

**BELKIN**<sup>®</sup>

# 2-Port KVM Switch with Audio Support and Built-In Cabling

*Control two computers using one video monitor, and a PS/2 keyboard and mouse*



**User Manual**

F1DL102P

# TABLE OF CONTENTS

## Introduction

Package Contents . . . . .	1
----------------------------	---

## Overview

Feature Overview . . . . .	2
Operating Systems . . . . .	3
Unit Display Diagram . . . . .	4
Specifications . . . . .	5

## Installation

Pre-Configuration . . . . .	6
Step-By-Step Installation Guide . . . . .	7

## Using your Switch

Powering Up the Systems . . . . .	9
AutoScan Mode . . . . .	10

FAQs . . . . .	11
----------------	----

Troubleshooting . . . . .	14
---------------------------	----

Information . . . . .	17
-----------------------	----

# INTRODUCTION

Congratulations on your purchase of this Belkin 2-Port KVM Switch with Audio Support and Built-In Cabling (the Switch). The diverse line of market-leading KVM solutions from Belkin exemplifies our commitment to delivering high-quality, durable products at a competitive price. Engineered to give you control over multiple computers and/or servers from one console, Belkin KVM switches come in a variety of capacities suitable for all configurations, large or small. This Switch is backed by a Belkin Three-Year Warranty and free technical support.

This manual will provide you details about your new Switch, from installation and operation, to troubleshooting—in the unlikely event of a problem.

For easy installation, please refer to the Quick Installation Guide included with your Switch.

Thank you for purchasing the Belkin 2-Port KVM Switch with Audio Support and Built-In Cabling. We appreciate your business.

## **Package Contents**

- 2-Port KVM Switch with Audio Support and Built-In Cabling
- User Manual
- Quick Installation Guide
- Registration Card

# OVERVIEW

The Belkin 2-Port KVM Switch with Audio Support and Built-In Cabling allows you to control multiple computers with one keyboard, monitor, and mouse. The Switch supports PS/2 input devices (keyboard and mouse), VGA, SVGA, XGA, and PS/2 computers.

## Feature Overview

### Complete Compact Solution

Built-in cables and color-coded connectors make operation and organization easy.

### Microphone/Audio Support

Built-in microphone, speaker jacks, and cables support your small- and home-office multimedia add-ons. This feature reduces clutter by eliminating the need to unplug and re-plug speakers and mics when you switch between computers.

### Hot Keys

Hot keys allow you to select ports using designated key commands. Control multiple computers using a simple hot key sequence on your keyboard.

### AutoScan

The AutoScan feature allows you to automatically scan and monitor the activities of all operating computers connected to your Switch one by one.

### Video Resolution

The Switch is able to support video resolutions of up to 2048x1536@65Hz. To preserve signal integrity at high resolutions, 75-Ohm coaxial VGA cabling is built-in to your Switch.

# OVERVIEW

## Light-Emitting Diode Display

LEDs on the top of the Switch function as status monitors. The LEDs light to indicate which corresponding monitor port is currently active.

## Operating Systems

Your Switch is for use on CPUs using:

