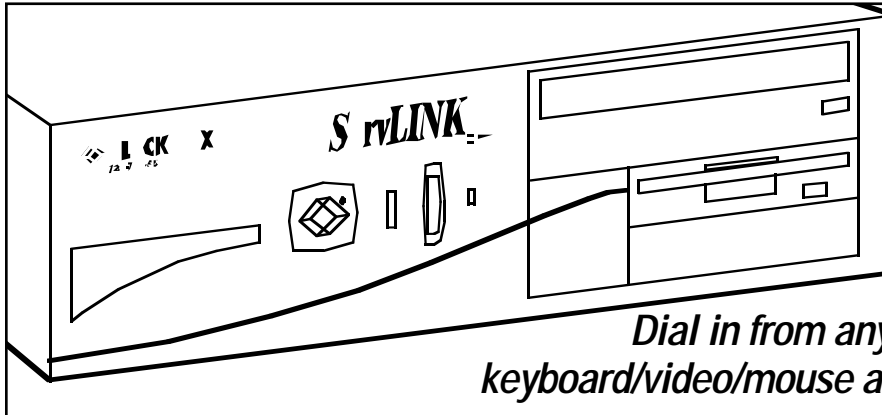# BLACK BOX ®
NETWORK SERVICES

SERVLINK™

Dial in from anywhere, anytime, for remote keyboard/video/mouse access to any attached CPUs.

Key Features

▶ *Get emergency video, keyboard, and mouse access to one or more PC CPUs from virtually any remote location.*

▶ *Supports dialup, LAN-based, TCP/IP Internet, and direct serial connections.*

▶ *Attach to the user port of a KVM-switching system to access any of the system's CPUs.*

▶ *Comprehensive and versatile menu system.*

▶ *Strong security options.*

▶ *Use Power Management Modules to reboot attached devices, power them ON or OFF, or conduct serial communication.*

With the ServLINK™, you can have keyboard, video, and mouse access to an IBM® compatible PC whenever you most need to, from anywhere in the world. Or you can use it with one or more ServSwitch™ family KVM switches to access *all* of your PCs, much more reliably and cost-effectively than you could with software-only solutions.

ServLINK supports emergency remote access through its internal modem, a LAN, or a TCP/IP Internet connection, as well as direct serial-port access. You won't need to install any hardware or software in your PCs, and the ServLINK operates completely independently of your PCs' operating systems or applications. The only thing your computers will need to have is a standard VGA/SVGA video card. ServLINK supports 2, 4, 16, or 256 colors in 640 x 480, 800 x 600, and 1024 x 768 graphics modes.

If your network is down or even if an attached PC is completely locked up, you can still receive the PC's video and send it keyboard and mouse data just as

if you were sitting in front of it. If your ServLINK ever locks up, you can remotely reset it and get back to work with very little interruption. Bottom line: A site with a ServLINK—especially if it has Power Management Modules too (see the next column)—can often be remotely diagnosed and even restored without on-site help.

The ServLINK runs Microsoft® Windows NT® and ships with pcANYWHERE® and the proprietary ServLINK application preinstalled. Each ServLINK is completely configured at the factory for quick startup and operation. Just connect the cables and you're "remote-access ready."

Because of their heavy bandwidth requirements, you might not find the ServLINK's video and mouse performance suitable for everyday use, which is why we recommend the ServLINK for emergency or as-needed access only. But you *can* fine-tune the video and mouse handling until you get the best possible display and response.
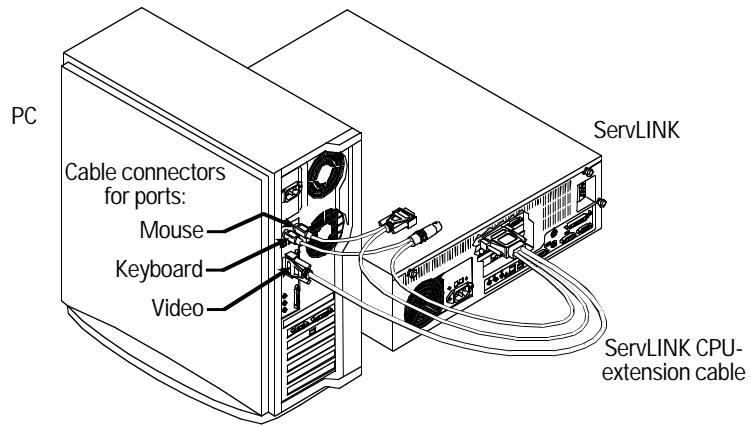
Once you start using the ServLINK, you'll wonder where its

