



USB 2.0 Peripheral Switch

USER MANUAL

US221A / US421A

FCC INFORMATION

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.

ROHS

This product is RoHS compliant.

SJ/T 11364-2006

The following contains information that relates to China.

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
电器部件	●	○	○	○	○	○
机构部件	○	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。

●: 表示符合欧盟的豁免条款, 但该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。



US221A / US421A USER MANUAL

ONLINE REGISTRATION

You can register your product at our online support center:

International	http://support.aten.com
North America	http://www.aten-usa.com/product_registration

ONLINE SUPPORT

INTERNATIONAL

Email Support		support@aten.com
Online Support	Technical Support	http://support.aten.com
	Troubleshooting Documentation Software Updates	http://www.aten.com
Telephone Support		886-2-8692-6959

NORTH AMERICA

Email Support		ATEN TECH	support@aten-usa.com
		ATEN NJ	sales@aten.com
Online Support	Technical Support	ATEN TECH	http://www.aten-usa.com/support
		ATEN NJ	http://support.aten.com
	Troubleshooting Documentation SW Updates	ATEN TECH	http://www.aten-usa.com
		ATEN NJ	http://www.aten.com
Telephone Support		ATEN TECH	1-888-999-ATEN
		ATEN NJ	1-732-356-1703

PACKAGE CONTENTS

The US221A / US421A USB 2.0 Peripheral Switch package contains the following items:

- ◆ 1 2-port (US221A) or 4-port (US421A) USB 2.0 Peripheral Switch
- ◆ 1 1.8 m USB Type A to USB Type B Cable
- ◆ 1 Installation Disk
- ◆ 1 User Manual*
- ◆ 1 Quick Start Guide

Check to make sure that all the components are present and that nothing got damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices connected to it.

* Features may have been added to the US221A / US421A since this manual was printed. Please visit our website to download the most up-to-date version of the manual.

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OVERVIEW

The US221A / US421A is a 2/4-port USB 2.0 Peripheral Switch that allows up to 2/4 computers to share the use of a single USB peripheral device (such as a printer, scanner, mass storage drive, etc.*) on a one-at-a-time basis.

The peripheral focus can be given to a computer manually by using pushbuttons on the switch or by using the software-based configuration utility. In addition, the US221A / US421A has a new Auto Switch function that stores commands sent to the USB peripheral device to be processed on a first-come, first-served basis, meaning that a print server is not required.

Compatible with both Windows and Mac, and with multifunction printer support, the US221A / US421A is the ideal way to share the latest USB 2.0 peripherals in a multimedia SOHO environment.

Note: The US221A / US421A does not support a USB hub peripheral device.

FEATURES

- ◆ Enables two (US221A) or four (US421A) computers to share a single USB peripheral device
- ◆ Simple port selection via pushbuttons or easy-to-use configuration utility
- ◆ Auto Switch function – no need for a separate print server
- ◆ USB 2.0 compliant
- ◆ Supports transfer rates up to 480 Mbps
- ◆ Multiplatform support – Windows and Mac
- ◆ LED indicators display port focus
- ◆ Overcurrent protection
- ◆ Bus-powered
- ◆ Hot pluggable
- ◆ Buzzer indicates switching between computers
- ◆ Supports multifunction printers

SYSTEM REQUIREMENTS

COMPUTERS

The following equipment must be installed on each computer that is to be connected to the system:

- ◆ USB host controller

CABLES

- ◆ USB to USB cables to connect the computers to the peripheral device.

Note: Only one USB Type A to USB Type B cable is provided in the US221A / US421A package. You will need to purchase an additional USB Type A to USB Type B cables for each computer you wish to connect to the US221A / US421A.

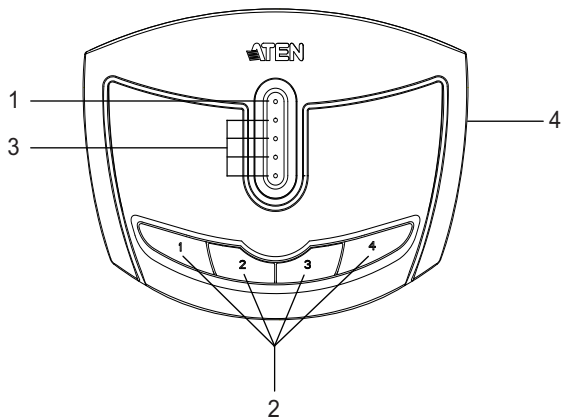
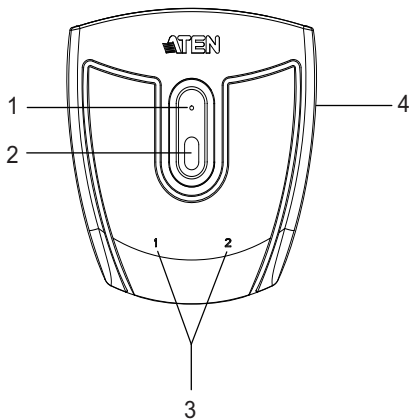
OPERATING SYSTEMS

