BLACK BOX® NETWORK SERVICES

SERVSWITCH CONSOLE PLUS

Bring serial access to your KVM switching applications.

Key Features

▶ *Access and switch between CPUs or serial devices from a single KVM station.*

▶ *Connects up to 1000 servers or CPUs to a console user station.*

▶ *Switch via keyboard commands, menu list, or commands through serial port.*

▶ *Video resolution up to 1600 x 1280.*

▶ *Supports async serial devices.*

▶ *Control access by grouping users by profiles.*

▶ *Modular design for expandability. Use Expansion Card to extend to other units.*

Do you want to access multiple serial devices (such as PCs and servers) via a single keyboard, monitor, and mouse (KVM)? The ServSwitch Console Plus lets you switch among servers, CPUs, routers, hubs, UNIX devices, and other serial devices. It's unique because it allows you to not only switch between CPUs and servers, but also serial devices.

The advanced distributed design of a single ServSwitch Console Plus enables access to multiple (4, 8, or 16, depending on the model you order) asynchronous serial devices from the same console interface. Or, if you daisychain ServSwitches, you can connect up to 1000 servers, CPUs, or other serial devices.

The switch effectively acts as a dumb terminal with an eight-page scroll buffer to enable easy monitoring of your serial equipment. You don't need to jump between user stations to access both servers and serial devices.

Multiplatform capability.

The ServSwitch Console Plus works with PC, Mac®, Sun®, UNIX®, Linux, and USB systems. Mix platforms in a single installation and switch between them all.

From a central KVM station, connect either 4, 8, or 16 servers or CPUs (depending on the model you order). Once connected, use the attached computers and all the functions and applications with it from a single KVM station that serves as a central access point for your system.

The interface is so powerful that it's actually a colour VT220™ terminal. When you connect to a serial device, you see a 24 x 80 full-screen display with two status lines. Linux serial ports also display directory lists in colour.

By incorporating KVM switching to your network, you save on hardware costs and space as well as make your application more efficient.

And, because it's modular in design, you can add an expansion card, link it to additional switches,

and increase the number of your connections to computers.

Daisychain for more CPU access.

For even more port density, connect multiple units with our specially designed cables to create a seamless KVM matrix switch. In fact, the Console Plus can be expanded to as many as 1000 CPUs or servers! You need only one cable between boxes for every two KVM stations.

To expand the Console Plus in a bus configuration, you'll need to install an Expansion Card in each chassis. The card's connectors provide the means of sending system, keyboard, video, and mouse data from one unit's Expansion Card output to another unit's Expansion Card input. This enables the first KVM station to switch to a computer that's connected on another chassis.

Daisychaining additional KVM stations to the main chassis also creates an expanded system that enables access to servers, CPUs, and serial devices from multiple locations.

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Three ServSwitch Console Plus Chassis in a Bus Topology

This bus configuration is typically used when the user is connected to the KVM ports on chassis #1. In this configuration, the video path goes from the last unit in the bus to the first unit (OUT to IN ports). This way, if you're attached to the first unit, you can access all computers on all units.
NOTE: All units in the bus must have an Expansion Card installed.

ServSwitch Console Plus (KV103A) #3 CPUs (33 of 48)

ServSwitch Console Plus (KV103A) #2 CPUs (17 of 32)

ServSwitch Console Plus (KV103A) #1 CPUs (1 of 16)

KVM Cable

KVM Station

CPU Cable

CPU
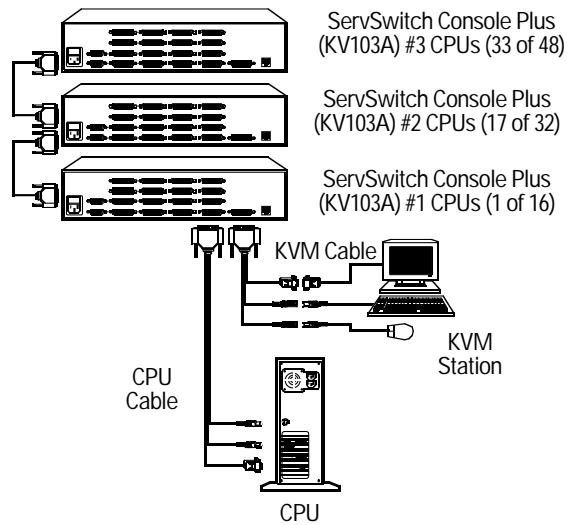
Cabling is easy, too!

