to reset one or more host system power switches.
- Supports PS/2® or USB keyboards and mice either at a local workstation or the remote consoles (PS/2 and USB SAMs and remote units available).
- Order SAMs and remote units with audio to hear prompts and for use in multimedia workstations.
- Includes rackmounting hardware.
- ♦♦ **WARRANTY** — 2 Years

Starting at \$1499.95

ServSwitch Octet

Cutting-edge server management with support for USB, serial RS-232, and audio.



KV1700A: top: front view;
bottom: rear view

- Supports connections up to 984.2 feet (300 m) over solid CAT5, CAT5e, or CAT6 cabling.
- Maximum resolution of 1600 x 1200 at 100 feet (30.4 m); up to 1280 x 1024 at 984.2 feet (300 m) using the Enhanced Video User Station.
- Configurations are four users by 16 CPUs; four users by 42 CPUs; eight users by 32 CPUs; and 16 users by 64 CPUs.
- Outstanding for remote system control.
- Easy to configure locally.
- Security allows access for authorized users only.
- Ideal for mission-critical environments.
- Remote access with real-time performance.
- Non-blocking access to servers.
- ♦♦ **WARRANTY** — 2 Years

State-of-the-art system control.

The ServSwitch Octet™ offers server management at its best with all the control and security features you need!

The included Octoware control software enables you to monitor complete system setup via IP access, scan connected devices, edit user profiles, and flash upgrade system components.

Octoware also monitors and stores the entire system's switching activities and logins, providing you with a great deal of security.

Security and monitoring.

LDAP integration enables seamless integration into standard network security setups. If the network link fails, the ServSwitch Octet is still protected by its own proprietary security settings.

You can configure the ServSwitch Octet to create SNMP traps to flag certain events. And you can control the ServSwitch Octet via SNMP.

Solutions starting at \$2549.95

KVM Solution Profile

Listen up

A leading radio broadcaster needed to find a way for their disk jockeys to be able to access their individual show schedules and playlists. Each user required individual access to particular servers, but as he or she could be in a different studio each day, setting up this access was proving challenging.

The solution was the ServSwitch Octet, which was installed using the broadcaster's existing CAT5 cabling infrastructure. Users could enter any studio and log onto the Octet system using their unique usernames and passwords. Once logged in, they could see only the servers they were authorized to use. The Octet system,



besides providing security through the existing LDAP infrastructure, reports to the SNMP management platform with all changes and updates. It also provided the SNMP manager with the option of remotely connecting users to the servers, increasing security even more.

Server Room/Enterprise KVM — Multiuser

- 1 Determine the number of servers you need to manage.
- 2 Select console (user) port interface: PS/2®, USB, or SUN® 8-pin.
- 3 Select server (CPU) port interface.
- 4 Decide if you need remote access or BIOS-level, out-of-band control.

Buyer’s Guide | Server Room/Enterprise KVM

			1	2			3						
		No. of Users	No. of Servers	Console			Server Interfaces Supported				CATx Cable & SAM	On- Screen	
		No. of IP Users		PS/2®	USB	Sun®	PS/2	USB	Sun 8-pin	Serial			
Multi-User	—	4	16	•	•	—	•	•	•	—	•	•	
	—	4	24	•	•	—	•	•	•	—	•	•	
	1	4	16	•	•	—	•	•	•	—	•	•	
	1	4	24	•	•	—	•	•	•	—	•	•	
	—	2	8	•	•	—	•	•	•	•	•	•	
	—	2	16	•	•	—	•	•	•	•	•	•	
	—	2	16	•	•	—	•	•	•	•	•	•	
	2	2	16	•	•	—	•	•	•	•	•	•	
	4	4	16	•	•	—	•	•	•	•	•	•	
	—	2	4	•	—	—	•	•	•	—	—	•	
	—	2	8	•	—	—	•	•	•	—	—	•	
	—	2	12	•	—	—	•	•	•	—	—	•	
	—	2	16	•	—	—	•	•	•	—	—	•	
	—	2	8	—	•	—	•	•	•	—	—	•	
	—	2	16	—	•	—	•	•	•	—	—	•	
	—	4	16	•	—	—	•	•	•	—	—	•	
	—	2	4	•	•	—	•	•	—	—	—	•	
	—	2	8	•	•	—	•	•	—	—	—	•	
	—	2	16	•	•	—	•	•	—	—	—	•	
	—	4	4	•	•	—	•	•	—	—	—	•	
	—	4	8	•	•	—	•	•	—	—	—	•	
	—	4	16	•	•	—	•	•	—	—	—	•	
	—	2	4	•	•	•	•	•	•	•	—	•	
	—	2	8	•	•	•	•	•	•	•	—	•	
	—	2	16	•	•	•	•	•	•	•	—	•	
	—	4	4	•	•	•	•	•	•	•	—	•	
	—	4	8	•	•	•	•	•	•	•	—	•	
	—	4	16	•	•	•	•	•	•	•	—	•	
	—	4	42	•	•	—	•	•	•	•	•	•	
	—	8	32	•	•	—	•	•	•	•	•	•	
	—	16	64	•	•	—	•	•	•	•	•	•	
	—	4	16	•	•	—	•	•	•	•	—	•	
	1	1	1	•	—	—	•	•	—	—	—	—	
	1	1	1	—	—	—	•	•	—	—	—	—	
	1	1	16	•	—	—	•	•	—	—	•	•	
	2	3	16	—	•	—	•	•	—	—	•	•	
	2	3	16	—	•	—	•	•	—	—	•	•	
	—	—	—	•	•	—	—	—	—	—	—	—	
	—	—	—	•	•	—	—	—	—	—	—	—	
	—	—	—	•	•	—	—	—	—	—	—	—	
	All	n	x	n	•	•	—	•	•	—	—	•	
	All	n	x	n	—	•	—	—	•	—	—	•	
	All	n	x	n	—	•	—	—	•	—	—	•	

