



#### USER MANUAL

# US-221 US-421

Read this guide thoroughly and follow the installation and operation procedures carefully in order to prevent any damage to the units and/or any devices that connect to them.

#### This package contains:

- ◆ 1 US-221 or US-421 USB 2.0 Peripheral Switch
- ◆ 1 USB Cable
- 1 CD (software)
- 1 User Manual

If anything is damaged or missing, contact your dealer.

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Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected:
- Consult the dealer or an experienced radio/television technician for help.

This product is RoHS compliant.



# SYSTEM REQUIREMENTS

- A USB Host Controller installed on the computer
- An OS that supports the USB specification
- Win98 SE or higher for optional switch program and hotkey options

# OVERVIEW

The US-221 / US-421 is a two (US-221) / four (US-421) port USB 2.0 Switch that allows up to two / four computers to share the use of a single USB peripheral device (such as a printer, scanner, modem, etc.) on a one-at-a-time basis.

The peripheral focus can be given to a computer manually, with hotkeys, or a Windows® based program.

## **FEATURES**

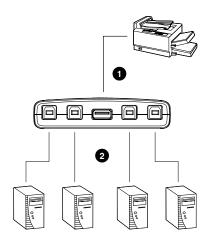
- USB 2.0 compliant
- Fully backward compatible with USB 1.0 and USB 1.1
- Bus powered no external power supply necessary
- Up to two (US-221) or four (US-421) computers can share a single USB device
- Supports transfer rates of 1.5/12/480 Mbps
- Plug & Play
- Hot pluggable USB devices can be plugged and removed without having to reset the system
- LED status indicators
- Hotkey (Windows OS only) or manual switching for easy computer selection
- Overcurrent protection
- Beeper confirmation when switching
- Windows based program for easy status monitoring/switching
- Simple to install No driver needed

#### INSTALLATION

The US-221 / US-421 provides two / four Type B USB ports for computers to connect to, and one Type A USB port for the peripheral device (printer, scanner, modem, etc.) that the computers will share.

#### To install the USB 2.0 Switch:

- Plug the Type B connector end of a USB cable into the peripheral device's USB port; plug the Type A connector into the US-221 / US-421's Type A port.
- Plug the Type B connector end of a USB cable into any available port on the US-221 / US-421; plug the Type A connector into the computer's USB host port.
   Repeat Step 2 for any other computers you are connecting.



## MANUAL OPERATION

#### US-221

To toggle the peripheral focus between the two computers, press and hold the port selection switch (located on the top of the unit) until you hear the beep or see the next port's LED light illuminate.

#### US-421

To switch the peripheral focus to another port, press the button which corresponds to the port you want to give focus to.

# HOTKEY OPERATION (WINDOWS ONLY)

- Press [Num Lock] twice to bring the peripheral focus to your computer.
- Press [Scroll Lock] twice to move peripheral focus from the current port to the next port (US-421 only). You must enable the Next Port Hotkey to use this function (see p. 12).

## PROGRAM INSTALLATION

To install the USB 2.0 Switch program:

- Insert the installation disc included with your switch into the CD-ROM drive. Double-click the USB 2.0 Switch icon and follow the installation wizard.
- When the installation completes, an icon labeled USB 2.0 Switch appears on your desktop and another icon appears in the system tray.



**Note:** The program provided with the USB 2.0 Switch is compatible only with Windows operating systems.

## PROGRAM OPERATION

#### BASIC MODE

To use the program to switch the device focus:

1. Right-click the *USB 2.0 Switch* icon (located in the system tray). The *Standard Mode* pop-up menu appears:

Switch To Advanced Mode Exit

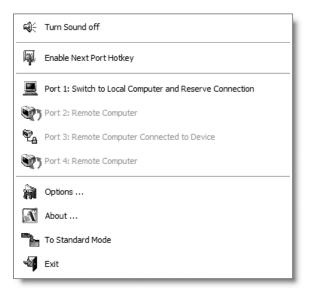
2. Select Switch to take control of the peripheral device.

**Note:** Performing this action will take away control of the peripheral device from any person who currently is using it. If this may cause problems, we recommend that you enable Switch and Reserve (see p. 13).

#### ADVANCED MODE

To turn on Advanced Mode:

- 1. Right-click the *USB 2.0 Switch* icon (located in the system tray) and select *Advanced Mode*.
- 2. Right-click the *USB 2.0 Switch* icon again and select the specific computer you want to give the peripheral focus to.



To enable (disable) the Next Port Hotkey (US-421 only):

**Note:** The USB 2.0 Switch program must be in Advanced Mode (see p. 11) before you can perform this operation.

1. Right-click the *USB 2.0 Switch* icon (located in the system tray) and select *Enable (Disable) Next Port Hotkey.* 

To view and change options:

**Note:** The USB 2.0 Switch program must be in Advanced Mode (see p. 11) before you can perform this operation.

1. Right-click the *USB 2.0 Switch* icon (located in the system tray) and select *Options*. The following dialog box appears:



- Enable Software Sound On/Off: Checking this box enables you to turn the US-221 / US-421 beeper on or off. After clicking OK, an option appears at the top of the Advanced Mode pop-up menu that allows you to mute or unmute the beeping sound you hear when the peripheral device is switched.
- Enable Switch and Reserve: Checking this box enables you
  to reserve control of the peripheral device. If another user
  attempts to gain control of the device the user is informed that
  the peripheral device is in use and they are required to
  confirm that they really want to take control of the device.

## TROUBLESHOOTING

**Note:** First make sure that there are no problems with the cables and that they are all properly connected.

Problem	Cause	Action	
Unit operates erratically	Static electricity may cause the unit to operate erratically.	Unplug the appropriate USB cable from the US-221 / US-421 port, then re-insert it.	
The program does not respond.	The program does not have control over the switch.	Press the button(s) on the switch to change control of the peripheral to another computer. (Alternately, you can use the program on another computer to accomplish this task.) Then, use the program to bring control of the peripheral to the desired computer.	

# SPECIFICATIONS

Function		US-221	US-421
Console Connection		2	4
Computer Selection		Hotkey, Buttons, Program (Windows)	
Connectors	Computer	2 x USB Type B	4 x USB Type B
	Console	1 x USB Type A	1 x USB Type A
LEDs	Device	1 (orange)	
	Port Select	2 (green)	4 (green)
Protection		Poly fuse	
Power Supply		USB Bus Powered	
Power Consumption		DC 5V 2.5W	DC 5V 2.5W
Environment	Humidity	0~80% RH, Non-condensing	
	Storage Temperature	-20~60°C	
	Operating Temperature	5~40°C	
Physical Properties	Housing	ABS	
	Weight	54g	97g
	Dimensions (LxWxH)	7.2 x 6.6 x 2.5 cm	10.2 x 7.6 x 2.3 cm

# LIMITED WARRANTY

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK, OR ITS DOCUMENTATION.

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