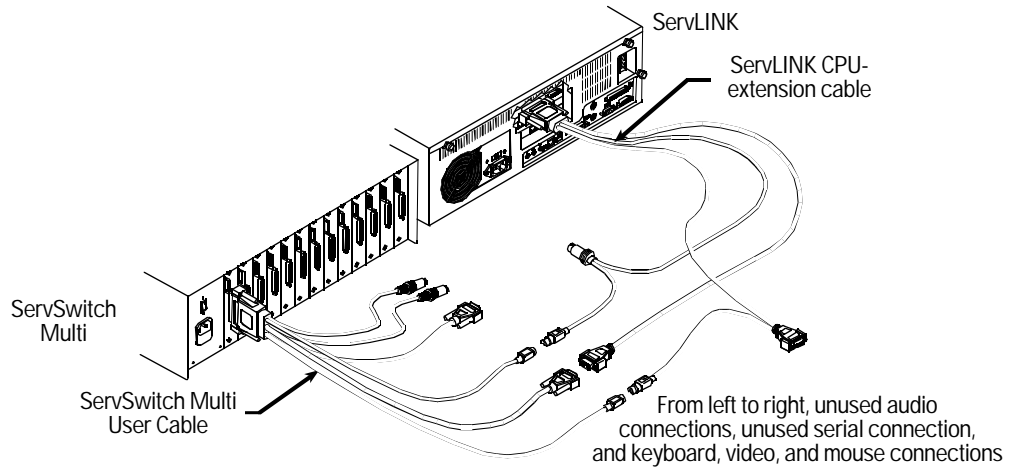menus end. Options available through the menu system include:
• Setting up profiles for your PCs and KVM switches, including defining keystroke macros for easy command and control;
• Switching between PCs;
• Setting up user profiles, including access privileges;
• Configuring other security measures, including encrypted passwords, Caller-ID checking, pager alerts, and event logging;
• Bringing up dozens of pages of on-line help; and
• Setting when, for whom, and under what conditions any ServLINK Power Management Modules will toggle power.

Attach these Modules to the ServLINK, and plug its controlled devices into them, to make the ServLINK even more flexible: You can independently command each Module to power ON, power OFF, or reboot the device plugged into it—either immediately, on a schedule, or in response to events. What's more, they support serial communication as well, so you can reconfigure attached routers or similar devices as needed.
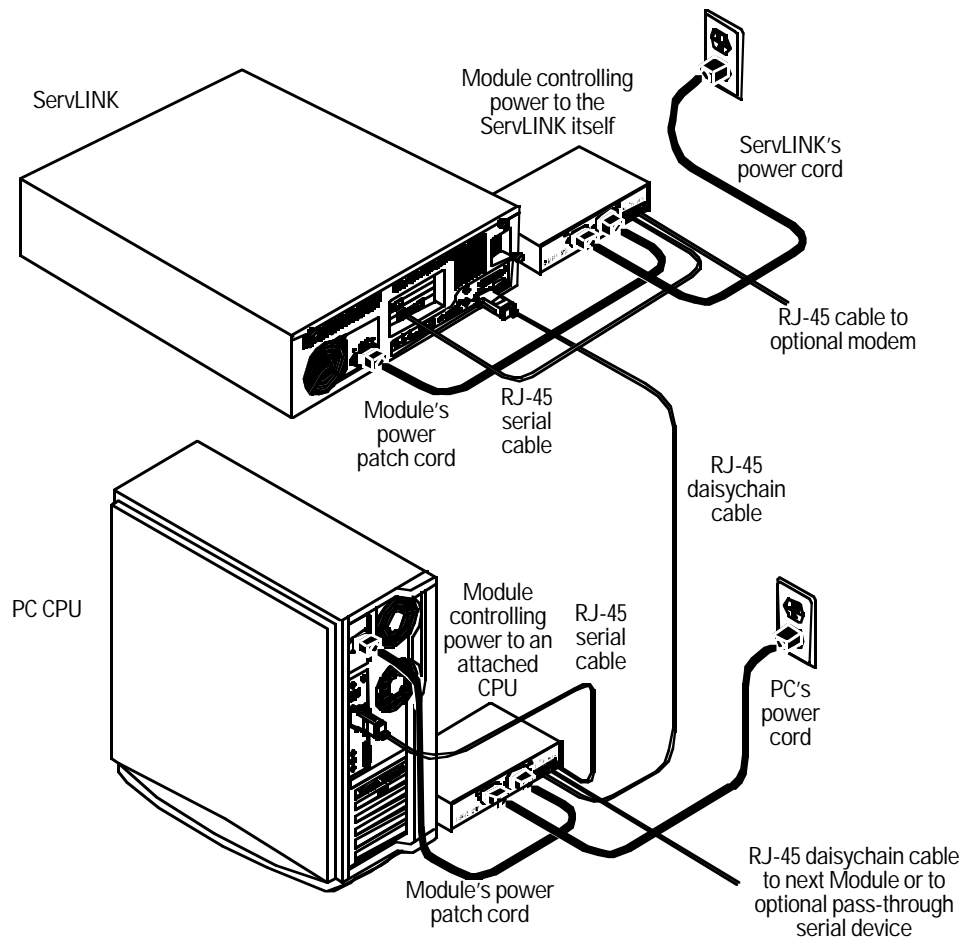
Use the included CPU-extension cable to attach a single CPU…

