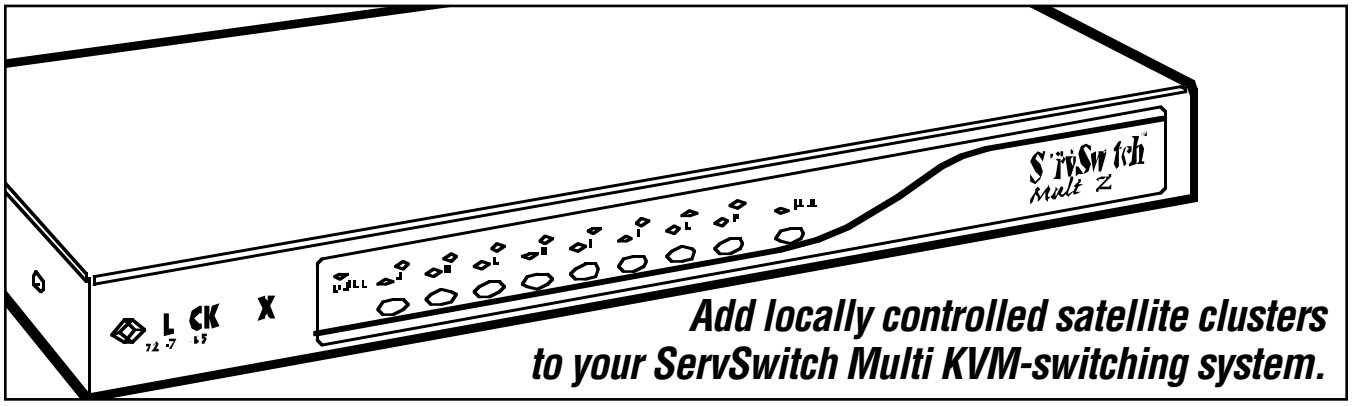
BLACK BOX®
NETWORK SERVICES

SERVSWITCH™ MULTI Z8



Key Features

- ***Add a cluster of eight or more CPUs with their own local management to your ServSwitch Multi system.***
- ***Local (Z8) and central (Multi system) users have independent CPU access.***
- ***Central users control the Z8's CPUs like any other CPUs in the system.***
- ***The local user controls the Z8's CPUs with separate commands and on-screen display.***
- ***Unit is rackmountable and only 1U high.***
- ***Can be cascaded to create groups of up to 64 CPUs.***

Do you have a ServSwitch Multi system, or are you thinking of installing one? If so, do you have sets of IBM® type PCs that form natural groups, that you'd like to be able to control from a local keyboard/video/mouse user station as well as from the larger ServSwitch Multi system?

With the ServSwitch Multi Z8 (product code KV158A), you can establish such groups easily:

1. Attach as many as eight IBM PS/2® or PC/AT® compatible CPUs to it through our standard one-to-many CPU cables.

2. Hook up a local PS/2 or PC/AT type monitor, keyboard, and mouse for accessing those computers *only*.

3. Install the included Z8 Remote-Connect Card in a ServSwitch Multi Expansion Chassis (KV160A-R2) or other card chassis in your ServSwitch Multi system. Use any slot that you would put a CPU Card in.

4. Get a Category 5 cable in whatever length you need, up to 500 ft. (152.4 m)—we recommend our product code EYN737A (bulk) or EYN737MS (preterminated) . Run this cable from the ServSwitch Multi Z8 to the Z8 Card. Now any users in your ServSwitch Multi system who can access the computers on the Card's chassis can also access the computers on the Z8.

Both the local user (at the user station attached to the Z8) and the central users (at the stations attached to the rest of the Multi system) can independently access different CPUs attached to the Z8. They can even both share access to the same Z8 CPU, but only one user can be in keyboard and mouse control at any given time. You can set the "inactivity timeout" for one or ten seconds: That long after one user stops typing or moving the mouse, the other user can assume control.

