Synology®

Product Manual

FS3420

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Chapter 1: Before You Start

Thank you for purchasing this Synology product! Before setting up your new Synology NAS, please check the package contents to verify that you have received the items below. Also, make sure to read the safety instructions carefully to avoid harming yourself or damaging your Synology NAS.

Notes:

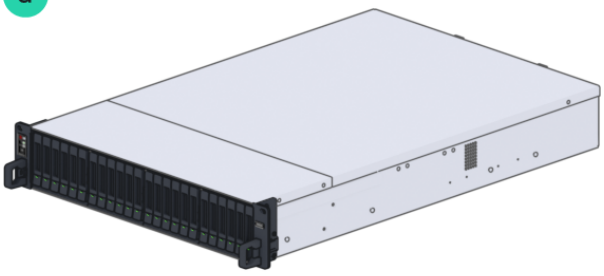
- All images below are for illustrative purposes only, and may differ from the actual product.

1.1 Package contents

Contact your reseller if any of the following items are missing from your package:

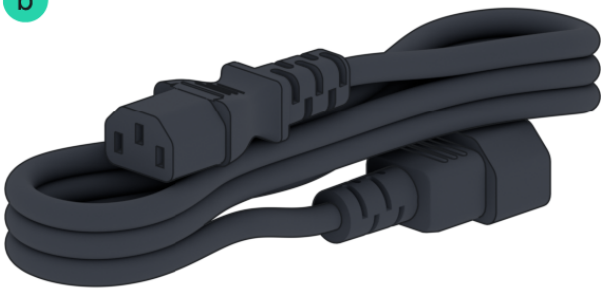
Main unit x 1

a



C13 to C14 power cord x 2

b



Screw for 2.5" drives x 100

c



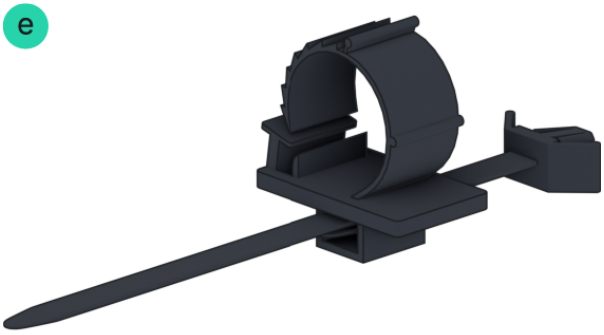
Front cover x 1

d

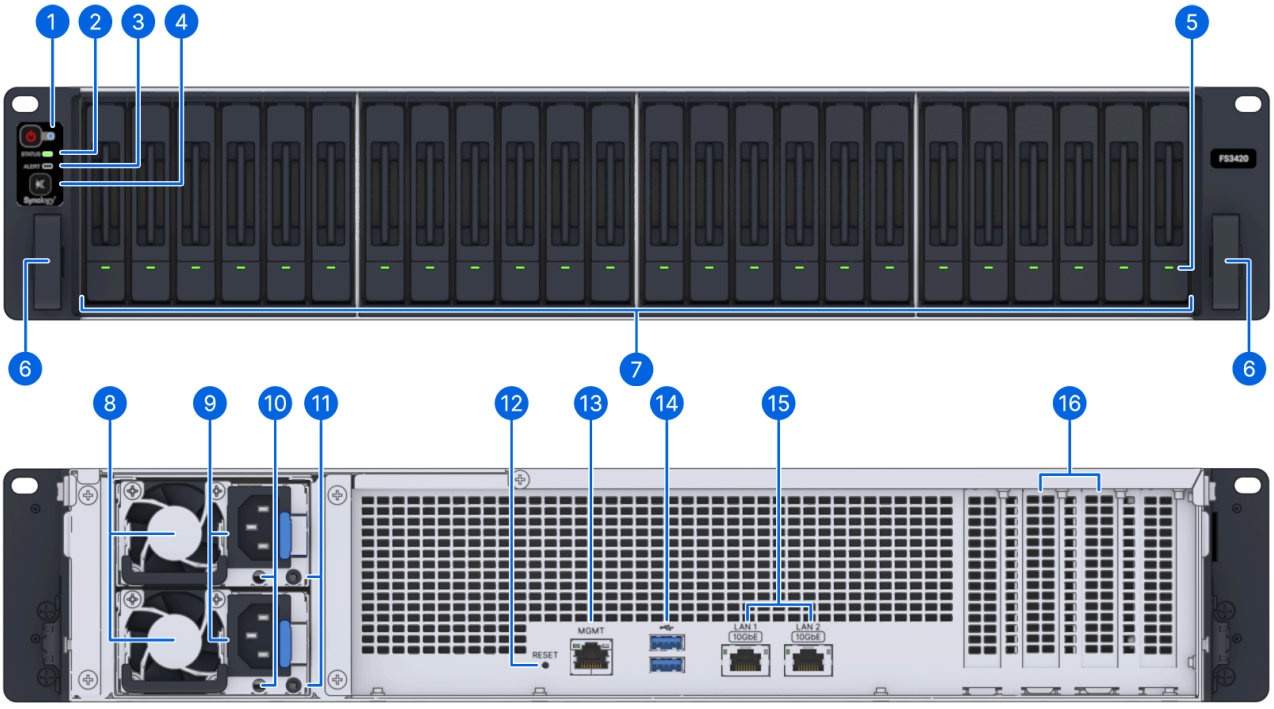


Push mount cable tie x 2

e



1.2 Synology FS3420 at a glance



No.	Name	Description
1	Power button and indicator	1. Press to power on your Synology NAS. 2. To power off your Synology NAS, press and hold until you hear a beep sound and the Power LED starts blinking.
2	Status indicator	Displays the status of the system. For more information, see "System modes and LED indicators".
3	Alert indicator	Displays warnings regarding fan or temperature. For more information, see "Other LED indicators".
4	Alarm silence button	Press to deactivate the beep that sounds when a malfunction occurs.

5	Drive status indicators	Displays the status of drive. For more information, see "Other LED indicators".
6	Rail kit release tabs	Push in and hold to release your Synology NAS from a rail kit lock.
7	Drive trays	Install drives (hard disk drives or solid state drives) here.
8	PSU fans	Dispose of excess heat and cool the PSUs.
9	Power ports	Connect power cords here.
10	Mounting holes	Insert push mount cable ties here to secure the power cables.
11	PSU indicators	Display the status of the power supply unit (PSU). For more information, see "Other LED indicators".
12	Reset button	1. Mode 1: Press and hold until you hear a beep sound to restore the IP address, DNS server, and password for the admin account to default. 2. Mode 2: Press and hold until you hear a beep, release the button immediately, then press and hold again within 10 seconds to reinstall DiskStation Manager (DSM). For detailed information on how to reset your Synology NAS, please refer to this article.
13	Management Port	This port is used for out-of-band management only.
14	USB 3.2 Gen 1 ports	Connect external drives or other USB devices to the Synology NAS here.
15	10GbE RJ-45 ports	Connect RJ-45 network cables here.
16	PCI Express expansion slots	Support the addition of PCIe network interface cards.

1.3 System modes and LED indicators

System modes definitions

There are 8 system modes in Synology NAS. The System modes and their definitions are as below:

System Mode	Definition
Powering on	Synology NAS is powering on when you press the power button or restarting when you run operations in DSM. During the boot up process, the device also performs hardware initialization, such as hardware reset or BIOS initialization.
Shutting down	Synology NAS is shutting down as a result of pressing the power button or operation in DSM.
DSM not ready	DSM is not ready for use. This could either be: • Synology NAS is powered on, but DSM is not properly installed. • Synology NAS is currently powering on and initializing services necessary for DSM to fully function. • The attached UPS device has insufficient power; DSM stops all services to prevent data loss (enters safe mode).
DSM is ready for use	DSM is fully functioning, and users can sign in.
Memory not recognized	Synology NAS is unable to boot due to unrecognized memory. Please replace it with compatible memory modules.
Hibernation	Synology NAS has been idle for a while and is now in Hibernation mode.
Application	Certain packages/services (e.g., USB Copy and Find me service) while in operation will control the actions of the LED. After the operation is complete, the LED indicator will return to its normal state.
Powered off	Synology NAS is powered off.

Identify system modes

You can identify the system mode through the Power and Status LED indicators. Please refer to the table below for more details.

System Mode	Power LED	Status LED	
	Blue	Green	Orange
Powering on/Memory not recognized	Blinking	Off	Off

Shutting down	Blinking	Static	Off
DSM not ready	Static	Blinking	Off
DSM is ready for use	Static	Static	Off
Hibernation	Static	Off	Off
Application	Static	Switching	
Powered off	Off	Off	Off

Transitions between system modes

To better understand the transition between system modes, please refer to the examples below:

- **Powered on with no DSM installed:**
  Powered off > Powering on > DSM not ready
- **Powered on with DSM installed:**
  Powered off > Powering on > DSM not ready > DSM is ready for use
- **Entering hibernation then waking up from hibernation:**
  DSM is ready for use > In hibernation > DSM is ready for use
- **Shutdown:**
  DSM is ready for use > Shutting down > Powered off
- **Power failure with UPS attached:**
  DSM is ready for use > DSM not ready (due to power failure, DSM enters safe mode) > Shutting down > Powered off > Powering on (power has recovered, DSM will reboot) > DSM not ready > DSM is ready for use

1.4 Other LED definitions

LED Indicator	Color	Status	Description
Alert	Orange	Blinking	Fan failure/Over temperature[1]
	Off		System normal

Drive status	Green	Static	Drive ready and idle
		Blinking	Accessing drive
	Orange[2]	Static	Locating drive
			Drive deactivated by user
			Drive slot disabled[3]
			Drive status is Critical or Failed
	Off		No drive detected
Management Port (on left side of jack)	Green	Static	Network connected
		Blinking	Network active
	Off		No network
Management Port (on right side of jack)	Green	Static	1 Gbps connected
	Off		100/10 Mbps connected/No network
Rear 10GbE LAN (on left side of jack)	Green	Static	Network connected
		Blinking	Network active
	Off		No network
Rear 10GbE LAN (on right side of jack)	Green	Static	10 Gbps connected
	Off		5/2.5/1 Gbps/100 Mbps connected/No network
PSU indicator	Green	Static	Power supply unit normal
		Blinking	Power standby/AC present
	Orange	Static	Power supply unit fail/No AC power
	Off		Power supply unit off

Notes:

1. If the **Alert LED** continuously blinks orange, this indicates there are system errors such as fan failure, system overheating, or volume degrade. Please sign in to DSM for detailed information.
2. When the drive LED indicator is orange, we recommend you sign in to DSM and go to **Storage Manager** > **HDD/SSD** for more information.
3. Please try to restart your Synology NAS or re-insert the drives. If the issue persists, refer to this article to resolve it.

1.5 Hardware specification

Item	FS3420
CPU	Intel Xeon D-1739
System Memory	DDR4 32 GB
Drive Type	2.5" SATA x 24
External Port	USB 3.2 Gen 1 × 2
LAN Port	• 1GbE (RJ-45) x 1 • 10GbE (RJ-45) x 2
PCIe Slot	Gen4 ×8 slot (x8 link) x 2
Size (H x W x D) (mm)	• 88 × 430.5 × 692 • 88 × 482 × 724 (with server ears)
Weight (kg)	15
Agency Certification	• FCC Class A • CE Class A • UKCA • BSMI Class A • VCCI • RCM • EAC • CCC • KC • UL
HDD Hibernation	Yes
Scheduled Power On/Off	Yes
Wake on LAN	Yes

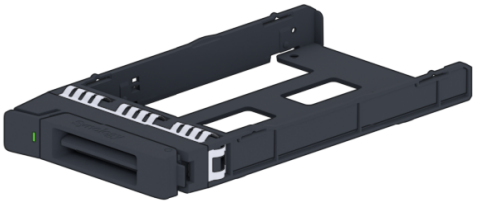
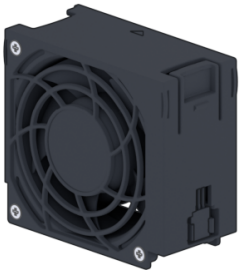
Environment Requirement	• Line voltage: 100V to 240V AC • Frequency: 50 / 60Hz • Operating Temperature: 32˚F to 95˚F (0˚C to 35˚C) • Storage Temperature: -5˚F to 140˚F (-20˚C to 60˚C) • Operating Humidity: 8% to 80% RH • Storage Humidity: 5% to 95% RH

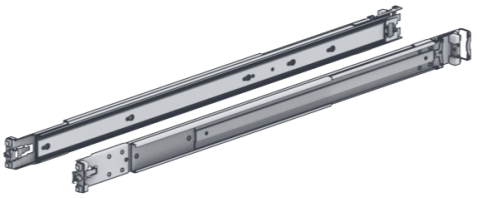
Notes:

1. Model specifications are subject to change without notice. Refer to Synology website (http://www.synology.com) for the latest information.

1.6 Spare parts

Refer to Spare Parts (http://www.synology.com/products/spare_parts) if you need to replace system fans, disk trays, or power supply units.

Model Name	Picture	Description
DRIVE Tray (R6)		2.5" Drive Tray
FAN 80*38_2		System Fan 80*80*38 mm
PSU 550W-RP Module_1		Redundant Power Module 550W

RKS-02[1]		Sliding rails

Notes:

1. Refer to the "Install and Remove Rail Kits" for detailed information and carefully install the rail kit.

1.7 Optional accessories

With Synology accessories, you can customize your Synology NAS to fit different business environments without worrying about compatibility and stability. Refer to Synology Products Compatibility List (http://www.synology.com/compatibility) for more information.

Chapter 2: Hardware Components Installation

2.1 Recommended tools

This section lists the required and optional tools used in the installation procedures.

- Phillips #2 screwdriver (with a cross tip)
- At least one 2.5" SATA drive (see here (http://www.synology.com/compatibility) for compatible models)

Caution:

- If you install a drive that contains data, the system will format the drive and erase all existing data. Back up any important data before installation.

Notes:

- If an automatic screwdriver is used, set its torque reading to 4.0 (+/-0.3) kgf-cm.

2.2 Precautions

Before installing or removing any components in your Synology NAS, review all safety information.

Caution:

- Leaving stray or loose screws inside your Synology NAS may severely damage its components. Avoid dropping any metallic objects into the NAS, such as paper clips and hairpins.
- Do not pull a cable by its connector or its pull tab when disconnecting it. Certain cables have connectors with locking tabs or thumb-screws that must be released before disconnecting the cable. When disconnecting a cable, keep it evenly aligned to avoid bending the connector pins. When connecting a cable, make sure that the ports and the connectors are correctly oriented and aligned.
- If you need to move your Synology NAS, get someone to assist you. Do not attempt to lift it on your own to prevent injury.
- Make sure that your Synology NAS is working correctly before installing optional hardware components. If your Synology NAS is not working correctly, see the "Troubleshooting" chapter to do basic troubleshooting. If the problem cannot be solved, see the section "Getting information, help, and service" for more information.
- Always carefully handle system components (such as PCIe cards, memory modules, and system boards) by the edges or the frame. Do not touch solder joints, pins, or exposed circuitry.
- Do not place parts and other components (such as PCIe cards, memory modules, and system boards) on the top cover of the NAS or other metal surfaces.
- Only specific Synology NAS support the hot-swapping of components and are designed to operate safely while it is turned on.