The ServSwitch Console Plus offers cable distances of up to 100 feet (30.5 m) without any additional extension products. You'll need a CPU cable for each computer connected to the Console Plus; a KVM cable for the KVM station; and if you want to daisychain multiple units in a bus topology, expansion cables.

With the Console Plus, you get an RJ-12 serial cable for flash upgrades and an RJ-to-DB9 adapter. You'll have to order the CPU, KVM, and expansion cables separately. The DTE and DCE serial cables you'll need are listed on **page 4**.

Serial port flexibility.

Connect the rear RS-232 port on the ServSwitch Console Plus to the COM port on your computer using the included serial cable. Through this connection, you can switch a KVM station to a CPU port, configure an expansion switch, upgrade the system firmware, or restore the Console Plus to its factory settings.

To access the serial port's parameters, all you need is a communications program such as Windows® HyperTerminal. This interface enables you to start a serial communication session and change the serial port's

baud rate (between either 9600 bps or 57.6 kbps).

Any CPU port on the ServSwitch Console Plus can be configured as a serial port, too. This way, you can connect a KVM station to a serial device (such as the serial port on a UNIX or Sun computer) or any device with a serial port. To do this, simply connect the device to the DB25 CPU port on the Console Plus with a serial cable. Switching to that port gives you access to the attached serial device. And baud speeds can be controlled on the serial-configured CPU port just as they can on the Console Plus' dedicated RS-232 serial port.

Easy to switch and configure.

All switching and CPU/server access can be done using the Console Plus' advanced On Screen Display (OSD). This graphical representation, which can be accessed with a simple keystroke and overlays your existing monitor image, enables you to select connected computers without having to push a button on the Console Plus unit.

Just make your choices by selecting from the OSD's pop-up menus. User-friendly help lines are shown for each item. Connect to computers by name, and view the connection status or observe

the system status in real-time with the status screen displays. The status screen also shows all connections between multiple Console Plus units.

The OSD also links you to a host of configuration options. Establish CPU names, assign addresses, set security features, and customise the appearance of the interface with style and ease. You can even change the language of the interface's text (for English, French, German, Italian, Portuguese, or Spanish).

Keep access to authorised users.

For security on the Console Plus, either auto assign settings to a KVM station or require users to log in with a user ID and password. Depending on the amount of security you require, you can configure different levels of access for different users. For instance, set the Console Plus to allow only authorized personnel to access computers or servers that contain sensitive information or restricted applications.

You can also assign certain computers to a unique group and define them by profiles. For each profile, you can assign specific modes of access. By default, all users who connect to the Console Plus operate in Share Mode, in which keyboard and mouse

control of a computer is granted on a first-come, first-served basis.

But there are also View, Control, and Private Modes, too. In View Mode, users can switch computers but have no keyboard or mouse control. In Control Mode, specified users can take exclusive control of keyboard and mouse functions while other users are restricted to view-only capabilities. Private Mode is the the same as Control Mode except other users can't view the video or access the computer.

The ServSwitch Console Plus fully emulates keyboards and mice and can be used with a PS/2® keyboard and mouse or a Sun keyboard and mouse. For your KVM station, we recommend using a multisync monitor that supports resolutions up to 1280 x 1024 @ 75 Hz or better.

The Console Plus's scan function sets the time the monitor video is displayed before switching to the video of the next computer in the sequence.

The Console Plus also supports hotkey switching, in which a simple command sequence on the keyboard gives you quick CPU access.

Upgrade the firmware via flash memory so it maintains compatibility with the latest devices and features.

