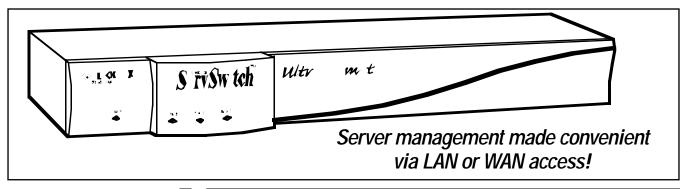


Black Box Corporation.

BLACK BOX NETWORK SERVICES

SERVSWITCH ULTRA REMOTE/SERVSWITCH REMOTE



Key Features

- Connect to remote computers over an Ethernet network.
- Single-, dual-, and quad-user versions.
- Up to 1280 x 1024 @ 85 Hz resolution.
- Local port for KVIM control station connection.
- Display four server screens in quadscreen format.
- Scale screen images automatically.
- Easy to install and operate.
- Autosense network connection speed.
- Compatible with many KVM switches.
- Include brackets for rackmounting.

For the ultimate in remote computer server management, order a ServSwitch™ Ultra Remote or ServSwitch Remote. These compact, rackmountable devices bring remote server connectivity to you in the form of an Ethernet LAN/WAN connection, giving you computer CPU access anywhere in the world.

By extending a KVM switch's user port for operation from a remote workstation or location, the ServSwitch Ultra Remote or ServSwitch Remote lets you tap into a network server from home or another office.

In addition to an RJ-45 Ethernet port for a remote connection, the Single-User ServSwitch Ultra Remote and ServSwitch Ultra units provide an integrated switched analog KVM port for the local side. Use this port to attach a keyboard, monitor, and mouse and gain direct access to the unit.

For port density up to two or four remote users, order a Dual-User or Quad-User Ultra Remote. The dual and quad models contain two or four independent ServSwitch Ultra Remote units in a single rackmountable chassis. They enable multiple users to have remote access to servers

by connecting to the KVM inputs on the Dual-User or Quad-User Ultra Remote units.

The Single-User ServSwitch Ultra Remote (ACR9000A) differs from the other models in that it's designed for future connections and long-term use. It includes dual USB Type A connectors that are reserved for future applications and will soon support connections via a dialup modem.

If you need a single-access model and don't think you'll need these type of connectors in the future, you can get the job done with our low-cost ServSwitch Remote (ACR9005A).

All ServSwitch Ultra Remote and ServSwitch Remote units also include a pair of DB9 connectors for future use.

The ServSwitch Ultra Remote and ServSwitch Remote are fully embedded products with no hard drives or complicated operating systems, so they're highly reliable and available. To begin configuring the Ultra Remote for connection to your network and set password information, just access the analog KVM port(s) on the local side.

Advanced viewing options.

With the included remoteaccess client Viewer software installed on your workstation, you can see up to four connected servers in your data center (as long as the Ultra Remote/Remote is attached to a compatible KVM switch) in real time.

For easy viewing, the client interface displays these four remote computers simultaneously within a split-screen format in color, shades of gray, or black and white. A computer-selection box for each quadrant of the screen appears on the software's toolbar.

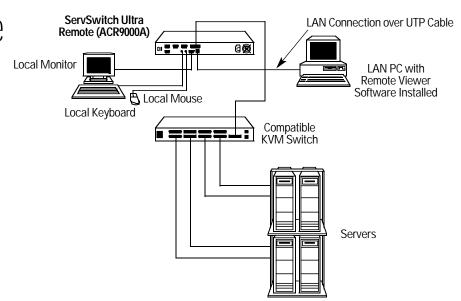
You can also use a singlescreen view, in which the video image from only one remote computer is shown in the display area

An advanced scaling function even resizes the video image to fit your window and allows you to reposition video images of any size image anywhere on your monitor's screen. This helps you monitor the connected servers while you tend to other tasks. Place a scaled image of your server in the corner of your monitor screen or work with it at full resolution.

What's more, because the scaling function requires less data

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View servers from a remote location using a TCP/IP network connection.



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to transmit images, you're able to obtain video updates quickly over slower links. There's also reduced demand on network bandwidth.