Before working inside your Synology NAS

1. Power off the Synology NAS, including all attached peripherals.
2. Disconnect the Synology NAS from the electrical outlet and disconnect the peripherals.

After working inside your Synology NAS

1. Reconnect the peripherals and connect the Synology NAS to an electrical outlet.
2. Power on the attached peripherals and then power on the Synology NAS.

Preventing electrostatic discharge

Static electricity discharge from a finger or other conductors might lead to system halt, loss of data, or other damages to system boards or other static-sensitive components. This type of damage may also reduce the life expectancy of the Synology NAS.

Prevent exposure to static electricity by doing the following:

- Avoid hand contact by transporting and storing hardware components in static-safe containers.
- Keep electrostatic-sensitive hardware components in their containers until they arrive at static-free workstations.
- Place hardware components on a grounded surface or touch them before removing them from their containers.
- Avoid touching joints, pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive hardware component or assembly.
- When handling a hardware component, carefully hold it by the edges or the frame.
- Use an electrostatic-discharge wrist strap or other ground systems. The Synology NAS should be placed on an anti-static mat (ESD mat).
- The Synology NAS will provide standby power when it is connected to AC power even if it is powered off. Damage can be done to the NAS if a conductor is accidentally touched and parts are short-circuited under this condition. Before removing the top rear cover, make sure the AC power supply is disconnected.

2.3 Safety instructions

	• Keep away from direct sunlight and chemicals. Ensure a stable environment with no abrupt changes in temperature or humidity.
	• Place the unit right side up at all times.
	• Keep the unit away from liquids.
	• Before cleaning, unplug the power cord(s) and use a damp cloth to wipe the surface. Do not use chemical aerosol cleaners.
	• To prevent the unit from falling over, do not place it on carts or any unstable surfaces.



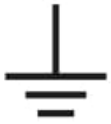
- When setting up this product, use only Synology-provided or designated cables, power cords, PSUs, and power adapters that adhere to local regulations and safety requirements. Ensure the power cord(s) are plugged into the correct power supply voltage and that the AC voltage provided is correct and stable. Failure to do so may result in malfunctions or fires.
- Do not use Synology-provided accessories on non-Synology products.



- Warning, electric shock hazard. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



- There is a risk of explosion if the battery is replaced with an incorrect type. Dispose of used batteries appropriately.



- Power cord(s) must be plugged into a socket-outlet with earthing connection.



- Keep your body parts away from a moving fan.



- This product must be installed by qualified personnel in a restricted access location (e.g., dedicated equipment rooms, service closets, etc.).



- Certain repair procedures require a certified service technician. Perform only basic troubleshooting and simple repairs authorized in the product documentation or by Synology Technical Support. Damage resulting from unauthorized service or modifications is not covered under the product warranty. Before performing any service procedures, read and follow all safety instructions and system reliability guidelines provided with the product.

System reliability guidelines

To guarantee adequate system cooling and reliability, follow the system reliability guidelines listed below.

- Leave adequate space around the Synology NAS to ensure that its cooling system works well. Leave approximately 50 mm (2 inches) of open space around the front and rear of the Synology NAS. Do not place objects in front of the fans.

- For proper cooling and airflow, install the Synology NAS cover before you power it on. Operating a Synology NAS without its cover might damage Synology NAS components.
- If your Synology NAS has air ducts or air baffles, do not remove them while the Synology NAS is running. Operating the Synology NAS without the air ducts or air baffles might cause your system to overheat.
- Opening or removing the Synology NAS top cover while the system is powered on may expose you to a risk of electric shock.
- If you must power on the Synology NAS without its top cover, ensure that no one is near the Synology NAS and that no tools or other objects have been left inside it. Do not operate the system without Synology NAS cover for a duration exceeding five minutes.
- When replacing a hot-swap drive, install the new hot-swap drive as soon as possible.
- Back up all important data before you make changes to drives.

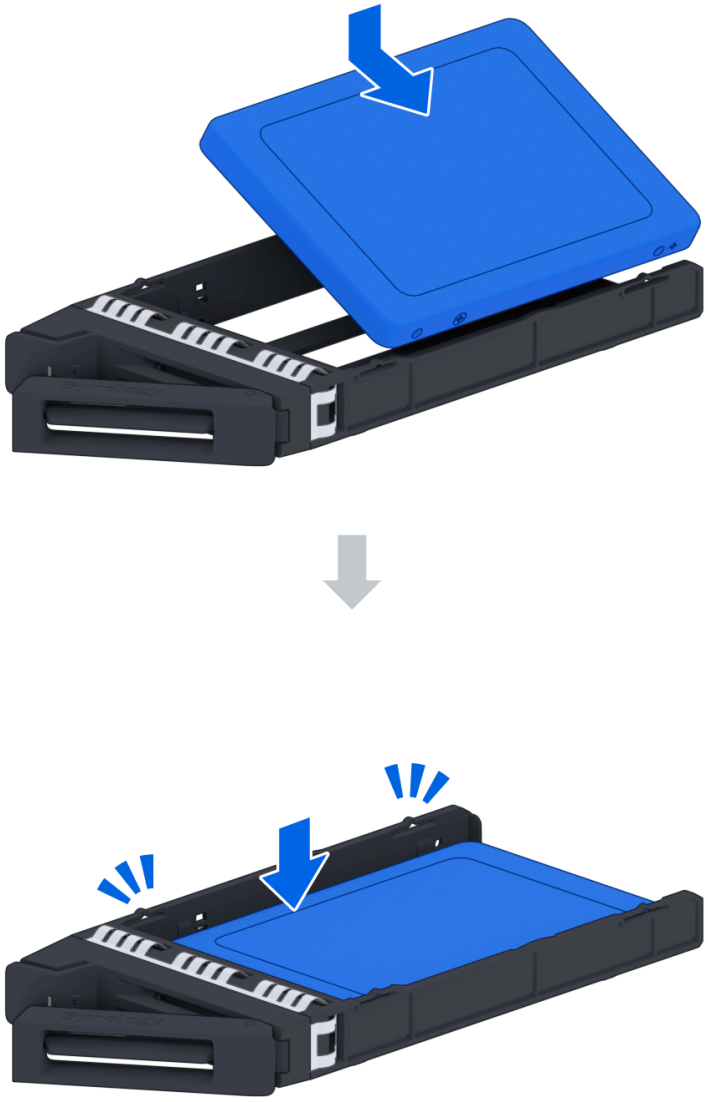
2.4 Install drives

1. Open the drive tray.
    a. Find the small button located at the bottom of the drive tray handle. Press the button down, and the drive tray handle will pop out.
    b. Pull the drive tray handle out as illustrated below.

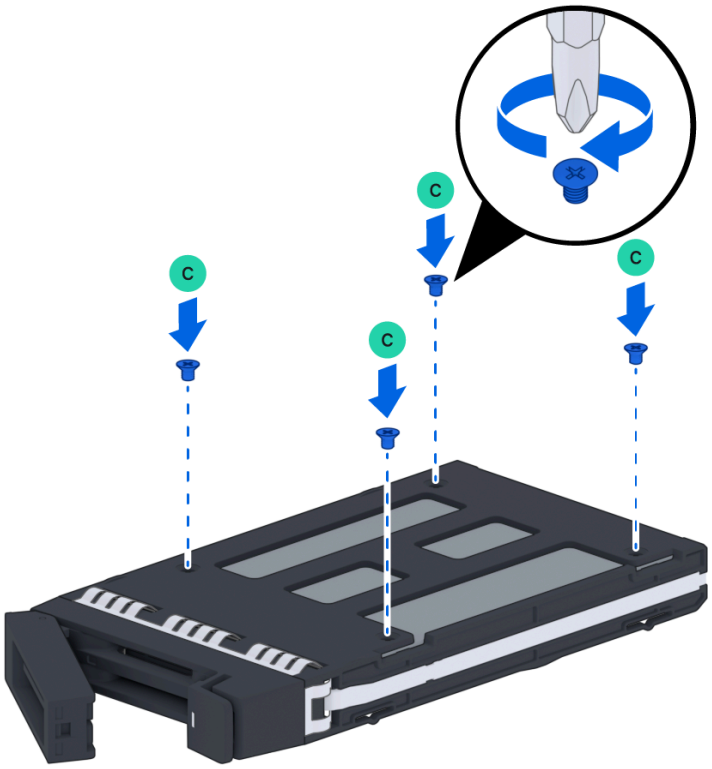


2. Load drives in the drive trays.

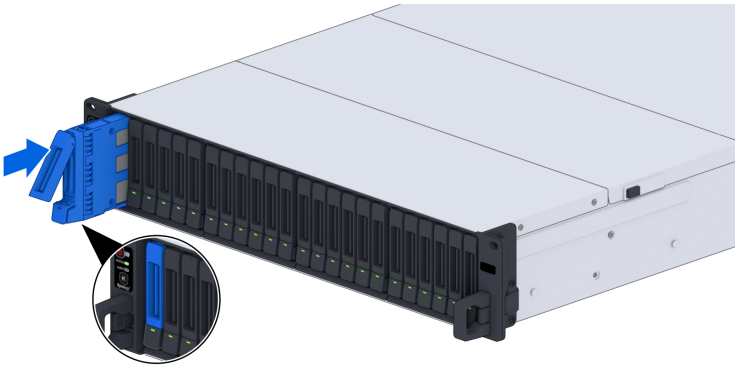
a. Place the drive in the drive tray.



b. Turn the tray upside down and tighten the screws to secure the drive in place.



3. Insert the loaded drive tray into the empty drive bay.



Notes:

- Make sure the tray is completely inserted. Otherwise, the drive might not function properly.

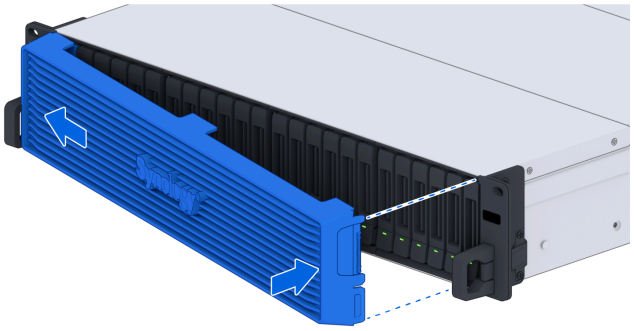
4. Repeat the steps above to install the other drives you have prepared.
5. Drives are numbered as shown below.



Notes:

- If you plan to create a RAID volume, we recommend installing drives of identical size to make the best use of drive capacity.

6. Install the front cover.
   a. Align the left side of the front cover with the main unit.
   b. Push the right side of the front cover inward until it snaps securely into place on the main unit.



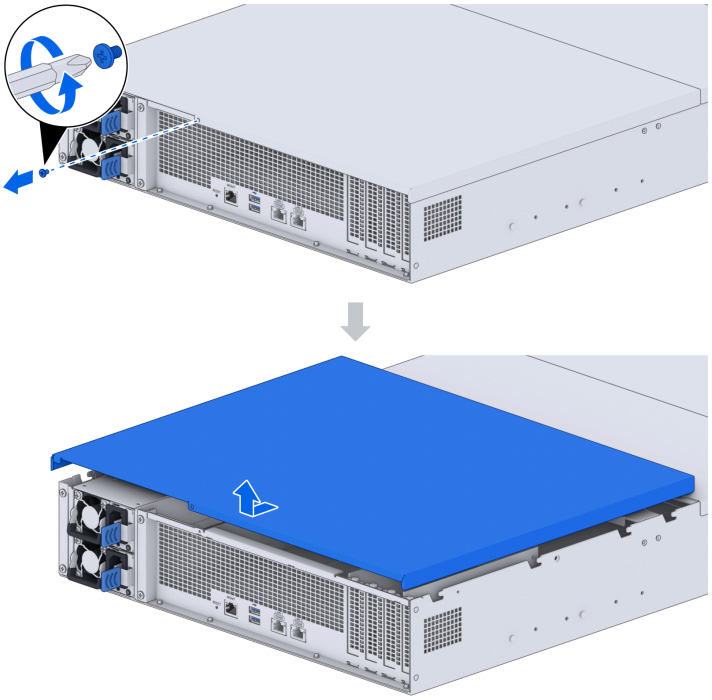
2.5 Install PCIe add-in card

FS3420 provides two PCIe x8 slot for optional add-in card expansion, allowing network interface card to be installed.

To install the network interface card

1. Shut down your Synology NAS. Disconnect all cables connected to your Synology NAS to prevent any possible damage.
2. Remove the rear top cover.
   a. Remove the screw on the back of your Synology NAS.

b. Slide open the rear top cover, then lift it up and put it aside.

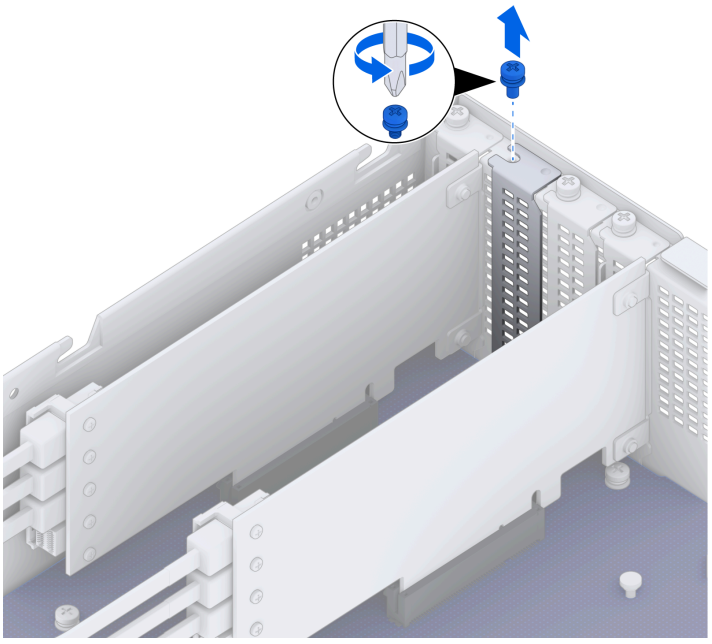


Notes:

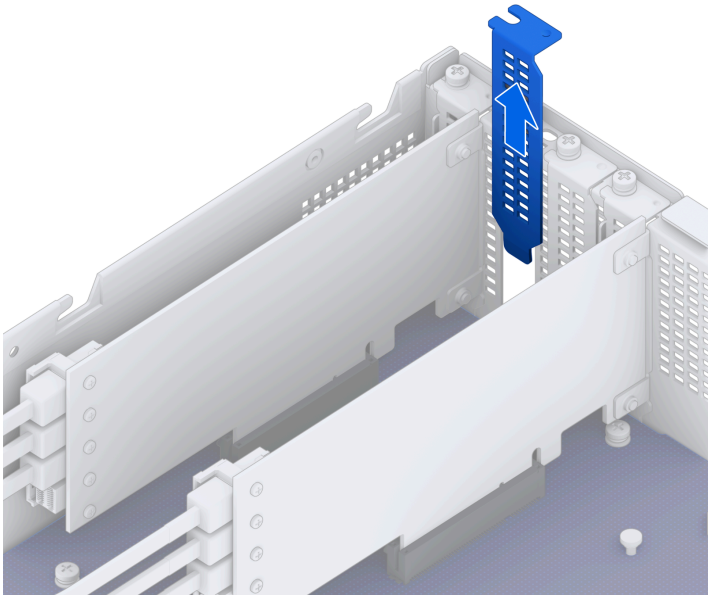
- When you remove the rear top cover, sensitive internal components are exposed. Avoid touching anything other than the network interface cards when removing or adding them.