PC

ServLINK

Cable connectors for ports:

Mouse

Keyboard

Video

ServLINK CPU-extension cable

…or many CPUs through a KVM switch such as this ServSwitch Multi.

ServLINK

ServLINK CPU-extension cable

ServSwitch Multi

ServSwitch Multi User Cable

From left to right, unused audio connections, unused serial connection, and keyboard, video, and mouse connections

With ServLINK Power Management Modules, you have total power control over your whole ServLINK system— and full serial communication, too!

ServLINK

Module controlling power to the ServLINK itself

ServLINK's power cord

RJ-45 cable to optional modem

Module's power patch cord

RJ-45 serial cable

RJ-45 daisychain cable

PC CPU

Module controlling power to an attached CPU

RJ-45 serial cable

PC's power cord

Module's power patch cord

RJ-45 daisychain cable to next Module or to optional pass-through serial device

Specifications

ServLINK (ACR3500A and ACR3600A)

Compliance:
EMI/RFI: CE (EN55022 Class A, EN50082); FCC Part 15 Subpart J Class A, IC Class/classe A;
Telephone-network regulations: FCC Part 68, IC;
Electrical safety: UL® 1950, CSA C22.2 No. 950, EN60950

Modem Type:
ACR3500A: North America compatible V.90 (56K);
ACR3600A: Europe compatible V.90 (56K)

Standards:
Video: VGA, SVGA, or XGA video;
LAN: IEEE 802.3 Ethernet v2

Interfaces:
To monitor: VGA;
To keyboard and mouse: IBM PS/2® compatible (including PS/2 type IntelliMouse®); with appropriate adapters, also supports IBM PC/AT® keyboard and EIA/TIA RS-232 serial mouse on these PS/2 ports;
To CPU: Proprietary composite of video, keyboard, and mouse interfaces listed above;
To telephone network and to phone: Modular telco;
To LAN: 10/100BASE-T;

Interfaces (continued):
To microphone and speakers, and from stereo input: 3.5-mm stereo;
Serial: COM ports are EIA/TIA RS-232, DTE, pinned according to TIA-574; DATA port on Access Card is also RS-232, but is proprietarily pinned on RJ-45;
Also has IEEE 1284-A parallel (IBM PC parallel compatible bidirectional) and USB Type A interfaces, but we don't recommended using these

Resolution and Refresh Rate:
Up to 1280 x 1024 noninterlaced at up to 60 Hz;
Interlaced video is not supported