4 IP Connect Method			List Price	Product Code	Product Name
VNC	Browser	Unit Software			
•	•	—	\$1499.95	KV0416A-R2	ServSwitch CX™
•	•	—	\$1799.95	KV0424A-R2	
•	•	—	\$2239.95	KV1416A-R2	
•	•	—	\$2549.95	KV1424A-R2	
—	—	—	\$969.95	KV22008A	ServSwitch™ III
—	—	—	\$1121.95	KV22016A-R2	
—	—	—	\$1529.95	KV0216A	ServSwitch III VM
—	•	•	\$4789.95	KV2116A	ServSwitch IP VM
—	•	•	\$6629.95	KV4116A	
—	—	—	\$863.95	KV6104SA-R2	ServSwitch Duo™
—	—	—	\$1219.95	KV6108SA-R2	
—	—	—	\$1839.95	KV6112FA-R2	
—	—	—	\$2239.95	KV6116FA-R2	
—	—	—	\$1014.95	KV6608SA	ServSwitch Duo USB
—	—	—	\$1529.95	KV6616FA	
—	—	—	\$2349.95	KV6416FA-R2	ServSwitch Quadro™
—	—	—	\$949.95	SW741A-R3	Matrix ServSwitch
—	—	—	\$1139.95	SW742A-R3	
—	—	—	\$2279.95	SW743A-R3	
—	—	—	\$1829.95	SW764A-R3	
—	—	—	\$2299.95	SW765A-R3	
—	—	—	\$3229.95	SW766A-R3	
—	—	—	\$1329.95	SW761A-R4	ServSwitch CX™ Multi-platform Matrix ServSwitch
—	—	—	\$1739.95	SW762A-R4	
—	—	—	\$2959.95	SW763A-R4	
—	—	—	\$2549.95	SW767A-R4	
—	—	—	\$3059.95	SW768A-R4	
—	—	—	\$4079.95	SW769A-R4	
—	—	—	\$3569.95	KV1700A	ServSwitch Octet™
—	—	—	\$6119.95	KV1701A	
—	—	—	\$11729.95	KV1702A	
—	—	—	\$2549.95	KV1703A	
—	•	—	\$699.95	KVIP1000A	ServReach KVMoIP System
—	•	—	\$499.95	KVIP1001A	
—	•	—	\$1499.95	KVIP1016A	
—	•	—	\$2599.95	KVIP2016A	
—	•	—	\$3499.95	KVIP2032A	
—	•	—	\$5899.95	KVMGR-32	ServReach KVMManager
—	•	—	\$9499.95	KVMGR-64	
—	•	—	\$15899.95	KVMGR-512	
—	—	—	\$1639.95	DTX5000	ServSwitch DTX
—	—	—	\$2499.95	DTX5002	
—	—	—	\$2095.95	DTX5001	

ServSwitch EC with Built-In IP

Economical server control across TCP/IP networks.



KV9308A-R2: top: front view;
bottom: rear view

- Securely access and control up to 16 remote servers across any TCP/IP network.
- Resolutions up to 1600 x 1200 (local unit). Use with PS/2 or USB consoles.
- Cascade up to 136 servers.
- Support for 16-bit color and real-time remote readings of temperature and voltage levels.
- Incredible protection includes SSL encryption, SSH tunneling, and RADIUS authentication.
- Set up password-protected accounts.
- SNMP manageable.
- Can be used with any Java™ enabled Web browser or VNC client.
- Manage up to an additional 16 serial devices by using the serial modules.
- Also available for PS/2® and USB servers and USB consoles; for details, call our FREE Tech Support.
- ♦♦ **WARRANTY** — 1 Year

Starting at \$999.95

ServReach KVMultiport KVMoIP

Cutting-edge combination of innovative CAT5 technology plus OSD management for up to 16 or 32 servers over IP.



KVIP2016A: top: front view;
bottom: rear view

- Enables one local and two remote users to have access to and control of up to 16 or up to 32 servers.
- Ideal for small-to-medium business IT environments.
- Remotely troubleshoot, manage, configure, and reboot servers from almost any location.
- BIOS-level control of USB or PS/2 servers over IP.
- Space-saving unit is 1U, rackmountable.
- Can be managed with the KVMManager (KVMGR-32, etc.) or work as a standalone KVM-over-IP switch.
- Access your target servers through the Internet, a LAN, a modem, or a local KVM station.
- Place servers up to 100 feet (30 m) from the switch.
- Standard 128-bit SSL security.
- No software to install—you only need a browser running Internet Explorer 6.0 or higher.
- Cut costs associated with downtime and service calls.
- Cost-effective and scalable.
- You will need server access modules. For USB, order KV1120A; for PS/2, order KV1121A.
- ♦♦ **WARRANTY** — 3 Years

Starting at \$2595.95

ServReach KVMCube KVMoIP ServReach KVMGate KVMoIP

Cost effective options for businesses that require remote server access.



KVIP1001A: top: left-side view;
bottom: right-side view



KVIP1000A: top: rear view;
bottom: front view

ServReach™ KVMCube KVMoIP (1 x 1)

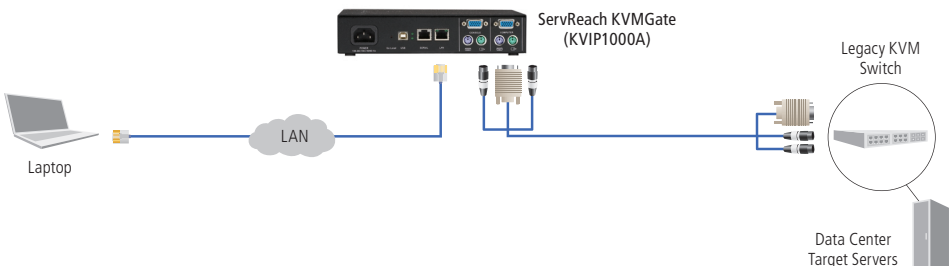
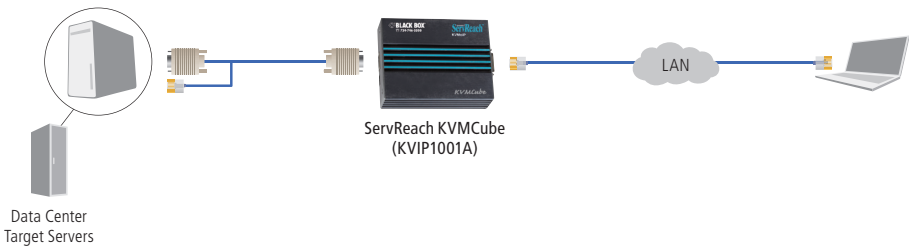
- BIOS-level server connections over IP.
- Gives you complete control of mission-critical servers no matter their location.
- Single RJ-45 port on a palm-sized device.
- Use included external power supply or PoE.
- Superior video performance.
- Cost-effective and scalable.
- Standard 128-bit SSL security.
- Works with USB and includes (1) 2-ft. USB cable. For PS/2, order a PS/2 cable.

Starting at \$499.95

ServReach KVMGate KVMoIP (1 x 1)

- Adds IP capability to most manufacturer's KVM switches.
- 128-bit SSL encryption is standard.
- Access the unit through the Internet, a LAN, or a local KVM station.
- Get BIOS-level control of PS/2 servers over IP.
- Cut costs associated with downtime, equipment, and service calls.
- ♦♦ **WARRANTY** — Both: 2 Years

Starting at \$699.95



Server Room/Single User/IP

ServSwitch Wizard IP
ServSwitch Wizard IP Plus

Add IP connectivity to your existing KVM switch or single computer.