### Platforms

- Windows® 95, 98, 2000, Me, NT®, XP
- DOS
- Linux®
- Novell® NetWare® 4.x/5.x

### Keyboards

- Supports 101-, 102-, and 104-key keyboards

### Mice

- Microsoft® system-compatible PS/2 mice with 2, 3, 4, or 5 buttons

### Monitors

- VGA
- SVGA
- MultiSync®

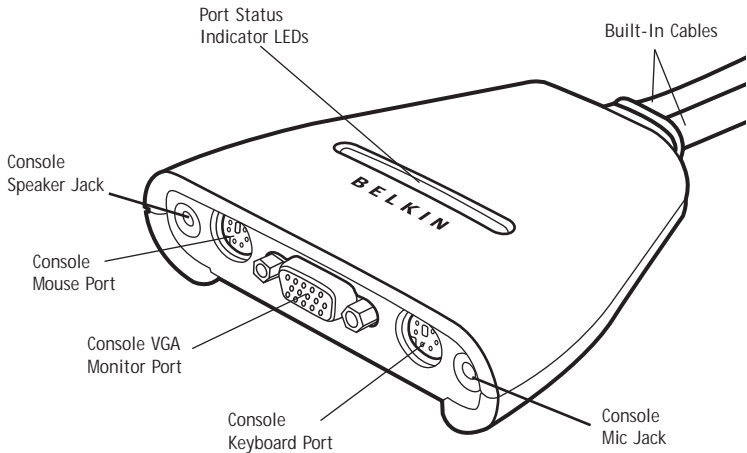
### Speakers

- Stereo

# OVERVIEW

## Unit Display Diagram

### The 2-Port KVM Switch with Audio Support and Built-In Cabling:



# OVERVIEW

## Specifications

**Part No.:** F1DL102P

**PCs Supported:** 2

**Keyboard Emulation:** PS/2

**Mouse Emulation:** PS/2

**Monitors Supported:** VGA, SVGA, MultiSync, and LCD (with use of adapter cable)

**Max. Resolution:** 2048x1536@65Hz

**Keyboard Input:** 6-pin miniDIN (PS/2)

**Mouse Input:** 6-pin miniDIN (PS/2)

**Audio/Mic Input:** 3.5mm jack

**VGA Port:** 15-pin HDDB type

**LED Indicators:** 2

**Enclosure:** Plastic

**Dimensions:** (H) 27.5 x (W) 82 x (D) 81.25mm

**Weight:** 1.3 lbs.

**Operating Temp:** 32° to 104° F (0° to 40° C)

**Storage Temp:** -4° to 140° F (-20° to 60° C)

**Humidity:** 0-80% RH, non-condensing

**Warranty:** 3 years

***NOTE:** Specifications are subject to change without notice.*

# INSTALLATION

## Pre-Configuration

### Where to Place the Switch

The Switch is designed for positioning on the desktop. The exact placement will be based on the location of your CPUs and length of your cables.

### Cable Distance Requirements

For PS/2 computers: VGA signals are best retained when transmitted up to eight feet. Beyond eight feet, probability of video degradation increases with an increase in distance. For this reason, your PS/2 computer should be placed within eight feet of the KVM Switch.

*Note: If your computer needs to be more than eight feet from the KVM Switch, you can use the Belkin CAT5 Extender (part number F1D084) to extend your PS/2 keyboard, PS/2 mouse, and monitor up to 500 feet (152.4m) away using a standard CAT5 UTP cable.*

### Cautions and Warnings

Avoid placing cables near fluorescent lights, air conditioning equipment, or machines that create electrical noise (e.g., vacuum cleaners).



# INSTALLATION

## Step-by-Step Installation Guide

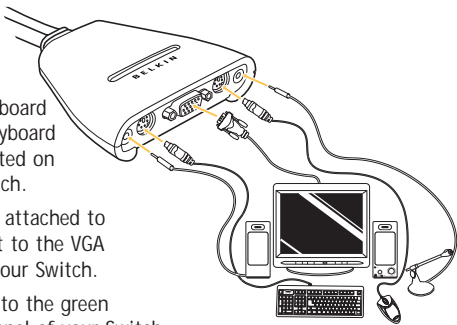
This section provides complete instructions for the hardware setup of a single Switch.

### Important Note

Before attempting to connect anything to the Switch or to any computer, make sure that everything is powered off. Plugging and unplugging cables while computers are powered on can cause irreversible damage to your computers, data, and/or to the Switch. Belkin Corporation will not be responsible for damage caused in this way.

