



Industrial 12-Port USB 2.0 Powered Hub for PC-MAC DIN-RAIL Mount

Product Manual



Coolgear, Inc.

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Model Number: USBG-12U2ML

Revision History

| Revision | Date | Author | Comments |
|----------|------------|----------|-------------------|
| 1.0 | 07/14/2015 | Coolgear | Original format |
| 1.1 | 10/5/2017 | Coolgear | New Manual Format |

About this document

This product manual outlines installation and features of the USBG-12U2ML Industrial 12-Port USB 2.0 Powered Hub for PC-MAC DIN-RAIL Mount.

Scope

The scope of this manual is to give the user of the product an understanding of its use with detailed diagrams and verbiage. The manual allows the users to apply the product to their application.

Intended Audience

This product is intended for use in numerous industries including but not limited to applications such as; Data Centers, Machine Equipment, Kiosk, Office Devices, and others.

Product Support

support@coolgear.com

Table of Contents

| | |
|---|----------|
| 1. Introduction | 4 |
| 1.1 Features | 4 |
| 1.2 Connector Layout..... | 5 |
| 1.3 Hardware Installation | 5 |
| 1.4 Checking the Hub Installation..... | 6 |
| 1.5 Environmental Specifications | 6 |
| 2. Notes, Tips, Warnings, and Safety | 7 |
| 3. Supporting References | 8 |

Table of Figures

| | |
|---------------------------------------|---|
| Figure 1 – Full Connector Layout..... | 5 |
| Figure 2 - Device Manager Image..... | 6 |

1. Introduction

12-Port USB 2.0 powered hi-speed hub enabling you to connect 12 additional USB peripherals to your system. Industrial-grade metal chassis supporting rugged use and is backward compatible with USB 1.0/1.1. It is targeted at PC and Mac Industrial Application users that are expanding the number of USB ports on their system.

| | |
|------------------|---|
| WEIGHT | .843 lbs |
| DIMENSIONS | 5.132in(L) (6.147 w/flange) x 2.615in(W) x 2.029in(H) |
| UPC | 729440625146 |
| WARRANTY | 1 year from date of purchase |
| COLOR | Black |
| DOWNSTREAM PORTS | 12 USB Type-A Ports |
| UPSTREAM PORTS | 1 USB Type-B Port |

1.1 Features

- | | |
|---|--|
| <ul style="list-style-type: none"> • Compliant with USB Specification Revision 2.0 • Rigid and Wall-mountable Metal Case • Supports High-speed and or Full-speed Packet • Built-in Multi-TT Chip USB 2.0 Hub Controller | <ul style="list-style-type: none"> • Protocol Sequencer for Endpoint 0/1 • Multi Transaction Translator (per hub 12 concurrent non-periodic transactions) • Provides 12 Downstream Facing Ports • Supports 480Mbps, 12Mbps and 1.5Mbps Speed • Supports Self-powered Mode |
|---|--|

1.2 Connector Layout

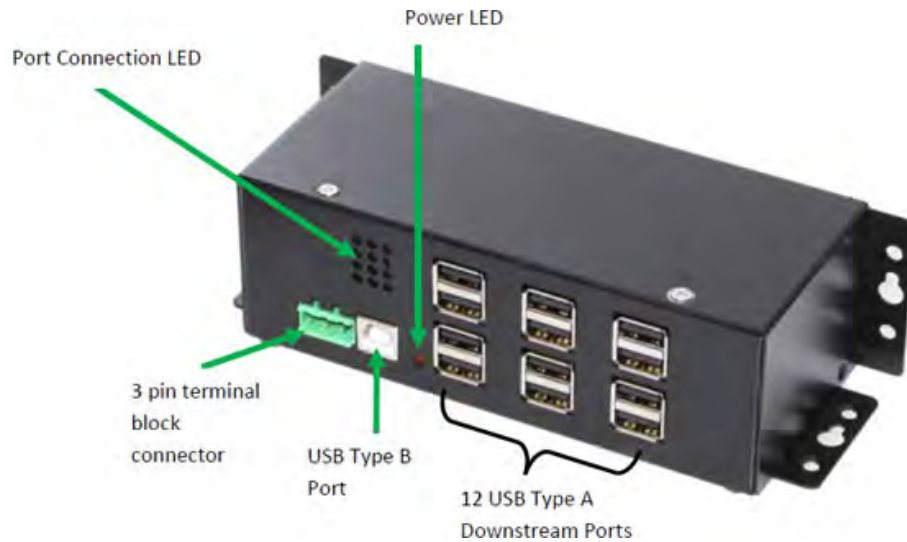


Figure 1

| +7~24V 3-Pin Terminal | USB 2.0 Upstream Port | AC Power Adapter |
|---|--|---|
| A 3-Pin Terminal Block Connector supplies power for the use of this product. The AC adapter's output has to be connected to here. | Type-B connector from upstream USB 2.0 port. It is connected from host or another USB 2.0 hub. | This adapter is required for supplying 110/220 AC power from a wall plug to the hub |

1.3 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. **Attach the AC power adapter.**
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.
4. **Connect the USB Devices to the downstream ports of this hub.**
5. **Mount your hub on the wall or DIN RAIL if required.**

1.4 Checking the Hub Installation

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


| | |
|---|---|
| <ol style="list-style-type: none"> 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 |  <p>The screenshot shows a list of USB devices in Windows Device Manager. The items listed are: Generic USB Hub, Intel(x) 82801DB/DBM USB 2.0 Enhanced Host Controller - 24CD, Intel(x) 82801DB/DBM USB Universal Host Controller - 24C2, Intel(x) 82801DB/DBM USB Universal Host Controller - 24C4, Intel(x) 82801DB/DBM USB Universal Host Controller - 24C7, USB Root Hub, USB Root Hub, USB Root Hub, and USB Root Hub.</p> |
|---|---|

Figure 2

1.5 Environmental Specifications

| Specification | Data |
|------------------------|-----------------------------|
| Operating Temperature: | 0-55°C (32 to 131°F) |
| Operating Humidity: | 5 to 95% RH |
| Storage Temperature | -20°C to 85°C (-4 to 185°F) |

2. Notes, Tips, Warnings, and Safety

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.

Reference Section 1.3 Hardware Installation.

Tip

N/A

Warning

N/A

Safety

- Read the entire Product Manual before implementing this product for your application. This manual 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.

3. Supporting References

| Document | Link |
|----------------------|---|
| Website Product Page | https://www.coolgear.com/product/industrial-12-port-usb-2-0-powered-hub-for-pc-mac-din-rail-mount |

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