



Table of Contents

- [Introduction](#)
- [Serial Ports - Mac OS X vs 'classic' Mac OS](#)
- [Installation Instructions](#)
- [Configuring Your Serial Device](#)
- [Keyspan Serial Assistant](#)
- [Problem Solving](#)
- [Appendices](#)
 - [Frequently Asked Questions \(FAQs\)](#)
 - [Configuration Examples for Mac OS X](#)
 - [Uninstalling Keyspan software](#)
 - [Keyspan Warranty Information](#)
 - [Support Information](#)



1.1 - Introduction

The Keyspan USB Serial Adapter Software for Mac OS X allows you to add serial ports to your Mac OS X computer. Using Mac OS X native software, you can use your Keyspan USB to Serial Adapter to communicate with various serial devices via the POSIX API (for more information, Serial Ports - Mac OS X vs 'Classic' Mac OS section in this manual) .

Important Note:

The Keyspan USB Serial Adapter Software for Mac OS X will add 'Mac OS X serial ports' to your computer. These 'Mac OS X serial ports' can only be used by Mac OS X native software (ie a program that does not require the **Classic** environment to run). If you are not certain if your serial device's software can access Mac OS X serial ports, please read the **Serial Ports - Mac OS X vs 'Classic' Mac OS** section in this manual. Examples of serial devices that use Mac OS X serial ports are modems using PPP (for internet access - configured via the Networking System Preference icon), Palm Handhelds (using Palm's HotSync Manager), and UPS devices (using PowerGuardian software - www.benatong.com).

Requirements

The **Keyspan USB Serial Adapter Software for Mac OS X** requires the following:

- **Macintosh:**

- At least one available USB port
- Mac OS X (**10.1.3** or greater)
- For use with one of the following Keyspan USB to Serial Adapters:

USB Twin Serial Adapter (pn# USA-28X)

USB PDA Adapter (pn# USA-19, USA-19X, USA-19Qi, USA-19Q)

High Speed USB Serial Adapter (pn# USA-19W, USA-19QW)

USB 4-Port Serial Adapter (pn# USA-49W, USA49WLC, 4E230)

USB Serial Port Adapter (pn# USA-18X)

USB Serial Adapter (pn# USA-28)

Mini Port Replicator (pn# UPR-112/UPSH-112 - only supports serial)

USB Serial Adapter (pn# USA-19H)

Note: This documentation applies to Keyspan's USB Serial Adapter Software for Mac OS X and covers the features and use of this software on that platform. For specific information about Keyspan's USB to Serial Adapter hardware, please visit Keyspan's web page <<http://www.keyspan.com>> or read the Keyspan Mac OS 9 User Manual for that product.



2.1 - Serial Ports - Mac OS X vs 'classic' Mac OS

This section is intended to briefly explain how 'older' Mac OS (Mac OSes released before Mac OS X, ie Mac OS 8.1 through 9.x) serial ports differ from serial ports on Mac OS X. This section is intended as an overview to help you decide whether or not you need to install Keyspan's USB Serial Adapter software for Mac OS X.

Please note that when 'older Mac OSes' is used in lowercase, we are referring to an operating system or application software that was made prior to Mac OS X.

When 'CLASSIC' is used in UPPERCASE, we are referring to Apple's CLASSIC environment that allows certain older (or 'classic') software to run under Mac OS X.

Which Keyspan Software Should I Use?

There are basically 2 requirements in order for your serial device to work natively on Mac OS X:

1. a Mac OS X serial port
(provided by Keyspan's software and hardware)
2. a serial device that has Mac OS X software
(that can see/access Mac OS X serial ports e.g. modem)

Note: We will be posting a list of Mac OS X compatible serial devices soon. The URL for this page is <http://www.keyspan.com/support/macosex/>.

Since some serial devices are not Mac OS X compatible, you may find cases where it is **better to not install** the USB Serial Adapter software for Mac OS X and install the USB Serial Adapter software for Mac OS 8.6-9.x **instead**.

For this reason, we ask you read this guide to help you in determining whether or not you need to install the USB Serial Adapter software for Mac OS X.

If your serial device's software requires the 'Classic' environment to run under Mac OS X, please skip ahead to **'classic' Mac OS Serial Ports & Serial Devices ...**

If your serial device's software is Mac OS X native software, please skip ahead to **Keyspan Mac OS X Serial Ports & Serial Devices ...**

If you are not sure if your serial device has Mac OS X native software, please read the rest of this section ...

(continued on next page...)

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

'classic' Mac OS Serial Ports & Serial Devices

Serial devices under the 'older' Mac OSes (Mac OS 8.x-9.x) access serial ports via the following software:

- the Chooser (ie printers)
- applications (ie Palm Pilots)
- Control Panels (ie Wacom tablets)

Regardless of which software you used, your serial device was communicating with software libraries that handled the very low level communications between your serial device hardware and your serial port. These low level software libraries (specifically: Communications Resource Manager (CRM), CommToolBox (CTB), and OpenTransport) are **unique to the 'older' Mac OSes** and are **not found on Mac OS X**.

Unfortunately, 'older' serial programs cannot communicate with Mac OS X serial ports. Therefore, if your serial device's software only works on a 'older' Mac OSes, installing the USB Serial Adapter software for Mac OS X will not make your serial device work under Mac OS X.

If your serial device's software only runs in 'classic' Mac OSes, you have several options:

1. Try to get your serial device to work using your existing 'classic' hardware and software (the hardware and software that ran on Mac OS 8.1 through 9.x) via Mac OS X CLASSIC environment. If this does not work, please try option 2.
2. Boot into Mac OS 9.x and use your serial device from there.

Keyspan, Mac OS X Serial Ports & Serial Devices

Serial devices that run natively on Mac OS X access serial ports via the following software:

- System Preferences
- Mac OS X applications
- terminal applications

Regardless of which method is used, your serial device communicates with a software library called **POSIX** (aka POSIX API).

When a Keyspan adapter is connected, the Keyspan USB Serial Adapter software for Mac OS X registers a port with the **IORegistry** (this is another software library). At this point, a program can get the list of available serial ports (including Keyspan serial ports) from **IORegistry**. Once the program has the list available serial ports, the program uses the **POSIX API** to communicate with the serial port.

(continued on next page...)

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Note: If you are a developer and need more information about using Mac OS X serial ports, please visit our Developer web page at:
<<http://www.keyspan.com/support/developers/>>

Using the Keyspan Serial Assistant application, you see which *Keyspan* serial ports have been added to Mac OS X. This is useful in determining which port to select in your serial device's software.

Please note, the POSIX API is unique to Mac OS X and cannot be used by 'classic' applications.

Mac OS X vs CLASSIC

Since both Mac OS X and the Classic environment have the ability to use USB devices directly, you may run into a case where you have installed the USB Serial Adapter software for Mac OS X as well as the 'classic' USB Serial Adapter software. At this point, you have two software drivers for one hardware device.

In these cases, Mac OS X will allow you to use **BOTH** the 'classic' Keyspan drivers as well as the Mac OS X Keyspan drivers. However there are certain rules regarding which operating system has access to the ports...

1. if your 'classic' Mac OS has opened the Keyspan serial port(s) or is sending data to it, the Keyspan device and its serial port(s) will appear as 'busy' or 'in use' to any application requesting the Keyspan device in Mac OS X.
2. if Mac OS X has opened the Keyspan serial port(s) or is sending data to it, the Keyspan device will appear as if it is not connected (or unplugged) in your 'classic' Mac OS and any application requesting the Keyspan serial ports (in the 'classic' Mac OS) will get an error or report that the serial port is not available.

Exception: if you are using Virtual PC's 'USB' emulation setting, neither Mac OS X or your 'classic' Mac OS will have access to the Keyspan device. If you use Virtual PC's COM port emulation both of the above rules apply depending on whether you run Virtual PC in Mac OS X or CLASSIC. Please see Virtual PC's documentation for more details regarding USB and COM port emulation.

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



3.1 - Installation Instructions

Installing the USB Serial Adapter Software for Mac OS X

Note: Only proceed if you are sure that your serial device and its software are Mac OS X compatible. If you are not sure about this, please read the **Serial Ports - Mac OS X vs 'Classic' Mac OS** section in this manual for further information.

Step 1 - Insert the Keyspan Serial Adapter CD-ROM

Place the CD into the CD-ROM drive. When the CD icon appears on your desktop, double click on this icon to display its contents.

Locate the Keyspan Mac OS X folder and then locate the Keyspan USB Serial Software for Mac OS X Installer.

Step 2 - Run the Keyspan USB Serial Software for Mac OS X Installer

Run the Keyspan USB Serial Software for Mac OS X Installer by double clicking the Keyspan USB Serial Software for Mac OS X installer icon. This will start the installer. Once the installer is running, follow the instructions on screen.

Note: The installer requires that you enter an administrator password before the Keyspan software can be installed. Generally, this password will be the same as your standard password. To enter the password, click on the lock icon in the lower left-hand section in the installer window.

The Keyspan USB Serial Adapter software is now installed.

Step 3 - Software Installation Complete!

Now that you have installed the Keyspan USB Serial Adapter software, you are ready to install the Keyspan USB Serial Adapter hardware. Please proceed to the **installing the Keyspan USB Serial Adapter Hardware** instructions.

(continued on next page...)



Installing the Keyspan USB Serial Adapter Hardware

The following hardware installation instructions provide a basic overview on installing the **Keyspan USB Serial Adapter** in a USB port. For detailed instructions on how to connect USB devices your specific computer, please refer to the USB Device Install section in your computer's user's manual.

Step 4 - Connect the USB cable to the Adapter (if necessary)

If your Keyspan adapter does not have an attached USB cable, attach the included USB cable into the Keyspan adapter's USB port.