### Connecting the Console

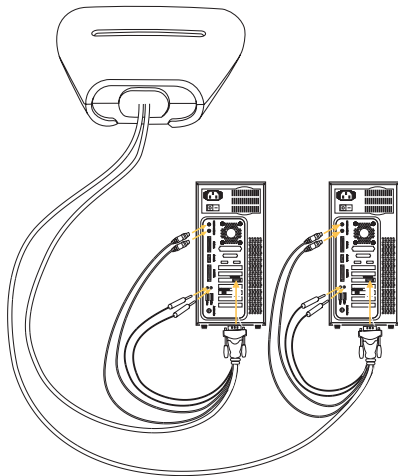
1. Power down all computers.
2. Connect your PS/2-type keyboard and mouse to the purple keyboard and green mouse ports located on the front panel of your Switch.
3. Take the video cable that is attached to your monitor and connect it to the VGA port on the front panel of your Switch.
4. Connect your speaker cable to the green speaker jack on the front panel of your Switch.
5. Connect your mic cable to the pink mic jack on the front panel of your Switch.



# INSTALLATION

## Connecting Computers to the Switch

1. Using the attached cables, take the VGA cable and connect it to the VGA port on the first computer.
2. Connect the PS/2 keyboard KVM cable to the keyboard port on the computer.
3. Connect the PS/2 mouse KVM cable to the mouse port on the computer.
4. Connect the green speaker KVM cable to the speaker jack on the computer.
5. Connect the pink mic KVM cable to the mic jack on the computer.
6. Repeat steps 1 through 5 for the additional computer to be connected to the Switch.



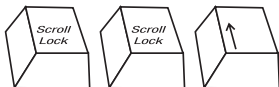
# USING YOUR SWITCH

## Powering Up the Systems

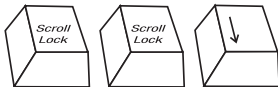
Once all cables have been connected, power up your CPUs that are attached to the Switch. All computers can be powered on simultaneously. The Switch emulates a mouse and keyboard on each port and will allow your computer to boot normally. Your Switch should now be ready for use.

You can select which computer to operate through hot key commands. Note that it will take 1-2 seconds for the video to display after switching. This is due to the refresh of the video signal. A re-synchronization of the mouse and keyboard signal also takes place. This is normal operation and ensures that proper synchronization is established.

You can conveniently change ports on the Switch through a keyboard command sequence using the "SCROLL LOCK" key and up and down arrow keys. To send commands to the Switch, press the "SCROLL LOCK" key twice within two seconds. Then you can press the up or down arrow keys to switch between ports.



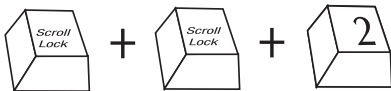
*Switch to next active port,  
up arrow*



*Switch to previous active port,  
down arrow*

## USING YOUR SWITCH

You can switch directly to any port by entering the Switch port number you wish to use. For example, if you press “SCROLL LOCK”, “SCROLL LOCK”, “2”, the computer on port 2 will be selected.



*Switch to Port 2—(2)*

### AutoScan Mode

In AutoScan mode, the Switch remains on one port for eight seconds before switching to the next. This time interval cannot be changed.

To enable AutoScan mode, press “SCROLL LOCK”, “SCROLL LOCK”, “S”.

*Note: There is no mouse or keyboard control in this mode by design, in order to prevent errors. If it were enabled, the user could move the mouse or use the keyboard while the KVM Switch is switching to the next port. This could interrupt communication between the computer and Switch that might cause erratic mouse movement, or result in errant display of characters when using the keyboard.*

To disable AutoScan mode, press the space bar.

## FAQs

**Q:** What operating system does the Switch support?

**A:** The Switch will support any operating system that runs on a PS/2 platform. It will also work with Sun™ and Mac® operating systems using the appropriate adapters (Belkin OmniView™ Sun Adapter F1D082, OmniView Mac Adapter F1D080). Operating systems include, but are not limited to, DOS, Windows 95, 98, 2000, Me, NT, XP, Linux, and Novell NetWare 4.x/5.x.