Supported operating systems are shown in the table, below:

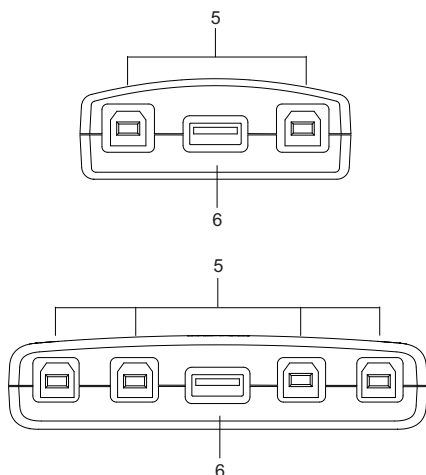
OS	Version
Windows	2000, XP, 2003, 2008, Vista
Mac	OS X 10.4.5, 10.5

COMPONENTS

TOP VIEW



REAR VIEW



No.	Component	Description
1	Lock LED	Lights orange to show that the US221A / US421A is locked.
2	Port Selection Pushbutton(s)	Pressing a Port Selection Pushbutton brings control to the computer attached to its corresponding port. See <i>Manual Operation – Pushbutton</i> , page 12 for further details.
3	Port Selected LEDs	Lights green to show that the computer attached to its corresponding port has control.
4	Beeper On/Off Switch (on side)	Use this recessed switch to turn the US221A / US421A's beeper on or off.
5	USB Type B Computer Port	Your computers plug into these ports. See <i>Installation</i> , page 10 for further details.
6	USB Type A Peripheral Port	Your USB 2.0 peripheral device plugs into this port.

INSTALLATION



1. Make sure that the power to any device that you connect to the installation has been turned off and that all devices are properly grounded.

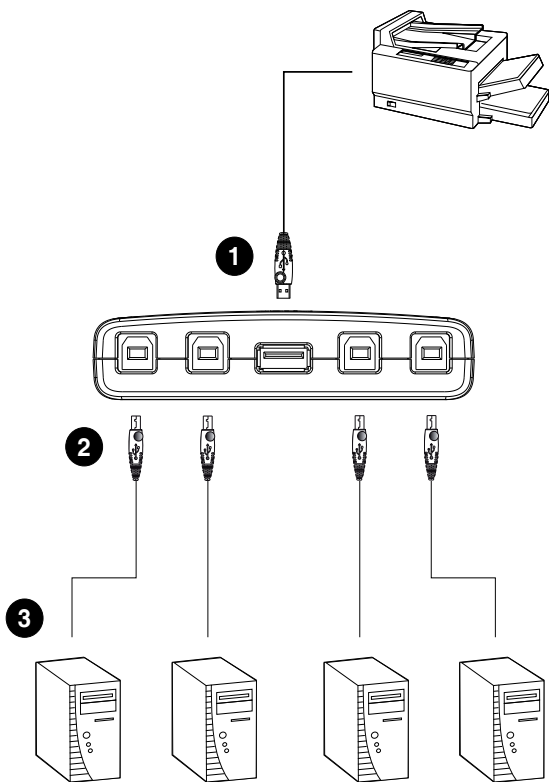
The US221A / US421A USB 2.0 Peripheral Switch provides 2/4 USB Type B ports for computers to connect to, and one USB Type A port for the peripheral device (multifunction printer, scanner, mass storage device, etc.) that the computers will share.

To install the US221A / US421A, do the following:

1. Use your USB device's USB cable to connect it to the US221A / US421A's USB Type A port.
2. Plug the USB Type B connector of the USB Type A to USB Type B cable provided with the US221A / US421A package into any available port on the US221A / US421A.
3. Plug the Type A connector into the computer's USB host port.

Repeat steps 2 and 3 for any other computers you are installing.

Note: Only one USB Type A to USB Type B cable is provided in the US221A / US421A package. You will need to purchase an additional USB Type A to USB Type B cables for each computer you wish to connect to the US221A / US421A.