Step 5 - Connect the Adapter to your USB port

Attach the Adapter to your computer by connecting the Adapter's USB cable into any built-in USB port on your computer or USB Hub. It is not necessary to turn off your computer when attaching the Adapter.

Step 6 - Hardware Installation Complete!

Your Keyspan USB Serial Adapter is ready for use now that you have installed hardware and software. Please proceed to the **Keyspan Serial Assistant** section in this manual for instructions on what to do next.



4.1 - Configuring Your Serial Device

Prior to using your serial device (modem,UPS, etc.) with the Keyspan USB Serial Adapter, you must:

1. connect your serial device (*hardware*) to the Keyspan port
2. configure your serial device's *software* to use the Keyspan port

The following instructions provide a general overview of this process.

Note: We will be adding detailed instructions in how to configure specific serial devices in the future. Please check Keyspan's website for the latest version of this document.

Connecting Your Serial Device (Hardware)

If your Keyspan adapter is not connected, please do so NOW.

Step 1 - Connect Your Serial Device To The Keyspan Adapter

Attach your serial device's serial cable to the serial port on your Keyspan USB Serial Adapter.

Step 2 - Determine Which Keyspan Port Your Serial Device Is Connected To

If you have a Keyspan product that has more than one serial port, please note which Keyspan serial port your serial device is connected to (the serial port on the Keyspan product, not your USB ports on your computer or USB hub). This information will become useful as we start Configuring Your Serial Device's Software.

Configuring Your Serial Device's Software

The following configuration instructions provide a basic overview of how to configure your software to use your Keyspan serial port(s). For specific instructions on how to operate your serial device, please refer to that device's user's manual for detailed instructions.

(continued on next page...)



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Step 3 - Determine Where To Select/Configure The Keyspan Serial Port(s)

Prior to using your serial device with a Keyspan serial port, you must first tell that serial device's software which Keyspan serial port your device is connected to.

Most serial devices will have software that will allow you to select which serial port the device is connected to. Depending on your serial device and its software, you may have to configure: a System Preference item (ie modems accessing ISPs), an application (ie UPSes), or some combination of these (ie modems accessing terminals using Zterm).

Please refer to your serial device's documentation on which method your serial device uses and how to access that software's serial port "configuration" screen.

Once you've determined where to select or configure your serial device's software's serial port settings, please proceed to **Step 4**.

Step 4 - Determine Which Serial Port To Select In Your Serial Device's Software

When you've found the port selection screen in your serial device's software, you may be presented with a list of serial port names.

If you have a Keyspan device that only has one serial port, simply select the port name that starts with the letters **USA**.

If you have a Keyspan device that has two or more serial ports, you will have more than one choice in your list of ports. Depending on the software, you should be able to see several ports with the letters **USA**. These ports will end with a number that corresponds to the port number on the adapter.

For example, a port named "USA28X9132" is referencing to the second port on a Keyspan USB Twin Serial Adapter (part number USA-28X). The numbers before the last number refer to location of that adapter on the USB bus. In this case, "913" is reporting that the adapter is on USB bus # **9**, host hub port # **1** and external hub port # **3**.

Step 5 - Use Your Serial Device

Once you've configured your serial software to use the Keyspan serial port, you're ready to start using your serial device under Mac OS X.



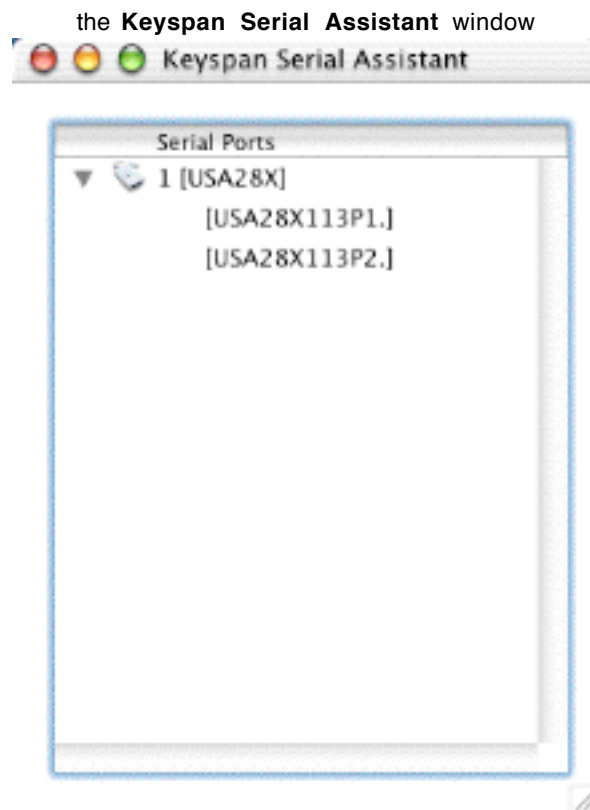
5.1 - Keyspan Serial Assistant

Besides the required drivers, the Keyspan USB Serial Adapter software installer installs an application called **Keyspan Serial Assistant**. This application is used to:

- Show the names of the installed serial ports
- Show which Keyspan adapters are connected
- Determine the status of the adapter software and hardware
- Assist in problem solving

Launching the Keyspan Serial Assistant

To launch the Assistant, double click the "Keyspan Serial Assistant" icon in your **Applications** folder. This will open the **Keyspan Serial Assistant** window.

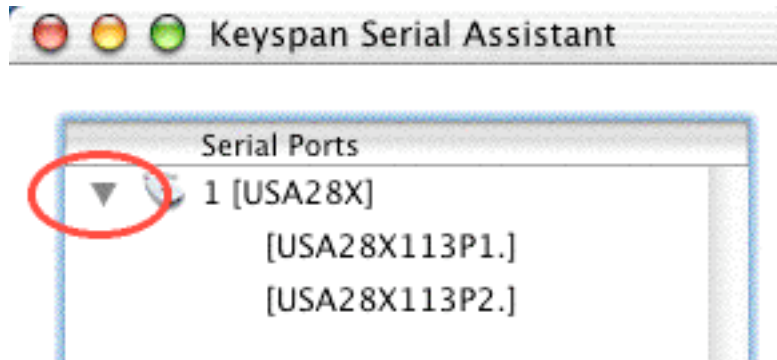


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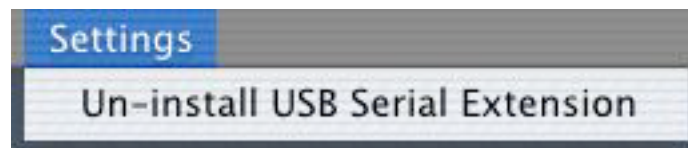
Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

The Keyspan Serial Assistant will display any Keyspan USB Serial Adapters connected to your computer. You can also see the names of the Keyspan serial ports by clicking on the *TRIANGLE* next to Adapter icon as shown below:



Once you know the names of the Keyspan ports, you can then select the appropriate port name in your serial device's software.

The Settings Menu



The Keyspan Serial Assistant's **Settings** menu is located in the Menu bar and provides access to the following command(s):

- The **Uninstall USB Serial Extension** command un-installs the Keyspan USB Serial extension. For specific instructions on how to use this feature, please read the [Uninstalling Keyspan software](#) section in this guide.



6.1 - Problem Solving

If you are having problems with your **Keyspan USB to Serial Adapter in Mac OS X**, please read the following instructions to assist you in troubleshooting your Keyspan adapter.

Hardware Troubleshooting

Step 1 - Use the Keyspan Serial Assistant

Launch the **Keyspan Serial Assistant** application. When you open the **Keyspan Serial Assistant** application, you should see your Keyspan adapter in the list of available adapters.

If you do not see your adapter, please contact Keyspan Technical Support for further assistance.

Otherwise, skip ahead to **Step 2**.

Software/Serial Device Troubleshooting

Step 2 - Is Your Serial Device Mac OS X Compatible

Check to make certain that your serial device is compatible with **Mac OS X**.

If your device **is not** compatible with Mac OS X, please read the '**classic**' **Mac OS Serial Ports & Serial Devices** section in this manual for more information.

If your device is compatible with Mac OS X, please proceed to **Step 3**.

Step 3 - Check The Physical Connections

Make certain that your serial device is powered on and is properly connected to the Keyspan Serial Adapter.

Proceed to **Step 4** ...

(continued on next page...)



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Step 4 - Check Your Serial Device's Software Configuration

Check to see if your serial device's software is configured to use the Keyspan port . Please refer to your serial device's documentation for instructions on how to select/switch/configure a serial port in that software.

Once you've found your software port configuration screen, does it display the Keyspan USB Serial Adapter port name(s)?

If you **do not see** the Keyspan port name(s), please contact Keyspan Technical Support for further assistance.

If you see the Keyspan port name(s) and have properly selected the Keyspan port that your serial device is connected to and are still having problems, please continue to **Step 5**.

Step 5 - Contact Technical Support

If you have followed all of the above steps and are still having problems with your Keyspan USB Serial Adapter, contact Keyspan Technical Support for further assistance.

When You Need More Help...

The Keyspan web site <http://www.keyspan.com> is your best source for technical support information. The website includes technical notes, reference manual updates, and answers to frequently asked questions.

You may also contact our technical support department directly via email, phone, or fax. Please see the [Support Information](#) section in this manual for more details.