3. Install the network interface card.

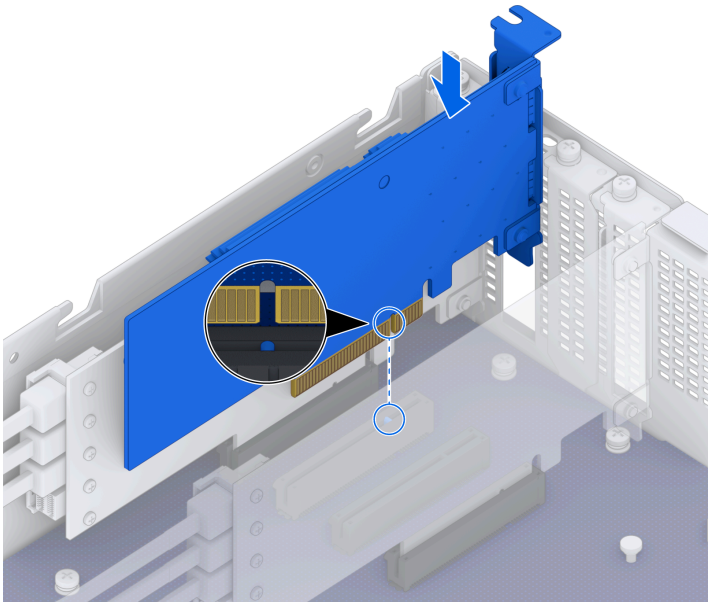
a. Remove the screw that secures the expansion slot's cover.



b. Lift the expansion slot's cover.



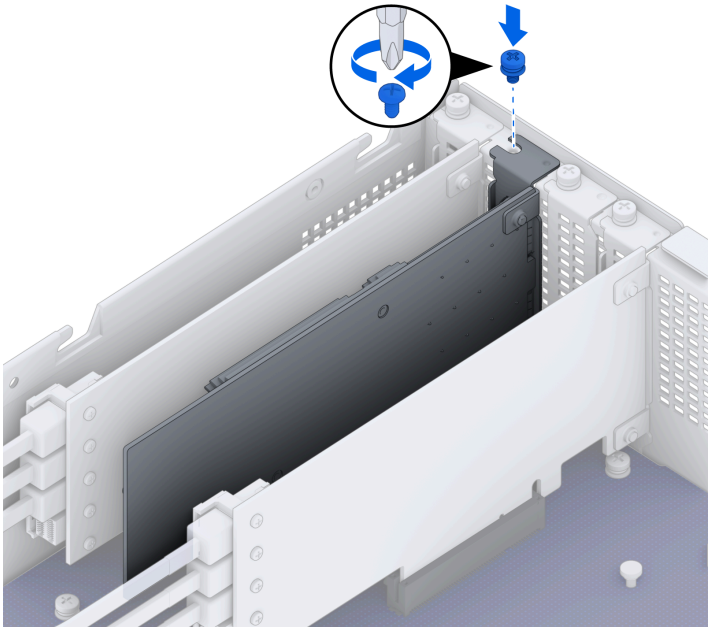
c. Align the card's connector with the expansion slot, and insert the card into the slot.



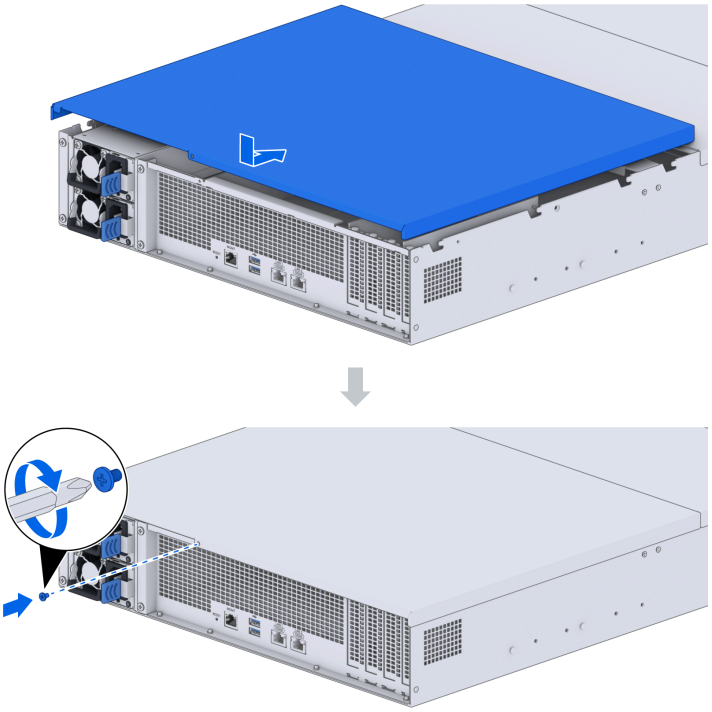
Notes:

- Confirm that the connector is fully inserted. Otherwise, the network interface card might not be able to function properly.

d. Put back and fasten the screw that you removed in step 3-a so as to secure the newly inserted card.



4. Place the rear top cover back and slide it into secure position.
    a. Align the hexagons at the side of the rear top cover with the slots on the chassis' edge.
    b. Place the rear top cover back and push it to slide it back into position.
    c. Fasten the screw you removed in step 2.



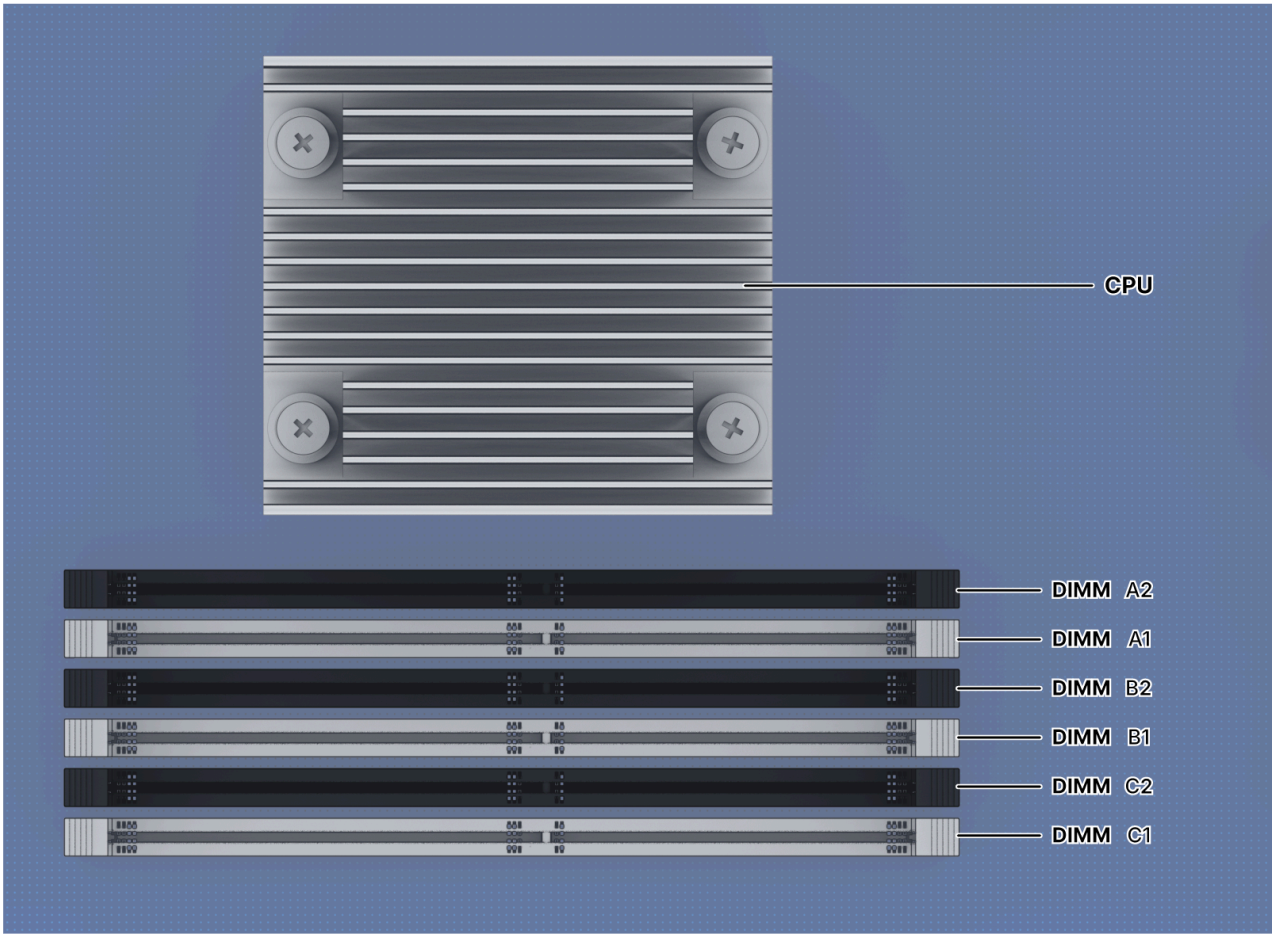
Notes:

- You need to have DSM installed for the network interface card to function properly.
- This Synology NAS supports GPU installation. When installing a GPU, ensure that the selected PCIe slot provides sufficient clearance and meets the card's size and spacing requirements.
- GPU support is limited to Synology AI workloads. Display output and other GPU functions are not supported.

2.6 Add memory modules to Synology NAS

Optional Synology memory modules are designed to expand the memory of your Synology NAS. Follow the steps below to install, check, or remove a memory module on your Synology NAS.

The memory slots are labeled as below.



FS3420 supports up to six identical DIMMs and can be installed with 1, 2, 3, 4, or 6 modules. The following table shows the memory configuration for best practice:

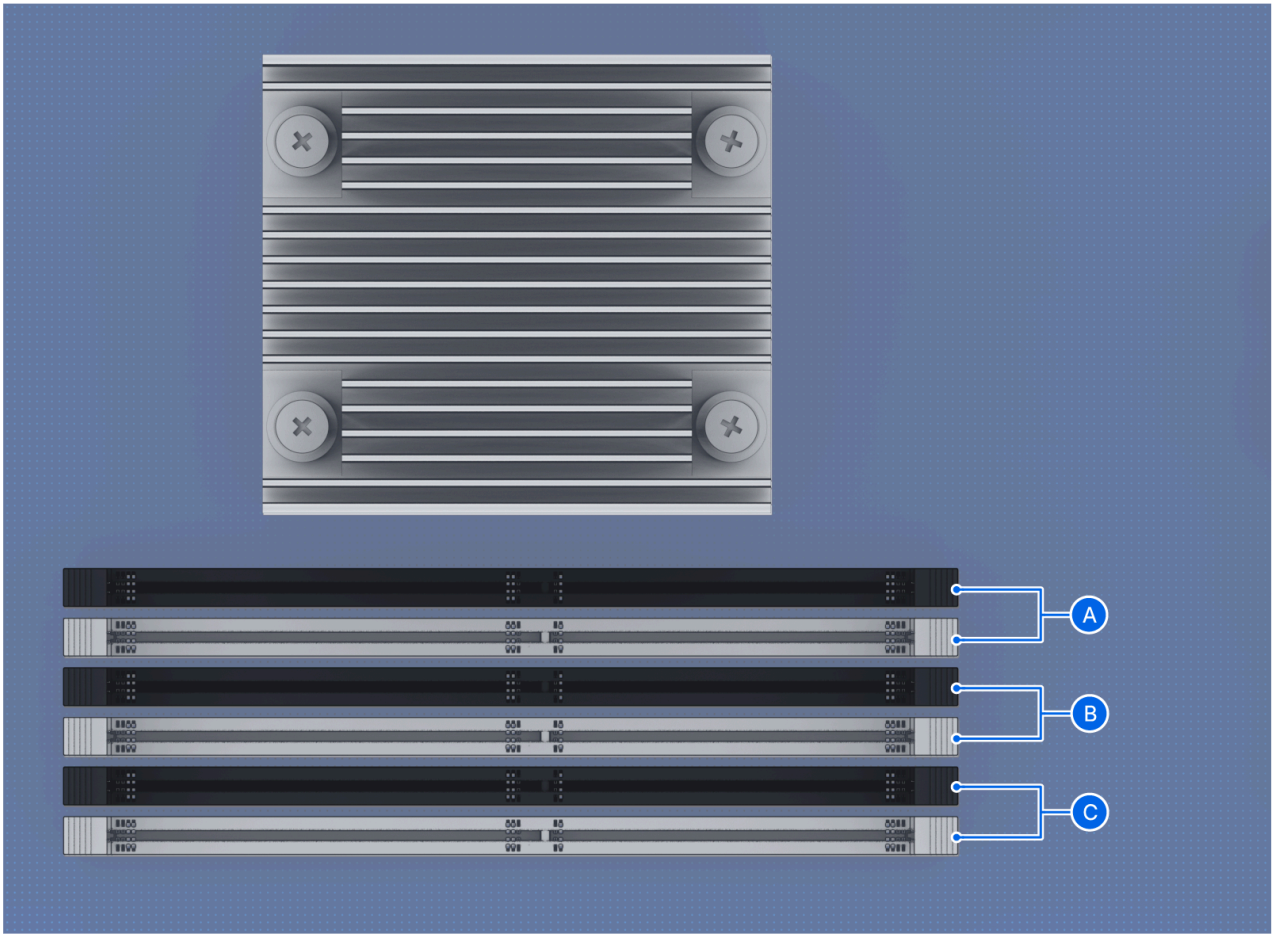
Amount of Memory Modules	DIMM A2	DIMM A1	DIMM B2	DIMM B1	DIMM C2	DIMM C1
1		V				
2		V		V		
3		V		V		V
4	V	V	V	V		
6	V	V	V	V	V	V

Notes:

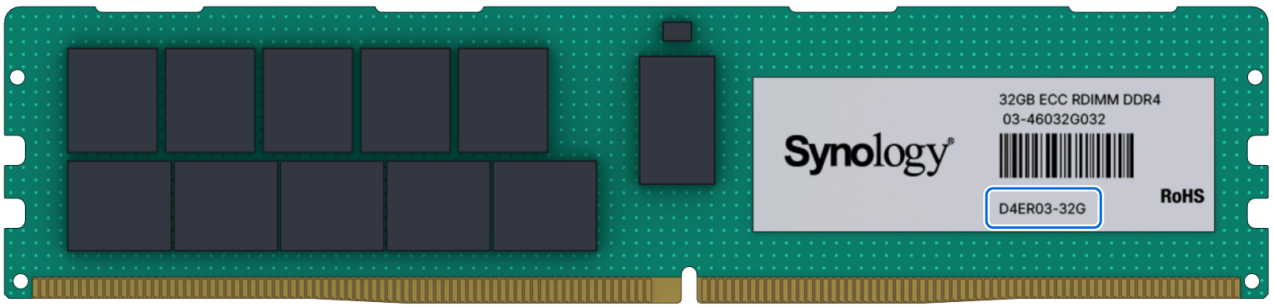
- No product warranty or technical support will be provided by Synology if a non-Synology memory module is used for memory upgrade. A list of Synology-compatible memory modules can be found here.