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognise any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Specifications

Video Sync: HV sync, composite, sync-on-green

Approvals: UL®, cUL, TUV, CE, GE

Chassis Construction: Electro galvanized steel with black powder coating

Controls: Lighted On/Off switch

Video Bandwidth:
KV101A–KV102A: 250 MHz;
KV103A: 100 MHz

Connectors: User port: (1) DB25 F;
CPU ports: (4), (8), or (16) DB25 F;
Expansion port (optional):
(1) DB15 M, (1) DB15 F;
RS-232 serial port:
(1) RJ-12 (6-wire);
Power: (1) IEC 320

Indicators: LEDs: (1) Chassis Power;
(4), (8), or (16) CPU Select;
(4), (8), or (16) CPU Power

Temperature Tolerance:
32 to 113ºF (0 to 45ºC)

Humidity Tolerance:
5 to 80%, noncondensing

Power: 90–240 VAC, 47–60 Hz, autoswitching

Size: KV101A–KV102A:
1.75"H (1U) x 16.7"W x 4.9"D
(4.4 x 42.4 x 12.4 cm);
KV103A: 3.5"H (2U) x 16.7"W x
4.9"D (8.9 x 42.4 x 12.4 cm)

Weight: KV101A–KV102A:
4 lb. (1.8 kg);
KV103A: 8 lb. (3.6 kg)

What's Included

- ServSwitch Console Plus
- RJ-12 flash cable
- RJ-to-DB9 adapter
- Power cord
- Users' manual

Ordering Information

ITEM	CODE
ServSwitch™ Console Plus	
4-Port KV101A	
8-Port KV102A	
16-Port KV103A	

To daisychain your system, order…
Expansion Module SW740C-R3-B

To connect multiple chassis, order…
Expansion Cable
   10-ft.   (3-m) KV140010
   35-ft.   (10.7-m) KV140035
   100-ft. (30.5-m) KV140100

For your serial connections, order…
ServSwitch Console Plus Serial Cables, DTE
   DB25 Male/DB9 Female
      5-ft. (1.5-m) EHN290-0005
      10-ft. (3-m) EHN290-0010
   DB25 Male/DB25 Female
      5-ft. (1.5-m) EHN291-0005
      10-ft. (3-m) EHN291-0010
ServSwitch Console Plus Serial Cables, DCE
   DB25 Male/DB9 Male
      5-ft. (1.5-m) EHN292-0005
      10-ft. (3-m) EHN292-0010
   DB25 Male/DB25 Male
      5-ft. (1.5-m) EHN293-0005
      10-ft. (3-m) EHN293-0010

For CPU or server connections, you'll need…
CPU/Server to ServSwitch Cables (CPU Cables) for PC
   PS/2, Standard
      5-ft. (1.5-m) EHN151-0005
      10-ft. (3-m) EHN151-0010
      20-ft. (6.1-m) EHN151-0020

   PS/2, Coax

ITEM	CODE
5-ft. (1.5-m) EHN382-0005	
10-ft. (3-m) EHN382-0010	
20-ft. (6.1-m) EHN382-0020	
50-ft. (15.2-m) EHN282-0050	
100-ft. (30.5-m) EHN282-0100	

   USB, Coax
      5-ft.   (1.5-m) EHN485A-0005
      10-ft. (3-m) EHN485A-0010
      20-ft. (6.1-m) EHN485A-0020
      35-ft. (10.7-m) EHN485A-0035
      50-ft. (15.2-m) EHN485A-0050
      75-ft. (22.9-m) EHN485A-0075
      100-ft. (30.5-m) EHN485A-0100

NOTE: Other lengths are available, as well as cables for
   AT® , Mac, and Sun connections.

For KVM connections, order…
ServSwitch to Keyboard/Monitor/Mouse Cables
(User Cables) for PC
   PS/2, Standard
      1-ft.   (0.3-m) EHN154-0001
      5-ft.   (1.5-m) EHN154-0005
      10-ft. (3-m) EHN154-0010
      20-ft. (6.1-m) EHN154-0020
   PS/2, Coax
      5-ft.   (1.5-m) EHN383-0005
      50-ft. (15.2-m) EHN283-0050
      100-ft. (30.5-m) EHN383-0100
   USB, Coax
      5-ft.   (1.5-m) EHN485-0005
      10-ft. (3-m) EHN485-0010
      20-ft. (6.1-m) EHN485-0020
      35-ft. (10.7-m) EHN485-0035
      50-ft. (15.2-m) EHN485-0050
      75-ft. (22.9-m) EHN485-0075
      100-ft. (30.5-m) EHN485-0100