- Access an attached ServSwitch™ and all servers connected to it via an IP network or dialup connection.
- Plus model includes USB, DVI-I, and audio connectors for streaming data and sound.
- Compatible with VNC and Java™ (Web browser) viewers.
- Robust, enterprise-grade security with AES 128 encryption and RSA 2048 authentication.
- No software needed, so you save money!
- Remotely reboot the entire system after a power crash.
- Link to just about any other ServSwitch or connect it directly to a Sun®, Mac®, or PC server.
- True DDC support for use with computer video cards.
- Easy on-screen display enables fast set up.
- ♦♦ **WARRANTY** — 2 Years

The ServSwitch Wizard™ IP from Black Box® enables you to remotely access an attached ServSwitch and all servers connected to it from anywhere in the world via an IP network or a dialup connection. No special software is needed.

Full server control.

The ServSwitch Wizard IP only requires a keyboard, video monitor, and mouse (KVM) connection to your servers and doesn’t need special software to be loaded on the controlled servers. Unlike software-only remote access solutions, the ServSwitch Wizard IP provides full control—even during computer startup.

The ServSwitch Wizard IP has a power control port that enables a remote user to reset one or more power switches in the host system. You can reboot the host remotely no matter how much it has locked up!

Plus audio, video, and USB connections.

With the Plus version, you get all the features of the Wizard IP but with a faster (533-MHz) processor and better video performance, making it ideal for high-end server rooms. Additionally, the Virtual Media feature enables you to remotely make files available to any host computer linked to the Wizard IP Plus.

The Plus has USB, DVI-I, and audio connectors for streaming data and sound to a remote virtual network collaborator (VNC). The console connectors include PS/2 and USB ports for a keyboard and mouse, an audio jack for plugging in speakers, and a DVI-I port that autosenses between digital and analog video connections. The DVI-I port converts an analog input signal into a DVI signal to give you much clearer video displays. There’s also an audio jack for “audio-over-IP” applications so you can feed audio signals from a host site to remote VNC viewers.

Buyer’s Guide | Remote KVM IP Access Gateways

No. of Users	No. of IP Users	No. of Servers per Switch	No. of Servers Max.	User Console		Servers Supported		Audio	Serial
				PS/2®	USB	PS/2	USB		
1	1	1	—	•	•	•	•	—	•
1	1	1	—	—	—	•	•	—	•
1	1	16	16	•	—	•	•	—	•
3	2	16	16	—	•	•	•	—	•
3	2	32	32	—	•	•	•	—	•
—	—	N/A	—	•	•	•	•	—	•
—	—	N/A	—	•	•	•	•	—	•
—	—	N/A	—	•	•	•	•	—	•
1	1	1	—	•	—	•	•	—	•
1	1	1	—	—	•	•	•	•	•



Was: \$1014.95
Now:
\$949.95

ACR2004A: top: front view;
bottom: rear view

Connect the Wizard IP (above) to just about any other ServSwitch product as well as IBM compatible, Sun, or Mac servers. The updated firmware enables you to use either a PC or Mac computer to view connected servers from a remote location. The Wizard IP and IP Plus are also rackmountable.

Black Box Explains

IP Access Technology.

IP access technology leverages the existing network infrastructure and supports local and remote users. KVM over IP works in diverse hardware environments and is ideal for managing multilocation data centers and branch offices.

ServSwitch IP access solutions, such as the ServReach KVMoIP System or the ServSwitch Wizard IP, enable you to remotely access and manage servers or ServSwitches connected to servers—from anywhere in the world—via an IP network. Ultimately, KVMoIP is about convenience, cost-savings, and control—even out-of-band access to servers and network devices.

By addressing network issues from a remote location, you can save yourself the hassle of traveling to a site in the middle of the night, or simply manage issues from your desk. Use a browser-based connection, even a cell phone or PDA, to reboot or administer a roomful of servers remotely.

Cost-savings are realized through reduced downtime and less travel. Additionally, no software needs to be installed—simply launch a browser.

You have complete 24/7 control over your servers from any location. React to problems immediately and prevent server room disasters. Security need not be a concern; the ServSwitch IP access solutions are password-protected, with robust encryption and authentication features.

KVMoIP means less downtime, fewer service calls, and cost-savings for your organization. What's not to like?

VM Support		IP Connect Method		List Price	Product Code	Product Name
Yes	No	Virtual Network Computing	Browser			
—	•	—	•	\$499.95	KVIP1001A	ServReach™ KVMoIP System
•	—	—	•	\$699.95	KVIP1000A	KVMGate KVMoIP
—	•	—	•	\$499.95	KVIP1016A	KVMCube KVMoIP
—	•	•	•	\$2595.95	KVIP2016A	KVMMultiport KVMoIP (1 x 16)
—	•	•	•	\$3495.95	KVIP2032A	KVMMultiport KVMoIP (2 x 16)
						KVMMultiport KVMoIP (2 x 32)
—	•	—	•	\$5899.95	KVMGR-32	ServReach KVMManager Appliance for 32 KVM Devices
—	•	—	•	\$9499.95	KVMGR-64	64 KVM Devices
—	•	—	•	\$15,899.95	KVMGR-512	512 KVM Devices
—	•	•	•	\$949.95	ACR2004A	ServSwitch Wizard IP
•	—	•	•	\$1299.95	ACR2005A	ServSwitch Wizard IP Plus

KVM Extension over Copper/0-150 FT

ServSwitch KVM Short-Range Extenders

Great for use in classrooms or conference rooms.

- Enjoy high-quality video with these low-cost, short distance extenders.
- Place a keyboard, monitor, and mouse up to 75 feet (22.8 m) from a computer or KVM switch.
- Available for PS/2® or USB extension.
- Enable you to place a CPU in a remote environment that is more secure or cleaner than where you work.
- Connect the computer unit and console (station) unit via inexpensive CAT5 UTP cable.
- Ideal for use in classrooms where security of the CPU is required.
- ♦♦ **WARRANTY** — 1 Year



ACU075A-USB

Starting at \$199.95

ServSwitch Brand CATx KVM Micro Extender Kits

A compact, low-cost way to extend KVM signals up to 150 feet.



