

USB 2.0 High-Speed Hub

Connect four or seven standard (1.5-Mbps) or high-speed (480-Mbps) USB devices to your computer.



1. Specifications

Distance (Maximum): 15 ft. (4.5 m)

Speed: 1.5/12/480 Mbps

RoHS: Yes

Connectors: IC147A-R3: (4) USB Type A F, (1) USB mini Type B F;
IC148A: (7) USB Type A F, (1) USB mini Type B F

Power: From the USB interface or from external power supply;
From external power supply: Input: 120 VAC, 0.4 amps, 47–63 Hz;
Output: 5 VDC, 2 amps

Size: IC147A-R3: 0.5"H x 1.4"W x 3.3"D (1.3 x 3.6 x 8.4 cm);
IC148A: 0.6"H x 4.5"W x 2.4"D (1.5 x 11.4 x 6.1 cm)

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2. Overview

2.1 Introduction

The USB 2.0 High-Speed Hub is USB 2.0 compliant and connects to a Universal Serial Bus (USB) port on your desktop or notebook computer. This slim hub has 4 or 7 ports for connecting USB (high-speed 480 Mbps or standard 1.5 Mbps) devices to your computer. With a maximum bandwidth of 480 Mbps, this slim hub enables you to connect devices that consume a large amount of bandwidth, such as an external storage device, printer, scanner, DVD or CD-RW drive or digital camera, to your computer.

2.2 Features

- Complies with Universal Serial Bus Specification Version 2.0 (Data Rate 1.5/12/480 Mbps)
- Four or seven external USB Type A downstream ports
- Connects up to a maximum of 127 USB devices through cascading multiple hubs
- Derives power from the USB interface or from provided power supply
- Enables one Transaction Translator per hub and supports four or seven concurrent non-periodic transactions
- Supports plug-and-play and hot-swap functions
- Compatible with Windows® and Mac® OS
- Supports EHCI/UHCI/OHCI specification
- Per-port output voltage is +5 VDC. Output current is 500 mA

2.3 System Requirements

To use the hub, your computer must meet the following hardware requirements and run on one of the operating systems listed in Section 2.4.

NOTE: The USB 2.0 High-Speed 4- and 7-Port Hubs are backward compatible, so you can connect them to a computer with either a USB 1.1 or 2.0 interface. When using the hub with a computer that has a version 1.1 USB interface, all the devices attached to the hub will run at USB 1.1 speed (up to 12 Mbps).

2.4 Hardware Operating System

- 64 MB RAM or higher, depending on the operating system
- USB interface

- Windows 98 SE/Windows Me/Windows 2000/Windows XP/Windows Vista®/Windows 7 and higher
- Mac OS 8.6 and higher

3. Installation

3.1 Connecting the Hub and Installing the Driver

To connect the hub to your computer and install the operating system's default driver, follow the steps listed below.

The hub comes with one high-speed Type A/mini USB cable so that you can connect it to a host computer.

1. Power on the computer.
2. Plug the supplied cable's USB Type A connector end into a USB port on your computer.
3. Plug the cable's USB mini USB connector end into the hub.
4. Your computer's operating system automatically detects the new hardware and begins installing the appropriate default driver. If the power LED does not come on, attach the AC power adapter to the AC power jack on the hub and plug the adapter into an electrical outlet.
5. Follow the on-screen instructions to complete the driver installation. You can now connect USB devices to the hub or daisychain additional hubs.

3.2 Connecting Devices to the USB Hub

To connect a USB device, plug it into a USB port on the hub and follow any additional instructions provided with the device. When connecting new devices to the hub, consider the following guidelines.

- If your computer is running the Windows 98 operating system, a series of screens appears, beginning with the "Add New Hardware Wizard," to guide you through the driver installation process.
- If your computer is running Windows 98 SE, Windows Me, Windows 2000, Windows XP, Windows Vista, or Windows 7, the device driver may install automatically.
- When connecting a new device to your hub, you must run the "Setup" or "Install" program for that device.
- When connecting a device to the hub, to avoid possible damage, never force the cable connector into the port on the hub if the cable connector does not attach.

3.3 Device Not Working

- Make sure that the device is connected to the hub.
- Plug the device into a different port on the hub. If it still does not work, test the device by connecting it directly to your computer.
- Check that you ran the “Setup” or “Install” program for the device.
- Make sure that the device appears in Device Manager. See Section 3.4.
- Disconnect all devices from the hub and reconnect them, one at a time. Check that each device works before plugging in the next device.

3.4 Verifying Device is Installed in Windows Operating System

To check that the hub is installed properly, use Device Manager to locate the Generic USB Hub on USB 2.0 Bus device. To access Device Manager for Windows 98/Me operating system, right-click “My Computer, Properties” and then click the “Device Manager” tab. For Windows 2000/XP/7 and Windows Vista, right-click “My Computer, Properties, Hardware tab,” then click the “Device Manager” tab.

To test that the hub is working properly, in the Device Manager window:

- Select the “Generic USB Hub” on USB 2.0 Bus device.
- Click the “Properties” button or icon, depending on the operating system.
- Verify that the message “This device is working properly” appears.
- To verify that the Hub is installed properly for Mac, locate the “Generic USB Hub on USB 2.0 Bus device” by opening “Apple System Profiler” and clicking “Devices and Volumes.”

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