Storage:
Standard 3.5" diskette drive;
Will always have a standard hard drive and an optical drive that can read CD-ROMs, but the type, capacity, and speed of these drives may vary depending on drive availability

User Controls:
(4) Front-mounted pushbuttons: Main power, main reset, CD-ROM eject, and 3.5"-diskette eject;
All other functions are software-controlled

Indicators:
(3) Front-mounted LEDs: Main power/activity, power/activity of CD-ROM drive, power/activity of 3.5" diskette drive;
All other indications are software-based

Connectors:
All rear-mounted;
(1) DB25 female to CPU or KVM switch;
(2) HD15 female: (1) to primary monitor, (1) to secondary monitor;
(2) 6-pin mini-DIN female: (1) to keyboard, (1) to mouse;
(4) RJ-11 jacks: (1) to telephone line, (1) to telephone, (2) between ServLINK cards;
(2) RJ-45 jacks: (1) to LAN, (1) to Power Management Modules;
(3) 3.5-mm stereo jacks: (1) to microphone, (1) for stereo audio output (speakers/headphones), (1) for stereo audio input;
(2) DB9 male to serial devices;
(1) IEC 320 male power inlet;
Also has (1) DB25 female parallel port and (1) Type A USB port, but these are not used or supported by the standard ServLINK software

Maximum Altitude: 3048 m (10,000 ft)

Temperature Tolerance:
Operating: 5 to 40°C (41 to 104°F);
Storage: –20 to +50°C (–4 to +122°F)

Humidity Tolerance: 10 to 90% noncondensing

Enclosure: Steel and high-impact plastic

Power:
120 or 240 VAC (switchable) at 50 to 60 Hz from utility-power (mains) outlet, through detachable power cord and IEC 320 inlet, to internal transformer;
Consumption: Typically 8 watts

Size: 12.1 x 38.1 x 43.8 cm (4.8"H x 15"W x 17.3"D)

Weight:
Net:9.1 kg. (20 lb) for chassis only;
Shipping:15 kg (33 lb.)

ServLINK Power Management Modules (ACRPWR)

Compliance:
EMI/RFI: CE (EN55022 Class A, EN50082); FCC Part 15 Subpart J Class A, IC Class/classe A;
Telephone-network regulations: FCC Part 68, IC;
Electrical safety: UL 1950, CSA C22.2 No. 950, EN60950

Interfaces:
Power: IEC 320;
Serial: EIA/TIA RS-232, proprietarily pinned on RJ-45 connectors

User Controls:
Front-mounted recessed "power output" switch;
All other functions are software-controlled

Indicators:
(3) Front-mounted LEDs: POWER (power input), CONNECTED DEVICE (power output), and STATUS (serial communication with attached device);
All other indications are software-based

Connectors:
All rear-mounted;
(1) IEC 320 male power inlet;
(1) IEC 320 female power outlet;
(3) RJ-45 female ports for serial communication

Maximum Altitude: 1524 m (5000 ft.)

Temperature Tolerance:
Operating: 0 to 40°C (32 to 104°F);
Storage:–20 to +70°C (–4 to +158°F)

Humidity Tolerance:
Operating: 15 to 85% noncondensing;
Storage: 5 to 90% noncondensing

Enclosure: Steel and high-impact plastic

Power:
120 or 240 VAC (switchable) at 50 to 60 Hz from utility-power (mains) outlet, through detachable power cord and IEC 320 inlet, to internal transformer;
Consumption: Typically 8 watts

Size: 4.4 x 21 x 12.4 cm (1.8"H (1U) x 8.3"W x 4.9"D)

**Weight:** 0.9 kg (1.9 lb.)

The complete packages

The **ServLINK** ships with:

- The ServLINK itself.
- Its keyboard and mouse.
- Software kits (in case you should ever have to reinstall the native software on the ServLINK) for:
  – Windows NT (one CD-ROM, three diskettes, and a manual);
  – pcANYWHERE (one CD-ROM); and
  – Proprietary ServLINK software (one CD-ROM).
- (1) Three-to-one CPU-extension cable for attaching a PC or KVM switch.
- (1) RJ-11 pigtail cable (preinstalled) attaching the ServLINK's modem to its access-control card.
- (1) RJ-11 cable for attaching the modem to a phone-line jack.
- (1) Power cord.
- (1) Manual.

