

Dual-Slot M.2 Drive to SATA Host Adapter for M.2 NGFF SSDs - RAID

S322M225R



*actual product may vary from photos

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For the latest information, technical specifications, and support for this product, please visit www.StarTech.com/S322M225SR.

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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Product diagram



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- 1 Power LED
- 2 RAID jumper switches
- 3 M.2 NGFF key B connectors
- 4 Drive installation holes (8 total)
- 5 Drive-mounting hardware
- 6 Activity/link LEDs



Package contents

- 1 x dual M.2 to SATA host adapter
- · 2 x sets of drive-mounting hardware
- 4 x adapter-mounting screws
- 1 x quick-start quide

Requirements

- 1 or 2 M.2 NGFF drives
- SATA host device
- Screwdriver

The S322M225R is OS independent and doesn't require any additional drivers or software

Requirements are subject to change. For the latest requirements, please visit www.StarTech.com/S322M225R.

About the LED indicators

The S322M225R features one power LED and two drive activity/link LEDs.

LED behavior	Significance
Power LED is illuminated	Adapter is receiving power
Activity/link LED is blinking	Drives are being accessed
Activity/link LED is slowly blinking on a consistent basis	Array is being rebuilt
Activity/link LED is illuminated	Drive failure is detected or drive is missing
Activity/link LED isn't illuminated	No activity and no errors detected

Install and connect the host adapter

Warning! 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.

- Depending on the length of your drive, you may need to move the preinstalled screw and standoff. Place your drive next to the host adapter and note the drive installation holes that match the height of your drive. If the screw and standoff are already installed in the correct position, proceed to step 5.
- 2. Remove the screws on the underside of the host adapter.
- 3. Move the standoffs to the drive installation holes that match the length of your drive.
- 4. Reinsert the screws that you removed in step 2 into the standoffs and tighten the screws in place.
- Gently slide the M.2 connector on your drive into the corresponding connector on the host adapter, and press the drive down towards the adapter until the drive is in place.

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

- 6. Insert one of the drive-mounting screws through the drive and into the standoff, and tighten the screw.
- 7. If necessary, repeat steps 1 to 6 to insert a second drive.
- 8. Install the host adapter in your SATA drive application. For more information about how to install the host adapter, consult the documentation that came with your SATA host device.

To remove a drive, remove the drive-mounting screw that is holding the drive in place. The drive will lift up when you remove the screw and you will be able to grasp and remove it.



Prepare a hard drive for use

Windows OS

If you install a hard drive that has data on it, the hard drive appears under **My Computer** or **Computer** with a drive letter assigned to it. If you install a brand-new hard drive that doesn't contain any data, you must prepare the hard drive for use.

Warning! When you complete the following steps, all of the data on your hard drive is deleted. If your hard drive has data on it that you require, you should create a backup file or use a different hard drive.

- 1. Depending on the version of Windows® OS that you're running, do one of the following:
 - · On your desktop, right-click My Computer and click Manage.
 - On your desktop, right-click Computer and click Manage.
 - Click the Start button or Windows icon. Enter compmgmt.msc and press
 Enter
- 2. On the Computer Management screen, click Disk Management.
- A dialog window appears and asks you to initialize the hard drive. Depending on the version of OS that you're running, you have the option to create either an MBR or a GPT disk.

Note: GPT (GUIDE partition) is required for hard drives that are larger than 2 TB, but GPT isn't compatible with earlier versions of operating systems. MBR is supported by both earlier and later versions of operating systems.

- 4. Locate the disk that is labeled **Unallocated**. To confirm that the hard drive is the correct one, check the drive capacity.
- Right-click the section of the window that says Unallocated and click New Partition.
- Complete the on-screen instructions to initialize the hard drive in the format of your choice.

When the hard drive is successfully installed, it appears under **My Computer** or **Computer** with a drive letter assigned to it.



macOS

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

Warning! When you complete the following steps, you create a partition that uses the entire hard drive space.

- 1. Do one of the following:
 - · In Spotlight, enter Disk Utility.
 - Open Finder. Navigate to Applications and click Utilities. Open Disk Utility.
- 2. Select the hard drive and click the Partition tab.
- 3. Enter a name for the partition.
- 4. Click Apply.

The hard drive now appears on your desktop and is accessible in **Finder**.

About RAID modes

The S322M225R supports four RAID modes: RAID 0, RAID 1, JBOD, and SPAN.

RAID mode	Description
RAID 0	Stripe set Splits data evenly across two or more drives
RAID 1	Mirror Creates a redundant drive on the second drive for security
JBOD	Lets you to access the drives as just a bunch of independent disks Note: The motherboard or SATA host connector must support the port multiplier to configure JBOD raid mode.
SPAN	Combines or concatenates two drives into one large logical volume



Consult the following table to determine which pins to short in order to set a RAID mode:

RAID mode	Short pins	
RAID 1	1-2, 5-6	
RAID 0	3-4, 5-6	
SPAN	1-2, 3-4, 5-6	
JBOD/PM	5-6	

Configure a RAID mode

Warning! When you set or change your RAID configuration, you will erase the data or metadata on your existing drives. Save or back up any important data before you proceed.

- 1. Set the RAID jumper switches to the configuration that corresponds to the mode that you want to set.
- 2. Set J2 jumper to SET GND.
- Connect the adapter to the data and power connections on your SATA host device. Refer to the documentation that came with your SATA host device for more information about how to connect your adapter.
- 4. Make sure that the adapter is receiving power.
- 5. Disconnect the adapter from the power connection on your SATA host device.
- 6. Set the J2 jumper to SET N.C.
- Reconnect the adapter to the data and power connections on the your SATA host device.
- 8. Navigate to Device Manager and make sure that the RAID change has taken effect.



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