

4-Port USB 2.0 Metal Hub with DIN RAIL Mounting Kit - Installation Guide

1. Introduction: USBG-4U2ML

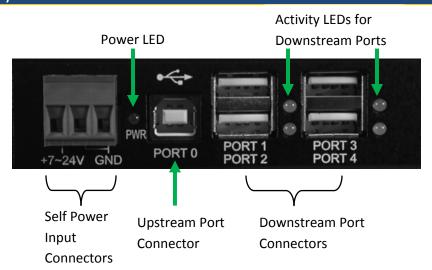
The High-Speed 4-port USB 2.0 hub provides an ideal solution to expand 4 USB 2.0 ports from one single USB 2.0 host port. It provides a self power source $(+7^{\sim}24\text{VDC} \text{ from 3-pin Terminal Blocks})$ to provide enough power on USB 2.0 buses.

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



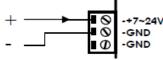
2. Connector Layout



- 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 USB 2.0 port. It is connected from host or another USB 2.0 hub.
- **Self Power Input Connectors:** This 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 be 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 USB 2.0 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:

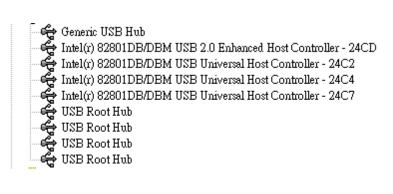
In some cases, you will see an error message said that the USB Hub caused the USB bus power over the current limit, please ignore this message since the hub is hot plug and its power capacitor will cause a very short period of current. It will NOT affect your USB function.

- 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. Checking the Hub 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 Temperature: 0 to 55°C (32 to 131°F)

Operating Humidity: 5 to 95% RH

Dimensions (LxWxH): 4.50"(L) x 2.26" (W) x 1.03" (H) (11.45 x 5.73 x 2.63 cm)