7.1 - Appendices -

- [Frequently Asked Questions \(FAQs\)](#)
Frequently Asked Questions
- [Configuration Examples for Mac OS X](#)
Instructions on how to configure selected hardware and software (ie VirtualPC, Final Cut Pro, Palm)
- [Uninstalling Keyspan software](#)
Instructions on how to uninstall the USB Serial Adapter software for Mac OS X
- [Keyspan Warranty Information](#)
Keyspan Warranty Information
- [Support Information](#)
Information about obtaining technical support



7.1.a - Frequently Asked Questions (FAQs)

The following is a list of Frequently Asked Questions (FAQs) about the Keyspan USB Serial Software for Mac OS X. Keyspan frequently updates and adds the questions and answers list below. For the latest list, please visit our website at: <http://www.keyspan.com>

Frequently Asked Question List

Question:

Which Keyspan USB Serial Adapters are supported by the USB Serial Adapter Software for Mac OS X?

Answer:

The following Keyspan products are supported by the Keyspan USB Serial Adapter software for Mac OS X.

- USB Twin Serial Adapter (pn# USA-28X)
- USB PDA Adapter (pn# USA-19, USA-19X, USA-19Qi, USA-19Q)
- High Speed USB Serial Adapter (pn# USA-19W, USA-19QW)
- USB 4-Port Serial Adapter (pn# USA-49W, USA49WLC, 4E230)
- USB Serial Port Adapter (pn# USA-18X)
- USB Serial Adapter (pn# USA-28)
- Mini Port Replicator (pn# UPR-112/UPSH-112 - only supports serial)
- USB Serial Adapter (pn# USA-19H)

Please note: You only need one driver (the Keyspan USB Serial Adapter Software for Mac OS X) for all of these devices.



7.1.c - Configuration Examples for Mac OS X -

The following is a list of available configuration examples for Mac OS X. These examples provide step-by-step instructions on configuring select serial devices. The current examples available are:

- [Palm Desktop for Mac OS X](#)
- [Modems and Cell Phones \(PPP\)](#)
- [VirtualPC](#)
- [Final Cut Pro](#)

For the latest version of this list, please visit our web site at: <http://www.keyspan.com>

For the configuration examples for other operating systems (ie Mac OS, Windows, etc.), please refer to the user manual for that platform or visit our web site at: <http://www.keyspan.com>



7.1.cx.01 - Palm Desktop

Before you begin...

This Configuration Example assumes that you have already done the following:

1. installed the Keyspan serial port *hardware* and *software*
2. installed the Palm Desktop *software*
3. connected the Palm Serial Cradle *hardware* to a Keyspan serial port

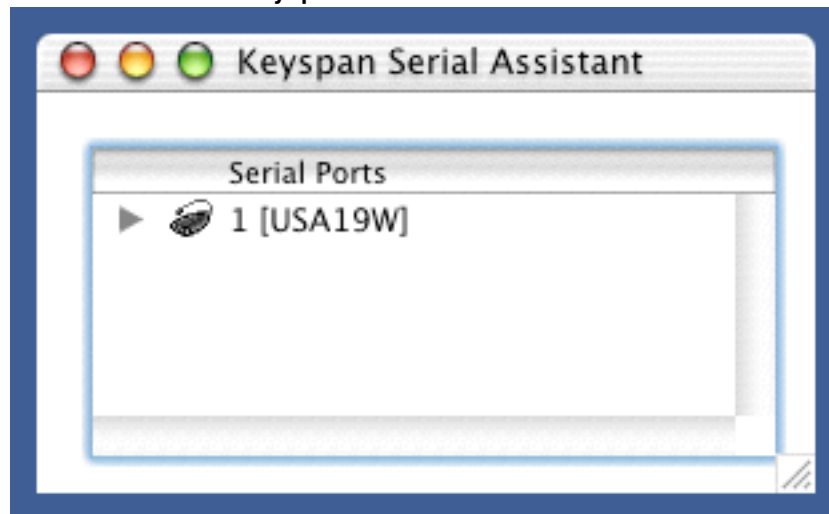
If you have not performed any of the steps mentioned above, please do so before proceeding.

Step 1 - Check the Keyspan Serial Assistant

Before proceeding, you should check to see if the Keyspan serial port is installed correctly.

To do this, open the [Keyspan Serial Assistant](#) (located in your **Applications** folder). When you open the [Keyspan Serial Assistant](#), you will see a window similar to the one shown below:

the **Keyspan Serial Assistant** window



If your Keyspan hardware and software are installed correctly, the '**Serial Ports**' text box will show an icon of your Keyspan serial product. If you do not see an icon of your Keyspan serial product, contact [Keyspan Tech Support](#) for further information.

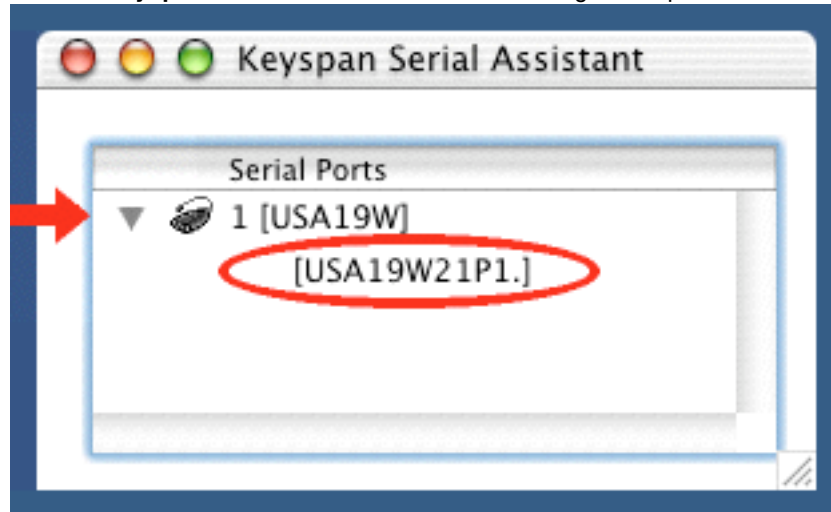
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Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Click on the TRIANGLE to the left of your Keyspan icon. This will display the names of the serial port(s) on that Keyspan product as shown below:

the Keyspan Serial Assistant window's triangle and port name



***** IMPORTANT *****

Note the the serial port name in the [Keyspan Serial Assistant](#). We will be selecting this port name in the Palm software later.

Note: If you have a Keyspan product that has more than one serial port, note the serial port name of the serial port that your Palm is connected to. Typically, the last 2 letters indicate the port number on your Keyspan hardware (ie P1 = port 1, P2 = port 2, etc.)

Step 2 - Open the HotSync® Manager application

Before you can begin to HotSync your Palm, you must access and configure the HotSync® Manager application. The HotSync Manager is the program that manages the serial communication between your Palm and your computer.

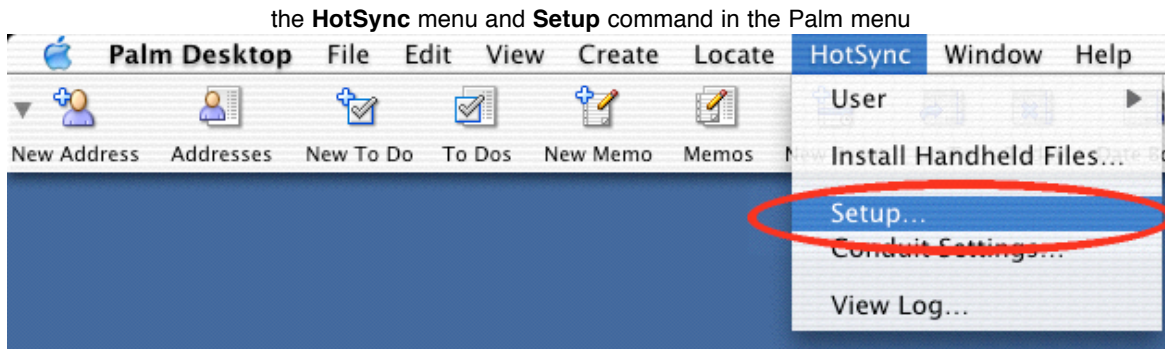
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This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

The easiest way to access the HotSync Manager is via the Palm Desktop software. To do this, launch the Palm Desktop software. When the Palm Desktop software is running, go to the "HotSync" menu and select the "Setup" command.

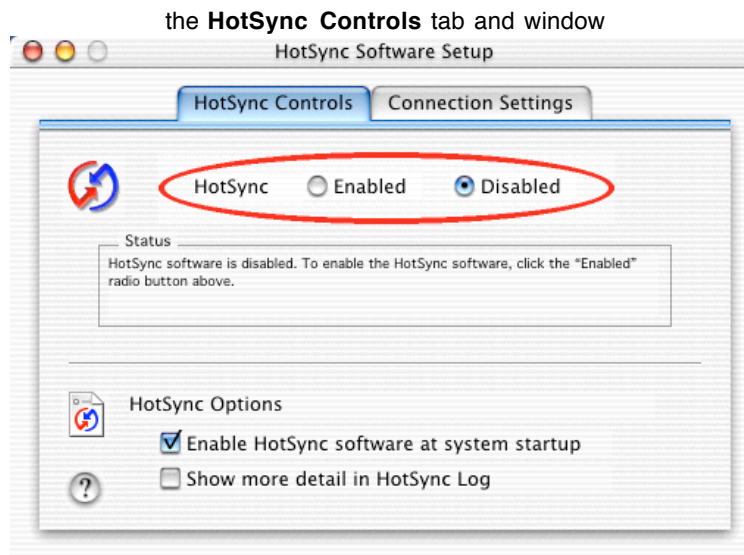


Once the HotSync® Manager application is opened, you will be presented with the **HotSync Software Setup** window.

Step 3 - Configure the HotSync Software Setup window

In the HotSync Software Setup window, click on the **HotSync Controls** tab at the top of the window. This will display the HotSync Controls options.

Click on the **Disabled** radio button to temporarily turn off HotSync monitoring.



