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COOLGear 1-to-4 SATA2 Port/Hub Expander with Switches

1. Introduction

Thank you for purchasing this SATA2 Expander with Switches. It is designed to be used as a SATA2 hard drive expander with switches to enable or disable the drives connected. It provides a high performance link between a single SATA2 host port and 4 SATA device ports. It connects the host upstream port (must support SATA2 Port Multiplier Feature) to the 4 downstream SATA devices simultaneously.

Enable and Disable the SATA drive is done by simply pressing the respective push button switch of each drive. The drive will be toggled On and Off whenever the push button switch was pressed.

The feature that turn off the unused drives will reduce the power consumption and make sure those devices are true off-line to prevent from any accidental erasing data by virus or application software.

Moreover, it provides a keylock switch to prevent from any unauthorized changing the settings. It helps home or school users to manage the devices easily.

The Expander can be fit into any standard 3.5-inch bay or 5.25-inch bay (by an 3.5-to-5.25 adapter frame kit), it provides the immediate upgrade of your PC storage system. Its major features as follows:
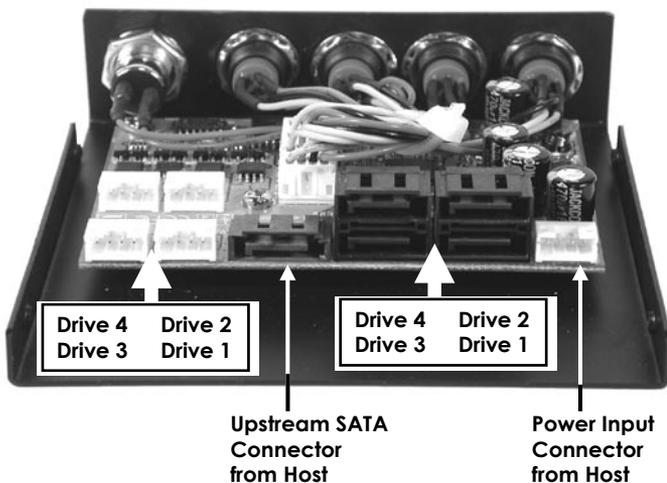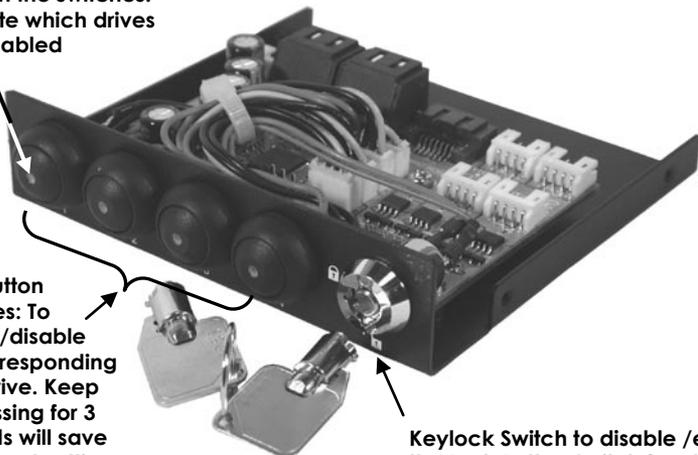
Features:

- ✓ Only Supports SATA2 Host with Port Multiplier Feature
- ✓ 1-to-4 SATA2 Expansion with Switches to Enable/Disable the 4 Devices
- ✓ Expands a SATA host (with Port Multiplier Feature) to the 4 SATA Devices
- ✓ Built-in High Speed SATA2 Port Multiplier
- ✓ Enable/Disable the Drive Simply by the Push Button Switch
- ✓ SATA2 Transfer Rate Compliant with 1.5Gbps and 3.0Gbps
- ✓ Switch Off Power of the Unused Drives to Save the Power Consumption and Put them True Off-Line
- ✓ Save the Current Settings by Built-in EEPROM
- ✓ 3.5-inch Bay Form Factor, Easy to Fit in Normal PC Systems
- ✓ Keylock to Prevent from Unauthorized Changing
- ✓ Provides LEDs to Indicate the Active/Inactive State of the Drives

