



© Copyright 2004. Black Box Corporation. All rights reserved.

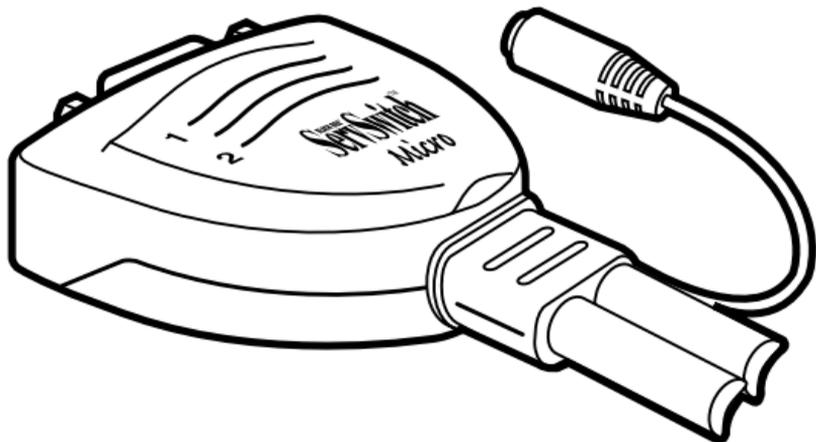
---

*1000 Park Drive • Lawrence, PA 15055-1018 • 724-746-5500 • Fax 724-746-0746*



OCTOBER 2004  
KV404A  
KV405A  
KV406A

## ServSwitch Micro with Audio



---

### 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](http://www.blackbox.com) • E-mail: [info@blackbox.com](mailto:info@blackbox.com)



## FEDERAL COMMUNICATIONS COMMISSION AND INDUSTRY CANADA RADIO FREQUENCY INTERFERENCE STATEMENTS

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## SERVSWITCH MICRO WITH AUDIO

*This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.*

*Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.*

### **TRADEMARKS USED IN THIS MANUAL**

ServSwitch is a trademark of Black Box Corporation.

PS/2 is a registered trademark of International Business Machines Corporation.

Linux is a registered trademark of Linus Torvalds.

Windows and Windows NT are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

*Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.*

# Contents

<b>Chapter</b>	<b>Page</b>
1. Specifications . . . . .	4
2. Overview . . . . .	7
3. Installation . . . . .	8
4. Operation . . . . .	11
4.1 LED Indicators . . . . .	11
4.2 Hotkey Commands . . . . .	11
5. Troubleshooting . . . . .	13

# 1. Specifications

**Video Resolution:** 1920 x 1440 DDC, DDC2, and DDC2B

**Scan Interval:** 3, 8, 15, and 30 seconds

**Cable Length to Computer:** 6 ft. (1.8 m)

**Software Requirements:** Windows® 95/98/Me/XP, Windows 2000, Windows NT®, or Linux®

**Connectors:** User end: KV404A–KV406A:  
(1) HD15 for connection to shared monitor, (2) 6-pin mini-DIN for connection to shared keyboard and mouse, (1) 2.5-mm female stereo audio connector;

**Connectors (continued):** Computer end:

KV404A: (2) HD15 and (4) 6-pin mini-DIN for connection to two PS/2<sup>®</sup> monitors, keyboards, and mice, (2) 2.5-mm male stereo audio connectors;

KV405A: (2) HD15 for monitor port, (2) USB Type A for keyboard and mouse ports, (2) 2.5-mm male stereo audio connectors;

KV406A: (2) HD15 for monitor port, (1) USB Type A for keyboard and mouse ports, (2) 6-pin mini-DIN for keyboard and mouse ports, (2) 2.5-mm male stereo audio connectors

**Indicators:** (2) Yellow status LEDs

## SERVSWITCH MICRO WITH AUDIO

**Temperature Tolerance:** 41 to 104°F  
(5 to 40°C)

**Relative Humidity:** Up to 80%

**Power:** From the interface

**Size:** 1.9"H x 2.4"W x 0.8"D  
(4.8 x 6.1 x 2 cm)

**Weight:** 0.6 lb. (0.3 kg)

## 2. Overview

Use the ServSwitch™ Micro to access two computers from a single shared monitor, keyboard, and mouse. Two high-quality, 6-ft. (1.8-m) integral coaxial cables provide the connections to the two computers.

Three models are available. They vary only in the number and type of connectors. All three models have audio connectors. See the Connectors specification in **Chapter 1**.

All models are plug and play and can be computer selected for easy setup and installation. They also have two status LEDs and advanced video enhancement technology for crisp, clear VGA quality up to 1920 x 1440. Computer switching is flawless, and PC startup is trouble-free.

## 3. Installation

Figure 3-1 shows a typical application. Follow the instructions on the next two pages to install the ServSwitch Micro.