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This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.

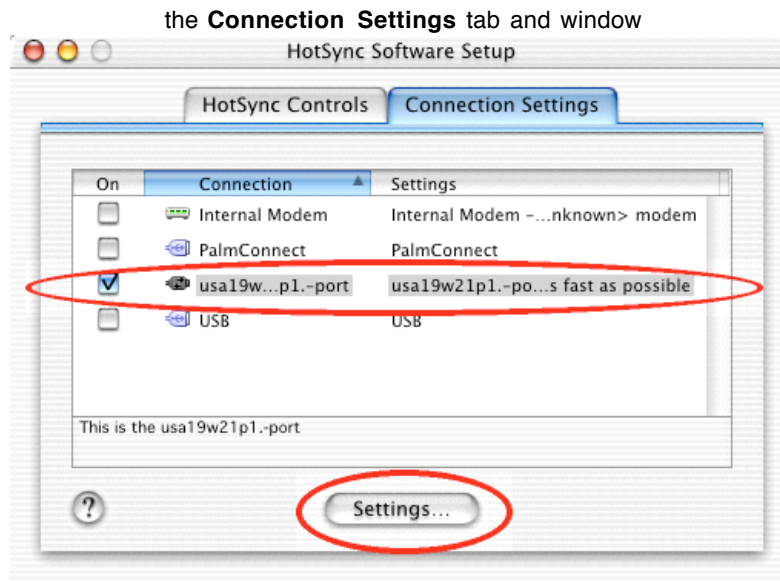


Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

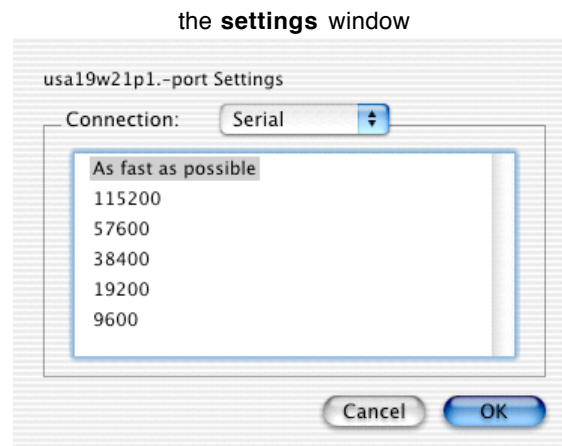
Then click on the **Connection Settings** tab at the top of the HotSync Software Setup window. This will display the connection options.

Turn off the PalmConnect, USB, and Internal Modem connections by unchecking their check boxes.

Then turn ON the *Keyspan serial port name* (see Step 1) by checking its check box.



The click on the Keyspan serial port name and click on the **Settings** button. This will open the settings window as shown below:



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This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

In the settings window, make sure that the **Connection** menu is set to SERIAL. The list of numbers below is the list of available baud rates.

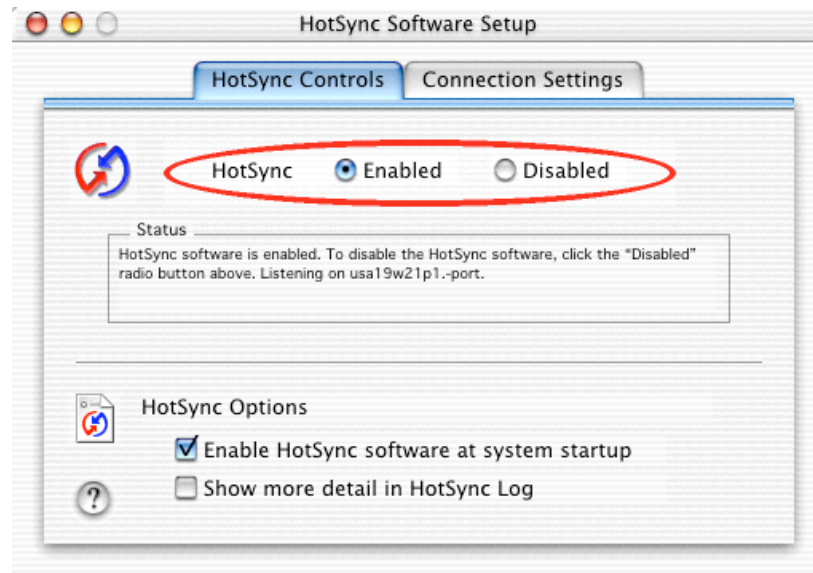
*** IMPORTANT ***

If you have a Keyspan USB PDA Adapter with the model number of **USA-19**, set the baud rate to **57600**. For any other Keyspan serial port product (including the Keyspan USB PDA Adapter model numbers USA-19Q and USA-19Qi), set the baud rate to **As fast as possible**.

NOTE: the easiest way to determine the model number of your Keyspan serial adapter is to turn it over. On the back of the adapter is FCC, CE, and other information. The part number is list as "P/N: USA-XXxx"

Once you have selected the correct baud rate, click the **OK** button to return to the **Connection Settings** window. Then click on the **HotSync Controls** tab.

At the **HotSync Controls** tab, select the **Enabled** button as shown below:



Step 4 - HotSync your Palm Organizer

Palm Software configuration is now complete. To initiate a 'HotSync' session, place your Palm Organizer in its cradle and then press the HotSync button on the cradle. Your Palm Organizer will now "HotSync."

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



7.1.cx.02 - Modem/Cell Phone PPP Setup

Before you begin...

This Configuration Example shows you how to configure a dial-up internet connection (aka PPP connection) via the **Network System Preference**. In this example, a modem or cell phone is connected to a Keyspan serial port and the **Network System Preference** is told to communicate with that Keyspan serial port.

Before you begin, please make sure that you have done the following:

1. installed the Keyspan serial port *hardware* and *software*
2. connected the Modem/Cell Phone *hardware* to a Keyspan serial port

If you have not performed any of the steps mentioned above, please do so before proceeding.

Step 1 - Check the Keyspan Serial Assistant

Before proceeding, you should check to see if the Keyspan serial port is installed correctly.

To do this, open the [Keyspan Serial Assistant](#) (located in your **Applications** folder). When you open the [Keyspan Serial Assistant](#), you will see a window similar to the one shown below:



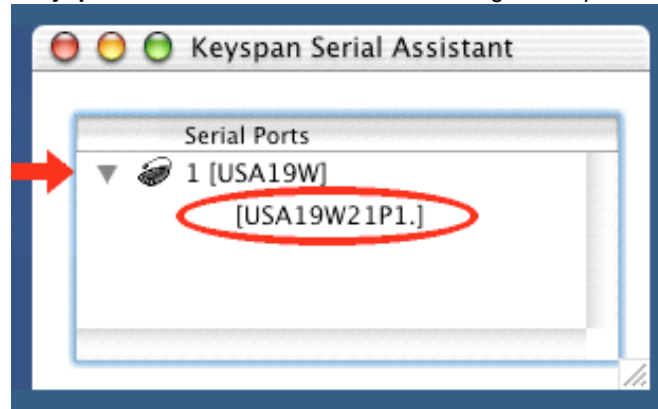
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Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Click on the TRIANGLE to the left of your Keyspan icon. This will display the names of the serial port(s) on that Keyspan product as shown below:

the **Keyspan Serial Assistant** window's triangle and port name



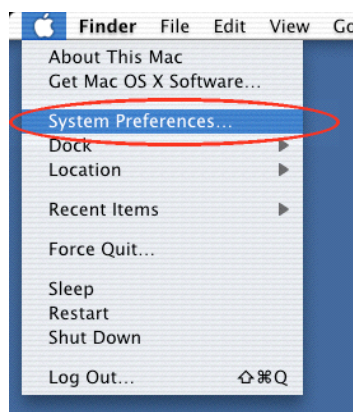
***** IMPORTANT *****

Note the the serial port name in the **Keyspan Serial Assistant**. We will be selecting this port name in the **Network System Preference** later.

Note: If you have an Keyspan product that has more than one serial port, note the serial port name of the serial port that your modem/cell phone is connected to. Typically, the last 2 letters indicate the port number on your Keyspan hardware (ie P1 = port 1, P2 = port 2, etc.)

Step 2 - Open the **Network** System Preference

To open the **Network** System Preference pane, you must first open the **System Preferences** window. To do this, select the System Preferences command from the Apple menu as shown below:



This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

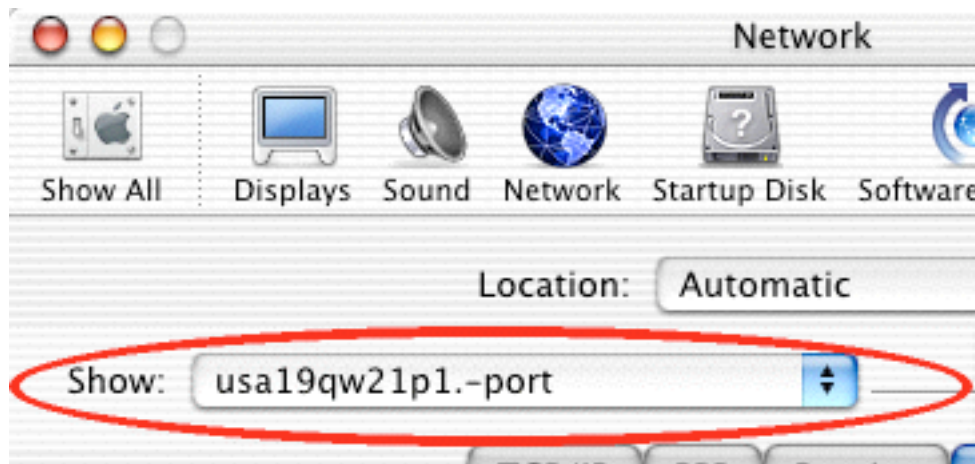
Once you are in the **System Preferences** window, click on the **Network** icon and proceed to Step 3.



