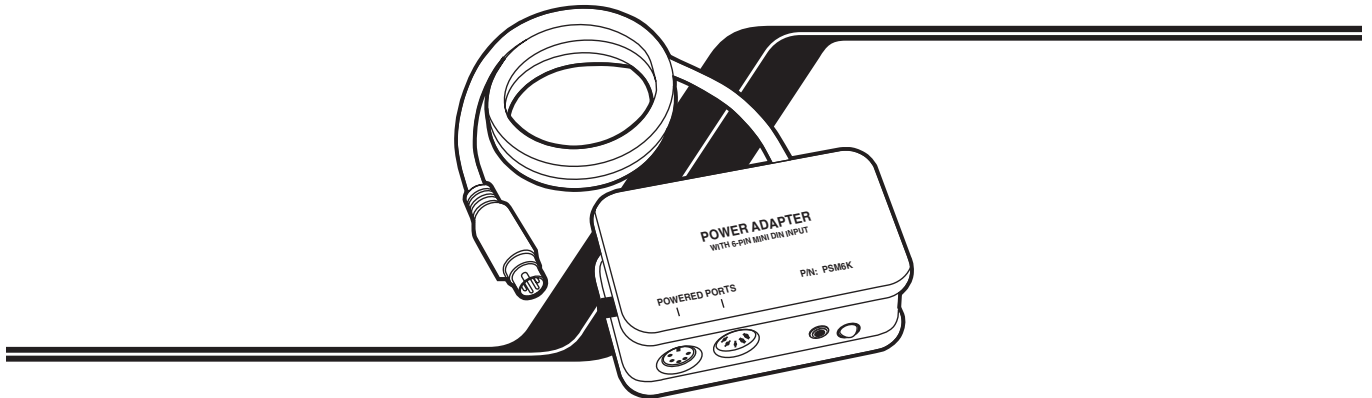# Keyboard-Line Power Adapter
for ServSwitch™ Family

There are two main situations in which you might need to add a Keyboard-Line Power Adapter to one or more of the keyboard lines attached to a ServSwitch™ brand keyboard/video/mouse switch. One is shown in Figure 2 on the next page; the other is shown in Figure 3 on page 3 and Figure 4 on page 4. Other applications might call for an Adapter as well; if it becomes apparent that your shared keyboard or interface-powered ServSwitch is not getting enough power, but you don't see your application here, call Black Box for technical support.

First, for reference, Figure 1 below shows a very simple ServSwitch Multi system without a Power Adapter attached. If the Switch can supply all of the power that the shared keyboard needs, everything's fine.
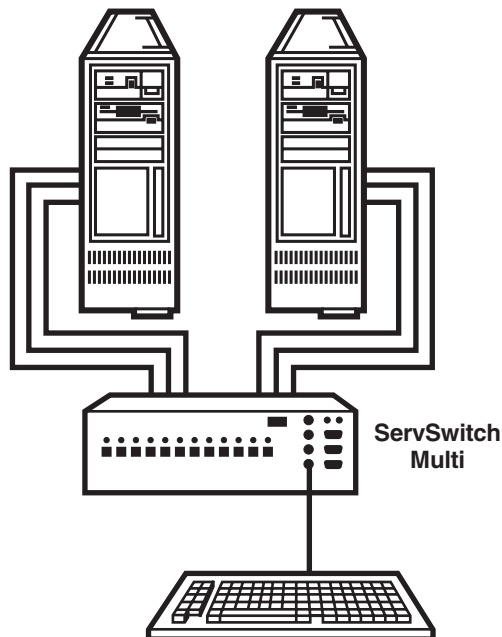
Figure 1. ServSwitch Multi system without an adapter.

However, if the keyboard (or other compatible input device) draws more power than your Switch can supply, you'll need to install one of these Keyboard-Line Power Adapters between the keyboard and the Switch, as shown in Figure 2 below. Take these steps:

1. Detach the shared keyboard from the Switch. (The Switch will continue to emulate the presence of the keyboard, so this won't cause your computers to crash.)