ACU3009A



ACU3001A

- Built-in surge protection protects the CATx link side from surges and spikes.
- Put 150 feet (45.7 m) between your CPU or ServSwitch KVM switch and your keyboard, monitor, and mouse.
- Adjustable video equalization and 1280 x 1024 resolution for crisp, clear video.
- Use ordinary CATx cable, which you may already have installed.
- Transmit high-resolution video even up to the maximum distance.
- Intelligent keyboard and PS/2 emulation prevents remote CPU lockup—even if your keyboard or interconnect cable is disconnected.
- ♦♦ **WARRANTY** — 1 Year

Starting at \$403.95

Buyer's Guide | KVM Extension over Copper

	Compatibility		Access		Spkr./Mic	Serial	Video Type				
	PS/2®	USB	Single	Dual			Single	Dual	Quad	VGA	
0-75 Feet	•	—	•	—	—	—	•	—	—	•	
	—	•	•	—	—	—	•	—	—	•	
0-150 Feet	•	—	•	—	—	—	•	—	—	•	
	•	—	—	•	—	—	•	—	—	•	
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ServSwitch Brand USB Micro Extender Kits

Place your CPU in a clean, secure area, up to 150 feet away, and transmit single- and dual-video—plus serial and audio.



ACU3201A: remote and local unit; front and rear view

- Transmit VGA as well as keyboard and mouse signals up to 150 feet over CAT5, CAT5e, and CAT6 UTP cable.
- Support up to 1600 x 1200 resolution.
- Choose from models for PS/2 or USB keyboard and mouse consoles; see chart (**below**) for price details.
- Ideal in manufacturing environments.
- Dual-VGA units support two monitors.
- Dual-access versions enable you to connect two workstations for local and remote server control.
- Serial and audio models enable you to connect devices such as touch screens and hear alarms.
- Kits include a local and a remote unit.
- Flash upgradeable.
- Provide local passthrough for video signals so you can connect a local VGA monitor for administration.
- ♦♦ **WARRANTY** — 1 Year

What's included

The **Micro Extender Kits** include:

- Local unit
- Remote unit
- (1) 9-VDC 1-amp power supply transformer and output cord
- (1) power supply input cord suitable for your country or region
- (1) 3-ft. HD15 to HD video cable
- (1) 3-ft. Micro Extender cable (EHN230-0003)

The **USB Micro Extenders** include:

- (1) 5-VDC power supply
- (1) 3.3-ft. USB/Video Cable with USB connector and VGA video (HD15 M-F)

Starting at \$649.95

Distance (Max.)	List Price	Product Code	Product Name
75 ft.	\$199.95	ACU075A-PS2	ServSwitch™ KVM Short-Range Extenders
75 ft.	\$229.95	ACU075A-USB	
150 ft.	\$403.95 \$475.95 \$559.95	ACU3001A ACU3009A ACU3022A	ServSwitch Brand CATx KVM Micro Extender Kits
164 ft.	\$625.95 \$899.95 \$999.95	ACU4001A ACU4201A ACU4222A	ServSwitch Brand USB Micro Extender Kits
164 ft.	\$649.95 \$729.95 \$874.95 \$899.95	ACU3201A ACU3222A ACU3209A ACU3228A	ServSwitch Brand Micro Dual-Video) Extender Kits

KVM Extension/0-300 FT

ServSwitch DVI/VGA CATx Extender

Extend analog VGA and digital DVI video signals over already-installed CATx UTP cable.



ACS253A-CT

- Resolutions up to 1600 x 1200 and perfect image quality even at the maximum distance of 328 feet (100 m).
- Perfect for flat-panel displays and applications that demand exceptional image quality.
- Also ideal for air-traffic-control systems, passenger information systems, or co-locating a user's computer in a call center.
- Combine VGA and DVI video in your extension applications!
- Flexible architecture is ready for future changes.
- On-screen display enables easy video adjustments.
- ♦♦ **WARRANTY** — 1 Year

Solutions as low as \$1830.95

ServSwitch Wizard USB KVM Extender with Audio

Put distance between your CPU and your USB peripherals in high-density applications.



AC5050A

- Extends transmissions up to 328 feet (100 m) over CATx between USB peripheral devices and the CPU, including audio.
- Supports resolutions up to 1600 x 1280.
- Ideal for high-density applications where you want to use USB keyboards, mice, and other devices, but the server is not close by.
- Includes a local and a remote unit; the remote unit features a 4-port USB hub.
- To transmit bidirectional audio for microphone or speaker signals, attach a second CATx link.
- Supports emulated DDC for high-quality video resolution.
- ♦♦ **WARRANTY** — 1 Year

Feature-rich solution only \$899.95

ServSwitch Brand CATx Single- or Dual-Access KVM Extenders

Place your CPU even farther away than before without compromising video quality.



*ACU1009A: top: local unit, rear view;
bottom: remote unit, rear view*

- CAT5 extender kits support extensions of 1600 x 1280 video up to 200 feet (60.9 m); CATx kits support extensions of 1600 x 1200 video up to 656.1 feet (200 m) from your CPU. Go even farther at lower resolutions!
- Place your keyboard, monitor, and mouse station away from your CPU and get clear video at the remote end.
- All dual-access units have single/dual local video outputs.
- Dual-video versions suit CPUs with multihead video applications.
- Serial models are available for transmitting touch screen and other RS-232 serial port data.
- Audio versions for CATx transmit near-CD-quality digital audio from the CPU to the remote end.
- Single- and dual-access kits available.
- CATx remote units include built-in skew compensator.
- All monitor skew compensation can be fine-tuned easily via keyboard hotkey commands—even at long distances and high resolutions.
- Video settings store in nonvolatile memory.
- Keyboard/mouse emulation provides keep-alive functionality.
- Flash-upgradable remote units.
- ♦♦ **WARRANTY** — 1 Year

Extend one or two video channels over UTP cable with the ServSwitch™ Brand CATx Single- or Dual-Access KVM Extenders.

All extender kits include local and remote units, and CPU cables; dual-access units also include monitor cables. Kits that support serial and/or audio extension also come with serial and/or audio cables. Local and remote components

communicate over a single dedicated UTP cable, and keyboard, mouse, and video signals—as well as serial and audio signals on models that support them—and are fully buffered to ensure consistent remote operation of your PC.

Complete listing of KVM Extension
over Copper, pp. 26–27.