This system supports installing memory modules of different models. When installing mixed modules, memory modules of the same model must be installed in the **same memory channel**, and the installation must follow the configuration shown in the table above.

The recommended memory configurations are shown below.



The model number can be found on the bottom of the white label on the memory module, as shown in the image below.



Notes:

- Only RDIMM memory modules are supported for mixed installation.

To install the memory modules

1. Follow steps 1 and 2 of the "To install the network interface card" section to shut down your Synology NAS, disconnect the cables, and then remove the rear top cover as described above.

   Notes:

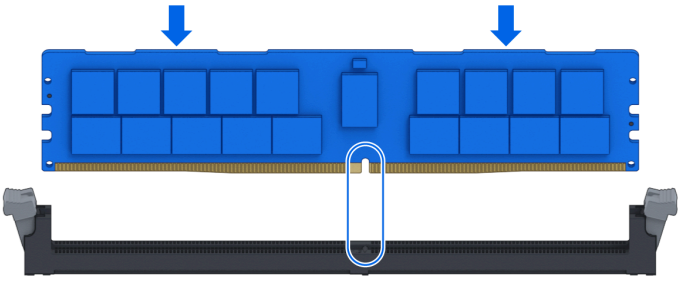
   - When you remove the rear top cover, sensitive internal components are exposed. Avoid touching anything other than the memory assembly when removing or adding memory.

2. Insert the new memory module in the slot.

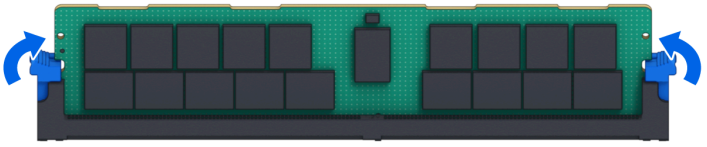
   a. Push the retaining clips on the slot out to the sides.

   b. Align the notch on the gold edge of the module with the notch in the memory slot.

   c. Apply firm and even pressure to push down the memory module. The retaining clips will snap into position when the module is inserted correctly.



Notes:

- Hold the memory module by its edges and avoid touching the gold connectors.

3. Put back the rear top cover by following step 4 of the "To install the network interface card" section.

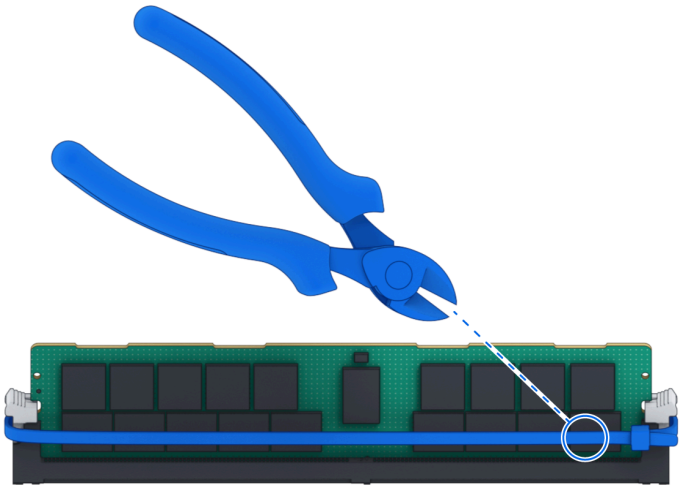
To confirm that your Synology NAS recognizes the new memory capacity

1. Install DiskStation Manager (DSM). Please see "Install DSM on Synology NAS" for more information.
2. Sign in to DSM as **admin** or a user belonging to the **administrators** group.
3. Go to **Control Panel** > **Info Center** and check **Total Physical Memory**.

If your Synology NAS does not recognize the memory or does not start up successfully, please make sure that the memory module is installed correctly.

To remove the memory modules

1. Follow steps 1 and 2 of the "To install the network interface card" section to shut down your Synology NAS, disconnect the cables, and then remove the rear top cover as described above.
2. Cut the cable tie before removing the memory module. (The pre-installed memory module is cable-tied to prevent it from loosening during delivery.)



Notes:

- Avoid touching any components on the motherboard when cutting the cable tie.

3. Push the retaining clips on the slot out to the sides. The memory module will pop out of the slot.
4. Follow step 4 of the "To install the network interface card" section to fasten the top cover back in place.

2.7 Install and Remove Rail Kits

Here we use the RKS-02 as an example to illustrate how to install or remove the rail kits. For more information about rail kit installation, please refer to the Quick Installation Guide that comes with the rail kit.

Caution:

Please read this section carefully before installing the rail kit.

1. Choose a setup location:
    - The server chassis should be in a clean, dust-free, and well-ventilated environment. Avoid areas where heat, electrical noise, or electromagnetic fields are generated.
    - Leave enough clearance (about 25 inches) in front of the rack so you can open the front door completely. Also make sure to leave enough clearance (about 30 inches) on the back of the rack to allow sufficient space for airflow and access when servicing.
    - This product should only be installed in restricted access locations, such as dedicated equipment rooms or service closets.
2. Rack precautions:
    - Make sure to read the installation instructions before sliding the rack out.
    - Make sure that the leveling jacks on the bottom of the rack are extended to the floor so the full weight of the rack rests on them.
    - Do not put any objects on top of slide rail mounted equipment.
    - Do not leave slide rail mounted equipment unattended while it is extended.
3. Stability hazard warning:
    - Before sliding the unit out for servicing, the rack-stabilizing mechanism must be in-place or the rack must be bolted to the floor.
    - The rack may tip over, causing equipment/property damage or serious personal injury.

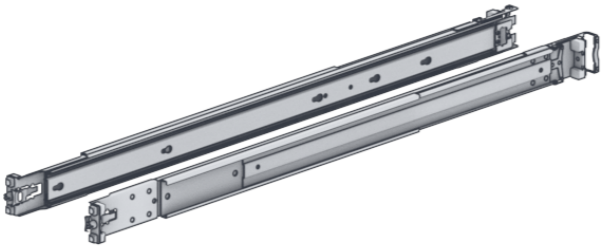
Notes:

- You may remove all drives first to reduce the weight of the chassis.

Please check the RKS-02 package contents to verify that you have received the items below.

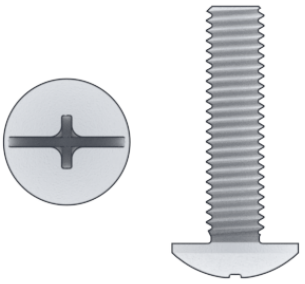
Main unit x 1

a



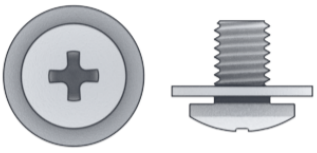
2U/3U screw x 3

b



1U screw x 3

c



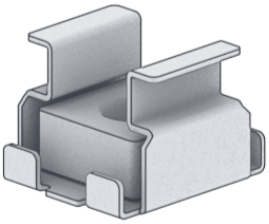
Inner rail screw x 5

d



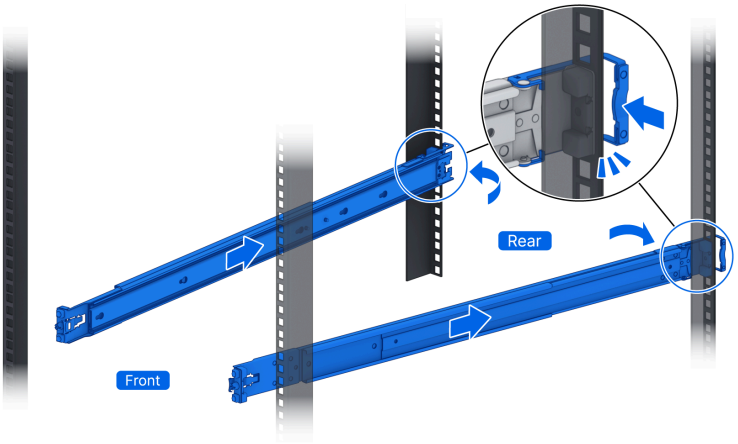
Cage nut x 3

e

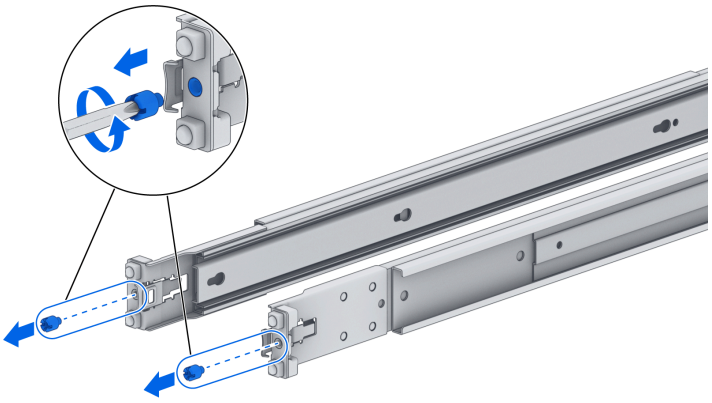


To install the rail kit

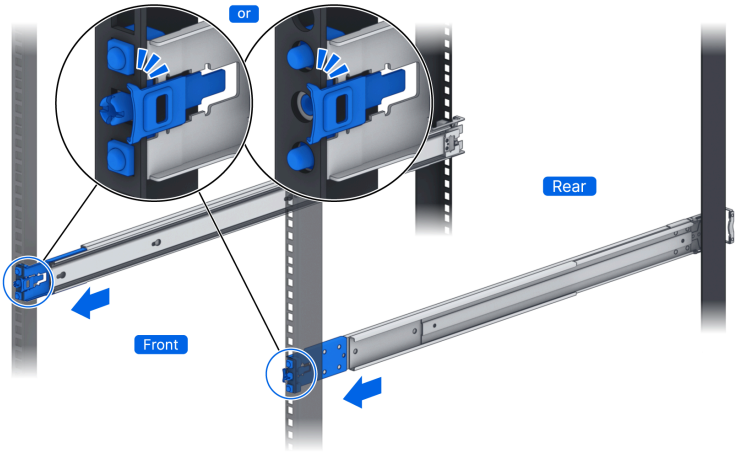
1. Attach the rear end of the rail kit assembly to the rack by pushing the latch and inserting the bracket into the rack holes.



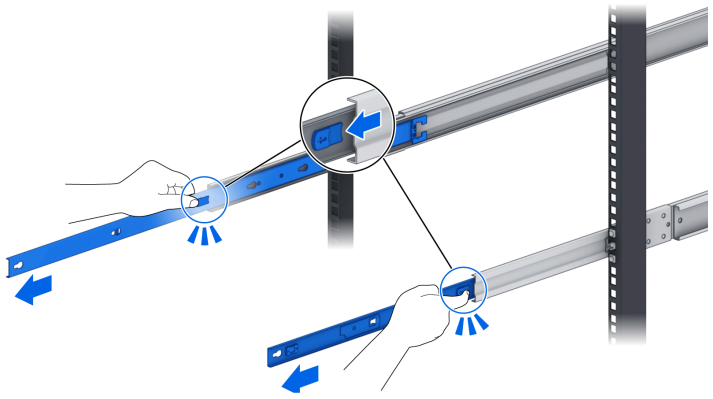
- For rack cabinets with round screw holes, remove the screw knot in front of RKS-02 first.



2. Adjust the length of the rail kit assembly, and insert the front end to the rack by slightly sliding the front latch outwards and inserting the brackets into the rack holes.

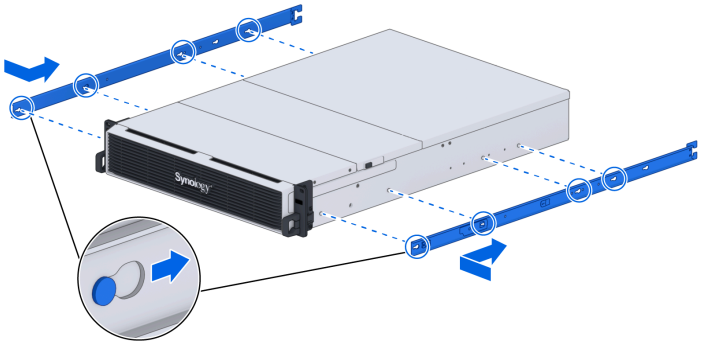


3. Pull out the inner rail.
   a. Fully extend the inner rail outwards until you hear a click sound.
   b. Pull and hold the rear latch on the inner rail, as illustrated, and continue to pull out the inner rail from the assembly.

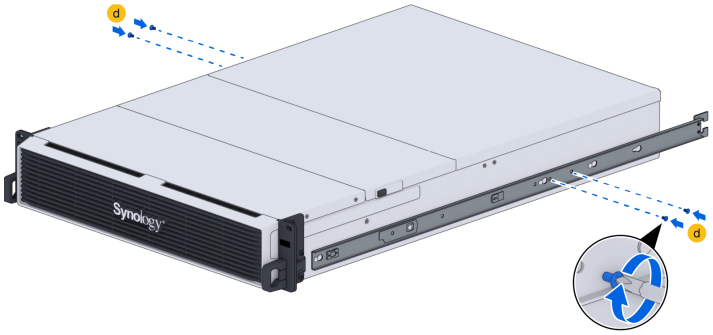


4. Attach the inner rail to the chassis.

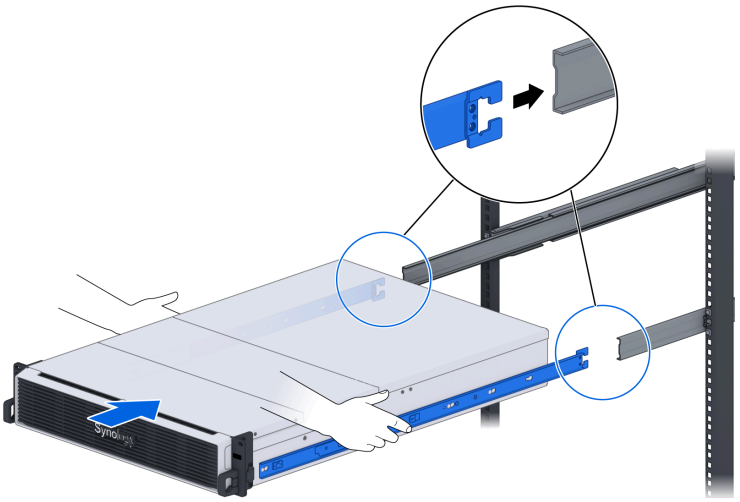
   a. Align the fixing holes of the inner rail to the side of the chassis and slide backward to attach the inner rail.



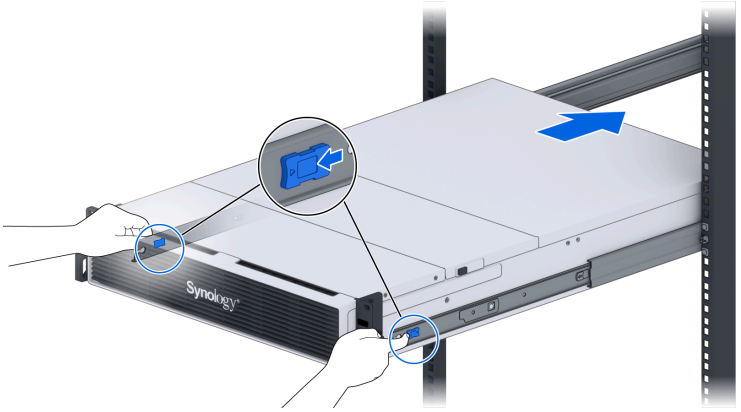
   b. Secure the inner rail screws as illustrated.



