



# USB 2.0 4-Port TetraHub™

## INSTRUCTION MANUAL



[www.jascoproducts.com](http://www.jascoproducts.com)

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## **I. Introduction**

Congratulations on the purchase of your 4-port USB 2.0 TetraHub™! The TetraHub™ will allow you to receive the maximum possible bandwidth for all of your USB 2.0 and 1.1 devices!

Please read this entire manual carefully before using your TetraHub™. Follow the instructions to prevent damage to the TetraHub™ and/or the connected devices.

### **THIS PACKAGE INCLUDES:**

- USB 2.0 4-Port TetraHub™
- User's Manual

## **II. Overview**

TetraHub™ technology gives you the best of USB 1.1 and 2.0 in one Hi-Speed USB 2.0 Hub. Connect USB 2.0 devices for data transfer rates of up to 480 Mbps. At the same time connect USB 1.1 devices for a guaranteed 12 Mbps of bandwidth per device. Use any combination of USB 1.1 and 2.0 devices – the TetraHub™ will adapt to give you the greatest bandwidth possible for each device!

### **FEATURES**

- USB 1.1 and 2.0 compatible
- Full speed guaranteed for each USB 1.1 device
- LED to indicate power
- Plug and Play
- Bus fault detection and recovery
- Per port over-current detection and protection
- All downstream ports support high-speed (480 Mbps), full-speed (12 Mbps) and low-speed (1.5 Mbps) operations.

### **III. Safety Instructions**

Always read the Safety Instructions carefully.

- Keep this instruction manual for future reference.
- Keep this equipment away from humidity.
- Do not expose to moisture.
- Replace if damaged.
- Replace if you see obvious signs of breakage.
- If you cannot get it to work according to this instruction manual refer to the Troubleshooting section (IX) or contact technical support at [www.jascoproducts.com](http://www.jascoproducts.com).

## **IV. Power Mode Setting**

There are two power mode options for the USB 2.0 4-Port TetraHub™.

The first is bus-power mode, which does NOT require the use of an AC power adapter. In this mode, the hub is provided with 500 milliamps for all 4 ports. This should be adequate for mice, keyboards, and other low power devices.

The second is self-power mode, which requires the use of an AC power adapter. In this mode, each port is provided with 500 milliamps, allowing for additional hubs, cameras and other high-powered devices.

How do you know which power mode is right for you? Most applications do not require an AC power adapter. If you have high powered devices connected, your computer may display an error message indicating the hub has insufficient power to support the connected devices. This will indicate that an AC power adapter is necessary for your application. If you are not sure or if device performance is poor, use the AC adapter.

An AC adapter can be purchased from our website for \$9.99 plus shipping and handling. For more information, please visit:

<http://www.jascoproducts.com/hubpowersupply.html>

When using the AC power adapter, make sure the plug is properly connected to the hub and to a standard electrical outlet. GE Surge protection is recommended.

## V. Hardware Installation



1. Make sure your computer has all the necessary updates required to support USB. These can be found on Microsoft's website.
2. Plug the USB connector of the Tetrahub™ into the USB port of your computer or hub. The power LED should illuminate.
3. Windows® 98 or 98 SE users see section VII for driver installation.



4. Connect your USB devices to any of the 4 available downstream Ports.

**Note:** If you connect the hub to a USB 1.1 Port, your computer may warn you that a high-speed device has been connected to a non-high speed port. Your hub will function properly, however it will function at the USB 1.1 speed of your USB port.

## VI. TetraHub™ Accessories

AC Power Adapter for just \$9.99\*

<http://www.jascoproducts.com/hubpowersupply.html>

Free\* High Speed USB Extension cable

<http://www.jascoproducts.com/freeusbcable.html>

\*Requires \$4.95 shipping and handling

## VII. Software Installation (Windows 98)

Software installation is only required for **Windows® 98 and 98 SE** users. Users of all other Operating Systems, including Windows® NT, ME, 2000, XP and any Mac® OS, may skip this section.

- 1) Connect the hub to your computer.
- 2) Windows® 98 and 98 SE will detect the hub and automatically run the “Add New Hardware Wizard”.
- 3) When the initial screen appears introducing the “Add New Hardware Wizard”, click **Next**.
- 4) Select “Search for the best driver for your device (Recommended):” and click **Next**.
- 5) When asked to select a location to search for the drivers, use the default selection. Do not change the location. Click **Next**.
- 6) Click **Next** to accept the location the driver will be installed in.
- 7) On the final screen notifying you that the driver has been installed, click **Finish**.

## VIII. Troubleshooting

- **Hub Not Seen**

Make sure you have installed all Windows® updates and patches pertaining to USB. These are available on Microsoft's® website. Make sure all cables are properly connected.

- **Hub Not Working After Reboot**

Unplug the uplink cable (and the AC adapter cable if it is connected) from the hub. The uplink cable is plugged into the "Upstream Port" shown in section VI. Wait 2 seconds. Plug the cable(s) back in.

- **Hub Not Seen on a laptop**

USB 2.0 Hubs may not work on all laptops. Try the hub on a desktop computer to confirm functionality of the hub. If this works, contact your computer dealer.

If you continue to experience problems contact customer support at:  
**[www.jascoproducts.com](http://www.jascoproducts.com)**

## IX. Technical Specifications

USB Hub:	4 Ports
Standards:	USB 1.1 and 2.0 Compatible
Operating Systems:	Windows® 98 SE, ME, 2000, XP Mac OS X and above
Data Speed:	High: 480 Mbps Full: 12 Mbps Low: 1.5 Mbps
Upstream Ports:	Series A plug x 1
Downstream Ports:	Series A receptacle port x 4
LEDs:	1 Power Indicator, 4 Port Activity Indicators
Power:	Bus Power (No Adapter): 100 milliamps *A maximum of 1 high-powered device may be used without the AC power adapter.
Dimension (LxWxH):	90 mm x 37 mm x 10 mm
Operation Temp.:	0°C ~ 40°C
Humidity:	5-90% RH non-condensing
External Power:	DC +5V / 2.5A

## **X. FCC Compliance Statement**

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 or used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- (1) Reorient or relocate the receiving antenna.
- (2) Increase the separation between the equipment and the receiver.
- (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- (4) Consult the dealer or an experienced radio/TV technician for help.

### **FCC WARNING:**

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

## **XI. Limited Lifetime Warranty**

Jasco Products Co., Inc. warrants this product to be free from manufacturing defects regardless of how long you own it. This warranty is limited to the replacement of this product only and does not extend to consequential or incidental damage to other products that may be used with this unit. This warranty is in lieu of all other warranties express or implied. Some states do not allow limitations on how long an implied warranty lasts or permit the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific rights, and you may also have other rights which vary from state to state. Simply return to the address below for a replacement:

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311 N.W. 122<sup>nd</sup> St  
Oklahoma City, OK 73114

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