



4-Port USB2.0 Metal Hub

w/ DIN RAIL Mounting Kit

Model Number: *USBG-4U2ML*

Installation Guide

Coolgear, Inc.

Version: 1.0

Date: 04/03/2024

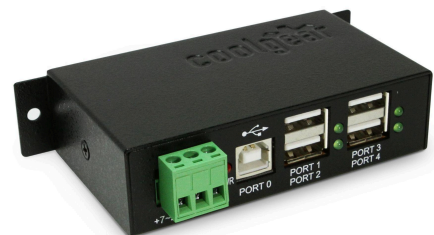


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Revision History

Revision	Date	Comments
1.0	04/03/2024	First Release

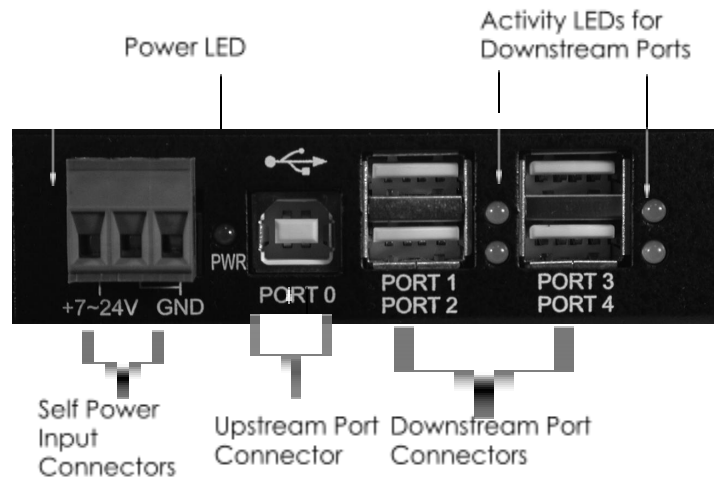
1. Introduction

Thank you for purchasing Coolgear's 4-Port USB2.0 Metal Hub. Thank you for purchasing this high-speed 4-port USB2.0 hub. It provides an ideal solution to expand 4 USB2.0 ports from one single USB2.0 host port. It provides a self power source (+7~24VDC from 3-pin Terminal Blocks) to provide enough power on USB2.0 buses.

Features:

- ✓ Compliant with USB Specification Revision 2.0
- ✓ Rigid and Wall-mountable Metal Case
- ✓ Supports High-speed and or Full-speed Packet
- ✓ Protocol Sequencer for Endpoint 0/1
- ✓ Provides 4 Downstream Facing Ports
- ✓ Supports 480Mbps, 12Mbps and 1.5Mbps Speed
- ✓ Supports Self-powered and Bus-powered Mode

2. Connector Layout

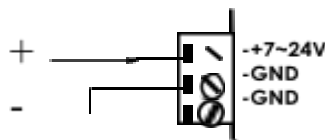


- Activity LEDs for Downstream Ports: These 4 LED indicators are blinking whenever the USB ports are transferring data.
- Upstream Port Connector: Type-B connector from upstream USB2.0 port. It is connected from the host or another USB2.0 hub.
- Self Power Input Connectors: These 3-pin (one pin plus voltage and the other 2 pins are GND) terminal block connectors are used to connect strong power to self-power the hub, the voltage can be in the range from +7V to 24VDC.



Warning!!

Please make sure the polarity of the input power should correctly match the terminal block pins, otherwise it will damage the hub.



3. Hardware Installation

- 1. Use static electricity discharge precautions.**
Remove possible static discharge potential from any objects that the hub may come in contact with before installation. This can be accomplished by touching a bare metal chassis rail after you have turned off the power.
- 2. Apply DC power (range from +7V to 24V) to the 3-pin Terminal Block Connector.** The hub was bus-powered by the upstream USB port, this terminal block connector is to add power to ensure enough power for the 4 downstream ports.

- 3. Connecting USB Host cable:** The host cable is a standard A-to-B USB2.0 cable. Please connect the type-A end connector of the cable to your upstream USB port, then connect the type-B end connector to this hub. Since the USB hub is plug-and-play, you don't have to turn off your host computer when installing the hub.