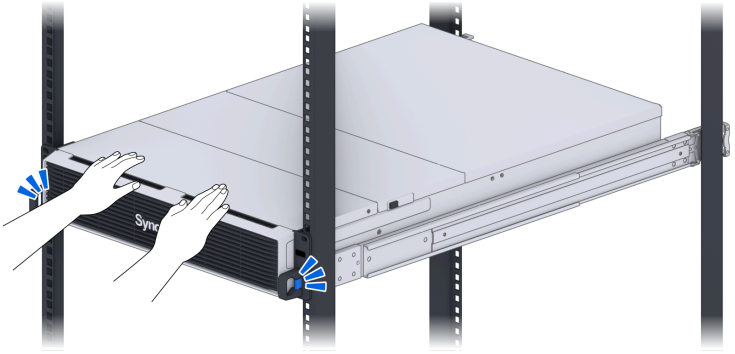
5. With the help of another person, carefully align the inner rails to the outer rail assembly, and push the chassis towards the rack.



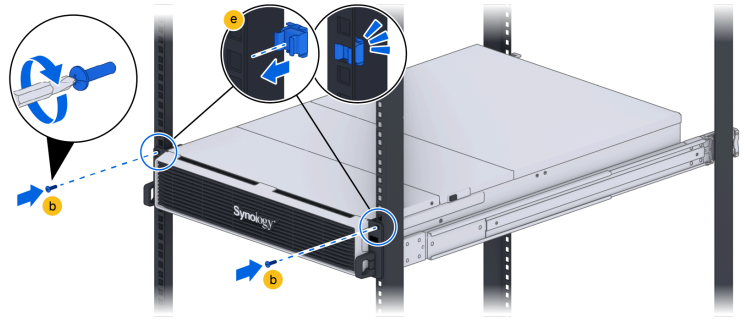
6. Pull the front latch of the inner rail as illustrated to unlock the inner rail, and continue pushing the chassis towards the rack.



7. You will hear a clicking sound when the ear holder is affixed properly to the rail assembly.

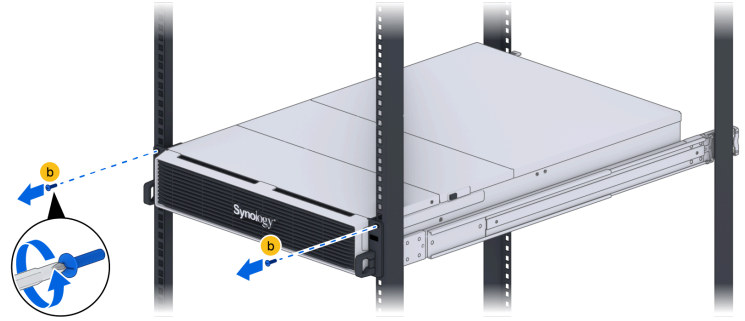


8. Use the cage nuts and screws in the rail kit package to secure the chassis to the rack if necessary.

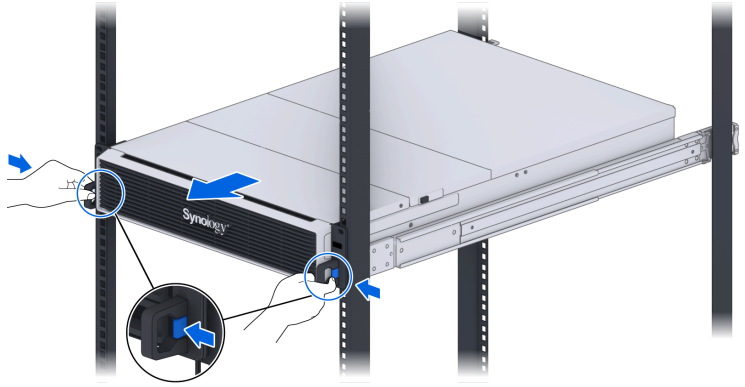


To remove the rail kit

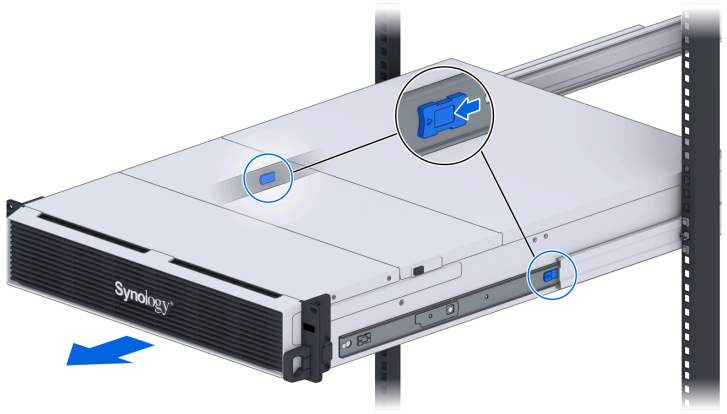
1. To remove the chassis from the rack, loosen and remove the screws from the rack.



2. Slide inwards and hold the rail kit release tabs on the ear holders, and pull out the chassis from the rack.



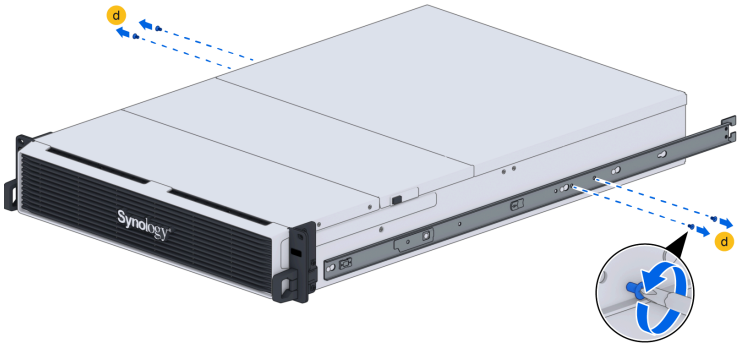
3. Slide the rear latch of the inner rail outwards to unlock the inner rail from the outer rail assembly. With the help of another person, carefully remove the chassis from the rack.



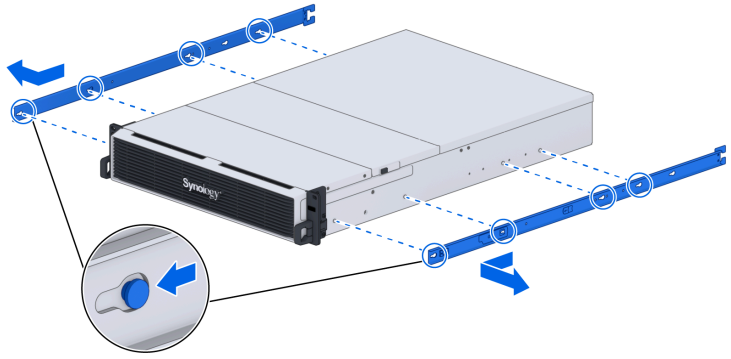
Notes:

- You may remove all HDDs first to reduce the weight of the chassis.

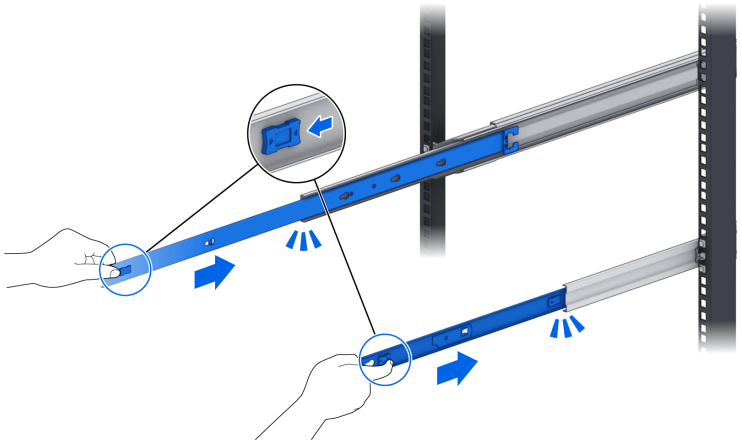
4. Loosen and remove the rail screws.



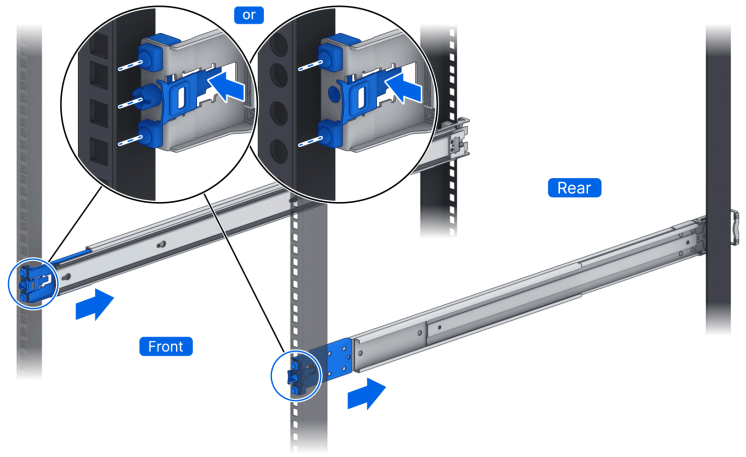
5. Slightly pull out the middle latch as illustrated, and slide forwards to remove the inner rail from the chassis.



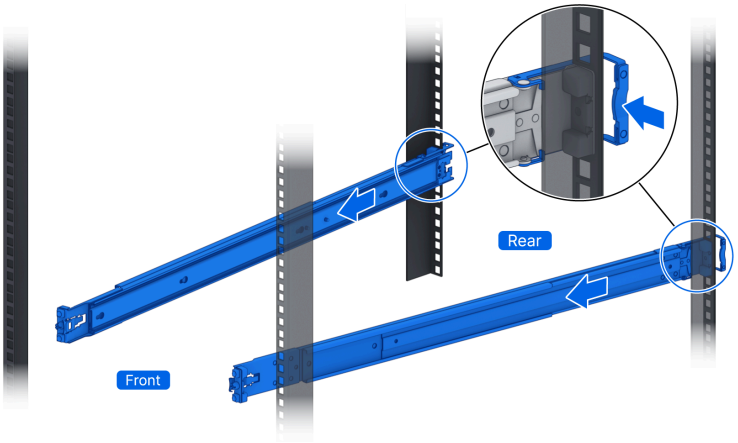
6. Insert the inner rail to the rail kit assembly by pulling outwards and holding its front latch.



7. Push the front latch of the inner rail assembly, and slide backwards to remove the assembly from the rack.

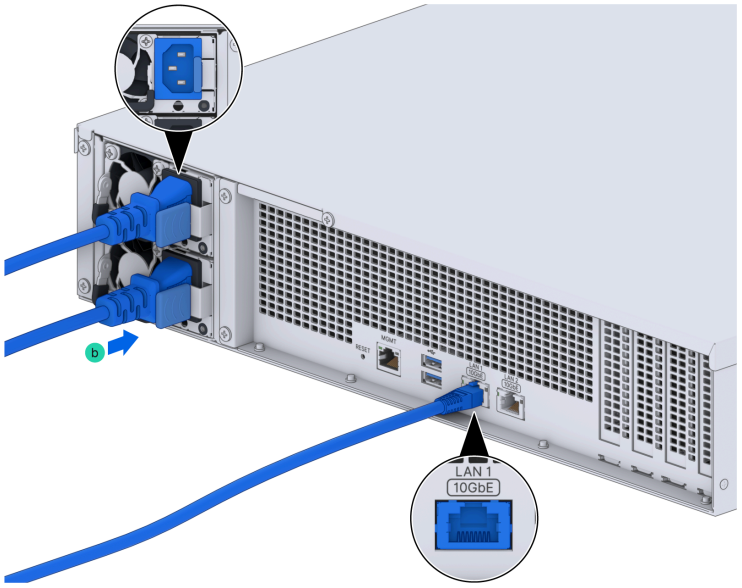


8. Pull the rear latch of the inner rail assembly, and slide forwards to remove the assembly from the rack.

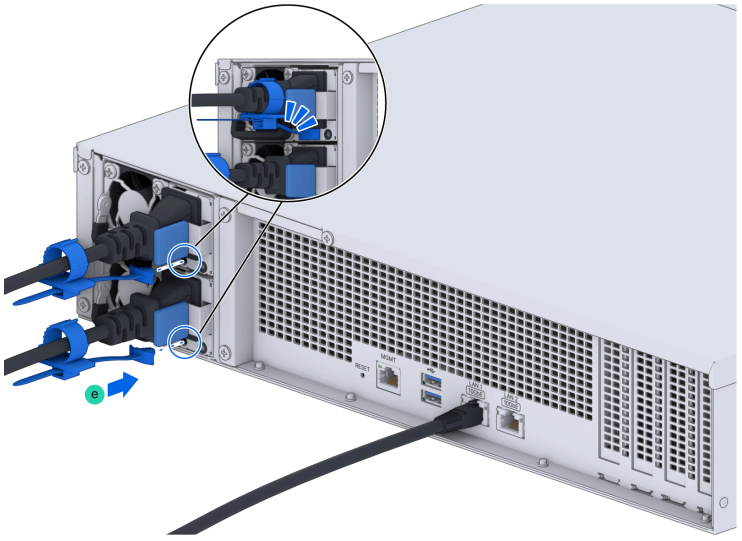


2.8 Start up your Synology NAS

1. If needed, refer to the "To install the rail kit" section for instructions.
2. Connect one end of each power cord to the power port located on the back of the Synology NAS and the other end to a power outlet.
3. Connect at least one LAN cable to one of the LAN ports and the other end to your switch, router, or hub.



4. Insert the push mount cable tie into the mounting hole, then secure the power cable bundle.



5. Press the power button to turn on the Synology NAS.



Congratulations! Your Synology NAS is now online and detectable from a network computer.

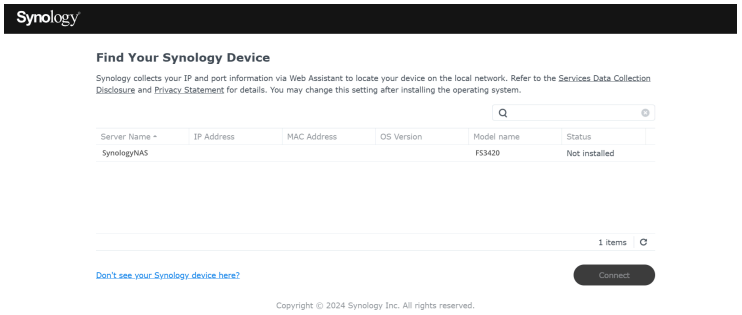
Chapter 3: Install DSM on Synology NAS

After hardware setup is completed, please install DiskStation Manager (DSM) – Synology's browser-based operating system – on your FS3420.