Each **ServLINK Power Management Module** ships with:

- The Module itself.
- (1) Power patch cord with an IEC 320 female outlet on one end and an IEC 320 male inlet on the other. (The Module doesn't come with a cord that would run to the AC outlet—see **What else you might need** at right.)
- (2) RJ-45 patch cables: one 3 ft. (1 m) long, one 8 ft. (2.4 m) long.
- (1) RJ-45 female to DB9 male adapter.
- (1) RJ-45 female to DB9 female adapter.
- (1) DB9 female to DB25 male adapter.
- (1) Manual.

> ### *The ServLINK comes with all of the necessary hardware installed to make dialup and LAN connections.*
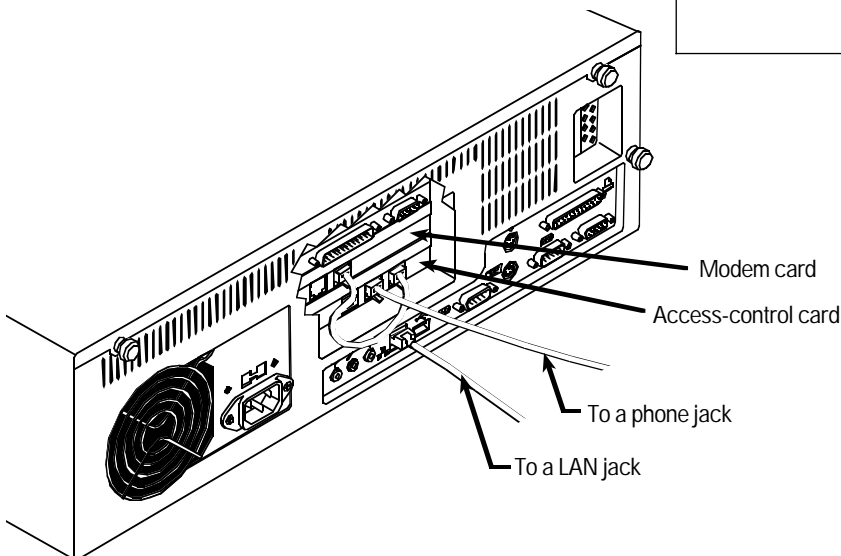
What else you might need

ServLINK:

- One or more ServSwitch family KVM switches to give the ServLINK centralized control over multiple CPUs.
- A 10BASE-T cable for attaching the ServLINK to an Ethernet network.
- A null-modem cable for direct PC-to-ServLINK communication.
- A microphone and/or speakers for sound I/O to/from the ServLINK itself. (The ServLINK *cannot* send or receive audio signals to/from the remote site or to/from the attached PCs.)
- An Uninterruptible Power Supply (UPS) and/or AC-power surge protection.
- Data-line surge protection for any attached phone, LAN, and serial cables.
- *At remote locations:* PCs running pcANYWHERE and equipped with either a modem (if they'll be connecting to the ServLINK across the phone network or a WAN) or a LAN card and an IP address on the same network as the ServLINK (if they'll be connecting to the ServLINK across a LAN).
  You might want to consider AC-power and data-line surge protection for these PCs as well.

ServLINK Power Management Module:

- Normally you would run the Module's power patch cord from the Module to the power-controlled device, and run the device's power cord from the Module to the AC outlet. However, if the device's power cord isn't suitable for this purpose, you'll need a replacement power cord.
- A DB9M to DB25F adapter for attaching a PC or other DTE device with a DB25M serial port to the Module.
- An Uninterruptible Power Supply (UPS) and/or AC-power surge protection.
- Data-line surge protection for any attached serial cables.
- *For the Module controlling power to the ServLINK itself:* An external modem, phone cable, and second phone line to provide a secondary dialup-reboot method for the ServLINK.
- *For the last Module in a Module daisychain:* A "pass-through" serial device (printer, modem, PC, etc.) that the ServLINK can communicate with when no Modules are active.

Modem card

Access-control card

To a phone jack

To a LAN jack

▼

Ordering Information