Starting at \$699.95

Buyer’s Guide | KVM Extension over Copper

	Compatibility		Access		Spkr./ Mic	Serial	Video Type					
	PS/2®	USB	Single	Dual			Single	Dual	Quad	VGA	DVI	
0-400 Feet	•	—	•	—	—	—	•	—	—	•	—	
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0-650 Feet	•	—	—	•	•	—	•	—	—	•	—	
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0-1000 Feet	•	—	•	—	—	—	•	—	—	•	—	
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Distance (Max.)	List Price	Product Code	Product Name
75 ft.	\$199.95 \$229.95	ACU075A-PS2 ACU075A-USB	KVM Short-Range Extender, PS2 KVM Short-Range Extender, USB
150 ft.	\$403.95 \$475.95 \$559.95	ACU3001A ACU3009A ACU3022A	ServSwitch Brand USB Micro Extender Kits
164 ft. 164 ft.	\$549.99 \$799.95	ACU5051A ACU552A	ServSwitch Wizard USB SRX KVM Extenders
164 ft.	\$699.95	ACU5501A	ServSwitch Wizard SRX DVI-D Plus USB Extenders
164 ft.	\$625.95 \$899.95 \$999.95	ACU4001A ACU4201A ACU4222A	ServSwitch Brand™ CATx KVM Micro Extender Kits
164 ft.	\$649.95 \$729.95 \$874.95 \$889.95	ACU3201A ACU3222A ACU3209A ACU3228A	ServSwitch Brand Micro (Dual-Video) Extender Kits
328 ft.	\$399.95 \$399.95	ACU5001A ACU5002A*	Low-Cost ServSwitch™ Wizard™ Extender Kits
300 ft.	\$383.95 \$485.95	ACU7017A ACU7025A	ServSwitch Brand Mini CATx KVM Micro Extenders with Auto Equalization
393.7 ft.	\$899.95	ACU5050A	ServSwitch Wizard USB KVM Extender with Audio
328 ft.	\$1830.95	ACS253A-CT	ServSwitch DVI/VGA CATx Extenders
400 ft.	\$1279.95 \$1299.95 \$2389.95 \$2295.95	ACS2009A-R2 ACS4001A-R2 ACS2209A-R2 ACS4201A-R2	ServSwitch DVI CATx KVM Extenders
650 ft.	\$949.95	ACU1600A	ServSwitch Wizard Multimedia KVM Extender w/Built-in Switch
650 ft.	\$529.95 \$329.95 \$385.95	ACU5010A ACU5011A ACU5013A	ServSwitch Wizard Extender Kits
1000 ft.	\$699.95 \$799.95 \$899.95	ACU1001A ACU1002A ACU1008A	ServSwitch Brand CAT5 KVM Extenders
1000 ft.	\$799.95 \$899.95	ACU1022A ACU1028A	ServSwitch Brand CAT5 KVM Extenders w/Serial Extension and Stereo Support
1000 ft.	\$799.95 \$949.95	ACU2001A ACU2009A	ServSwitch Brand Single-Video CATx Extenders
1000 ft.	\$899.95 \$1039.95	ACU2022A ACU2028A	ServSwitch Brand Single-Video CATx Extenders with Serial and Audio
1000 ft.	\$1249.95 \$1549.95	ACU2201A-R2 ACU2209A	ServSwitch Brand Dual-Video CATx Extenders
1000 ft.	\$1429.95 \$1649.95	ACU2222A-R2 ACU2228A	ServSwitch Brand Dual-Video CATx Extenders w/Serial and Audio
1000 ft.	\$629.95 \$749.95 \$749.95 \$1199.95 \$2299.95	ACU5110A ACU5114A ACU5112A ACU5122A ACU5142A	ServSwitch Wizard Extender Kits with Skew Compensation
1000 ft.	\$929.95 \$1069.95	ACU6001A ACU6022A	CATx USB KVM Extenders, Single-Video Channel
1000 ft.	\$1449.95 \$1629.95	ACU6201A ACU6222A	CATx USB KVM Extenders, Dual-Video Channel
1000 ft.	\$999.95	ACU1049A	ServSwitch CAT5 KVM Switching Extender
1000 ft.	\$1399.95	ACUR004A	ServSwitch Brand Quad-Video CATx Extenders
1000 ft.	\$1399.95	ACURA004A	ServSwitch Brand Quad-Video CATx Extenders w/Serial and Audio

* ACU5002A connects a PS/2 console with a USB computer.

KVM Extension over Fiber

ServSwitch DVI/VGA Fiber Extenders

Use fiber to extend digital DVI and analog VGA signals in electrically noisy environments.



ACS253A-MM

- Picture perfect DVI/VGA fiber extenders.
- Get perfect image quality up to 400 meters (1312.3 ft.) over multimode or up to 10 kilometers (6.2 mi.) over single-mode!
- Combine DVI and VGA video in your KVM extension applications. Ideal for VGA now plus future expansion to DVI.
- Access a server locally and remotely!
- Choose multimode or single-mode models; for pricing details see chart (below).
- Built-in video processors determine the best resolution and pixel phase.
- Download the latest firmware upgrades into flash ROM memory.
- All local and remote units feature diagnostic LEDs.
- ♦♦ **WARRANTY** — 2 Years

Multimode is now \$4299.95

Buyer's Guide | KVM Extension over Fiber

Compatibility		Video Type	Distance (Max.)	Fiber Interface	Resolution (Max.)	
PS/2®	USB					
•	—	VGA, SVGA,	400 m	Multimode SC	1280 x 1024	
•	—	XGA, SXGA	10 km	Single-mode SC		
•	—	VGA, SVGA,	1 km	Multimode	1280 x 1024	
•	—	XGA, SXGA		Multimode		
•	—	Single	400 m	Multimode	1600 x 1200	
•	—	DVI-I	10 km	Single-mode SC		
—	•	VGA to UXGA	400 m	Multimode SC	1600 x 1200	
—	•	VGA to UXGA	10 km	Single-mode SC	1600 x 1200	
•	—	Single DVI-D	400 m	Multimode LC	1600 x 1200	
•	—	Single DVI-D	10 km	Single-mode LC	1600 x 1200	
—	•	Single DVI-D	400 m	Multimode LC	1600 x 1200	
—	•	Single DVI-D	10 km	Single-mode LC	1600 x 1200	
•	—	Dual DVI-D	400 m	Multimode LC	1600 x 1200	
•	—	Dual DVI-D	10 km	Single-mode LC	1600 x 1200	
—	•	Dual DVI-D	400 m	Multimode LC	1600 x 1200	
—	•	Dual DVI-D	10 km	Single-mode LC	1600 x 1200	

ServSwitch DVI/VGA Fiber Extenders with USB

Support for today's DVI monitors and USB keyboards and mice.