Step 3 - Configure the **Network** System Preference to use the Keyspan serial port

When you first open the **Network** System Preference window, you may be told that a 'new port has been detected.' This message is normal and is letting you know that the **Network** System Preference has found a new connection. In this case, the new port/connection is the Keyspan serial port. If you see this message, simply click the **OK** button.

Once you are in the **Network** System Preference window, select the Keyspan serial port (this is the name of the port from Step 1) from the **Show** menu as shown below:



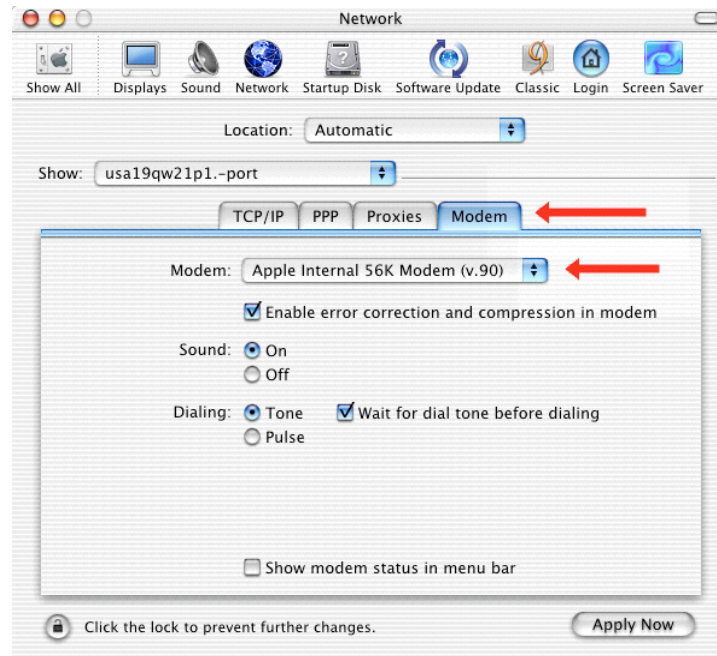
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This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Once your Keyspan serial port is selected, configure the **TCP/IP**, **PPP**, and **Proxies** tabs as per your Internet Service Provider (aka ISP, ie Earthlink, IBM, Mindspring, etc.) instructions. Then click on the **Modem** tab.



In the Modem tab, you will need to select a *modem script* for your modem or cell phone. These modem scripts tell your modem or cell phone how to operate. Select your modem/cell phone from this list and then click the **Apply Now** button.

Important: if you do not see your modem/cell phone in this list, contact your modem/cell phone manufacturer for a "**Mac OS X compatible modem script.**" If they don't have one, contact Keyspan Tech Support. We may be able to assist you in finding a script.

You have now told the **Network** System Preference which modem/cell phone you are using and which Keyspan serial port that modem is connected to. Please proceed to Step 4...

Step 4 - Configure the **Internet Connect** application and connect to the Internet

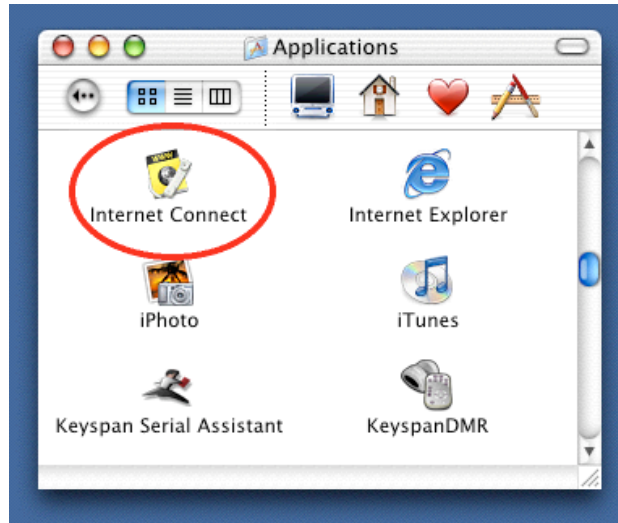
Open the **Internet Connect** application. This application is found in your Mac OS X **Applications** folder.

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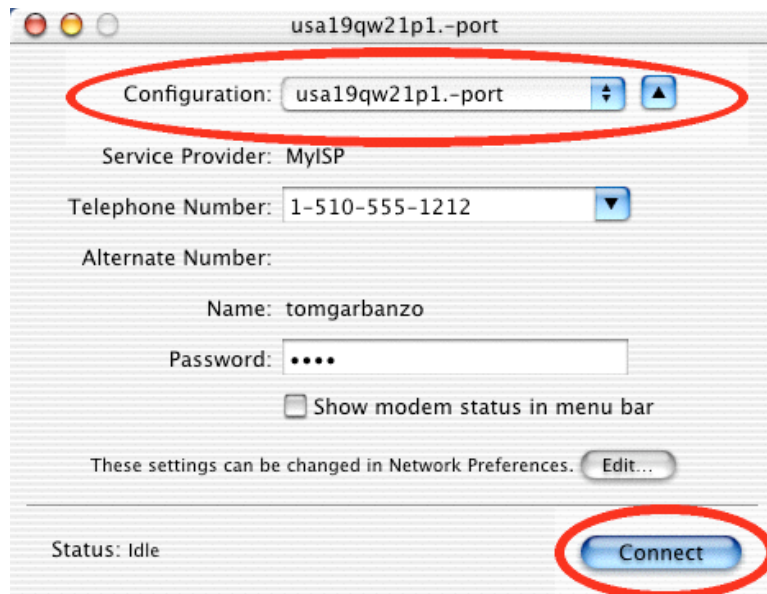
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Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual



Once **Internet Connect** is open, select the Keyspan serial port from the **Configuration** menu.



Select an access number in **Telephone Number** menu and enter your account's password if necessary. Click the **Connect** button to connect to the Internet.

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



7.1.cx.03 - VirtualPC

Keyspan Support For VirtualPC...

Information on how to use Keyspan serial products with VirtualPC is provided per the request of VirtualPC users. **Keyspan does not support VirtualPC** due to the fact that VirtualPC cannot provide the same USB and serial resources that you would find on a 'real' Windows computer. Because of this, serial devices running under VirtualPC (or any emulator) may or may not work. Serial and USB devices expect to communicate with hardware based serial and USB ports. Software based emulators, like VirtualPC, cannot provide the same level of performance as hardware based USB and Serial ports. Depending on you serial device and its software, you may or may not be able to reliably use VirtualPC as a way of using a serial device. Please keep this in mind as you read these instructions.

Before you begin...

This Configuration Example shows you how to configure VirtualPC (with Microsoft Windows) to use a Keyspan serial port. There are two ways of doing this depending on your Keyspan serial product:

Method 1 involves VirtualPC emulating **COM1** or **COM2** by using an existing Mac serial port. This method is compatible with all Keyspan serial ports. This method is recommended for use with DOS programs or any software that is not compatible with Microsoft's 'Win32 Communications API' (ie any pre-Windows 98 or 2000 programs)

Method 2 involves VirtualPC emulating USB and installing Keyspan's Windows software. This method only compatible with Keyspan serial ports that have Windows software. This method is recommended when you have: a) VirtualPC version 4.0 or later b) a Keyspan serial port that has Windows software. This method is not compatible with Mac only serial ports (ie USA-28, USA-28X, USA-18X, SXPRO, etc.)

Both methods accomplish the same the same thing (adding a a serial port) but one method may work better than the other depending on what serial device is used, what operating system is installed, which Keyspan serial port is used, etc. or neither method may work. You may be able to find more information on the internet as to how to speed up VirtualPC as this often is a factor in getting a successful outcome.

7.1.c.03.a - VirtualPC - Method 1

This method assumes that you have already done the following:

1. installed the Keyspan serial port *hardware* and **MAC software** only (not windows)
2. installed the VirtualPC *software*
3. installed your serial device *software* in Windows (in VirtualPC)
4. connected your serial device *hardware* to a Keyspan serial port

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

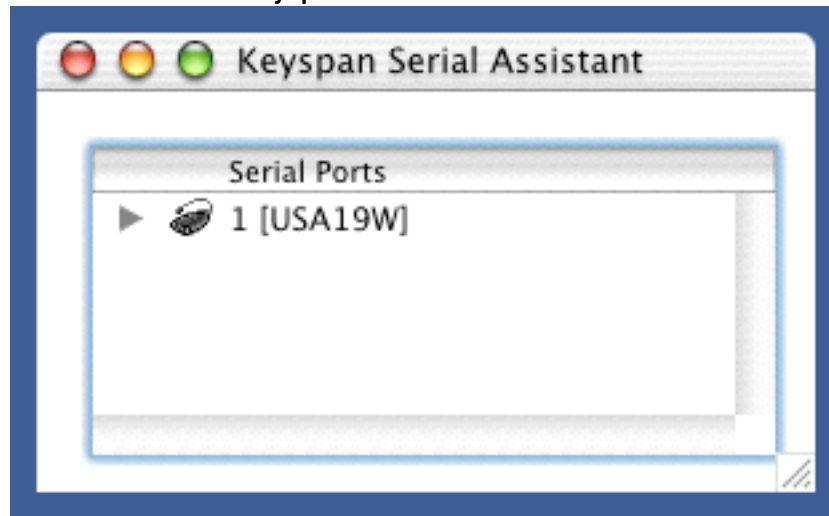
If you have not performed any of the steps mentioned above, please do so before proceeding.

Step 1 - Check the Keyspan Serial Assistant

Before proceeding, you should check to see if the Keyspan serial port is installed correctly.