2. Front Panel and Board Layout

LEDs on the switches: indicate which drives are enabled

Push Button Switches: To enable/disable the corresponding hard drive. Keep on pressing for 3 seconds will save the current setting

Keylock Switch to disable /enable the Push Button Switch function

Drive 4   Drive 2
Drive 3   Drive 1

Drive 4   Drive 2
Drive 3   Drive 1

**Upstream SATA Connector from Host**

Power Input Connector from Host

3. Installation

Before installing this product, please make sure the following accessories are well packed in the box :

☐ 1-to-4 SATA2 Expander 3.5-inch Bay x 1
☐ 3.5-inch to 5.25-inch Converting Frame
☐ 7-pin-to-7-pin Host SATA Cable x 1
☐ Mini 4-pin to Large 4-pin Host Power Cable x 1
☐ 7pin+15pin SATA+Power Cable x 4
☐ This Installation Guide × 1

The following figure shows the cables included with the product:
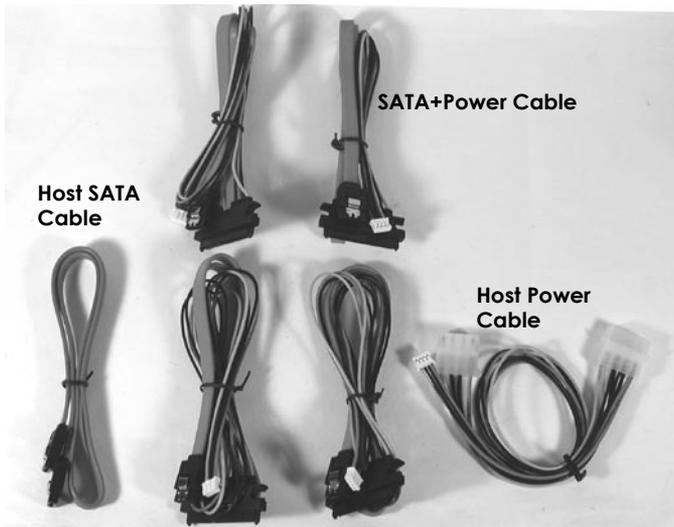
Be sure that you are properly grounded before opening your computer case or touching any components of this product.

1. Plan the drive number (which drive is drive 1, which one is drive 2, …) to be connected to SATA Expander downstream ports.

2. Install the host power cable and host SATA cable to the connectors. Leave the other end (to host) of the cables unconnected at moment. You will connect them after installed the unit into the 3.5-inch bay.

3. Install each 7+15 pin device cable(s) to the downstream connector(s) of the product.

4. Remove the chassis cover from your computer, install the product into the 3.5-inch bay in your PC. If your drive bay is 5.25 inch instead, you may need the supplied 3.5-inch to 5.25-inch adapter frame kit.

5. Install the host SATA cable to your SATA port in the motherboard or add-in cards. Install the power cable to your system power supply's large 4-pin connector. Put the chassis cover back on the computer.

4. Switching the SATA Drives

When you switching the drives, if the SATA drive is enabled (On) but it does not appear automatically, then your SATA host port may not support PM (Port Multiplier) Feature, in this case you have to install an add-in card (not included with this product) that supports PM.

There are 4 switches that control each drive respectively. Press the key once will change the drive state (please see the following figure). The power on default setting is Drive 1 On and the other 3 drives are Off. However, you can change the setting anytime by pressing any one of the 4 push button switches and hold for over 3 seconds.

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┌──────────────────┐      ┌──────────────────┐
│   Drive is Off   │─────▶│   Drive is On    │
└──────────────────┘      └──────────────────┘
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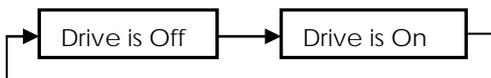
When the push button switch was pressed and hold for over 3 seconds, all 4 LEDs will be lit and flash 3 times, then the current settings will be saved as the power-up default setting. This setting will be restored whenever the product is powered up.