Note: In some cases, you will see an error message saying that the USB Hub caused the USB bus power over the current limit. Please ignore this message since the hub is hot plug and its power capacitor will cause a very short period of current. It will NOT affect your USB function.

- 4. Connect the USB devices to the downstream ports of this hub.**
- 5. Mount your hub on the wall or DIN RAIL if required.**

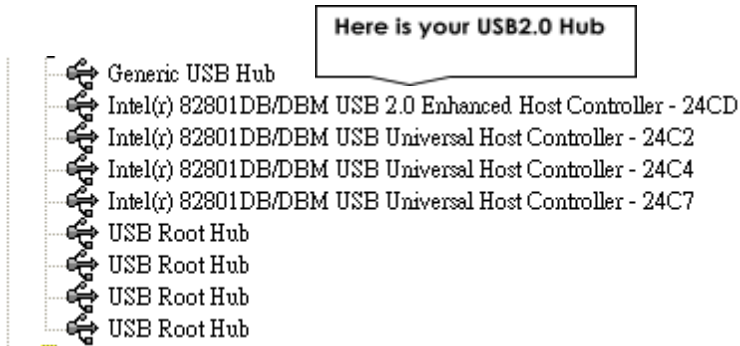


4. Check the Installation

To check the USB hub installation in Windows device manager, please follow the following steps:

1. Click **Start**
2. Click **Control Panel**
3. Click **System**
4. Click **Device Manager** button
5. Double click **Universal Serial Bus Controller**

6. Double click **Generic USB Hub**, the message will show that this device is working properly.



5. Environmental Specifications

Operating temp.: 0 to 55°C (32 to 131°F)

Operating humidity: 5 to 95% RH

Dimensions (LxWxH): 4.50"(L)x2.26"(W)x1.03"(H) (11.45x5.73x2.63 cm)

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Safety

- Read the entire Installation Guide before implementing this product for your application. This guide contains important information about electrical connections that must be followed for safe and proper operation.
- Inspect the product closely for visual defects before putting it to use.
- Keep away from areas where moisture builds, this product contains electrical components that can be damaged by moisture build up, this can adversely affect your equipment connected to it.
- Do not disassemble the product. Handling the product's internal components can expose it to ESD (Electro-Static Discharge) hazards that can affect the function of the device.
- If this product is not functioning properly, email our support team at support@coolgear.com.

USB CHARGING & CONNECTIVITY EXPERTS

Within Every Great Machine

For over 20 years our rugged, off-the-shelf USB hubs, chargers, and serial products are ready to go for your next project. Based in the US, Coolgear has successfully engineered and deployed millions of connectivity solutions into industrial, medical, automotive, commercial, and aerospace industries.

We understand the importance of reliability, build quality, & consider all our customers' applications as critical, wanting to ensure long-lasting event-free integrations.

Compliance Statement

View compliance within the product's respective Technical Data Sheet, found on the product's online listing.

Technical Support

When you reach out to Coolgear support, you'll find yourself in the hands of a solution-oriented and knowledgeable expert ready to answer whatever question you throw at them. If you ever need help with your product, visit coolgear.com/support for support tickets, downloads, and other support resources. For the latest drivers, please visit coolgear.com/download.

Product Standard Warranty

One (1) Year Warranty from Date of Purchase Invoice. Coolgear will repair or replace any Product determined to be defective and which has been returned, at your risk and expense, to Coolgear. Where Coolgear determines in its sole judgment that repair or replacement of such Product is not reasonable, Coolgear will keep the non-conforming Product and refund to you the amount you paid for such Product. Returned Products shall be subject to the balance of the Warranty Period otherwise applicable. Any reconditioned parts used by Coolgear shall be subject to all the same provisions as otherwise applicable to new parts. THE FOREGOING DESCRIBES COOLGEAR'S SOLE LIABILITY, AND YOUR SOLE REMEDY, FOR ANY BREACH OF WARRANTY. IF YOU DO NOT AGREE WITH THE TERMS OF THIS LIMITED WARRANTY, YOU MUST RETURN THE PRODUCTS UNUSED AND IN THEIR ORIGINAL CONTAINERS TO YOUR ORIGIN OF PURCHASE.

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