4-Port USB 2.0 Mini Metal High-Speed Hub

Product Manual

Coolgear, Inc.
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Model Number: USBG-4PUSB2-MH

Revision History

Revision	Date	Author	Comments
1.0	07/14/2015	Coolgear	Original format
1.1	09/25/2017	Coolgear	New Manual Format

About this document

This product manual outlines installation and features of the USBG-4PUSB2-MH 4-Port USB 2.0 Mini Metal High-Speed 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; USB Device Hub, Banking eEquipment, Industrial Warehouse, and others.

Product Support

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Table of Contents

1. Introduction

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 (+7~24VDC from 3-pin Terminal Blocks) to provide enough power on USB 2.0 buses.

WEIGHT	.25 lbs
DIMENSIONS	4.8 x 1.7 x 0.8 inches / 121.92(L) x 43.18(W) x 20.32mm(H)
UPC	736983900920
WARRANTY	1 year from date of purchase
COLOR	Black
DOWNSTREAM PORTS	4 USB Type-A Ports
UPSTREAM PORTS	1 USB Type-B Port
SYSTEM REQUIREMENTS	Compatible with all USB enabled operating systems.

1.1 Features

• Fully compatible with USB 2.0 specification • Fully backwards compatible with USB 1.1 specification • Supports Transfer rate of 480Mbps • Support Self-Powered Mode • Support Hot plug and play • One Upstream port	• Four Downstream ports • One LED to indicate Hub is ready / Four LEDs to indicate per port status • Downstream ports have automatic connect function plus over-current protection • Compatible with Windows 7/8/XP/Vista Mac OS X

Mounting	Upstream Port	LED Status
The USBG-4PUSB2-MH is surface mountable on any flat surface; wall, under table, etc…	Type-B connector from upstream USB 2.0 port. It is connected from host or another USB 2.0 hub.	Power and individual port status indicators.

Power Supply Unit	Input : 100-240V/ AC, 50~60Hz, 1500mA
Input Voltage	5V/ DC, 500mA (without power supply unit) 5V/ DC, 1500mA(with power supply unit)
USB Standard	2.0 / 1.1
Connections	4 x USB 2.0 / USB Mini-B Type
Transfer Rate	480Mbit/s
Cable Length	1m
Operating Temperature	-5℃ to 45℃
Storage Temperature	-10℃ to 60℃
Dimension(W x H x D):	122 x 20 x 45 mm
System Requirements	Windows® XP, Vista,7, MacOS® 9 or higher

1.2   Mounting

You can set up the HUB on an even base or mount it by means of one to four screws (not included) on a stable base in the desired orientation.

1.3   Operation

- Connect the USB A-type plug to a vacant USB port of your PC ;
- Connect the USB mini-B type plug to the hub's mini –B socket. The red LED lights up indicating that the hub is now operational.

Note: *The hub functions in "Bus-Powered-Mode". This means that the current of 500mA supplied by the computer via USB is divided among the four ports. The total current consumption of all devices connected at any one time must not be higher than this value. Alternatively, you can power the USB hub with the power supply. If the power supply is used, then each port could be loaded with 500mA.*

- If you use the power supply unit, plug it first into a mains outlet with suitable operating voltage.
- Connect the power supply unit's low-voltage plug to the hub's corresponding input socket. The LED on the power supply lights up.

1.4 Product Safety

- When used in conjunction with other devices, observe the operating instructions and safety notices of connected devices.
- Only operate the device in dry indoor room;
- The product must not be subjected to heavy mechanical stress or intense vibration
- The product must not be exposed to electromagnetic fields, extreme temperatures; direct sunlight or dampness The product should not be used immediately after it has been brought from an area of cold temperature to an area of warm temperature. Condensed water might destroy the product. Wait until the product adapts to the new ambient temperature before use.

1.5 Additional Information

- The USB 2.0 is USB 1.1 compatible. That means that traditional USB 1.1 devices can be operated without problems on the USB 2.0 hub. USB1.1 devices do not become quicker through this!
- The USB 2.0 hub can, of course, also be operated on a USB1.1 connection, e.g. if your PC has no USB 2.0 connection.
- An increase in speed in the data transmission is not possible here either.
- To be able to exploit the high speed, (theoretically 480MBits/s, i.e. 60MByte/s), all devices must support USB2.0-the USB device (e.g. an external burner) itself, the USB hub and USB controller in the PC.
- In practical operation, the 480MBit/s is not achieved. Hardly any device (e.g. hard disk, burner etc) is in a position to supply data so quickly. Other causes also (e.g. simultaneous operation of other USB devices, protocol information etc.) reduce the transmission rate.
- USB operation is not possible in Windows safe mode or under DOS. USB keyboards and a USB mouse do not normally work. The BIOS/setup of your PC possibly has appropriate support (could be called e.g. "Legacy USB support"). It is possible, however, that the USB keyboard/mouse is to be connected directly to the motherboard and not on a USB hub.

2. Notes, Tips, Warnings, and Safety

Note	The hub functions in "Bus-Powered-Mode". This means that the current of 500mA supplied by the computer via USB is divided among the four ports. The total current consumption of all devices connected at any one time must not be higher than this value. Alternatively, you can power the USB hub with the power supply. If the power supply is used, then each port could be loaded with 500mA.
Tip	N/A
Warning	N/A
Safety	Reference section 1.4

3. Supporting References

Document	Link
Website Product Page	https://www.coolgear.com/product/4-port-usb-2-0-mini-metal-high-speed-hub