2. Attach the Power Adapter's keyboard-cable pigtail to the shared keyboard port on the Switch. (If the Switch has a 5-pin DIN keyboard port, you'll need a 6-pin mini-DIN female to 5-pin DIN male keyboard adapter, such as our product code FA212.)

3. Plug the Adapter into AC power. The Adapter will begin operating automatically, supplying DC power on its powered ports.

4. Plug the shared keyboard into one of the Power Adapter's powered ports: If the keyboard cable has a 6-pin mini-DIN connector, plug it into the Adapter's left-hand 6-pin mini-DIN port. If the keyboard cable has a 5-pin DIN connector, plug it into the Adapter's right-hand 5-pin DIN port.
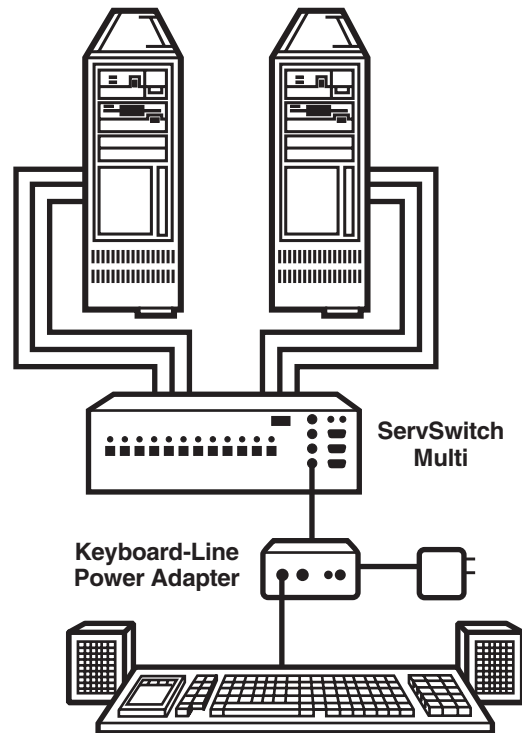

Figure 2. ServSwitch Multi system with a high-draw keyboard and a Keyboard-Line Power Adapter.

The other possibility, which will occur sometimes with interface-powered ServSwitch units, is that the CPUs attached to the Switch don't provide enough power to operate the Switch as well as the shared keyboard and mouse. In this case, you'll need to install Keyboard-Line Power Adapters between the Switch and one or more of the CPUs, as shown in Figure 3 below. (A similar situation, in which an Adapter is used with the interface-powered local unit of a CAT KVM Extender—the remote unit has its own power supply—is shown in Figure 4 on the next page.)

NOTE

If an interface-powered switch can get all of its power from just one of its CPU ports, and can still recognize all of the other CPUs, you will only need one Adapter. If, however, the switch must pull power from multiple ports, or if it is receiving so little power from multiple CPUs that it can't detect the presence of any of them (as can happen if you try to hook up laptops), you'll need to use multiple Adapters.

Take these steps for each CPU whose keyboard line you'll be attaching a Power Adapter to:

1. Power down the CPU.

2. Detach the keyboard-extension cable from the CPU's keyboard port.

3. Attach the Power Adapter's keyboard-cable pigtail to the CPU's keyboard port. (If the CPU has a 5-pin DIN keyboard port, you'll need a 6-pin mini-DIN female to 5-pin DIN male keyboard adapter, such as our product code FA212.)

4. Plug the keyboard-extension cable you detached in step 2 into one of the Power Adapter's powered ports: If the cable has a 6-pin mini-DIN connector, plug it into the Adapter's left-hand 6-pin mini-DIN port. If the cable has a 5-pin DIN connector, plug it into the Adapter's right-hand 5-pin DIN port.