**Q:** Does the Switch function with the Microsoft IntelliMouse®?

**A:** Yes, the Switch will function with Microsoft, Logitech, Kensington, as well as with all Belkin mice. The Switch will support only two mouse buttons. Please contact Belkin Technical Support for any compatibility questions you may have.

**Q:** How does the Switch allow the user to toggle between ports?

**A:** The user can choose computers using specially designated hot keys from the keyboard.

**Q:** How far can the user be from the Switch?

**A:** When using PS/2 connections, the Switch can be up to eight feet away from your computer. If your computer needs to be more than eight feet from the KVM Switch, you can use the Belkin CAT5 Extender (part number F1D084) to extend the operation distance of your PS/2 keyboard, PS/2 mouse, and monitor up to 500 feet away using standard CAT5 UTP cable.

## FAQs

**Q:** What is the maximum video resolution the Switch supports?

**A:** The advanced video circuit in the Switch supports a maximum resolution of 2048x1536@65Hz. This higher resolution support is ideal for graphic artists and designers who depend on high-quality video.

**Q:** What is the difference between the 2-Port KVM Switch with Audio Support and Built-In Cabling and the SOHO Series KVM Switch?

**A:** The SOHO Series KVM Switch offers a sculpted, space-saving design; cable management; flash-upgrade capability; and a USB option.

**Q:** What are the benefits of the Belkin 2-Port KVM Switch with Audio Support and Built-In Cabling over a similar competitor product?

**A:** The Belkin 2-Port KVM Switch with Audio Support and Built-In Cabling is an affordable solution, packed with features usually found in higher-priced units. It offers hot key command switching, resolution support of up to 2048x1536@65Hz, AutoScan, and a Belkin Three-Year Limited Warranty—all at a very affordable price.

**Q:** Can I use the Switch on my Sun computer?

**A:** Yes, the Switch works with Sun computers when used with the Belkin Sun Adapter, part number F1D082.

## FAQs

**Q:** Do I have to install any software to use the Switch?

**A:** No, the Switch does not require any drivers or software to be installed on your computers. Simply connect all your computers to the PC ports on the Switch, then attach one monitor, mouse, and keyboard to the corresponding console ports and your Switch is ready for use.

**Q:** Does the Switch require an AC adapter?

**A:** No, the Switch is powered by the PS/2 ports of your computer.

**Q:** Can I use the Switch to switch video signals only?

**A:** No, you cannot use the Switch to switch between video signals only. The Switch requires power from the PS/2 ports in order to operate.

**Q:** How long is the warranty for the Switch?

**A:** The Switch comes with a Three-Year Limited Warranty.

# TROUBLESHOOTING

## Video

I am getting ghosting, shadowing, or fuzzy images on my monitor.

- Check that all video cables are inserted properly.
- Check that the monitor you are using supports the resolution and refresh-rate setting on your computer.
- Check that the graphics card you are using supports the resolution and refresh-rate setting on your computer.
- Connect the monitor directly into the computer you are having trouble with to see if the problem still appears.

I am getting a black screen on my monitor.

- Check that all video cables are inserted properly.
- Connect your monitor directly to the computer to verify that your monitor is functioning properly.
- Take your computer off standby mode.

## Keyboard

Computer does not detect your keyboard and you get a keyboard error reported at boot up.

- Check that the keyboard cable between the Switch and the computer is connected properly. Tighten any loose connections.
- Try swapping your keyboard with a different one.



# TROUBLESHOOTING

- If you are using the keyboard software that was included with your keyboard, uninstall it and install the standard Microsoft keyboard driver.

## Mouse

Mouse is lost when I switch to a different channel.

- Check that the mouse you are using is connected properly to the console port of the Switch.
- If you are using a mouse driver that was included with your mouse, uninstall it and install the standard Microsoft mouse driver.
- Disconnect and reconnect the mouse cable attached to the channel with which you are experiencing problems to re-synchronize the mouse connection.
- Attach the mouse directly to the computer with which you are experiencing mouse problems.
- Allow up to one minute following the computer's waking from standby mode for mouse function to return.
- Deactivate power management schemes on the PC with which you are experiencing problems.
- Try swapping the mouse with a different one.