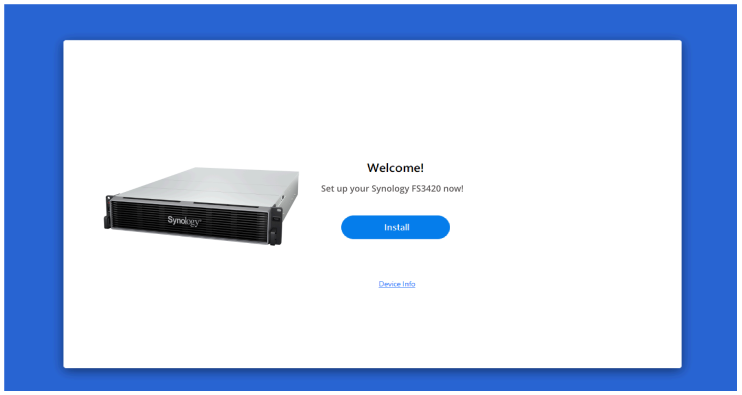
3.1 Install DSM with Web Assistant

Web Assistant is a Synology web portal that helps you locate Synology NAS devices on your local network, download the latest DSM version, and install it on your FS3420. Follow the steps below.

1. Open a web browser on a computer connected to the same network as your Synology NAS.
2. Go to finds.synology.com (http://finds.synology.com) to access Web Assistant.
3. Web Assistant lists all Synology NAS on the local network. The status of your Synology NAS should be **Not Installed**. Find your device and click **Connect**.



4. Click **Install** and follow the on-screen instructions.



Notes:

- Recommended browsers: Chrome, Firefox, and Edge.

5. If you accidentally leave the installation process before it is finished, repeat the steps above to reconnect and resume.

3.2 Install DSM with Synology Assistant

Synology Assistant is a desktop utility that helps locate Synology NAS devices on your local network. If you're setting up a NAS locally, we recommend using it over Web Assistant. Follow the steps below.

1. Go to Download Center, select your product model, and download the following:
    - DSM patch (under **Operating System**)
    - Synology Assistant (under **Desktop Utilities**)
2. Install Synology Assistant.
3. Open Synology Assistant and click **Search** to find your Synology NAS.
4. Select your device and click **Connect**.
5. Follow the on-screen instructions to complete the installation.
6. If you accidentally leave the installation process before it is finished, repeat the steps above to reconnect and resume.

3.3 Learn more

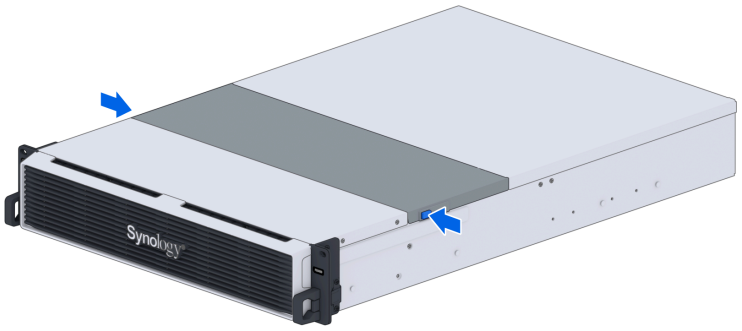
Your FS3420 is now ready for action. For more information or online resources about your FS3420, please visit Synology's official website (http://www.synology.com) , which contains step-by-step tutorials and frequently asked questions.

Chapter 4: System Maintenance

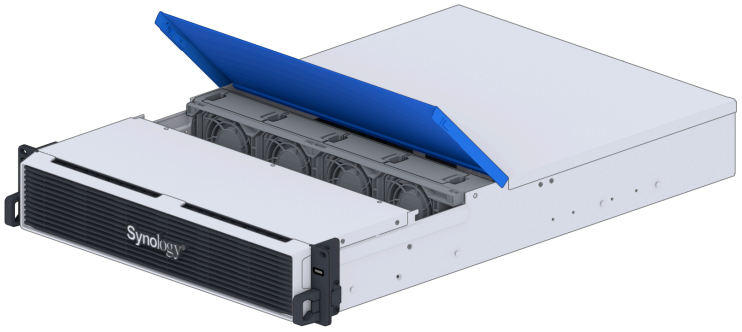
4.1 Replace the malfunctioning fan

If a system fan malfunctions, please see the instructions below to open the Synology NAS and replace the malfunctioning fan.

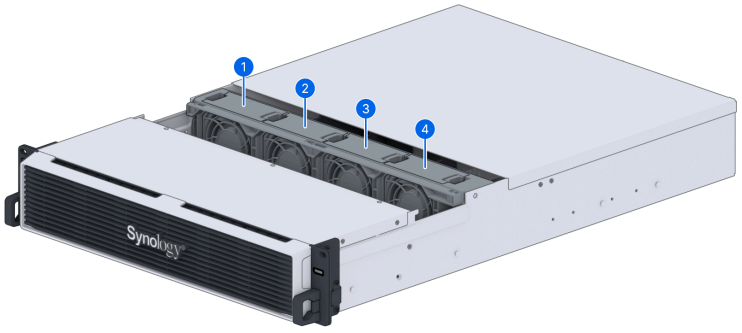
1. Press the small buttons located on the sides of the Synology NAS.



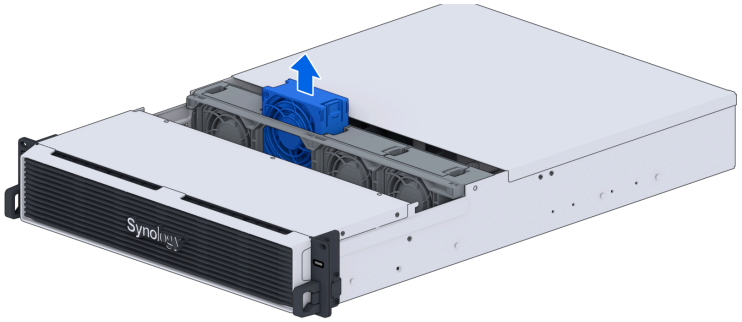
2. Lift to remove the fan cover.



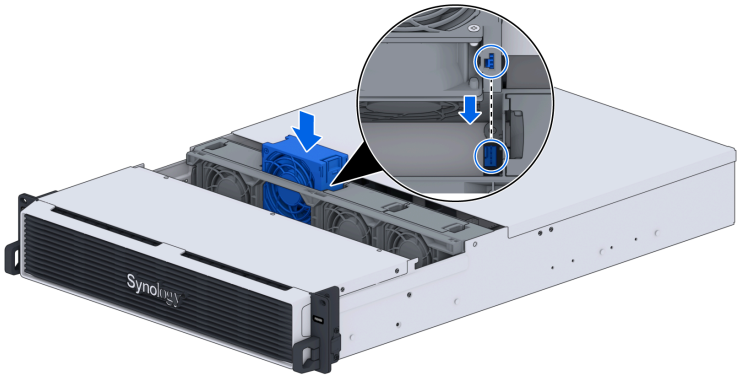
3. Fans are numbered as shown below.



4. Find the malfunctioning fan. Lift up the fan to remove it.



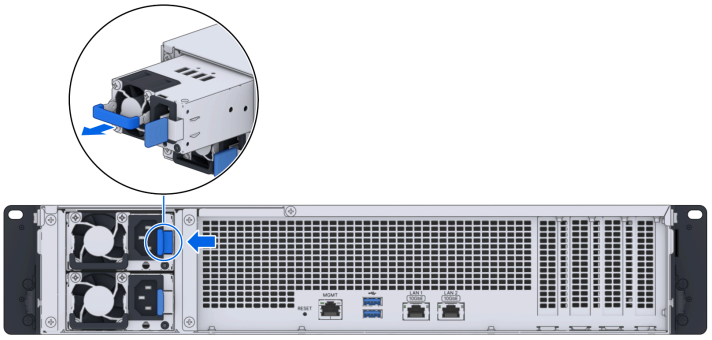
5. Prepare a new fan and slide it into the Synology NAS. Make sure that the fan is aligned properly.



4.2 Replace Power Supply Unit (PSU)

If a PSU or its fan malfunctions, please follow the steps below to replace the malfunctioning PSU.

1. Unplug the power cord from the PSU that is to be replaced.
2. Remove the malfunctioning PSU.
    a. On the rear panel, push the lever of the PSU inward as shown.
    b. Pull the PSU out of your Synology NAS.



3. Prepare a new PSU. Insert it into the empty slot until you hear a click.

Chapter 5: Troubleshooting

CAUTION:

- You should only perform troubleshooting and repairs as authorized or directed by the Synology Technical Support team.

Notes:

- This chapter describes possible issues that may occur. Not every issue will occur on your Synology NAS. Please refer to the corresponding sections for troubleshooting steps specific to the issue that has occurred.

5.1 Troubleshooting checklist

Before doing any troubleshooting or repair tasks, use the following checklist to find possible causes for hardware issues on your Synology NAS.

1. Remove all USB drives before powering on the Synology NAS.
2. Is the Synology NAS connected to a functional AC power outlet?
3. Is the Synology NAS turned on?
4. Is the Power LED light on?
5. Is the Status LED light on?
6. Is the Alert LED light blinking?
7. Verify that all cables are not loose or incorrectly connected.
8. If you have recently added non-hot swappable hardware components (e.g., memory modules, NIC, PCIe cards), remove the component and verify if the Synology NAS functions properly without it.
9. Are you operating the latest version of DSM?
10. If you are unable to connect to your Synology NAS through a network, change the network cable and try to connect again. (For troubleshooting purposes ensure you are directly connecting to your Synology NAS without a router, switch, or hub.)

5.2 Common issues resolution

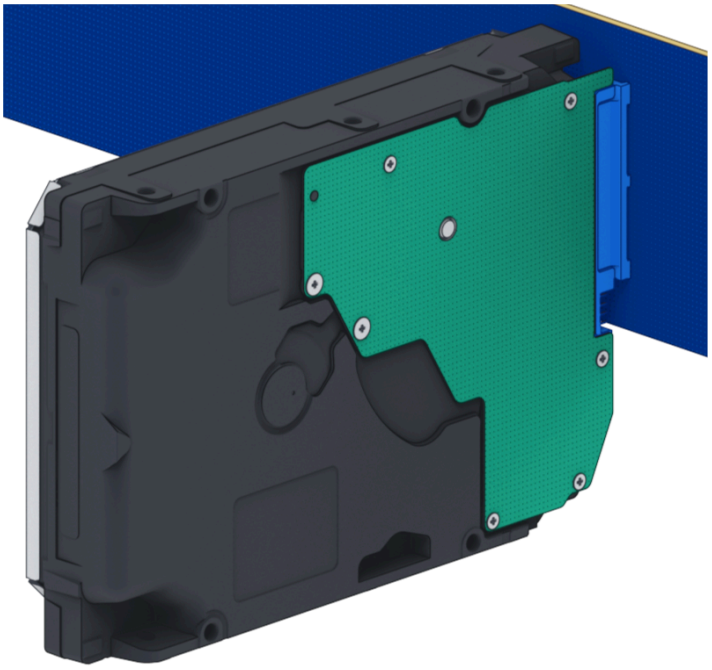
The following issues are discussed in this section:

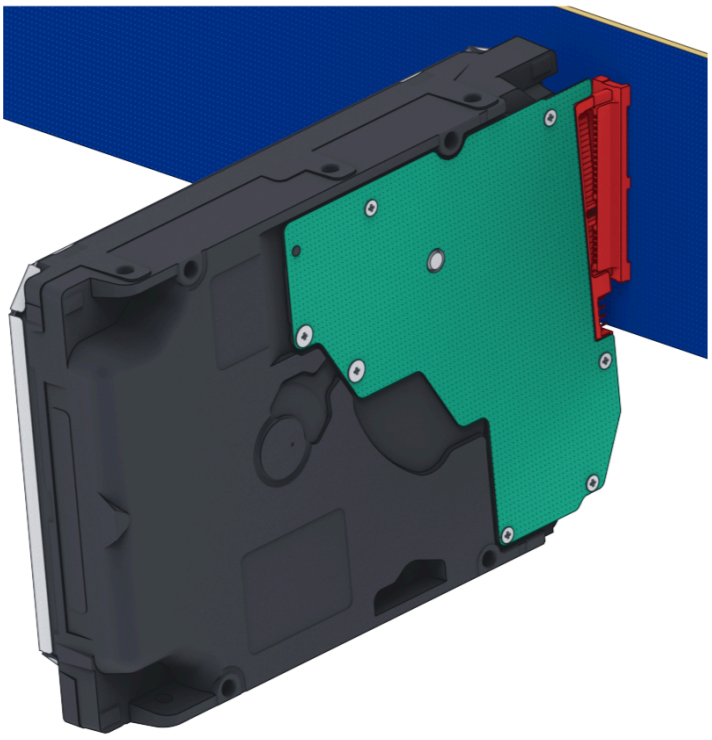
- Unable to recognize hard drive(s)
- Unable to connect to the network
- Unable to recognize external USB devices
- Unable to recognize PCIe Network Interface Card or unable to connect
- Alert LED is blinking continuously
- Unable to power on after installing RAM
- Unable to finish powering on (power LED is blinking continuously)
- Unable to finish powering on with no drives installed
- No power after pressing the power button
- Unable to power on after connecting UPS

Unable to recognize hard drive(s)

1. Confirm that you are using a hard drive listed in the Synology Products Compatibility List.
2. Remove the hard drive from the Synology NAS and do a visual inspection:

a. Confirm that the hard drive connector is not damaged or crooked.





3. Replace the hard drive with a new one, then reboot the Synology NAS to see if the problem is caused by the removed drive.
4. Remove the top cover and check that the power supply and connectors on the HDD backplane are properly plugged in.

Notes:

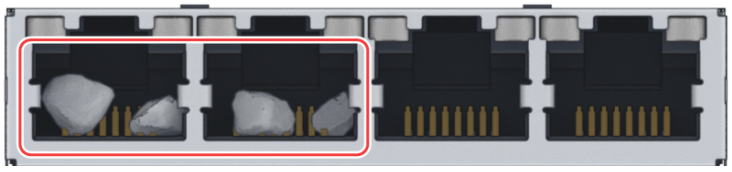
- When the Synology NAS is powered on, do not touch any parts of the PCB with your hands or tools.

5. If, after following the above troubleshooting steps and the issue is still unresolved, contact Synology Technical Support for further assistance.

Unable to connect to the network

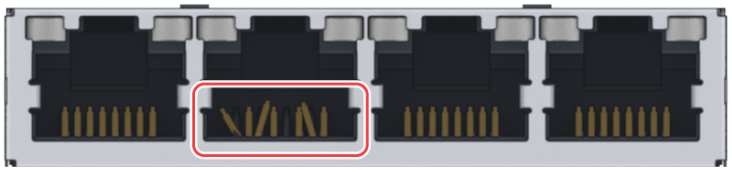
1. Restart the system and confirm that the network status and configuration are correct.
2. Check whether the network cable is loose or damaged, and replace it with a working network cable.
3. Connect the network cable to another port on the switch or hub.
4. Connect the network cable directly to a PC to confirm whether the Synology NAS can be connected to normally.
5. Check the interior and exterior of the network port for dust or damage.

❌



6. Check the interior of the network port for damaged or skewed pins.

❌



7. If, after following the above troubleshooting steps and the issue is still unresolved, contact Synology Technical Support for further assistance.

Unable to recognize external USB devices

1. Do a visual inspection and check whether the USB port is rusted, which may cause a bad connection.
2. Check that the external USB device is compatible with your Synology NAS.
3. Do a visual inspection and check whether there is foreign matter inside the port.
4. Check that the power supply for the external USB device is plugged in and provides power.