5. Plug the Adapter into AC power. The Adapter will begin operating automatically, supplying power (through its powered port) to the Switch.
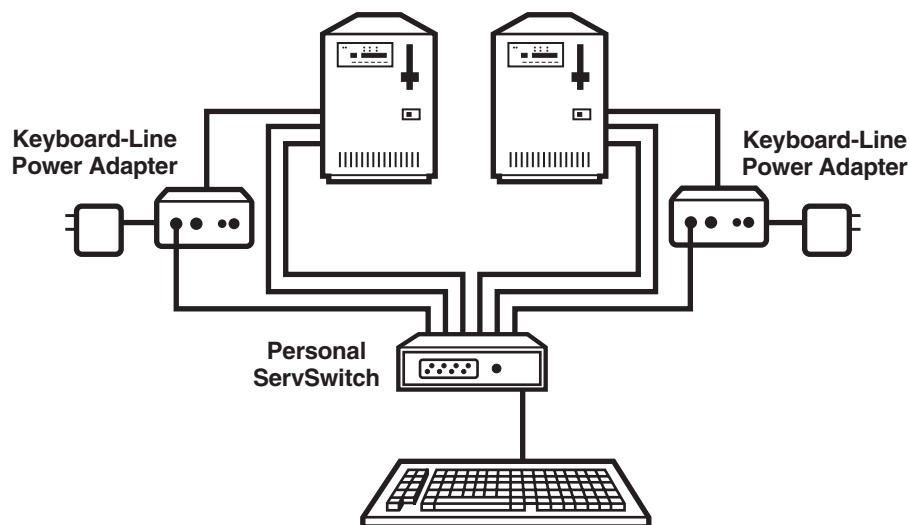
6. Power up the CPU.

Figure 3. Personal ServSwitch system with low-output computers and Keyboard-Line Power Adapters*.

*Multiple Adapters are shown as an example only. Your Personal ServSwitch system should not need more than one Adapter.
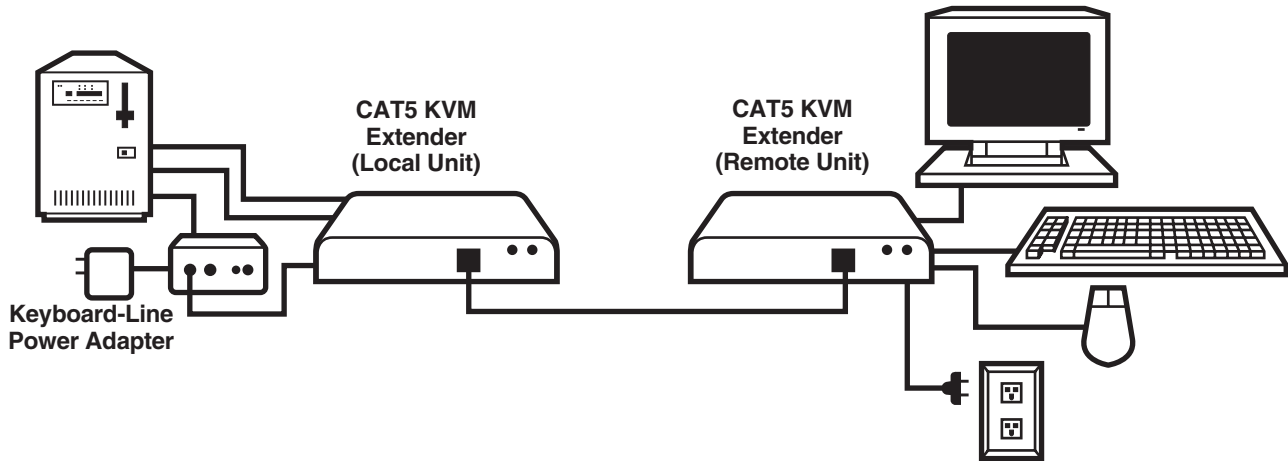
Figure 4. CAT5 KVM Extender system with a low-output computer and a Keyboard-Line Power Adapter attached to the Extender's local unit.