MANUAL OPERATION – PUSHBUTTON

Note: Manual operation and the software-based configuration utility operate independently; commands from one will not override the other.

US221A

To toggle the USB peripheral focus between the two computers, press the port selection pushbutton (located on the top of the unit). The selected port LED flashes and the unit beeps. When the flashing stops and the LED becomes steady (in about four seconds), that port has the peripheral focus.

US421A

To switch the peripheral focus to another port, press the pushbutton that corresponds to that port. The selected port LED flashes and the unit beeps. When the flashing stops and the LED becomes steady (in about four seconds), that port has the peripheral focus.

Lock/Unlock Peripheral Focus

To lock the peripheral focus on a certain computer, press and hold the pushbutton that corresponds to that port for two seconds, or until the orange LED lights up.

To unlock the peripheral focus, press and hold the pushbutton that corresponds to that port for one second, or until the orange LED turns off.

SOFTWARE OPERATION

INSTALLING THE CONFIGURATION UTILITY

The US221A / US421A has a software-based configuration utility that can be used to configure the US221A / US421A's settings, such as the Auto Switch function, Manual Switch and Release reminder, and sound effects. The utility can also be used to lock and unlock control of the US221A / US421A.

Note: Microsoft Windows users should login as an administrator to install and launch the US221A / US421A software.

To install the configuration utility, do the following:

1. Insert the installation disk that came with the US221A / US421A package and double click on the *Setup.exe* icon.
2. Follow the on-screen installation instructions.
3. When the installation completes, an icon labeled *USB 2.0 Peripheral Switch Utility* appears on your desktop and another icon appears in your system tray.



The icon on your system tray displays in four colors to indicate the US221A / US421A's status, as shown in the following table:

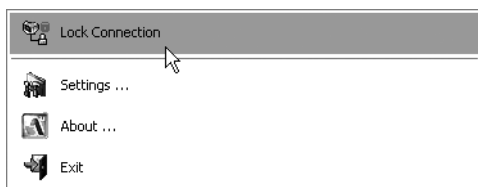
Color	Status
Green	Locked on local computer
Yellow	Connected to local computer
Red	Peripheral device not connected
Grey	Disconnected or busy

BASIC OPERATION

When you click on the icon in your system tray, a menu bar of shortcuts appears. The first item at the top of the menu is one of four shortcuts, depending on the current status of the US221A / US421A. Shortcut options are *Lock Connection*, *Unlock Connection*, *Switch to Local Computer*, and *Cancel Switch Request*.

LOCK / UNLOCK CONNECTION

To lock the connection from your computer to the USB peripheral, click on the icon in the system tray and select **Lock Connection**.



This method is a toggle between Lock and Unlock, so to unlock the connection, do the same but click **Unlock Connection**.

SWITCH TO LOCAL COMPUTER

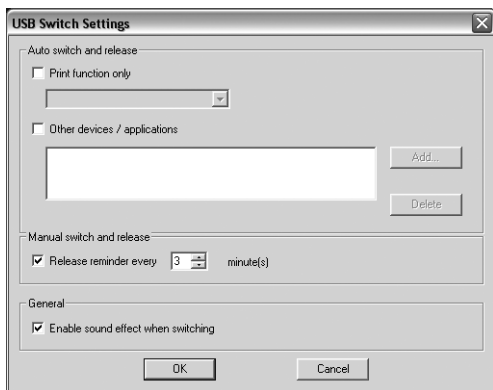
To bring the control of the USB peripheral device to your computer, click on the icon in the system tray and select **Switch to Local Computer**.

CANCEL SWITCH REQUEST

If you have sent a request to the USB peripheral device and the USB peripheral device is busy, your request is queued. To cancel a sent request, click on the icon in the system tray and select **Cancel Switch Request**.

ADVANCED OPERATION AND SETTINGS

To use the Configuration Utility to view and change the US221A / US421A's settings, click on the icon in your system tray and select **Settings**. The following dialog box appears:



AUTO SWITCH AND RELEASE

Enable these buttons to activate the US221A / US421A's Auto Switch function for a printer or other devices.

When *Auto Switch and Release* is enabled, commands sent to the USB peripheral device are stored to be processed on a first-come, first-served basis. Control of the US221A / US421A and the USB peripheral device is locked on the computer currently performing the action and then automatically released after the action is completed.

PRINTERS

If your USB device is a printer or MFP (multifunction printer) and you wish to use its print function, enable the *Print Function Only* button and select the printer from the drop-down menu.