5. Swap the inoperative USB device with one that has been confirmed to work properly.
6. If, after following the above troubleshooting steps and the issue is still unresolved, contact Synology Technical Support for further assistance.

Unable to recognize PCIe Network Interface Card or unable to connect

Please refer to "Install PCIe add-in card" and verify that your network upgrade module is correctly installed.

Alert LED is blinking continuously

When the Alert LED flashes continuously, and DSM shows "The temperature of the Synology NAS is too high. If the overheating issue persists, your Synology NAS may shut down to avoid hardware malfunctions" or "Fan on the Synology NAS has stopped working" messages, please refer to "Replace the malfunctioning fan" and verify that your fan is correctly installed and functional.

Unable to power on after installing RAM

Please refer to "Add memory modules to Synology NAS" and verify that your memory module is correctly installed.

Unable to finish powering on (power LED is blinking continuously)

1. Statically discharge yourself.
2. Make sure your Synology NAS is powered off.
3. Remove all attached external devices (USB, eSATA, Ethernet, etc.), installed drives, and any additional installed RAM (3rd party RAM is not supported).
4. Power up the Synology system and wait 10 minutes before proceeding to the next step.
5. Check the status of the power button LED light. For more information on LED definitions, please see "System modes and LED indicators".
    a. If the power LED continues to blink or remains powered off, unfortunately, that means the Synology NAS has experienced a hardware failure. Please follow the instructions in "Unable to finish powering on with no drives installed".
    b. If the power LED is static, please follow the instructions in this tutorial to troubleshoot drive issues.

Notes:

- If the power LED turns static, the Alert light will likely be blinking orange, and the Synology NAS will start beeping — this is normal and expected behavior. Once you finish testing all of the drives, it should stop doing this unless one or more of your drives are faulty.
- Being able to ping the unit doesn't mean anything of note other than that the LAN ports are functional. To properly do the above testing, ensure that the power LED goes static and does not continue blinking.

Unable to finish powering on with no drives installed

1. Finish all steps in the section "Unable to finish powering on (power LED is blinking continuously)".
2. Follow the steps below and do an internal check:
   a. Unplug the power cord(s).
   b. Remove any installed extended memory and PCIe card. Please follow the instructions in "Add memory modules to Synology NAS" and "Install PCIe add-in card".
   c. Confirm that motherboard is properly installed and is Synology-manufactured.
   d. Clean up and reinstall the memory modules. Make sure that memory slots and memory modules are free of dust, dirt, and other foreign matter.
3. If there is dust and dirt buildup inside the Synology NAS, clean it before trying the power-on process.
4. If, after following the above troubleshooting steps and the issue is still unresolved, contact Synology Technical Support for further assistance.

No power after pressing the power button

Do the following basic environmental check:

1. Confirm that the power cord(s) is functioning normally and that it is not damaged.
2. Confirm that the power cord(s) is properly plugged at both the power socket and the Synology NAS.
3. Confirm that the AC power supply meets the voltage requirements (110V - 220V). If a UPS is connected to the Synology NAS, disconnect it temporarily, and use AC power instead.
4. Remove all external I/O devices (such as external hard disks/USB/LAN/eSATA). Retain only the power supply and confirm that the Synology NAS can power on properly.

If the Synology NAS is still unable to power on after doing the environmental check, follow the steps below and do an internal check of your Synology NAS.

1. Remove the power cord(s) and remove the top cover.
2. Confirm that the LED cables are properly plugged in.
3. Confirm that PSU connectors are properly plugged in.
4. Remove any installed extended memory and PCIe card. Please follow the instructions in "Add memory modules to Synology NAS" and "Install PCIe add-in card".
5. Check that there is no dust buildup on internal components; if there are, it needs to be cleaned.
6. Reconnect the power cord(s) and try to power on the Synology NAS again.
7. If, after following the above troubleshooting steps and the issue remains unresolved, contact Synology Technical Support for further assistance.

Unable to power on after connecting UPS

1. Check that the power cord(s) for the UPS and the Synology NAS is properly plugged in.
2. Check that the power provided by the UPS is stable.
3. Connect the power cord(s) of the Synology NAS directly to the AC power outlet and confirm that it can power on.
4. Confirm that the UPS system is compatible with the Synology NAS.
5. If, after following the above troubleshooting steps and the issue is still unresolved, contact Synology Technical Support for further assistance.

5.3 Before you contact Synology Technical Support

Before you contact Synology Technical Support, follow the below instructions to try to solve the issue:

- Use the troubleshooting information in this manual.
- Follow the instructions in the "Troubleshooting checklist".
- Check for the updated information, new device drivers, and hints and tips on the Synology Knowledge Center.

If possible, be at your product when you contact Synology Technical Support and have the following information available:

- Product Model Name
- Serial numbers of your Synology products
- Description of the problem
- Exact wording of any error messages
- Hardware and software configuration information

5.4 Contacting Synology Technical Support

During the warranty period, you can get help and information through the Synology Technical Support. Trained service personnel are available to assist you in determining a hardware problem and deciding what action is necessary to fix the problem.

The warranty does not cover the following:

- Replacement or use of parts not manufactured for or by Synology or non-warranted Synology parts
- Identification of software problem sources
- Installation and maintenance of application programs

If it is determined that replacement services are necessary, please contact the local reseller or distributor where you purchased the product for further assistance. (Synology does not provide direct replacement services outside North America.)

Notes:

- For more information about on Synology's warranty policies, please refer to this article.

5.5 Getting information, help, and service

Synology publishes a wide range of supporting documentation.

In Knowledge Base, you will find useful Help and FAQ articles, as well as video tutorials, breaking up processes into handy steps.

Also, you can find User's Guides, Solution Guides, brochures, and White Papers. Experienced users and administrators will find answers and guidance in Developer Guides.

Got a problem and unable to find the solution in our official documentation? Search hundreds of answers by users and support staff in Synology Community or reach Synology Technical Support through the web form, email, or telephone.

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Section 10. Support. During the period specified in the Section 9, Synology will make available to you the support services.

Following the expiration of the applicable period, support for Software may be available from Synology upon written request.

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Section 15. Termination. Without prejudice to any other rights, Synology may terminate this EULA if you do not abide by the terms and conditions contained herein. In such event, you must cease use of the Software and destroy all copies of the Software and all of its component parts.

Section 16. Assignment. You may not transfer or assign your rights under this EULA to any third party, except for that pre-installed in the Products. Any such transfer or assignment in violation of the foregoing restriction will be void.

Section 17. Applicable Law. Unless expressly prohibited by local law, this EULA is governed by and construed in accordance with the laws of the country, in accordance with which Synology Inc. was organized without regard to any conflict of law principles to the contrary.

Section 18. Dispute Resolution. Any dispute, controversy or claim arising out of or relating to this EULA will be resolved exclusively and finally by arbitration conducted by three neutral arbitrators in accordance with the procedures of the Arbitration Law and related enforcement rules of the country in which Synology Inc. was organized. In such cases, the arbitration will be limited solely to the dispute between you and Synology. The arbitration, or any portion of it, will not be consolidated with any other arbitration and will not be conducted on a class-wide or class action basis. The arbitration shall take place in Taipei and the arbitration proceedings shall be conducted in English or, if both parties so agree, in Mandarin Chinese. The arbitration award shall be final and binding on the parties and may be enforced in any court having jurisdiction. You understand that, in the absence of this provision, you would have had a right to litigate any such dispute, controversy or claim in a court, including the right to litigate claims on a class-wide or class-action basis, and you expressly and knowingly waive those rights and agree to resolve any disputes through binding arbitration in accordance with the provisions of this Section 18. Nothing in this Section shall be deemed to prohibit or restrict Synology from seeking injunctive relief or seeking such other rights and remedies as it may have at law or equity for any actual or threatened breach of any provision of this EULA relating to Synology's intellectual property rights.

Section 19. Attorneys' Fees. In any arbitration, mediation, or other legal action or proceeding to enforce rights or remedies under this EULA, the prevailing party will be entitled to recover, in addition to any other relief to which it may be entitled, costs and reasonable attorneys' fees.

Section 20. Severability. If any provision of this EULA is held by a court of competent jurisdiction to be invalid, illegal, or unenforceable, the remainder of this EULA will remain in full force and effect.

Section 21. Entire Agreement. This EULA sets forth the entire agreement of Synology and you with respect to the Software and the subject matter hereof and supersedes all prior and contemporaneous understandings and agreements whether written or oral. No amendment, modification or waiver of any of the provisions of this EULA will be valid unless set forth in a written instrument signed by the party to be bound thereby.

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LIMITED PRODUCT WARRANTY

THIS LIMITED WARRANTY ("WARRANTY") APPLIES TO THE PRODUCTS (AS DEFINED BELOW) OF SYNOLOGY, INC. AND ITS AFFILIATES, INCLUDING SYNOLOGY AMERICA CORP, (COLLECTIVELY, "SYNOLOGY"). YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS WARRANTY BY OPENING THE PACKAGE CONTAINING AND/OR USING THE PRODUCT. PLEASE BE ADVISED THAT THIS LIMITED WARRANTY DOES NOT APPLY TO THE SOFTWARE CONTAINED IN THE PRODUCTS WHICH SHALL BE SUBJECT TO ITS END USER LICENSE AGREEMENT, AND THAT SYNOLOGY RESERVES THE RIGHT TO MAKE ADJUSTMENTS AND/OR MODIFICATION TO THIS PRODUCT WARRANTY FROM TIME TO TIME WITHOUT PROVIDING PRIOR NOTICE TO YOU. IF YOU DO NOT AGREE TO THE TERMS OF THIS WARRANTY, DO NOT USE THE PRODUCT. INSTEAD, YOU MAY RETURN THE PRODUCT TO THE RESELLER WHERE YOU PURCHASED IT FOR A REFUND IN ACCORDANCE WITH THE RESELLER'S APPLICABLE RETURN POLICY.

PLEASE NOTE THAT SYNOLOGY'S WARRANTY SUPPORTS ARE NOT AVAILABLE IN EVERY COUNTRY, AND THAT SYNOLOGY MAY REFUSE TO PROVIDE THIS LIMITED WARRANTY SUPPORTS TO YOU IF YOU REQUEST SUCH SUPPORTS NOT AT THE COUNTRY AT WHICH THE PRODUCT WAS ORIGINALLY PURCHASED. THE COUNTRY AT WHICH THE PRODUCT WAS ORIGINALLY PURCHASED SHALL BE DETERMINED BASED ON THE SYNOLOGY'S INTERNAL RECORDS.

Local Consumer Protection Laws. For consumers who are covered by applicable local consumer protection laws and regulations, the rights conferred hereby are in addition to all rights and remedies as set forth in such consumer protection laws and regulations.

Section 1. Products

(a) "Products" refer to New Products or Refurbished Products.

(b) "New Product" means the Synology-branded hardware product and Synology-branded accessories contained in the original packaging Customer bought from an authorized Synology distributor or reseller. You may see our "New Product" at Product Support Status.

(c) "Refurbished Product" means all Synology products which have been refurbished by Synology's affiliate or an authorized Synology distributor or reseller, not including those sold as "as is" or with "no warranty" by anyone.

(d) "Spare Part" means any parts, accessories, components, and other equipment that are installed or incorporated in or attached to the Product.

(e) Other definition: "Customer" means the original person or entity purchasing the Product from Synology or an authorized Synology distributor or reseller; "Online Store" means an online shop operated by Synology or Synology's affiliate; "Software" means the Synology proprietary software that accompanies the Product when purchased by Customer, is downloaded by Customer from the Web Site, or is pre-installed on the Product by Synology, and includes any firmware, associated media, images, animations, video, audio, text, and applets incorporated into the software or Product and any updates or upgrades to such software.

Section 2. Warranty Period

(a) "Warranty Period": The warranty period commences on the purchase date is shown on the purchase receipt or invoice to be presented by Customer and ending at the day after the end of the Warranty Period for each New Product. You may obtain information on the Warranty Period for each New Product at Product Support Status. For Spare Part, Warranty Period under normal use is one year (five years for system drives) from the date the Product was purchased. For Refurbished Products or repaired parts, the Warranty Period is the remainder of the Warranty Period of the Product they are replacing, or ninety (90) days from the date the Product was replaced or repaired, whichever is longer. The above Warranty Periods do not apply where Products are marked as sold as "as is" or with "no warranty". In the event that a valid receipt of purchase of our Product or Product invoice is not presented, or is apparently erroneous or falsified, the Warranty Period for the presented Product shall commence from the manufacturing date in accordance with Synology's internal records.

(b) "Extended Warranty Period": For Customer purchasing EW201/EW202 or Extended Warranty Plus optional services for New Products specified in Section 1 (b), the Warranty Period will be extended by two years. For EW201/EW202, you may see the applicable Product models and available regions at EW201/EW202 Extended Warranty. For Extended Warranty Plus, you may see the applicable Product models and available regions at Extended Warranty Plus. Customer can only choose either of the optional services.

(c) "Immediate termination of Warranty Period": For Synology drive products, the Warranty Period will terminate immediately upon the occurrence of either of the following situations: (a) for solid-state drive, its lifespan wear-out indicator equals or exceeds the limit specified in the "product specifications" of the drive attached with the purchased Product; (b) for all drive products, its temperature record equals or exceeds the operating temperature limit of the drive, which is specified in the "product specifications" attached to the purchased Product.

Section 3. Limited Warranty and Remedies

3.1 Limited Warranty. Subject to Section 3.2, Synology warrants to the Customer that each Product (a) will be free of material defects in workmanship and (b) under normal use will perform substantially in accordance with Synology's published specifications for the Product during the Warranty Period. Such limited warranty does not apply to the Software contained in the product or purchased by Customer which shall be subject to the accompanying end user license agreement provided with the Product. Synology provides no warranty for Refurbished Product sold as "as is" or with "no warranty".

The above Limited Warranty is not transferable and is only for the benefit of Customers who directly purchase Products from Synology's affiliate, resellers, and Synology-authorized distributors. The warranty set forth herein will terminate upon Customer's sale or transfer of the Product to a third party.

3.2 Exclusions. The foregoing warranties and warranty obligations do not apply to any Product that (a) has been installed or used in a manner not specified or described in the Product, specifications, or its related documents, or in any way misused, abused, or damaged; (b) has been damaged caused by accident, fire, liquid contact, earthquake, other external factor or product use in improper environment; (c) has been disassembled without authorization from Synology; or (d) with cosmetic damage caused by normal wear and tear or otherwise due to the normal aging of the Product, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (e) serial number has been removed or defaced from Product, resulting in not able to identify; (f) has been damaged or out of order because Customer fails to implement any correction, modification, enhancement, improvement or other update made available to Customer by Synology, or because Customer implements, installs or uses any correction, modification, enhancement, improvement or other update made available by any third party; (g) has been damaged, out-of-order, or incompatible due to installation or use with items not provided by Synology other than the hardware, software or other accessory for which the Product is designed.

Please note that each of the above situations shall be subject to the inspection and verification of the Product's appearance and functions by Synology. Synology may refuse to provide any warranty services, including but not limited to product repair, technical support, and product replacement as described in Section 3.3 to any Product under any of the above situations.