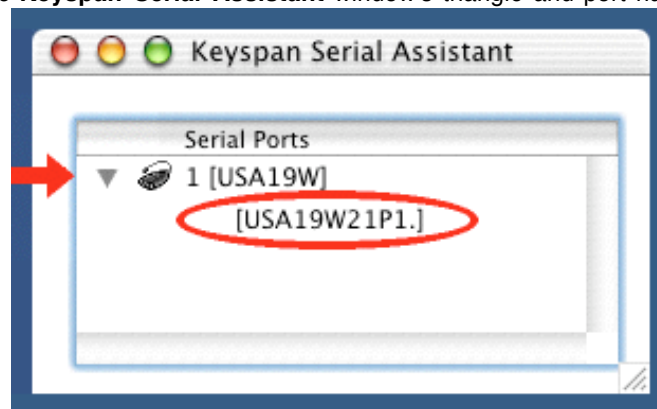
To do this, open the [Keyspan Serial Assistant](#) (located in your **Applications** folder). When you open the [Keyspan Serial Assistant](#), you will see a window similar to the one shown below:

the **Keyspan Serial Assistant** window



Click on the TRIANGLE to the left of your Keyspan icon. This will display the names of the serial port(s) on that Keyspan product as shown below:

the **Keyspan Serial Assistant** window's triangle and port name



This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

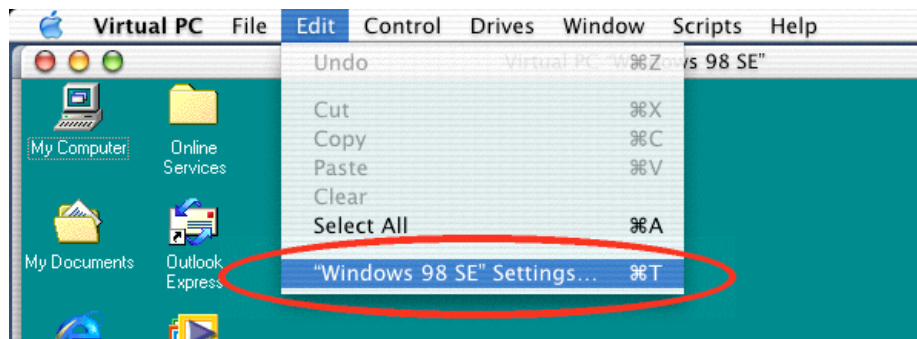
*** IMPORTANT ***

Note the serial port name in the [Keyspan Serial Assistant](#). We will be selecting this port name in **VirtualPC** later.

Note: If you have a Keyspan product that has more than one serial port, note the serial port name of serial port that your modem/cell phone is connected to. Typically, the last 2 letters indicate the port number on your Keyspan hardware (ie P1 = port 1, P2 = port 2, etc.)

Step 2 - Launch and Configure VirtualPC to emulate a COM port

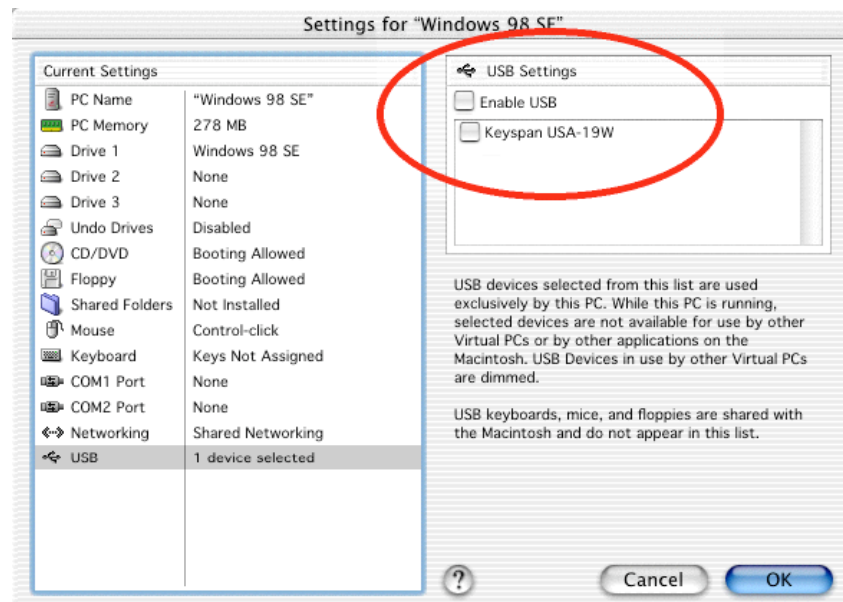
Launch VirtualPC by double clicking its icon. When VirtualPC is running, select the "...Settings" command from the **Edit** menu. Please note that the VirtualPC menu bar may be hidden. You may have to hold down the Command key (aka Apple key).



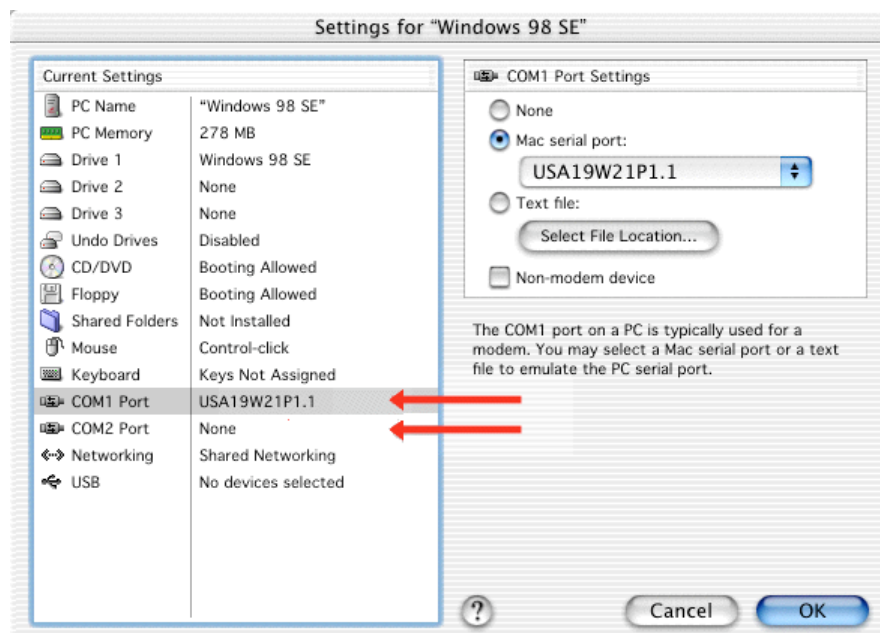
Once the Settings window is open, select **USB**. For **Method 1**, you will have to disable USB. Make sure that the **Enable USB** check box is **not checked** (disabled) and that all other check boxes are **not checked** (see next image).



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual



Next, select **COM1** or **COM2** depending on which port you wish to emulate. Please note which port you select as you will be selecting this port in your serial device's software later.



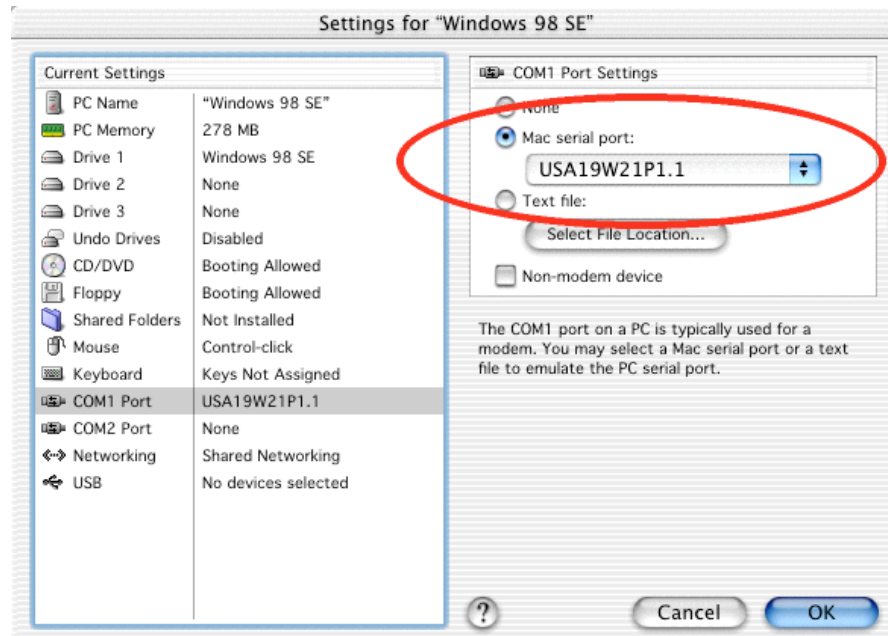
Now that you've selected **COM1** or **COM2**, you will need to map the **VirtualPC COM** port to a **Keyspan MAC** serial port. This is what causes data to be sent to COM1 or COM2 to be sent to your Keyspan serial port. To do this, turn on the **Mac serial port** radio button and select your

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Keyspan serial port from the list of available ports (this is same port from **Step 1**).



Once you have selected the Keyspan serial port, click the **OK** button to save your changes. Please note that you may have to restart your emulated environment (ie Windows).

Configuration is now complete. You must now open your serial device's software and tell it to use **COM1** or **COM2** as per that device's instructions.

7.1.c.03.b - VirtualPC - Method 2

This method assumes that you have already done the following:

1. installed the VirtualPC *software*
2. installed your serial device's *software* in Windows (in VirtualPC)
3. connected your serial device *hardware* to a Keyspan serial port
4. uninstalled any Keyspan MAC software
5. installed the Keyspan serial port **Windows** *software*
6. installed the Keyspan serial device's *hardware*

If you have not performed any of the steps mentioned above, please do so before proceeding.