ACS253A-U-MM

- Extend DVI video up to more than 400 meters (1312.3 ft.) over multimode or up to 10 kilometers (6.2 mi.) over single-mode!
- Support resolutions up to 1600 x 1200 at 60 Hz.
- Provide access to a remote server with VGA or DVI video.
- Include a 4-port USB hub for USB keyboards, mice, and peripherals.
- Remote units support up to four USB version 1.1 devices.
- Choose multimode or single-mode models; for pricing details see chart (below).
- Built-in video processors determine the best resolution and pixel phase.
- Upgradable, too! Just plug in the programming cable to transfer downloaded updates.
- All local and remote units feature diagnostic LEDs.
- ♦♦ **WARRANTY** — 2 Years

For KVM Extension over Copper, see pp. 26–27.

Multimode is now \$5699.95

Audio Support	List Price	Product Code	Product Name
•	\$4489.95	ACS250A-R2	ServSwitch™ Fiber KVM Extender II & II
•	\$4899.95	ACS251A-R2	
—	\$3299.95	ACS335A	ServSwitch Fiber Optic KVM Extenders
•	\$3499.95	ACS335A-AS	ServSwitch DVI/VGA Fiber Extenders
—	\$4299.95	ACS253A-MM	
—	\$5199.95	ACS253A-SM	ServSwitch DVI/VGA Fiber Extenders with US
—	\$4699.95	ACS253A-U-MM	
—	\$5919.95	ACS253A-U-SM	ServSwitch DVI Fiber Optic KVM Extenders
—	\$1899.00	ACS2009A-R2-MM	
—	\$2199.00	ACS2009A-R2-SM	
—	\$1899.00	ACS4001A-R2-MM	
—	\$2199.95	ACS4001A-R2-SM	
—	\$3699.00	ACS2209A-R2-MM	
—	\$4199.95	ACS2209A-R2-SM	
—	\$3779.95	ACS4201A-R2-MM	
—	\$4289.95	ACS4201A-R2-SM	

KVM Trays

ServTray Complete

Make your server room more manageable without sacrificing valuable space.



- Select a 15", 17", or 19" monitor.
- Choose 1-, 8-, or 16-port integrated KVM switching modules.
- Mounts in a standard 19" cabinet or four-post rack with depths from 19.5" to 39.5".
- Compact—only 1U high.
- Features a touchpad with an ergonomic hand rest.
- Includes a full 105-key keyboard.
- Reduces clutter in your server room.
- The pull-out tray has an attractive front panel to conceal the unit when not in use.
- Features an autosensing 100- to 240-VAC power supply.
- CE approved.
- ♦♦ **WARRANTY** — 1 Year

Starting at \$1679.95

How to order ServTray Complete

- Select the screen size for your ServTray Complete using the following base codes:
 - 15" Screen = **KVT415A**
 - 17" Screen = **KVT417A**
 - 19" Screen = **KVT419A**
- Choose your KVM switch module by adding the code (in red) that corresponds to the module you want.

1-Port Module	PS/2 or USB = 1UV
8-Port Modules	PS/2 only = 8PV
	PS/2 or USB = 8UV
16-Port Modules	PS/2 only = 16PV
	PS/2 or USB = 16UV
- Add the code that indicates the bracket extension you need to mount the ServTray Complete.

Rear Bracket Extension Kits*	
19.5"–22.375"	A
22.625"–27.75"	B
26.625"–31.625"	C
30.5"–35.625"	D
34.5"–39.5"	E

* NOTE: The measurements listed are the depths between the front rail and rear rail inside a cabinet or rack, not the outside depth of a cabinet or rack enclosure.

ServView V

Use this rackmountable, dual-rail, 1U console drawer when space is at a premium.



Left: ServView V with LCD panel open and keyboard and mouse tray drawer open. Right: ServView V with LCD panel open and keyboard and mouse tray closed.

Above: Front panel KVM switch selection buttons enable switching between servers with only the LCD panel open.

- Dual-rail console drawer features keyboard, touch pad, and LCD monitor in 1U.
- Flip-open 17" LCD panel supports resolutions up to 1280 x 1024.
- Keyboard and LCD display slide in and out independently, enabling the monitor to remain visible while keyboard is stored.
- USB port, for USB 2.0 peripherals, on front panel remains accessible with keyboard and mouse tray closed.
- Access the ServView V and server using a wireless keyboard and a BlueTooth® installed in the front-panel USB port.
- KVM switch function module connects to VGA, and either PS/2® or USB servers.
- Cascade the console with other KVM switch modules to increase server management capacity.
- Rail depth is 23.7" minimum to 45.3" maximum.
- LED lighting bar indicates power status of console and KVM modules.
- ♦♦ **WARRANTY** — 1 Year

The ServView V offers server management in a space-saving, streamlined package. The tray includes a keyboard touch pad, a 17" TFT LCD panel, and an optional KVM switching module housed in an industry-standard 19" 1U rack drawer, saving you valuable cabinet space.

The dual-rail design enables the keyboard and LCD display to slide in and out of the rack independently of each other. Store the keyboard out of the way while keeping the display open so you can easily monitor your servers. Check system status even with the cabinet door closed.

Easy in-and-out

The sturdy, slim drawer helps reduce server room clutter. Pull it out and latch it securely in place to use. Or fold your display into the drawer, slide it into the

rack, and lock it in place. The ServView V also includes a scratch-resistant surface and a slip-free handle. Installation is easy, too.

Easy to use

The drawer console features a full 105-key, low-profile keyboard. It also supports Sun and Mac® keyboard mapping.

The touch pad has simulated wheel control and is dust- and waterproof. Both the keyboard and the touch pad are replaceable.

Easy to order

Choose from 1-, 8-, or 16-port KVM switching modules. The single-port model includes all the cables you need; you will need to order cables with the 8- and 16-port models' USB or PS/2 connections.