3.3 Warranty Support and Exclusive Remedy. If Customer gives notice of noncompliance with any of the warranties set forth in Section 3.1 within the applicable Warranty Period in the manner set forth below, then, upon verification of the noncompliance by Synology, Synology will, at Synology's option: (a) use commercially reasonable efforts to repair the Product, (b) provide technical support, or (c) replace the noncomplying Product or part thereof upon return of the complete Product in accordance with Section 3.4 The foregoing sets forth Synology's entire liability and Customer's sole and exclusive remedy for any breach of warranty under Section 3.1 or any other defect or deficiency in the Product. Customer will reasonably assist Synology to diagnose and validate any nonconformity with the Product. Please note that the warranty support does not apply to rescue of the data stored in Synology Product or its backup. Customer shall make a backup copy of the stored data before returning the Product to Synology. Synology may remove all information or data in the Product while it performs the warranty services and shall not be responsible for or liable to any data loss therein. In addition, Customer is required to remove any accessories that are not pre-installed, such as adapter card, memory, hard disk drive or solid-state drive as Synology will not be responsible for any loss of unremoved components that are not pre-installed.

3.4 Return. For warranty claims, the Customer must return the complete Product to Synology in accordance with this Section 3.4. Any returned Product which (a) has been disassembled (except under the direction of Synology); or from which (b) the serial number has been removed or defaced, causing inability to identify, or which (c) was damaged on the way of return because of improper packaging (including but not limited to scratches and deformation), will be refused and returned to Customer at Customer's expense. Any Product must be returned in the same condition as it was received from Synology to the address designated by Synology, freight pre-paid, in packaging sufficient to protect the contents thereof. International shipping may be required depending on the Customer's location, and Customer shall be responsible for customs duties, clearance, and all other charges related to the replacement service. Customer is responsible for insurance and risk of loss and/or damage with respect to returned items until they are properly received by Synology.

3.4.1 General Replacement Service. Any Product returned by Customer under Section 3.3 must be made in accordance with Synology's then-current replacement procedures with the purchase receipt or invoice. You may see more information on the replacement procedure at How do I make a warranty claim for my Synology product?

3.4.2 Extended Warranty Plus Service. (Only applicable to the Customer purchasing Extended Warranty Plus)
(a) Standard Direct Replacement service: Regarding Standard Direct Replacement service, the Customer must return the nonconforming Product recognized by Synology to the designated return service center at Customer's expense first. The replacement will not be shipped until the nonconforming Product is received at Synology's designated return service center.
(b) Advanced Direct Replacement service: Regarding Advanced Direct Replacement service, Synology will ship the replacement Product to the address specified by the Customer before the Customer returns the nonconforming Product. Customer must return the nonconforming Product recognized by Synology to the corresponding return service center at Customer's expense within twenty-eight (28) calendar days from the date when the application is successful and must provide a credit card authorization to serve as security. The credit card authorization will be

canceled after Synology has received the nonconforming Product returned by the Customer. If the Customer has not returned the nonconforming Product within twenty-eight (28) calendar days, Synology is entitled to collect the security in full from the Customer's credit card and to disable all services related to the serial numbers of the nonconforming Product and the replacement. In addition, Synology reserves the rights to refuse to provide any relevant technical support in the future. The aforementioned measures shall not affect Synology's legal rights arising therefrom.

3.5 Replacement of New Product or Refurbished Product by Synology. If Synology elects to replace any Product under this Warranty set forth in Section 3.1, then Synology will ship a replacement Product at Synology's expense via the shipping method selected by Synology after receipt of the nonconforming Product returned in accordance with Section 3.4 and validation by Synology that the Product does not conform to the warranty. Before the shipment of the Refurbished Product to the Customers, they have been verified to strictly comply with Synology's quality standard. Please note that part of the Refurbished Products would be with certain stain, scratches, or other minor wear and tear. In some countries, Synology may at its own discretion apply the Synology Replacement Service to certain Products, through which Synology will ship a replacement Product to Customer before its receipt of the nonconforming Product returned by Customer ("Synology Replacement Service").

3.6 Disclaimer of Warranties. THE WARRANTIES, OBLIGATIONS, AND LIABILITIES OF SYNOLOGY AND THE REMEDIES OF CUSTOMER SET FORTH IN THIS WARRANTY ARE EXCLUSIVE AND IN SUBSTITUTION FOR, AND CUSTOMER HEREBY WAIVES, RELEASES AND DISCLAIMS, ALL OTHER WARRANTIES, OBLIGATIONS AND LIABILITIES OF SYNOLOGY AND ALL OTHER RIGHTS, CLAIMS AND REMEDIES OF CUSTOMER AGAINST SYNOLOGY, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, WITH RESPECT TO THE PRODUCT, ACCOMPANYING DOCUMENTATION OR SOFTWARE AND ANY OTHER GOODS OR SERVICES DELIVERED UNDER THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO ANY: (A) IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE; (B) IMPLIED WARRANTY ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING, OR USAGE OF TRADE; (C) CLAIM OF INFRINGEMENT OR MISAPPROPRIATION; OR (D) CLAIM IN TORT (WHETHER BASED ON NEGLIGENCE, STRICT LIABILITY, PRODUCT LIABILITY OR OTHER THEORY). SYNOLOGY MAKES NO GUARANTEE AND SPECIFICALLY DISCLAIMS ANY WARRANTY THAT THE DATA OR INFORMATION STORED ON ANY SYNOLOGY PRODUCT WILL BE SECURE AND WITHOUT RISK OF DATA LOSS. SYNOLOGY RECOMMENDS THAT CUSTOMER TAKES APPROPRIATE MEASURES TO BACK UP THE DATA STORED ON THE PRODUCT. SOME STATES/JURISDICTIONS DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO CUSTOMER.

3.7 Extended Warranty Plus Limitations. (a) The Customer must complete the purchase of the Extended Warranty Plus Service within ninety (90) days following the original purchase date of the new Product. (b) As Synology provides the Extended Warranty Plus Service only in certain areas, the Customer must select the area to activate the Service during the purchase process. If the Customer requests Extended Warranty Plus Service from an area other than the selected area, Synology, at its sole discretion, may not provide Extended Warranty Plus Service; (c) Exceptions to coverage: The Extended Warranty Plus Service does not apply to overseas departments, overseas territories, overseas autonomous regions, and islands other than the main island of the countries and regions.

Section 4. Limitations of Liability

4.1 Force Majeure. Synology will not be liable for, or be considered to be in breach of or default under this Warranty on account of, any delay or failure to perform as required by this Warranty as a result of any cause or condition beyond its reasonable control (including, without limitation, any act or failure to act by Customer).

4.2 Disclaimer of Certain Damages. IN NO EVENT WILL SYNOLOGY OR ITS SUPPLIERS BE LIABLE FOR THE COST OF COVER OR FOR ANY INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL OR SIMILAR DAMAGES OR LIABILITIES WHATSOEVER (INCLUDING, BUT NOT LIMITED TO LOSS OF DATA, INFORMATION, REVENUE, PROFIT OR BUSINESS) ARISING OUT OF OR RELATING TO THE USE OR INABILITY TO USE THE PRODUCT, ANY ACCOMPANYING DOCUMENTATION OR SOFTWARE AND ANY OTHER GOODS OR SERVICES PROVIDED UNDER THIS WARRANTY, WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHER THEORY EVEN IF SYNOLOGY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

4.3 Limitation of Liability. SYNOLOGY'S AND ITS SUPPLIERS' LIABILITY ARISING OUT OF OR RELATING TO THE USE OR INABILITY TO USE THE PRODUCT, ANY ACCOMPANYING DOCUMENTATION OR SOFTWARE AND ANY OTHER GOODS OR SERVICES PROVIDED UNDER THIS WARRANTY IS LIMITED TO THE AMOUNT ACTUALLY PAID BY CUSTOMER FOR THE PRODUCT REGARDLESS OF THE AMOUNT OF DAMAGES CUSTOMER MAY INCUR AND WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHER THEORY. The foregoing disclaimer of certain damages and limitation of liability will apply to the maximum extent permitted by applicable law. The laws of some states/jurisdictions do not allow exclusion or limitation of certain damages. To the extent that those laws apply to the Product, the exclusions and limitations set forth above may not apply to Customer.

Section 5. Miscellaneous

5.1 Proprietary Rights. The Product and any accompanying Software and documentation provided with the Product include

proprietary and intellectual property rights of Synology and its third party suppliers and licensors. Synology retains and reserves all right, title, and interest in the intellectual property rights of the Product, and no title to or ownership of any intellectual property rights in or to the Product, any accompanying Software or documentation and any other goods provided under this Warranty is transferred to Customer under this Warranty. Customer will (a) comply with the terms and conditions of the Synology end user license agreement accompanying any Software furnished by Synology or an authorized Synology distributor or reseller; and (b) not attempt to reverse engineer any Product or component thereof or accompanying Software or otherwise misappropriate, circumvent or violate any of Synology's intellectual property rights.

5.2 Assignment. Customer will not assign any of its rights under this Warranty directly, by operation of law or otherwise, without the prior written consent of Synology.

5.3 No Additional Terms. Except as expressly permitted by this Warranty, neither party will be bound by, and each party specifically objects to, any term, condition or other provision that conflicts with the provisions of this Warranty that is made by the other party in any purchase order, receipt, acceptance, confirmation, correspondence or otherwise, unless each party specifically agrees to such provision in writing. Further, if this Warranty conflicts with any terms or conditions of any other agreement entered into by the parties with respect to the Product, this Warranty will prevail unless the other agreement specifically references the sections of this Warranty that it supersedes.

5.4 Applicable Law. Unless explicitly prohibited by local law, this Warranty is governed by the laws of the State of Washington, U.S.A. for the Customers residing within the United States; and by the laws of the Republic of China (Taiwan) for Customers not residing within the United States, without regard to any conflict of law principles to the contrary. The 1980 U.N. Convention on Contracts for the International Sale of Goods or any successor thereto does not apply.

5.5 Dispute Resolution. Any dispute, controversy or claim arising out of or relating to this Warranty, the Product or services provided by Synology with respect to the Product or the relationship between Customers residing within the United States and Synology will be resolved exclusively and finally by arbitration under the current commercial rules of the American Arbitration Association, except as otherwise provided below. The arbitration will be conducted before a single arbitrator, and will be limited solely to the dispute between Customer and Synology. The arbitration, or any portion of it, will not be consolidated with any other arbitration and will not be conducted on a class-wide or class action basis. The arbitration shall be held in King County, Washington, U.S.A. by submission of documents, by telephone, online or in person as determined by the arbitrator at the request of the parties. The prevailing party in any arbitration or legal action occurring within the United States or otherwise shall receive all costs and reasonable attorneys’ fees, including any arbitration fee paid by the prevailing party. Any decision rendered in such arbitration proceedings will be final and binding on the parties, and judgment may be entered thereon in any court of competent jurisdiction. Customer understands that, in the absence of this provision, Customer would have had a right to litigate any such dispute, controversy or claim in a court, including the right to litigate claims on a class-wide or class-action basis, and Customer expressly and knowingly waives those rights and agrees to resolve any disputes through binding arbitration in accordance with the provisions of this Section 5.5. For Customers not residing within the United States, any dispute, controversy or claim described in this section shall be finally resolved by arbitration conducted by three neutral arbitrators in accordance with the procedures of the R.O.C. Arbitration Law and related enforcement rules. The arbitration shall take place in Taipei, Taiwan, R.O.C., and the arbitration proceedings shall be conducted in English or, if both parties so agree, in Mandarin Chinese. The arbitration award shall be final and binding on the parties and may be enforced in any court having jurisdiction. Nothing in this Section shall be deemed to prohibit or restrict Synology from seeking injunctive relief or seeking such other rights and remedies as it may have at law or equity for any actual or threatened breach of any provision of this Warranty relating to Synology's intellectual property rights.

5.6 Attorneys' Fees. In any arbitration, mediation, or other legal action or proceeding to enforce rights or remedies under this Warranty, the prevailing party will be entitled to recover, in addition to any other relief to which it may be entitled, costs and reasonable attorneys' fees.

5.7 Export Restrictions. You acknowledge that the Product may be subject to U.S. export restrictions. You will comply with all applicable laws and regulations that apply to the Product, including without limitation the U.S. Export Administration Regulations.

5.8 Severability. If any provision of this Warranty is held by a court of competent jurisdiction to be invalid, illegal, or unenforceable, the remainder of this Warranty will remain in full force and effect.

5.9 Entire Agreement. This Warranty constitutes the entire agreement, and supersedes any and all prior agreements, between Synology and Customer related to the subject matter hereof. No amendment, modification or waiver of any of the provisions of this Warranty will be valid unless set forth in a written instrument signed by the party to be bound thereby.

5.10 Extended Warranty Plus Service Payment and Termination. (a) Upon verifying the purchase order by Synology, the Customer shall immediately pay all charges and tax. Synology reserves the right to refuse to provide the Extended Warranty Plus Service to Customer who are ineligible or who are under statutory age. (b) The Customer who has not used the Extended Warranty Plus Service within thirty (30) days after the purchase of the Product can submit a request to terminate through a technical support ticket within thirty (30) days from the purchase.

FCC Declaration of Conformity

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.

この装置は、クラス A 機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI ー A

Declaration Letter of REACH & RoHS Compliance

About REACH

In June 2007, the European Union Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) was first released. Under this Regulation, manufacturers are required to gather information on the properties of their chemical substances, which will allow their safe handling, and to register the information to European Chemicals Agency (ECHA). The aim is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.

About RoHS

RoHS Directive (EU Directive 2002/95/EC) was issued in 2002, restricted the use of the six chemicals lead, cadmium, mercury, and hexavalent chromium, as well as flame retardants polybrominated biphenyls (PBBs) and polybrominated dipheny ethers (PBDEs). Under this directive, manufacturers are required to replace these chemicals in their products with less hazardous alternatives.

Then RoHS 2.0 (Directive 2011/65/EU) has replaced Directive 2002/95/EC since January 3, 2013. In 2015, EU commission publishes Directive (EU) 2015/863 to amend Annex II to EU RoHS 2 (Directive 2011/65/EU) to add 4 phthalates (DEHP, BBP, DBP and DIBP) onto the list of restricted substances from 22 July 2019.

REACH and RoHS Compliance

Synology meets all requirements of the REACH Regulation and is compliant to all implemented RoHS type regulations worldwide. To the best of Synology’s knowledge, all Synology products in production (including finished

products, spare parts, and packaging materials) are in compliance with the requirements of the Regulation and/or Directives. Synology continues to monitor, influence, and develop our processes to comply with any proposed changes to the Regulation and/or Directives.



WEEE Directive

The WEEE (Waste from Electrical and Electronic Equipment) directive was developed by the EU (European Union) to contribute to sustainable production and consumption of electrical and electronic equipment throughout the EU. As this directive has been incorporated into national legislation by EU member states, you should recycle or dispose of this product in accordance with any applicable local and national laws.

The European WEEE symbol on this product or its packaging indicates that this equipment must not be disposed of with your other household waste. Prior to disposal, lithium button batteries should be taken out of the equipment. Used equipment should be disposed of with relevant local authorities. Ensure that all of your personal data has been destroyed before you dispose of your equipment.

For more information about where you can drop off your end-of-life equipment for recycling, please contact your local government authority, your household waste disposal service or the shop where you purchased the product. Your participation is essential in reducing any potential effects of EEE on the environment and human health due to the presence of hazardous substances in EEE.