The local user can directly access the Z8's on-screen display and keyboard commands. Central users have to select the Z8 Card's slot and *then* bring up the Z8's display or send the Z8 keyboard commands. (You'll have to change the command hotkey sequence on either the Z8 or the Multi system to do this, though.)

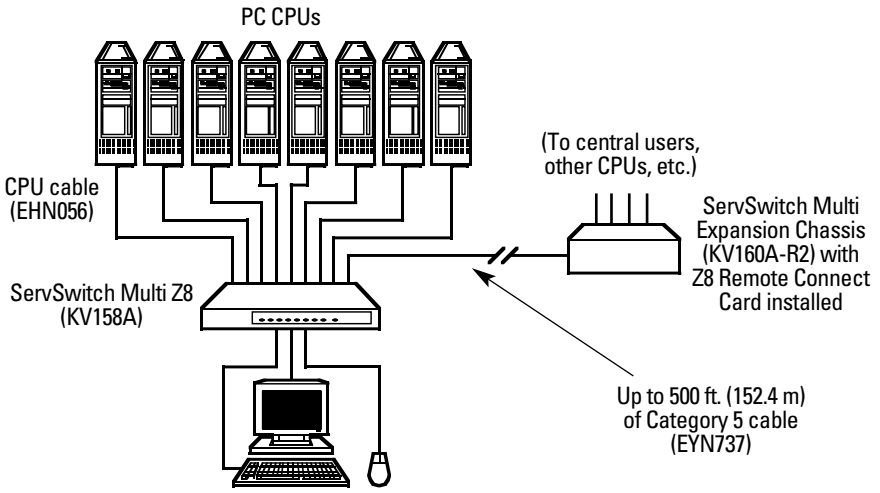
The ServSwitch Multi Z8 is 1U (1.75", 4.4 cm) high and is well-suited for rackmounting. Use our RMK19K rackmount kit if you want to do this.

Video resolution for the local user can be as high as 1280 x 1024; at up to 72 Hz. For central users, the maximum resolution will depend on how widely separated the Z8 is from the Z8 Card; you will have to test your system to determine the maximum resolution for your application.

If you would like to include more than eight PCs in the same Z8 group, you can cascade extra Z8 units from the main Z8's CPU ports in order to connect as many as 64 PCs together. (In this situation, the local user and central users don't share access; they *must* access different CPUs.)

The ServSwitch Multi Z8 is like our 8-port ServSelect (KV108A-R3) in most other respects, except that it can't be "paired." See **FaxBack #17862** for more about the ServSelect (and the Z8); see **FaxBack #17855** for more about the various Multi models.

Establishing groups of locally managed servers that can also be centrally administered is very easy with the ServSwitch Multi Z8. This one is "fully loaded" with eight CPUs, but you could cascade Z8 units to add more CPUs.



Specifications

Standards: VGA, SVGA, XGA, or XGA-2 video

Interfaces:
VIDEO port: VGA/SVGA; with adapter, XGA/XGA-2;
KBD and MSE ports: IBM PS/2 peripheral input;
Lettered channel ports:
Proprietary composites of:
- IBM PC/AT or PS/2 keyboard;
- RS-232 or PS/2 mouse; and
- VGA, SVGA, XGA, or XGA-2 video

Resolution:
For local (Z8) user:
At up to 75 Hz: Up to 1024 x 768 noninterlaced;
At up to 60 Hz: Up to 1280 x 1024 noninterlaced;
For central (Multi system) users: Resolution will depend on length of cable between Z8 and Z8 Card; call Black Box Technical Support

Maximum Distance:
Between Z8 and Z8 Card: 500 ft. (152.4 m) of Category 5 cable;
From Z8 to attached CPUs: 30 ft. (9.1 m);
Local user's monitor, keyboard, and mouse should be plugged directly into the unit and should not be placed farther away than their native cables can reach

User Controls:
On-screen function menu;
Keyboard commands;
(1) Rear-mounted ON/OFF rocker switch;
(1) Front-mounted SCAN pushbutton;
(8) Front-mounted port-selection pushbuttons;
(1) 8-position DIP switch on the Z8 Remote-Connect Card for inactivity timeout (also controls video sync options, but these positions should be left in their default settings)