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Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

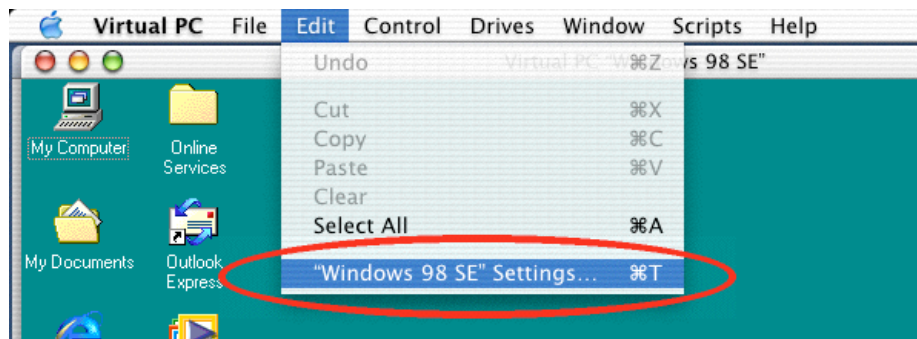
Step 1 - Launch VirtualPC and Install Keyspan Windows Software

Launch VirtualPC by double clicking its icon. Once VirtualPC is running and you are in Windows, install the Keyspan Windows software for your Keyspan serial port.

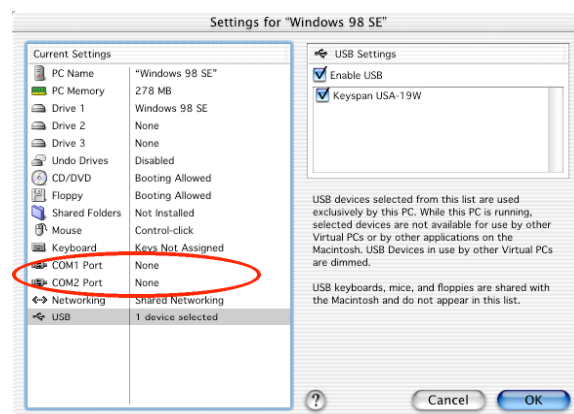
If you are not familiar with installing Windows software, please read that Keyspan product's **Windows documentation** for step by step instructions.

Step 2 - Configure VirtualPC to emulate USB

Now that you have installed the Keyspan Windows software, we are ready to configure VirtualPC to emulate USB. To do this, first select the "**...Settings**" command from the **Edit** menu. Please note that the VirtualPC menu bar may be hidden. You may have to hold down the Command key (aka Apple key).



Once the Settings window is open, select **COM1 Port** and set it to *None*. Next, select **COM2 Port** and set it to *None* as well.

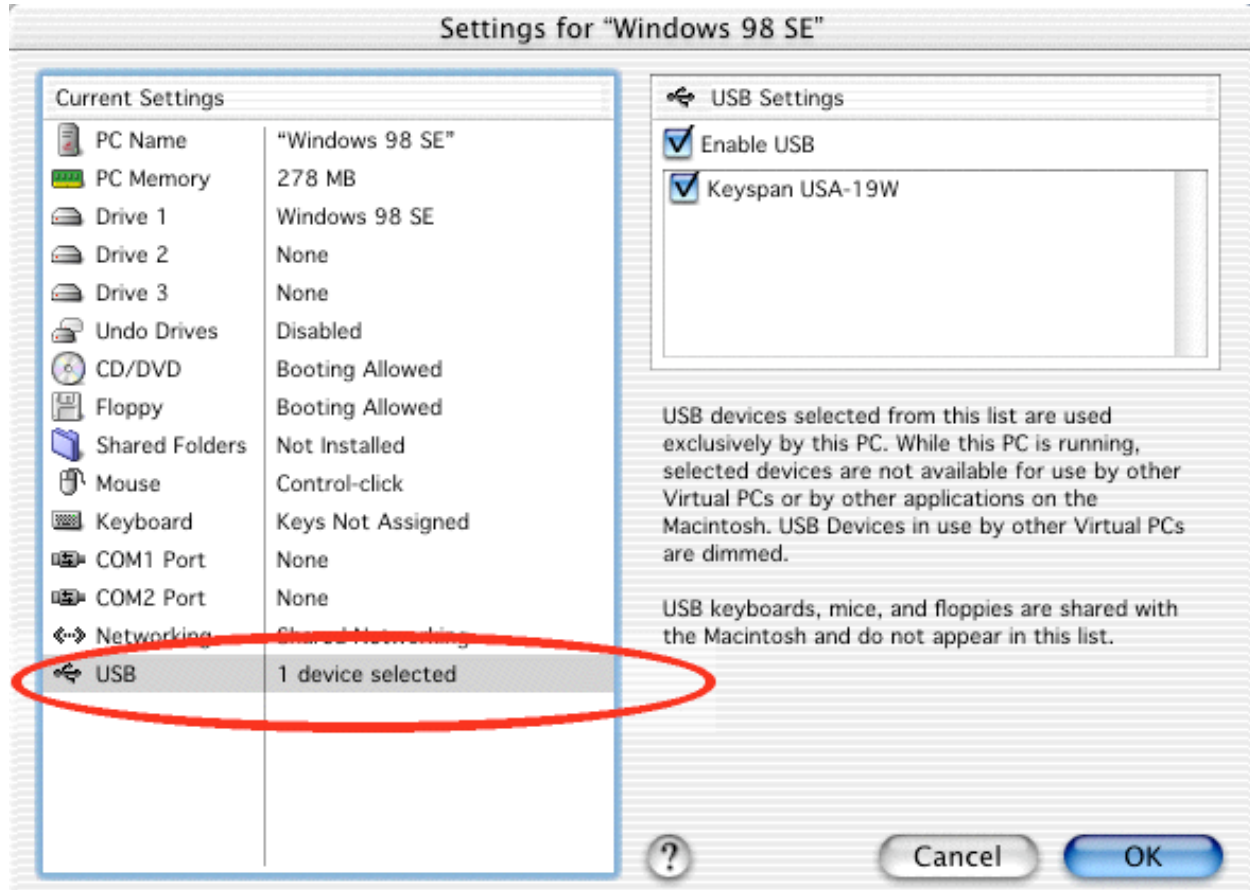


This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



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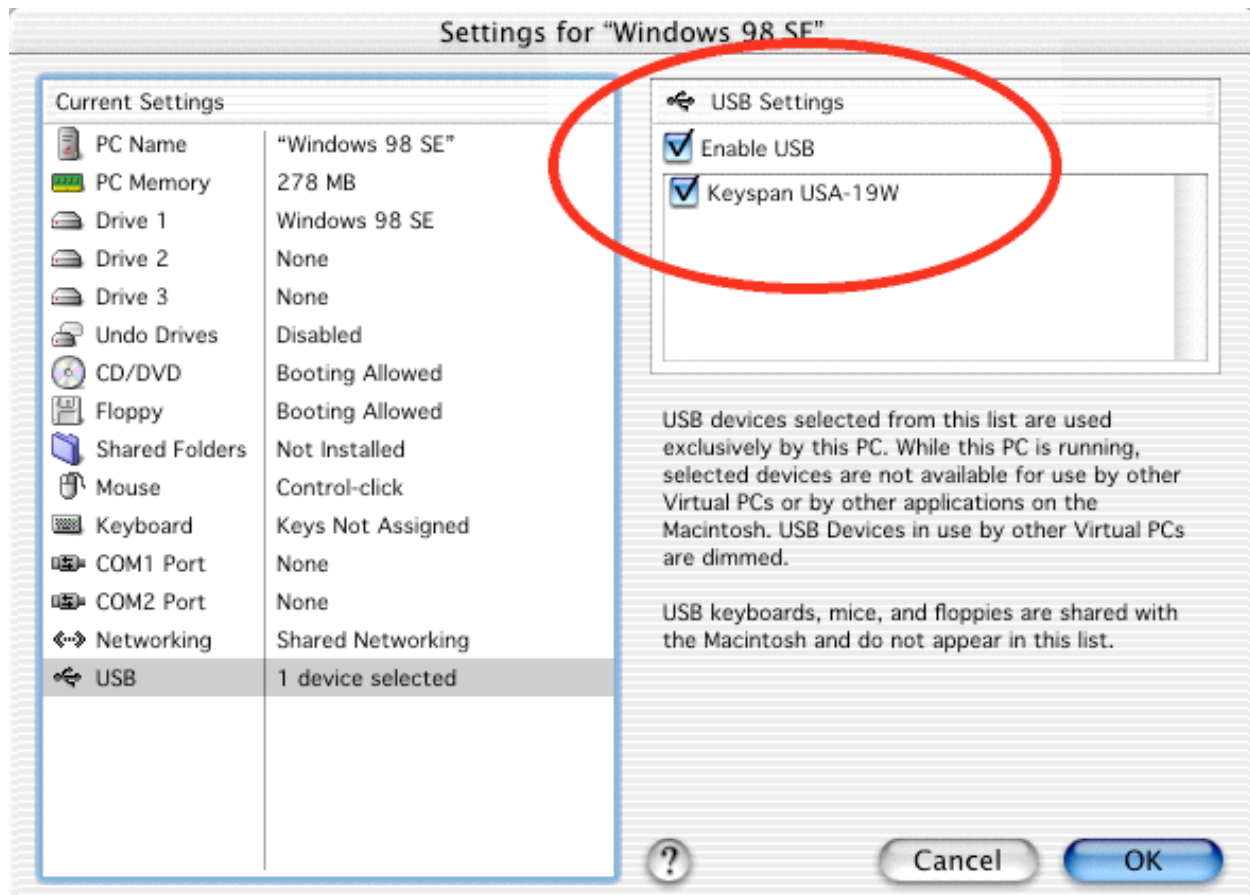
Once the Settings window is open, select **USB**.



