USB 3.0 4-Port Industrial Hub with Power Supply

Product Manual

Coolgear, Inc.
Version 1.1
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Model Number: USBG-3X4M

Revision History

Revision	Date	Author	Comments
1.0	07/14/2015	Coolgear	Original format
1.1	09/28/2017	Coolgear	New Manual Format

About this document

This product manual outlines installation and features of the USBG-3X4M USB 3.0 industrial 4 port hub.

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; Automotive, Machine Equipment, Kiosk, Office, and others.

Product Support

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1. Introduction

The USBG3-3X4M is a 4 Port USB 3.0 Hub that complies with the Universal Serial Bus 3.0 (USB 3.0) Specifications Revision 1.0 and works up to 5Gbps. The design incorporates dual power conversion systems to operate to USB 3.0 maximum current for each port.

WEIGHT	1.85 lbs
DIMENSIONS	6.013in(L) 7.013 (w/flange) x 2.350(W) x .955in(H)
UPC	729440625191
WARRANTY	1 year from date of purchase
COLOR	Black
DOWNSTREAM PORTS	4 USB 3.0 Type-A Ports
UPSTREAM PORTS	1 USB 3.0 Type-B Port

1.1 Features

- Compliant with USB 3.0 Specification Revision 1.0
- Rigid and Wall-mountable Metal Case
- Provides 4 Downstream Facing Ports
- Supports Screw Lock Mechanism for Upstream and Downstream Connectors to Enhance Reliability
- Supports Super Speed, High-speed and or Full-speed Packet
- Supports 5Gbps, 480Mbps, 12Mbps and 1.5Mbps Speed
- Supports Self-powered and Bus-powered Mode
- Supports 900mA Bus Power for Each Downstream Ports

1.2 Connector Layout

Figure 1

Front Side Connection with Screw Lock USB Cable

Downstream USB 3.0 Port
w/ Screw Lock Cable

Figure 2

+12V DC Jack Power	USB 3.0 Upstream Port	USB 3.0 Downstream Port
A DC12V AC adapter is supplied with this product. The AC adapter's output has to be connected to here.	Type-B connector from upstream USB 3.0 port. It is connected from host or another USB3.0 hub. The connector is compatible with either non-Screw-Lock or Screw-Lock (optional) type cables.	There are 4 Type-A downstream USB 3.0 connectors. They should be connected to the USB devices with non-Screw-Lock or Screw-Lock (optional) cables.

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. **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.

4. **Connect the USB devices to the downstream ports of this hub. You can use either non-Screw-Lock or Screw-Lock type (optional) cables.** This hub supports both USB 3.0 and USB 2.0 devices. Since the USB 3.0 connectors are capable of plugging in the standard USB2.0 or USB3.0 cable, it supports both devices directly.
5. **Mount your hub on the wall if required.**

1.4 Checking the Hub Installation

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

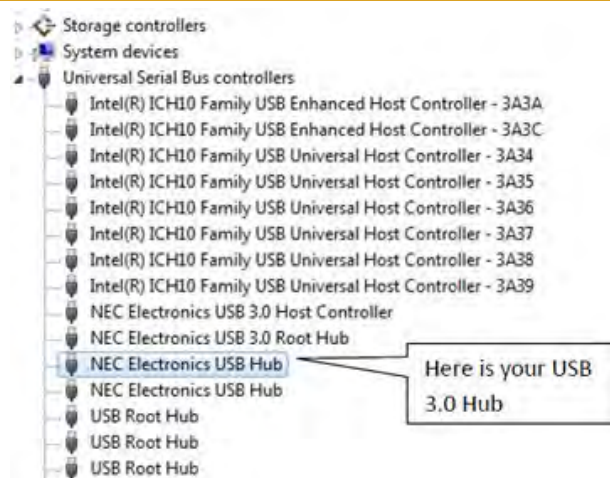|	
1. Click **Start** 2. Click **Control Panel** 3. Click **System** 4. Click **Device Manager** button 5. Double Click **Universal Serial Bus Controller** 6. Double click **Generic USB Hub**, the message will show that this device is working properly	

Figure 3

1.5 Environmental Specifications

Specification	Data
Operating Temperature:	0-55°C (32 to 131°F)
Operating Humidity:	5 to 95% RH

1.6   Circuit Image
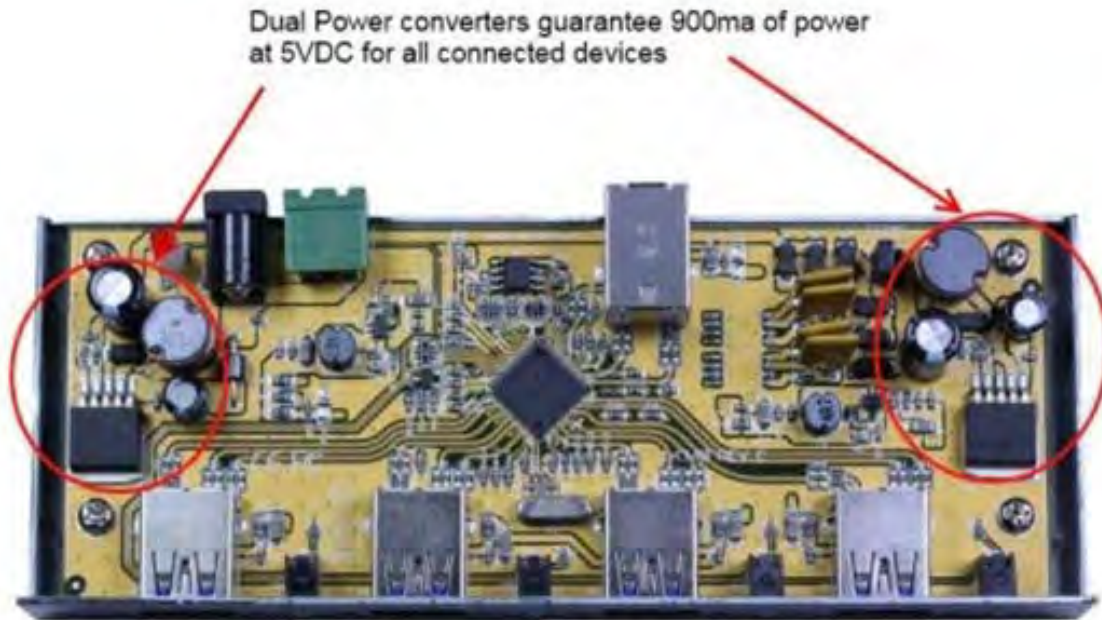
Figure 4

2. Notes, Tips, and Warnings

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/usb-3-0-4-port-industrial-hub-with-power-supply