Plus, with the ServSwitch Ultra Remote or ServSwitch Remote, you won't have to operate multiple mouse cursors—that is, a cursor for both the local mouse and another for the remote server—which is often the case with many competing products. Instead, use a single mouse cursor to control both the local screen and the remote screen that's being displayed. This makes switching between the remote servers and the applications on your own PC smooth and effortless.

And there's no fiddling with complicated controls to get the optimum video quality. The ServSwitch Ultra Remote and ServSwitch Remote do it all automatically. Supporting full 16-bit color in resolutions of up to 1280 x 1024 @ 85 Hz, they offer enough resolution to support PC, Mac*, and even Sun* servers.

Quick and secure CPU access.

Compatible with nearly all IBM° PC computers as well as with many industry-standard KVM switches (including many of those in the ServSwitch family), the

ServSwitch Ultra Remote and ServSwitch Remote let you tap into standalone or KVM-switched PCs. Via a TCP/IP connection, you can access Mac, Sun, and other highresolution servers connected to a KVM switch, too*.

Access to attached servers is through a password-protected menu within the Viewer software interface. Just enter the IP address of the Ultra Remote/Remote, click on the Connect icon, and enter the correct password. You're now connected to the KVM switch or standalone computer. Frontpanel LEDs show power and the currently connected input port (either remote or local KVM).

Password security prevents unauthorized configuration. In fact, the ServSwitch Ultra Remote and ServSwitch Remote are designed with the highest consideration for security. They encrypt connections with Blowfish or triple DES technology. You can also set the Ultra Remote/Remote unit to automatically terminate a session when it no longer detects keyboard or mouse activity after a certain amount of time.

Easy to install and configure.

To install the ServSwitch Ultra Remote or ServSwitch Remote, you'll need one, two, or four standalone computers or KVM switches to be viewed and accessed, as well as:

- local PC keyboard(s) with PS/2* connector(s),
- · local VGA monitor(s),
- an active Ethernet TCP/IP network,
- network cable(s) with RJ-45 male connectors
- at least one network PC where the Viewer software can be loaded

The software runs on Windows* 95 or above operating systems. At minimum, you'll need a PC or compatible with 4 MB of free disk space and 32 MB RAM. The PC must also have a keyboard and mouse and a network connection with TCP/IP protocol.

Setting up the ServSwitch
Ultra Remote or ServSwitch
Remote is easy. You can either
place it on a flat surface or use the
included rackmount brackets and
screws to mount it in a 19" rack.

Installation includes connecting the ServSwitch Ultra Remote or ServSwitch Remote unit to a standalone computer or KVM switch and your Ethernet network. You only need to set a few basic communication parameters from a simple menu. These parameters include IP address, subnet mask, gateway address (optional), and speed/duplex if you've connected

the Ultra Remote/Remote to a LAN device that requires a particular data rate or duplex setting. By default, the ServSwitch Ultra Remote and ServSwitch Remote are set to "Auto," meaning they autosense and autoadjust to the best available data rate (10 or 100 Mbps) and duplex setting (halfor full-duplex) on their network port(s).

Once these parameters are set on the box, you can access the Ultra Remote/Remote via the Viewer program installed on a remote-access workstation. A setup wizard guides you through the software installation process. Using this program, configure settings such as user management and security. You can use the Viewer software to set user IDs and passwords, specify the type of encryption between the Ultra Remote/Remote and Viewer stations, and program an inactivitydisconnection timeout for Viewer stations.

^{*} NOTE: The Viewer software can be installed on PCs only, and the only types of devices you can attach directly to the ServSwitch Ultra Remote or ServSwitch Remote are IBM PC compatible computers and KVM switches. To find out if your KVM switch is compatible with the ServSwitch Ultra Remote or ServSwitch Remote, call Tech Support.