Once USB is selected, turn on or check the **Enable USB** check box. Below this check box, you should see an item for your Keyspan USB device. Turn on this check box as well. This will emulate USB and tells your emulated environment that your Keyspan USB device is connected.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual



Once you have selected the Keyspan USB device, click the **OK** button to save your changes. Please note that you may have to restart your emulated environment (ie Windows).

Configuration is now complete. Windows will now detect the Keyspan USB device. Since you have already installed the Keyspan Windows software, all you need to do is check which COM port was created (the Keyspan Serial Assistant for Windows that will give you this information - please refer to the Windows documentation for details) and tell your serial device's software to use the Keyspan COM port.



7.1.cx.04 - Final Cut Pro

This Configuration Example assumes that you have already done the following:

1. installed the Keyspan serial port *hardware* and *software*
2. installed the Final Cut Pro *software*
3. connected your video deck *hardware* to a Keyspan serial port.

If you have not performed any of the steps mentioned above, please do so before proceeding.

Step 1 - Check the Keyspan Serial Assistant

Before proceeding, you should check to see if the Keyspan serial port is installed correctly.

To do this, open the [Keyspan Serial Assistant](#) (located in your **Applications** folder). When you open the [Keyspan Serial Assistant](#).

If your Keyspan hardware and software are installed correctly, the '**Serial Ports**' text box will show an icon of your Keyspan serial product. If you do not see an icon of your Keyspan serial product, contact [Keyspan Tech Support](#) for further information.

Click on the TRIANGLE to the left of your Keyspan icon. This will display the names of the serial port(s) on that Keyspan product as shown below:

***** IMPORTANT *****

Note the the serial port name in the [Keyspan Serial Assistant](#). We will be selecting this port name in the Final Cut Pro software later.

Note: If you have a Keyspan product that has more than one serial port, note the serial port name of the serial port that your Palm is connected to. Typically, the last 2 letters indicate the port number on your Keyspan hardware (ie P1 = port 1, P2 = port 2, etc.)

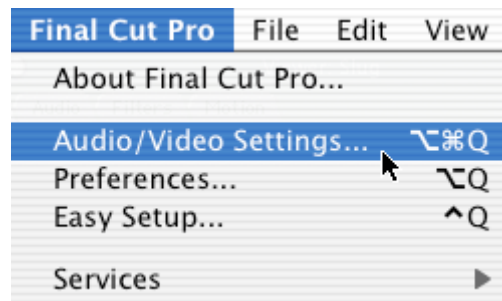
Step 2 - Setup the Final Cut Pro Software.

Launch Final Cut Pro.

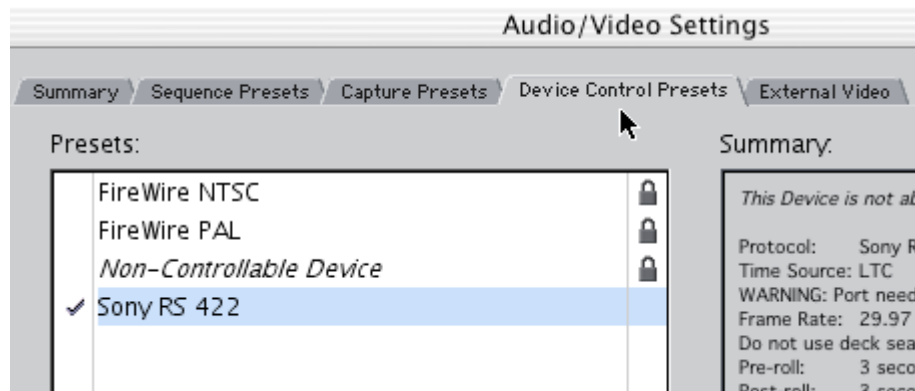
Under the Final Cut Pro menu, select **Audio/Video Settings**. (see below)



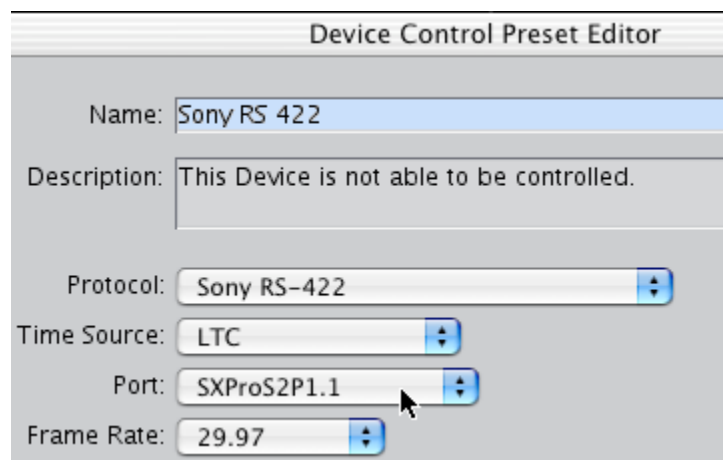
Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual



Click on the **Device Control Presets** tab. (see below)



Select your deck from the list and click on **edit**. This will bring up the **Device Control Preset Editor**. (see below)



This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Select the correct protocol for your deck (your).

Under **Port**, select the Keyspan serial port your deck is connected to. (see above)

Select **OK** and now you should have deck control with Final Cut Pro!



7.1.u - Uninstalling Keyspan software

Uninstall Instructions

To uninstall the Keyspan USB Serial Adapter software for Mac OS X, you will have to:

1. launch the [Keyspan Serial Assistant](#)
2. select the **Uninstall USB Serial Extension** command (from the **Settings** menu)
3. delete the [Keyspan Serial Assistant](#) application
4. Restart

For detailed instructions on this process, please follow these steps:

Step 1 - Open the Keyspan Serial Assistant

Open the [Keyspan Serial Assistant](#) by double clicking the "Keyspan Serial Assistant" icon in your Applications folder. This will open the [Keyspan Serial Assistant](#) window.

Step 2 - Access the Settings menu

In the [Keyspan Serial Assistant](#), select the **Uninstall USB Serial Extension** command from the **Settings** menu and follow the on-screen instructions.



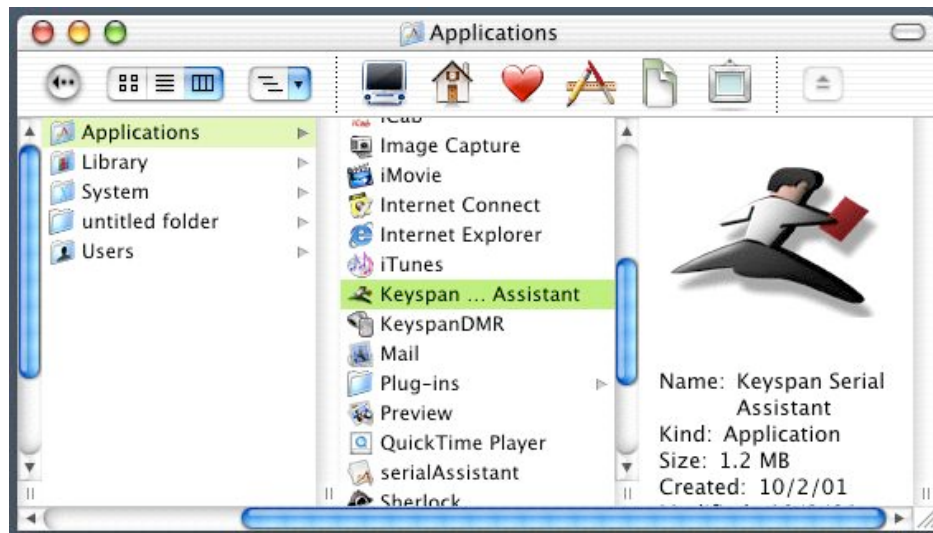
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Keyspan:USB Serial Adapter for Mac OS X-v2.x User Manual

Step 3 - Delete the Keyspan Serial Assistant application

To delete the "Keyspan Serial Assistant", open your applications folder, find the Keyspan Serial Assistant icon and move it to the trash.



Step 4 - Restart Your Computer

Restart your computer to complete the uninstall process.

This User Manual applies to the Keyspan USB Serial Adapter Software for **Mac OS X**.



7.1.y - Keyspan Warranty Information

KEYSPAN Software License Agreement and Limited Warranty

Definitions

The following definitions apply to the terms as they appear in this agreement.

- KEYSpan means KEYSpan, a division of InnoSys Incorporated.
- Software means the computer program contained in this package, and all updates to the computer program. The term also includes all copies of any part of the computer program.
- Documentation means the on-disk user's manual(s) as well as printed materials accompanying the Software.
- Product means the Software and Documentation

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General

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Keyspan,
a division of InnoSys, Inc.
4118 Lakeside Dr
Richmond CA 94806



7.1.z - Support Information

Contacting Support

If you require assistance with any Keyspan product, you may contact us by one of the following ways:

- **web/email:** <http://www.keyspan.com/support/>
(Monday through Friday: 9am to 5pm Pacific)
- **fax:** +1.510.222.0323
(Monday through Friday: 9am to 5pm Pacific)
- **telephone :** +1.510.222.8802
(**tech support**) (Monday through Friday: 9am to 5pm Pacific)

International Support Options

If you live outside of the United States and require assistance with your Keyspan product, please contact the Keyspan's distributor in your country for technical support in your language. For a list of Keyspan's international distributors, please visit our international web page at:

<http://www.keyspan.com/international/>