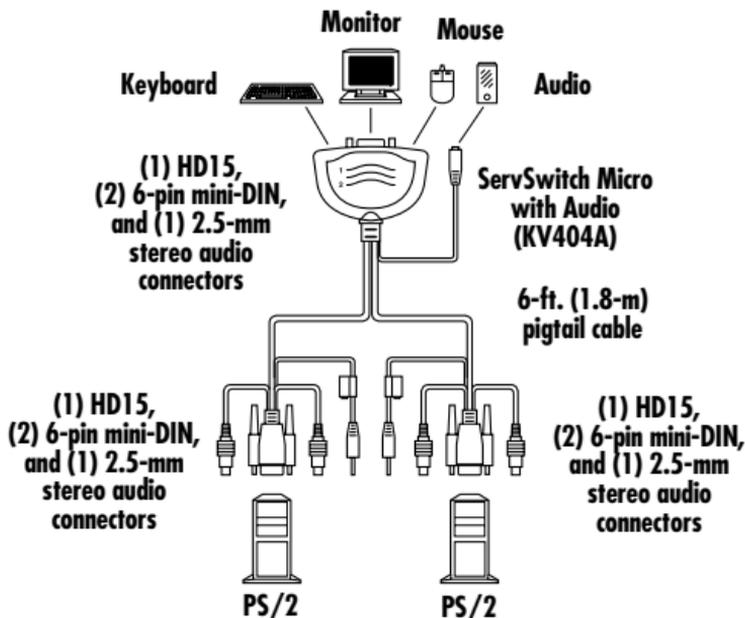


Figure 3-1. The ServSwitch Micro's cable connections.

1. Power off both computers.
2. Connect, in order, the mouse connector, keyboard connector, and monitor connector to one computer's respective ports. Start by attaching the 6-pin mini-DIN connectors to the computer's keyboard and mouse ports. (The mini-DIN connectors are color-coded; mate the connectors with the same color. The purple connector attaches to the keyboard and the green connector attaches to the mouse.)

Next, attach the adjoining HD15 connector to the computer's HD15 video port.

## SERVSWITCH MICRO WITH AUDIO

Then, connect the 2.5-mm stereo audio connector to the computer's audio port.

3. Repeat step 2, only this time connect the ServSwitch Micro to the second computer.
4. Connect your keyboard, mouse, and VGA monitor to the two 6-pin mini-DIN connectors and one HD15 connector on the ServSwitch Micro's user end. Then connect the 2.5-mm stereo audio connector to the user computer's audio connector.

## **4. Operation**

### **4.1 LED Indicators**

Two LEDs indicate the ServSwitch Micro's status. When the LED is lit, the computer connected to the associated port is active. In AutoScan mode, the keyboard's Scroll Lock should be flashing.

### **4.2 Hotkey Commands**

The ServSwitch Micro selects computers using hotkey commands. These are summarized in Table 4-1.

## SERVSWITCH MICRO WITH AUDIO

Table 4-1. Hotkey command summary.

Key Sequence	Function
left <b>CTRL</b> left <b>CTRL</b> <b>1</b>	Selects computer 1
left <b>CTRL</b> left <b>CTRL</b> <b>2</b>	Selects computer 2
left <b>CTRL</b> left <b>CTRL</b> <b>F1</b>	Initiates AutoScan
left <b>CTRL</b> left <b>CTRL</b>	Aborts AutoScan
left <b>CTRL</b> left <b>CTRL</b> <b>F2</b>	Toggles computer selection
left <b>CTRL</b> left <b>CTRL</b> <b>F3</b>	Toggles AutoScan intervals. To select the AutoScan interval, press and release the Ctrl key twice, then press the F3 key repeatedly to toggle through the settings: 3, 8, 15, or 30 seconds.
left <b>CTRL</b> left <b>CTRL</b> <b>F12</b>	Resyncs the mouse

## 5. Troubleshooting

**Table 5-1. Problems/Causes/Solutions.**

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
The mouse does not work.	Improper initialization.	<ol style="list-style-type: none"><li>1. Unplug the mouse, then plug it back into the ServSwitch Micro.</li><li>2. Press the left Ctrl key twice, followed by the F12 key to resync the mouse.</li></ol>
The ServSwitch keeps switching between computers. The Scroll Lock LED is flashing.	The ServSwitch is in AutoScan mode.	You can still use the selected computer during AutoScan mode. To abort AutoScan mode, press the left Ctrl key twice.

## SERVSWITCH MICRO WITH AUDIO

Table 5-1 (continued). Problems/Causes/Solutions.

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Both LEDs are off.	Both computers are off.	Turn on at least one computer.
	There is a bad connection.	Make sure that both connections are secure.
One LED is on while both computers are off.	At least one computer has keyboard power-up ability.	This is not a problem. You can still use the computer's keyboard power-up feature.
AutoScan mode does not work.	One or both computers is (are) powered off.	Power on both computers.
The AutoScan interval has changed since its last use.	AutoScan resets to a default of three seconds when both computers are powered off.	Use a hotkey command (see Table 4-1) to set the interval to 8, 15, or 30 seconds.
I need to connect my serial mouse.	The ServSwitch does not support a serial mouse.	You need to upgrade your computer and purchase a PS/2 mouse.