There is one other application in which some people use the Keyboard-Line Power Adapter; we don't recommend this, but it might be something you need to do at some point. If you want to use an interface-powered KVM switch to switch video only (that is, you don't want to attach CPUs' keyboard ports to the switch), you can power the switch with these Adapters, as shown in Figure 5 below. (Note that, if you don't attach a keyboard to the switch, it must have manual controls on it somewhere in order for you to switch between ports. Also—and this is very important—most electronic KVM switches will *not* switch to a port on which they detect no keyboard-power input, so you will probably need one Adapter for *each* of your CPUs.)
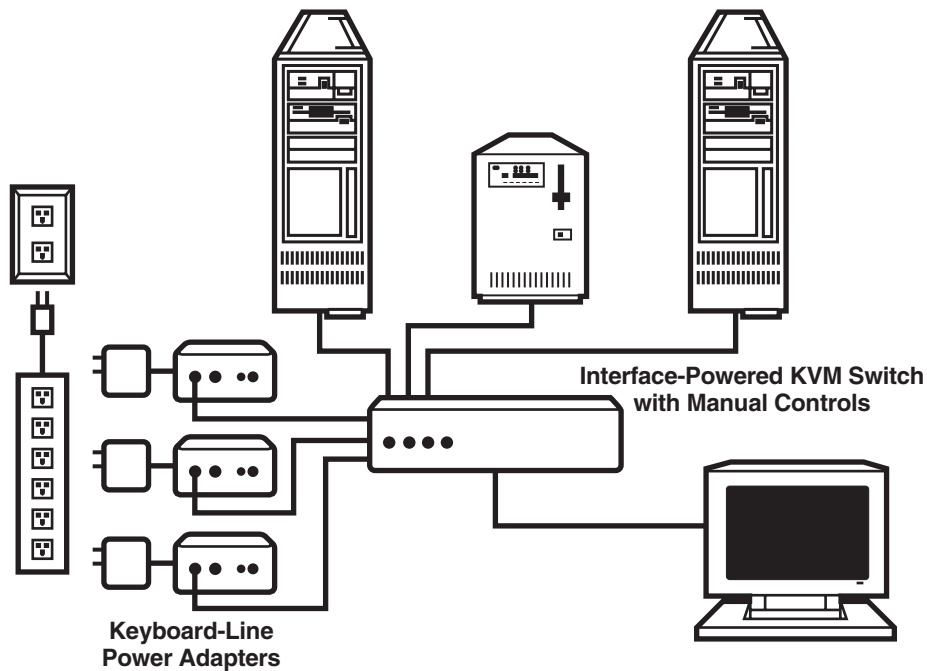

Figure 5. Using the Adapter with an interface-powered switch for video-only switching.

Specifications

System Hardware Required — IBM PS/2 or PC/AT compatible computers and keyboards

Compliance — UL listed, CSA certified

Standard — Class 2 transformer

User Control — (1) Side-mounted ON/OFF slide switch

Indicator — (1) Front-mounted Power LED

Connectors — On Adapter itself:
   (1) Front-mounted 2.5-mm jack for AC input;
   (2) Front-mounted "powered ports" for DC output;
     (1) 6-pin mini-DIN female, (1) 5-pin DIN female;
   (1) Rear-mounted 6-pin mini-DIN male on short pigtail for attachment to the
     keyboard port of a computer or switch;
On transformer:
   (1) North American standard NEMA 5-15P plug

Temperature Tolerance — Operating: +32 to +104˚ F (0 to +40˚ C);
Storage: –4 to +122˚ F (–20 to +50˚ C)

Humidity Tolerance — 0 to 95% noncondensing

Power — 115 VAC, 60 Hz from AC-power (mains) outlet into wallmount transformer;
9 VAC, 60 Hz at 1 amp maximum from transformer through nondetachable
   6-ft. (1.8-m) cord to Adapter;
Adapter provides 5 VDC at 700 mA on its powered ports

Size — Adapter: 2.5"H x 2"W x 3.5"D (6.4 x 5.1 x 8.9 cm);
Transformer: 2"H x 2"W x 2.5"D (5.1 x 5.1 x 6.4 cm)

Weight — Net, Adapter: 0.5 lb. (0.2 kg);
Net, Transformer: 0.7 lb. (0.3 kg);
Total: Approx. 1.3 lb. (0.6 kg)

NOTES

CUSTOMER SUPPORT INFORMATION

Order **toll-free** in the U.S. Call **877-877-BBOX** (outside U.S. call **724-746-5500**)
FREE technical support, 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**
Mailing address: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: **www.blackbox.com** • E-mail: **info@blackbox.com**