The mouse is not detected at boot up.

- Check the cables and make sure that they are inserted properly.

The computer boots up fine, but the mouse does not work.

- Make sure it is plugged-in properly.

# TROUBLESHOOTING

- Make sure the mouse works when directly plugged into the computer. Rebooting may be necessary when trying this.
- Try a different mouse.

When I switch from one port to another, mouse movement is completely erratic.

- Make sure you do not have more than one mouse driver installed. Make sure that the driver is either for a standard PS/2 mouse or a Microsoft compatible PS/2 mouse.
- Make sure you do not have any mouse drivers loaded in your CONFIG.SYS or AUTOEXEC.BAT files.
- Avoid moving the mouse or pressing the mouse button when switching ports on the Switch.
- You can reset the mouse and resume proper mouse movement simply by unplugging the mouse from the Switch and waiting 2–3 seconds before plugging it in again.

## General

My computer does not boot up when connected to the Switch, but works fine when I connect the keyboard, video, and mouse directly to it.

- Make sure that the keyboard and mouse cables are connected tightly between the Switch and the computer.
- Check that the keyboard and mouse cables are not crossed, i.e., make sure the connectors are plugged into the correct ports.

# INFORMATION

## FCC Statement

### **DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY**

We, Belkin Corporation, of 501 West Walnut Street, Compton, CA 90220, declare under our sole responsibility that the product:

F1DL102P

to which this declaration relates:

Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **CE Declaration of Conformity**

We, Belkin Corporation, declare under our sole responsibility that the product F1DL102P, to which this declaration relates, is in conformity with Emissions Standard EN55022 and with Immunity Standard EN55024, LVP EN61000-3-2, and EN61000-3-3.

## **ICES**

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# INFORMATION

## Belkin Corporation Limited Three-Year Product Warranty

Belkin Corporation warrants this product against defects in materials and workmanship for its warranty period. If a defect is discovered, Belkin will, at its option, repair or replace the product at no charge provided it is returned during the warranty period, with transportation charges prepaid, to the authorized Belkin dealer from whom you purchased the product. Proof of purchase may be required.

This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication; if the product has been modified without the written permission of Belkin; or if any Belkin serial number has been removed or defaced.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE IN LIEU OF ALL OTHERS, WHETHER ORAL OR WRITTEN, EXPRESSED OR IMPLIED. BELKIN SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

No Belkin dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

BELKIN IS NOT RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH BELKIN PRODUCTS.

Some states do not allow the exclusion or limitation of incidental or consequential damages or exclusions of implied warranties, so the above limitations of exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.



belkin.com

### **Belkin Corporation**

501 West Walnut Street  
Compton • CA • 90220 • USA  
Tel: 310.898.1100  
Fax: 310.898.1111

### **Belkin Components, Ltd.**

Express Business Park • Shipton Way • Rushden  
NN10 6GL • United Kingdom  
Tel: +44 (0) 1933 35 2000  
Fax: +44 (0) 1933 31 2000

### **Belkin Components B.V.**

Starparc Building • Boeing Avenue 333  
1119 PH Schiphol-Rijk • The Netherlands  
Tel: +31 (0) 20 654 7300  
Fax: +31 (0) 20 654 7349

### **Belkin, Ltd.**

7 Bowen Crescent • West Gosford  
NSW 2250 • Australia  
Tel: +61 (0) 2 4372 8600  
Fax: +61 (0) 2 4372 8603

### **Belkin Tech Support**

US: 310.898.1100 ext. 2263  
800.223.5546 ext. 2263  
Europe: 00 800 223 55 460  
Australia: 1800 666 040

**P74415**

© 2003 Belkin Corporation. All rights reserved. All trade names are registered trademarks of respective manufacturers listed. Mac is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.