Specifications

Hardware Required: Monitor that supports your computers' highest video standard; in multiplatform applications, it should be a multisync model

System Requirements for Remote Client Software:

IBM PC or compatible with 4 MB of free disk space, 32 MB RAM, and Microsoft® Windows 95 or

Compatibility: Keyboard: PC/AT*, PS/2

Video: VGA, Super VGA, XGA; Mouse: PS/2 mouse only

Compliance: CE (EN55022 Class B, EN50082-1/EN60555-2. Low-Voltage Directive), FCC Part 15 Subpart B Class A, IC Class/ classe A, UL®, cUL, TUV, VCCI

Protocol: TCP/IP

Standards: VGA, SVGA, or XGA video from directly attached computer; Mac, Sun, RS/6000°, or $SGI^{\dot{\text{\tiny TM}}}$ video can be displayed if the computers outputting these standards are attached to the unit through a KVM switch

Resolution (Maximum): 1280 x 1024 @ 85 Hz

Video Bandwidth: 150 MHz

Distance (Maximum):

Users connected through TCP/IP: No distance limit: LAN cable to directly attached hub, router, network switch, or other LAN device: 328 ft. (100 m); VGA or PS/2 cabling to any directly attached monitor,

keyboard, or mouse: 20 ft. (6.1 m) or: Original ServSwitch or coax cable to any directly attached CPU or KVM switch:

Speed: 10/100 Mbps

20 ft. (6.1 m)

User Controls: Rear-mounted rocker switch for power; keyboard commands; on-screen menus; Viewer software program installed on LAN PCs

Interfaces: To KVM switch or CPU: Proprietary composite of IBM PS/2 keyboard and mouse and VGA, SVGA, or XGA video; Network: 10/100BASE-T Ethernet;

VGA IN/OUT and to monitor: VGA, SVGA, or XGA video; To keyboard and mouse:

Connectors: Video:

IBM PS/2 type

ACR9000A: (3) HD15 F; All others: (1), (2), or (4) HD15 F; Keyboard: (1), (2), or (4) 6-pin mini-DIN F;

Mouse: (1), (2), or (4) 6-pin mini-DIN F

To ServSwitch or CPU: (1), (2), or (4) DB25 F;

Ethernet: (1), (2), or (4) RJ-45; Power: (1) IEC 320 receptacle; ACR9000A also has (2) USB Type A F connectors for future

All switches also have (2) DB9 M serial connectors for future use

Indicators: Front-panel LEDs: Power (indicates that unit is receiving AC power), Remote (indicates log in by TCP/IP user[s]),

Local (indicates log in by local user[s]),

Serial (non-functional), Viewer software includes various indications and warnings

Temperature Tolerance: 32 to 113°F (0 to 45°C)

Humidity Tolerance: 5 to 80% noncondensing

Enclosure: Electrogalvanized steel

Power: 90-240 VAC, 50-60 Hz, autoswitching

Size: ACR9000A, ACR9002A: 1.75"H (1U) x 16.7"W x 9.7"D (4.4 x 42.4 x 24.6 cm); ACR9004A: 3.5"H (2U) x 16.7"W x 9.7"D (8.9 x 42.4 x 24.6 cm); ACR9005A: 1.75"H (1U) x 8.9"H x 8.4"D (4.4 x 22.6 x 21.4 cm)

Weight: ACR9000A: 8 lb. (3.6 kg); ACR9002A: 9 lb. (4.1 kg); ACR9004A: 11 lb. (5 kg); ACR9005A: 4.1 lb. (1.9 kg)

Package Includes

- ServSwitch Ultra Remote or ServSwitch Remote
- (1), (2), or (4) 6-ft. (1.8-m) power cord(s)
- (1), (2), or (4) 5-ft, (1.5-m) DB25 male to DB25 male ServSwitch-to-ServSwitch expansion cable(s) for attaching compatible KVM
- (1), (2), or (4) 5-ft. (1.5-m) DB25 male to HD15 male and dual 6-pin mini-DIN male ServSwitch CPU cable(s) for attaching standalone
- (1) 1-ft. (0.3-m) HD15 male to HD15 male video-loop cable used to enable permanent local-monitor attachment
- · (2) 3.5" diskettes for Viewer remote client software
- (2) 19" rackmount brackets and (4) screws
- · Users' manual

*Ordering Information	
ITEM	CODE
ServSwitch Ultra Remote	
Single-User	ACR9000A
Dual-User	ACR9002A
Quad-User	ACR9004A
ServSwitch Remote	
Single-User	ACR9005A
For KVM-switching capabilities, you'll need a compatible	
KVM switch. For details on whether the swi	itch you want to
use is compatible, call our FREE Tech Suppo	