Solutions as low as \$1649.95

Buyer’s Guide | KVM Trays

	Product Code	Compatibility			Monitor Size		
		PS/2®	USB	Sun®	15"	17"	19"
ServView KVM Drawer with LCD	KVT315A-R2	•	—	—	•	—	—
	KVT317A-R2	•	—	—	—	•	—
	KVT319A-R2	•	—	—	—	—	•
ServView KVM Drawer with LCD for Sun	KVTS317A-R2	—	—	•	—	•	—
	KVTS319A	—	—	•	—	—	•
ServView KVM Separate Drawer for Keyboard/Mouse	KVT217A-R2	•	—	—	—	•	—
	KVT219A-R2	•	—	—	—	—	•
ServTray Complete: Select the Screen Size							
15" Screen	KVT415A	—	—	—	•	—	—
17" Screen	KVT417A	—	—	—	—	•	—
19" Screen	KVT419A	—	—	—	—	—	•
Then select the KVM Switch Module							
1-Port	1UV	•	•	—	—	—	—
8-Port Module PS/2 Only	8PV	•	—	—	—	—	—
8-Port Module PS/2 or USB	8UV	•	•	—	—	—	—
16-Port Module PS/2 Only	16PV	•	—	—	—	—	—
16-Port Module PS/2 or USB	16PV	•	•	—	—	—	—
Then add the code for rear bracket extension kit							
19.5"–23.375"	A	—	—	—	—	—	—
22.625"–27.75"	B	—	—	—	—	—	—
26.625"–27.75"	C	—	—	—	—	—	—
30.5"–35.625"	D	—	—	—	—	—	—
34.5"–39.5"	E	—	—	—	—	—	—
ServView KVM Drawer with Touch Screen LCD	KVT317A-R2-T	•	•	—	—	•	—
	KVT319A-R2-T	•	•	—	—	—	•
ServView V	KVT517A-1UV	•	•	—	—	•	—
	KVT517A-8PV	•	—	—	—	•	—
	KVT517A-8UV	•	•	—	—	•	—
	KVT517A-16PV	•	—	—	—	•	—
	KVT517A-16UV	•	•	—	—	•	—
ServView V Wide Screen	KVT517A-1UV-WIDE	•	•	—	—	•	—
	KVT517A-8PV-WIDE	•	—	—	—	•	—
	KVT517A-8UV-WIDE	•	•	—	—	•	—
	KVT517A-16PV-WIDE	•	—	—	—	•	—
	KVT517A-16UV-WIDE	•	•	—	—	•	—

	Minimum Rail Depth	Maximum Rail Depth	ServSwitch Included	Hotkey Panel	List Price
	15.4"	25.6"	No	16.2 million	\$1149.95
	15.4"	25.6"	No	16.2 million	\$1195.00
	15.4"	25.6"	No	16.2 million	\$1395.95
	15.4"	25.6"	No	16.2 million	\$1395.95
	15.4"	25.6"	No	16.2 million	\$1939.95
	15.4"	25.6"	No	16.2 million	\$1295.00
	15.4"	25.6"	No	16.7 million	\$1499.95
	—	—	—	16.7 million	\$1349.95*
	—	—	—	16.7 million	\$1595.95*
	—	—	—	16.7 million	\$2199.95*
	—	—	—	16.7 million	\$Call
	—	—	—	16.7 million	\$Call
	—	—	—	16.7 million	\$Call
	—	—	—	16.7 million	\$Call
	—	—	—	16.7 million	\$Call
	19.5"	23.375"	—	16.7 million	\$Call
	22.625"	22.75"	—	16.7 million	\$Call
	26.625"	35.625"	—	16.7 million	\$Call
	30.5"	35.625"	—	16.7 million	\$Call
	34.5"	39.5"	—	16.7 million	\$Call
	15.4"	25.6"	No	16.2 million	\$1839.95
	15.4"	25.6"	No	16.2 million	\$1449.95
	23.7"	45.3"	No	16.2 million	\$1649.95
	23.7"	45.3"	Yes	16.2 million	\$1824.95
	23.7"	45.3"	Yes	16.2 million	\$1875.95
	23.7"	45.3"	Yes	16.2 million	\$2024.95
	23.7"	45.3"	Yes	16.2 million	\$2075.95
	23.7"	45.3"	No	16.2 million	\$2049.95
	23.7"	45.3"	Yes	16.2 million	\$2199.95
	23.7"	45.3"	Yes	16.2 million	\$2249.95
	23.7"	45.3"	Yes	16.2 million	\$2349.95
	23.7"	45.3"	Yes	16.2 million	\$2449.95

* Price for the ServTray with only a monitor and keyboard. For ServTray Complete pricing including KVM switching modules and rear bracket extension kits, see our Web site or call our FREE Tech Support.

Specialty KVM

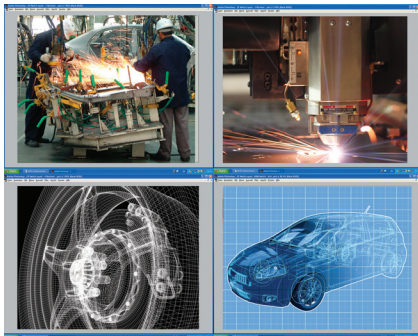
ServSwitch 4site

Simultaneously display and control KVM signals from four computers or switching systems on one screen—in real time!

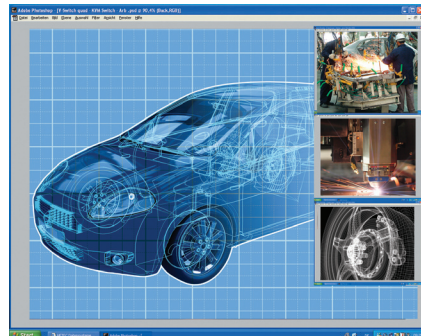


KVP4000A: top: front view; bottom: rear view

- Quad-screen viewer and KVM switch in one device.
- Video signals can be analog VGA (1600 x 1200) or digital DVI (1900 x 1200).
- Choose from four operation modes: Full-Screen, Dual-Screen, Quad-Screen, and Picture in Picture (PiP).
- Get full KVM switching capability for up to four servers.
- Supports USB and PS/2® keyboards and mice for multiplatform use.
- No software needed.
- ♦♦ **WARRANTY** — 2 Years



In Quad Mode, you can view the entire screen from four different video sources.



In Picture-in-Picture Mode, you can view the full screen display on one video source along with smaller images from the three other video sources.

One for all.

The ServSwitch™ 4site gives you true KVM switching for controlling four servers from one keyboard and mouse. Plus, it enables you to display the video from those four servers on one monitor—all at the same time, and in real time!

This ServSwitch is a real bonus if you work in a control room or need to keep track of multiple screens. You can view them all on the one monitor at your workstation instead of setting up a bank of monitors.

Clearly compatible.

The ServSwitch 4site gives you the flexibility to use all types of monitors and video equipment. It supports all combinations of analog VGA and digital DVI video cards, monitors, even cameras.

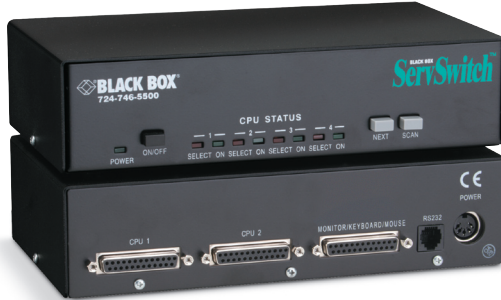
Easy, menu-based configuration.

Set up your ServSwitch 4site parameters with an easy-to-use on-screen display. Use different menus to set up your preferences for System Hotkey, Configuration, Console, Video, Computer, and Help.