Indicators:
On-screen function menu;
Front-mounted LEDs:
(1) SCAN;
(1) STATUS;
(8) CPU Power;
(8) Selected CPU

Connectors:
On Z8 unit: All rear-mounted:
(8) DB25 male CPU ports;
(1) HD15 female for video output to monitor;
(2) 6-pin mini-DIN female:
(1) for keyboard input,
(1) for mouse input;
(1) DB9 female reserved for future use

*[For the connectors on the CPU cable, see **Technically Speaking** below.]*

Temperature Tolerance:
Operating: 5 to 40°C;
Storage: –20 to +50°C

Humidity Tolerance: Up to 90% noncondensing

Enclosure: Steel

Power:
Input: 100 to 240 VAC at 50 to 60 Hz from utility-power outlet, through detachable power cord and IEC 320 male inlet, to internal transformer;
Consumption: 8 watts

Size: 4.5 x 43.7 x 21.6 cm

Weight: 1.9 kg

Technically Speaking

You'll need one CPU cable to connect each CPU to the ServSwitch Multi Z8. These cables have a DB25 female connector on one end (plug this into the Z8), and they split into three strands.

One strand has an HD15 male connector that plugs into the CPU's video card. The second strand has both 6-pin mini-DIN male (for a PS/2 keyboard port) and 5-pin DIN male (for a PC/AT keyboard port) connectors. The third strand has both a 6-pin mini-DIN male connector (for a PS/2 mouse port) and a DB9 female connector (for a serial mouse port).

To cascade Z8s, you would run one of these cables from a CPU port on the master Z8 to the video, keyboard, and mouse ports on a subsidiary Z8.

The complete Z8 package

- The ServSwitch Multi Z8.
- The Z8 Remote-Connect Card.
- A power cord.
- A manual.

What else you will need

- A local monitor capable of handling the video output of all of the CPUs attached to the Z8.
- An IBM compatible local keyboard and mouse. At this time, these mice are known to be compatible with the Z8: IBM PS/2 style, Kensington®, Logitech® Mouseman® for PS/2, Logitech Trackman®, and Microsoft® serial, PS/2 style, or IntelliMouse®.
- One CPU cable for each CPU or subsidiary cascaded Z8 that you plan to connect.
- A CAT5 cable to run from the Z8 to the Z8 Remote-Connect Card.

What else you might need

- A rackmount kit.
- An uninterruptible power supply (UPS) and/or AC-power surge protectors.
- Data-line surge protectors.
- *If you plan to use XGA or XGA-2 video:* A video adapter (call for a quote).

Ordering Information

ITEM	CODE
ServSwitch Multi Z8	KV158A
Don't forget your cabling:	
CPU cable:	
6 feet (1.8 m)	EHN056-0006
8 feet (2.4 m)	EHN056-0008
15 feet (4.5 m)	EHN056-0015
30 feet (9.1 m)	EHN056-0030
Category 5 cable (straight-through-pinned):	
Patch cable (preterminated), specify length	EYN737MS
Bulk cable, 500-ft. (152.4-m) spool	EYN737A-0500
XGA/XGA-2 Adapter	*Call Black Box Technical Support.*
You might also need:	
ServSwitch Multi Expansion Chassis	KV160A-R2
ServSwitch Multi MX	KV155A
ServSwitch Multi SB	KV162RA
Rackmount Kit for ServSwitch Multi Z8	RMK19K
Rackmount Kit for ServSwitch Multi Expansion Chassis	RMK19LE
6-Pin Mini-DIN Surge Protector for keyboard, mouse, or keyboard or mouse port	SP519A
HD15 Surge Protector for VGA/SVGA/XGA-type video interface	*Call Black Box Technical Support.*

Also call Black Box Technical Support for help in determining how best to back up and surge-protect the Z8's AC power.