Dual M.2 NGFF SATA RAID Adapter

25S22M2NGFFR

*actual product may vary from photos

DE: Bedienungsanleitung - de.startech.com
FR: Guide de l’utilisateur - fr.startech.com
ES: Guía del usuario - es.startech.com
IT: Guida per l’uso - it.startech.com
NL: Gebruiksaanwijzing - nl.startech.com
PT: Guia do usuário - pt.startech.com

For the latest information, technical specifications, and support for this product, please visit www.startech.com/25S22M2NGFFR.
FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by StarTech.com could void the user’s authority to operate the equipment.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

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Introduction

Use the 25S22M2NGFFR to install two M.2 NGFF SSDs into a 2.5 in. bay to create high-performance storage with configurable RAID. This M.2 NGFF RAID adapter enables a user to install 2 M.2 NGFF SSD into a 2.5” bay and configure the drives into 0, 1, Spanning, or JBOD RAID modes.

Packaging contents

• 1 x dual M.2 NGFF SATA RAID adapter
• 2 x M.2 drive mount hardware
• 4 x screws
• 1 x mini screwdriver
• 1 x quick start guide

System requirements

• 1 or 2 M.2 NGFF drives
• SATA host device

Operating system requirements are subject to change. For the latest requirements, please visit www.startech.com/25S22M2NGFFR.
Product diagram

- RAID switches
- Drive 2 Error LED
- RAID set button
- M.2 NGFF Key B
- Drive mount hardware
- Drive installation holes (8 total)
- Drive 1 Error LED
Install the 25S22M2NGFFR

Warning! Drives and storage enclosures should be handled carefully, especially when they’re transported. If you’re not careful with your drives, you may lose data as a result. Always handle storage devices with caution. Make sure that you’re properly grounded by wearing an anti-static strap when you install any computer component. If an anti-static strap isn’t available, touch a large grounded metal surface for several seconds to discharge any built-up static electricity.

1. Remove the back from the adapter.

2. Depending on the length of your drive, you may need to move the preinstalled M.2 drive mount hardware. Place your drive next to the adapter and note the drive installation holes that match the height of your drive. If the drive mount hardware is already installed in the correct position, proceed to step 7.

3. Remove the circuit board (held in by snaps) and use a small set of pliers to remove the nuts that are holding the drive mount hardware in place on the reverse side.

4. Use the provided screwdriver to remove the two screws that make up the drive mount hardware.

5. Place the screws that you removed in step 4 in the drive installation holes that match the length of your drive and use the screwdriver to tighten the screws.

6. Replace the nuts that you removed in step 3 and tighten them.

7. Gently slide the M.2 connector on your drive into the corresponding connector on the 25S22M2NGFFR, and press the drive down toward the adapter until the drive is in place.

Note: The connector on your drive is keyed so that it only fits one way.

8. If necessary, insert a second drive.

9. Install the adapter in your 2.5 in. SATA drive application. For more information on how to install the adapter, consult the documentation that came with your SATA host device.

To remove a drive, remove the screws that are holding the drive in place and the drive will lift up and you can grasp it and remove it.
Prepare a drive for use

If you install a drive that already has data on it, after you plug in the drive, it appears under My Computer or Computer with a drive letter assigned to it.

If you install a brand-new drive that doesn’t contain any data, you must prepare the drive for use.

If you use a computer that’s running a version of Windows®, do the following:

1. On the taskbar, click the Windows icon.
2. In the Search field, type disk management.
3. In the search results, click Disk Management.
4. A dialog window appears and asks you to initialize the drive. Depending on the version of Windows that you’re running, you have the option to create either an MBR or a GPT disk.

**Note:** GPT (GUID partition) is required for drives larger than 2 TB but GPT isn’t compatible with some earlier versions of operating systems. MBR is supported by both earlier and later versions of operating systems.

5. Locate the disk that is labeled Unallocated. To confirm that the drive is the correct one, check the drive capacity.
6. Right-click the section of the window that says Unallocated and click New Partition.
7. To initialize the drive in the format of your choice, complete the on-screen instructions.

When the drive is successfully installed, it appears under My Computer or Computer with a drive letter assigned to it.
About RAID configurations
You can set one of four RAID configurations, including RAID 0, RAID 1, JBOD, and SPAN modes.

Use the RAID switches and the table below to set your desired RAID configuration.

<table>
<thead>
<tr>
<th>RAID mode</th>
<th>Description</th>
<th>J4</th>
<th>J5</th>
<th>J6</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAID 0</td>
<td>Striping - Improves system performance</td>
<td>ON</td>
<td>ON</td>
<td>1</td>
</tr>
<tr>
<td>RAID 1</td>
<td>Mirror - Creates a redundant drive on the second drive for security</td>
<td>ON</td>
<td>1</td>
<td>ON</td>
</tr>
<tr>
<td>SPAN</td>
<td>Creates a large single drive volume, consisting of both drives</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>JBOD</td>
<td>Just a Bunch of Disks - Allows access to both drives individually</td>
<td>ON</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Set a RAID mode

**Warning!** Setting or changing your RAID configuration will erase the data or metadata on your existing drives. Save or back up any important data before you proceed.

**Note:** In order to configure your device to RAID 0 or RAID 1, your device must be configured to JBOD.

1. Set the RAID switches to either 1 or ON, depending on the configuration that you want to set.
2. Connect the adapter to your SATA host device. Refer to the documentation that came with your SATA host device for more information about how to connect your adapter.
3. Power up the adapter.
4. Press the RAID set button on the adapter.
About the LED indicators
The 25S22M2NGFFR includes a status LED for each of the two drives. Consult the table below for more information about what the LED behaviors signify.

<table>
<thead>
<tr>
<th>LED behavior</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED is illuminated and not blinking</td>
<td>Indicates a drive error</td>
</tr>
<tr>
<td>LED is blinking</td>
<td>Indicates that the drive is being rebuilt</td>
</tr>
<tr>
<td>LED is blinking and then stops</td>
<td>Indicates that the drive is finished being rebuilt</td>
</tr>
</tbody>
</table>

Quick start guide
Technical support
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For the latest drivers/software, please visit www.startech.com/downloads

Warranty information
This product is backed by a two-year warranty.

StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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