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- Note:**
1. If the USB peripheral device is a printer, you do not need a separate print server.
 2. If you cannot find your printer in the drop-down menu, the printer may need to be reinstalled. See *Troubleshooting*, page 19 for further details.
 3. If your printer is a multifunction printer and you want to use its scan function, you must also enable the *Other Devices/Applications* button if these functions have dedicated applications. See *Multifunction Printers*, page 17 for further details.
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OTHER DEVICES

To add another device (such as a scanner) and associate its application with the Auto Switch function, enable the *Other Devices/Applications* button and click **Add**. In the dialog box that appears, click **Browse** to search for the application program.* (In Microsoft Windows only, you can also key in the device name for easy reference).

Note: Be sure to search for the full application path. A desktop shortcut, for example, does not work.

Once a device and application has been associated with the Auto Switch function, the US221A / US421A automatically takes control of the attached USB 2.0 peripheral when the application is opened. Control is released when the application is closed.

MULTIFUNCTION PRINTERS

If your USB 2.0 peripheral device is a multifunction printer and you wish to use its **scan** function, there are three ways to do this:

- ◆ If the multifunction printer's scan function have dedicated applications, enable both the *Print Function Only* and the *Other Devices/Applications* buttons and click **Add**. In the dialog box that appears, click **Browse** to search for the application program. (In Microsoft Windows only, you can also key in the device name for easy reference).
- ◆ Simply operate the US221A / US421A manually. See *Manual Operation – Pushbutton*, page 12.
- ◆ Use the shortcut in the system tray. See *Basic Operation*, page 14.

To use the **fax** function of a multifunction printer, operate the US221A / US421A manually. See *Manual Operation – Pushbutton*, page 12.



If your printer is a multifunction printer and you want to use its print and scan functions, you must enable **both** the *Print Function Only* and the *Other Devices/Applications* buttons, if these functions have dedicated applications.

MANUAL SWITCH AND RELEASE

If the US221A / US421A is operating under manual control (with a USB 2.0 peripheral such as a storage device, for example), enable this button to set the time for a reminder to release control of the US221A / US421A. The reminder will appear as a dialog box on screen of the PC currently in control of the US221A / US421A.

GENERAL

Enable this button to turn the US221A / US421A's configuration utility beeper on.

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- Note:** 1. This enables the software beeper. To enable/disable the hardware beeper, use the On/Off switch located on the side of the US221A / US421A unit.
2. Default settings are *Enabled*.
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TROUBLESHOOTING

First, make sure that all cables are securely attached and seated completely in their sockets.

Problem	Possible Cause	Action
Unit operates erratically	Static electricity may cause the unit to operate erratically.	Disconnect the appropriate USB cable from the US221A / US421A port, then reconnect it.
Printer does not appear in configuration utility.	Printer was not installed correctly.	Re-install the printer; the configuration utility will now find the printer.
Monitor program of a printer does not respond / Print error messages are generated	The printer's USB port is configured for a PC; the US221A / US421A is in Auto Switch mode.	Disable the Auto Switch function and operate the US221A / US421A manually.
The Lock / Unlock function does not respond	The too rapid or continuous connecting / disconnecting of a USB connector from a locked port can cause the status of the lock to be misread.	Disconnect all USB cables from the US221A / US421A, then reconnect them.
Auto Switch print function does not respond.	OS printer settings not sent / not set correctly.	Reboot your PC to re-establish settings, or re-install the Configuration Utility. See <i>Software Operation</i> , page 13.
Auto Switch function for other devices does not release control after application closes.	OS failed to close the application.	Manual close the application in your OS.

SPECIFICATIONS

Function		US221A	US421A
Computer Connections		2	4
Computer Selection		Pushbuttons, Software, Auto Switch	
Connectors	Computer	2 x USB Type B	4 x USB Type B
	Device	1 x USB Type A	
LEDs	Device	1 (Orange)	
	Selected	2 (Green)	4 (Green)
Switches		2 x Pushbutton	4 x Pushbutton
Power Supply		USB Bus Powered	
Power Consumption		DC5V, 2.5W	
Environment	Humidity	0–80% RH, Non-condensing	
	Storage Temp.	-20–60°C	
	Operating Temp.	5–40°C	
Physical Properties	Housing	Plastic	
	Weight	54 g	97 g
	Dimensions (L x W x H)	7.20 x 6.60 x 2.50 cm	10.20 x 7.60 x 2.30 cm

LIMITED WARRANTY

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

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and specially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or update. For further inquires please contact your direct vendor.