4site power starting at \$3879.95

ServSwitch Secure

Secure KVM switch with 2 or 4 ports, plus VGA and PS/2 support.



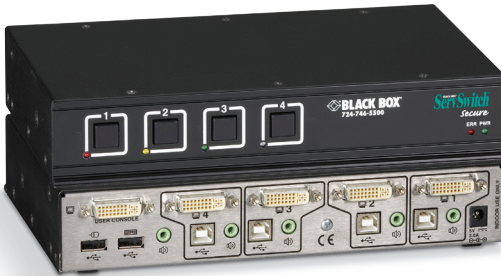
SW722A-R2: top: front view; bottom: rear view

- TEMPEST-approved.
- Supports digital resolution up to 1600 x 1200 and analog up to 1920 x 1440.
- Provides control and separation of up to four computers or servers connected to both secure and unsecure networks through just one keyboard, monitor, and mouse.
- 2- and 4-port models available.
- The switch is permanently hard wired and each circuit is soldered, so there is no way to use software to access one CPU from the other or to access one network from the other.
- Channel-to-channel crosstalk isolation protects against signal snooping.
- Boot connected servers simultaneously or one by one.
- Requires ServSwitch cables; see www.blackbox.com or call our FREE Tech Support.
- For higher resolutions, use coax cable.
- If you need to use this switch with USB CPUs, call our FREE Tech Support.
- ♦♦ **WARRANTY** — 2 Years

Starting at \$300.95

ServSwitch Secure (with USB)

TEMPEST-secure KVM switch with 2 or 4 ports, USB, and DVI-I.



SW4007A-USB: top: front view; bottom: rear view

- TEMPEST-approved.*
- Supports digital resolution up to 1600 x 1200 and analog up to 1920 x 1440.
- All microprocessors are One Time Programmable (OTP) with no flash ROM.
- Shielded, secure metal casing is electrically bonded to ensure low electromagnetic emissions for minimized snooping risks.
- High levels of port isolation prevent data leakage.
- Unexpected operations (signaled by the ERR indicator) cause channel isolation and require you to find the fault and reboot the unit.
- Tamper-evident seals and screws.
- Unidirectional keyboard and mouse signaling via data diodes ensures that USB data cannot leak back through the switch.
- ♦♦ **WARRANTY** — 2 Years

* NSA tested and TEMPEST approved for and by the U.S. Air Force. Other agencies under review for approval. For details, call our FREE Tech Support at 877-877-2269.

NOTE: For VGA applications, adapters are required: FA461 for monitor or FA462 for computers.

Starting at \$749.95

Specialty KVM

ServSwitch DTX

Eliminates distance limitations within the KVM extension arena.

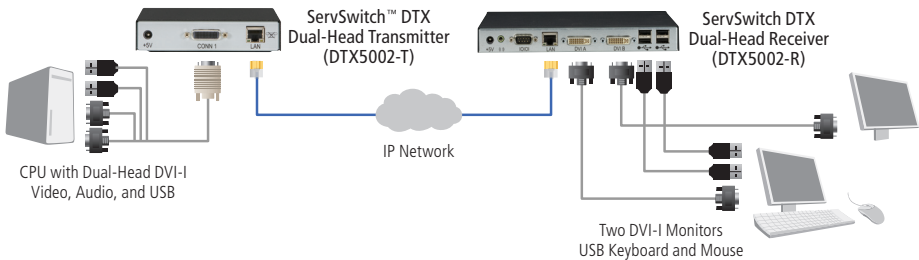
- Desktop KVM extension over IP.
- Extends a USB or PS/2® computer's KVM, audio, and USB 2.0 peripheral signals over an IP network to a workstation with one or two DVI-I or VGA monitors, speakers, and a USB or PS/2 keyboard and mouse.
- Available in kits or individual components.
- Enables matrix switching, control, and authentication capabilities.
- Dual-head receivers enable you to use two DVI-I monitors at a remote workstation.
- Features USB virtual media (VM) support.
- Connect up to four USB 2.0 devices to a receiver.
- Encrypts media streams for Secure Socket Layer (SSL) connections over a TCP/IP link.
- Using the extender's password-protected serial interface menu, you can configure network connections, change video settings, perform flash upgrades, configure hotkeys, and more.



*ServSwitch DTX single-head (DTX5000):
top: front view; bottom: rear view*

- Supports PC, Sun, and Mac CPUs and works with Windows®, Redhat Linux, Sun Solaris®, and Mac operating systems.
- The single-head components (DTX5000) support resolutions up to 1280 x 1024 at 60 Hz. Dual-head components support resolutions up to 1920 x 1200 at 60 Hz!
- ♦♦ **WARRANTY** — 1 Year

Dual-Monitor DVI Extension over IP



KVMoIP extension starting at \$1639.95

KVM Solution Profile

Cleaning Up

A large medical center had an urgent need for its surgeons and practitioners to be able to view high-resolution images of x-rays, photographs, and medical charts from its servers, plus conform to HIPAA regulation—all while maintaining a sterile environment. Power supply fans inside PCs or servers suck in air to cool down the processor, which makes them unsuitable for such an environment because germs and dust can easily gather. Constantly cleaning the various nooks and crannies of PCs and servers isn't practical in a surgical setting.

Black Box Network Services provided the solution with the ServSwitch DTX. The DTX enables the placement of servers in a secure environment while extending the keyboard, monitor, and mouse into operating, x-ray,



and consulting rooms. Cleanliness of the keyboards, displays, and mice was not an issue as they were medical standard equipment that could be directly disinfected.

ServSwitch CENTRAL™

BLACK BOX KVM SOLUTIONS



ServSwitch EC with Built-In IP (KV9304A-R2)



ServSwitch CX (KV0416A-R2)



ServSwitch Octet (KV1700A)



ServSelect IP VM (KV2116A)

Manage and maintain.

Manage different and distributed systems—and your server growth—while maintaining the security and accuracy of your mission-critical data. Black Box's KVM ServSwitch™ line has made us the industry leader in server management. Black Box has combined its extensive range of server management solutions with its Tech Support to create ServSwitch Central™, which offers:

- On-line demonstrations.
- Data center planning and design.
- Nationwide installation and post-installation services.

724-746-5500

Anytime, anywhere remote server management.

KVMCube | KVMGate | KVMultiport | KVMManager

With the ServReach™ family
of KVMoIP switches, you can:

- » Remotely access your servers
from anywhere in the world.
- » Perform maintenance.
- » Create a virtual data center.

For more
information visit
[blackbox.com/
go/servreach](http://blackbox.com/go/servreach)



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When ordering, please reference KV1.