# Synology®

# Synology NAS DS1821+

Hardware Installation Guide

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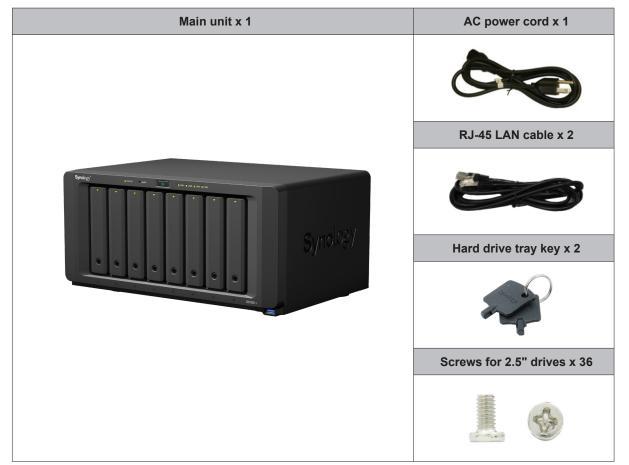
# **Before You Start**

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.

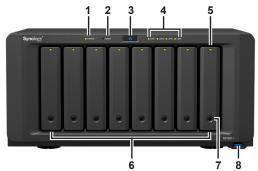
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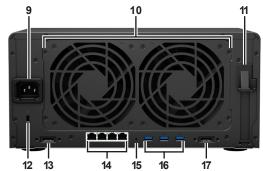
**Note:** All images below are for illustrative purposes only, and may differ from the actual product.

## **Package Contents**



## Synology DS1821+ at a Glance





No.	Article Name	Location	Description
1	STATUS Indicator		Displays the status of the system. For more information, see "System Modes and LED Indicators".
2	ALERT Indicator		Displays warnings regarding fan or temperature. For more information, see "Other LED Indicators".
3	POWER Button		<ol> <li>Press to power on your Synology NAS.</li> <li>To power off your Synology NAS, press and hold until you hear a beep sound and the Power LED starts blinking.</li> </ol>
4	LAN Indicator	Front	Displays the status of the network connection. For more information, see "Other LED Indicators".
5	DRIVE Status Indicator		Displays the status of each drive. For more information, see "Other LED Indicators".
6	Drive Tray		Install drives (hard disk drives or solid state drives) here.
7	Drive Tray Lock		Lock or unlock drive trays.
8	USB 3.2 Gen 1 Port		Connect external drives or other USB devices to the Synology NAS here.
9	Power Port		Connect power cord here.
10	Fan		Disposes of excess heat and cools the system. If the fan malfunctions, the Synology NAS will emit a beeping sound.
11	PCI Express Expansion Slot		Supports the addition of PCIe network interface cards.
12	Kensington Security Slot		Attach a Kensington security lock here.
13	eSATA Port 1		Connect Synology Expansion Unit <sup>1</sup> to the Synology NAS here.
14	LAN Port	Rear	Connect RJ-45 network cable here.
15	RESET Button		<ol> <li>Press and hold until you hear a beep sound to restore the IP address, DNS server, and password for the admin account to default.</li> <li>Press and hold until you hear a beep, then press and hold again until you hear three beeps to return the Synology NAS to "Not Installed" status so that DiskStation Manager (DSM) can be reinstalled.</li> </ol>
16	USB 3.2 Gen 1 Port		Connect external drives or other USB devices to the Synology NAS here.
17	eSATA Port 2		Connect Synology Expansion Unit <sup>1</sup> to the Synology NAS here.

<sup>1</sup> For more information about Synology Expansion Unit supported by your Synology NAS, please visit www.synology.com.

## **System Modes and LED Indicators**

#### **System Modes and Definitions**

There are 7 system modes in Synology NAS. The System modes and their definitions are as below:

System mode	Definition
Powering on	Synology NAS is powering on and performing 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 is not ready for use. This could either be:
	<ul> <li>Synology NAS is powered on, but DSM is not properly installed.</li> </ul>
DSM not ready	<ul> <li>Synology NAS is currently powering on and initializing services necessary for DSM to fully function.</li> </ul>
	<ul> <li>The attached UPS device has insufficient power; DSM stops all services to prevent data loss (enters safe mode).</li> </ul>
DSM is ready for use	DSM is fully functioning and users can sign in.
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 below table for more details.

	LED Indicator			
System mode	POWER	STA	STATUS	
	Blue	Green	Orange	
Powering on	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	Swite	ching	
Powered off	Off	Off	Off	

#### **Transitions between System Modes**

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

- 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
- Enter hibernation then wake up from hibernation:
   DSM is ready for use > Hibernation > DSM is ready for use
- Shutdown Synology NAS:
   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

## **Other LED Indicators**

LED Indicator	Color	Status	Description
	Green	Static	Drive ready and idle
DRIVE status	Green	Blinking	Accessing drive
DRIVE status	Orange	Static	Drive error/Port disabled <sup>1</sup>
	Off		No internal Drive
	Orange	Blinking	System error <sup>2</sup>
ALERI	ALERT		System normal
	Green	Static	Network connected
LAN		Blinking	Network active
	Off		No network
	Green	Static	Network connected
Rear 1GbE LAN (on left side of jack)	Green	Blinking	Network active
	Of		No network
	Green	Statia	1 Gbps connected
Rear 1GbE LAN (on right side of jack)	Orange	Static	100 Mbps connected
	C	Dff	10 Mbps connected/No network

#### Note:

1 Please try to restart your Synology NAS or re-insert the drives, then run the HDD/SSD manufacturer's diagnostic tool to check the health status of the drives. If you can sign in to DSM, please run the built-in S.M.A.R.T. test to scan the drives. If the problem remains unresolved, please contact Synology Technical Support for help.

2 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.

## **Hardware Specification**

Item	DS1821+	
Commotible Drive Tyres	• 3.5" / 2.5" SATA x 8	
Compatible Drive Type	• M.2 2280 NVMe SSD x 2	
Maximum Internal Raw Capacity	<ul> <li>• 128TB (8 x 16TB HDD)</li> <li>• 288 TB with 2 x DX517 (expansion unit)</li> </ul>	
External Port	• USB 3.2 Gen 1 x 4 • eSATA x 2	
LAN Port	1GbE (RJ-45) x 4	
PCIe Slot	Gen3 x8 slot (x4 link) x 1	
Size (H x W x D) (mm)	166 x 343 x 243	
Weight (kg)	6.0	
Ourse and a Olivert	Windows 7 onwards	
Supported Client	<ul> <li>macOS 10.12 onwards</li> </ul>	
File Ovetere	• Internal: Btrfs, ext4	
File System	• External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT <sup>1</sup>	
	Basic • JBOD • RAID 0 • RAID 1	
Supported RAID Type	• RAID 5 • RAID 6 • RAID 10	
Agency Certification	FCC Class B     CE Class B     BSMI Class B	
Agency Certification	• EAC • VCCI • CCC • RCM • RoHS Compliant	
HDD Hibernation	Yes	
Scheduled Power On/Off	Yes	
Wake on LAN	Yes	
Language Localization	・English ・Deutsch ・Français ・Italiano ・Español ・Dansk ・Norsk ・Svensk ・Nederlands ・Русский ・Polski ・Magyar ・Português do Brasil ・Português Europeu ・Türkçe ・Český ・日本語・한국어 ・ไทย ・繁體中文・简体中文	
	• Line voltage: 100 V to 240 V AC	
	• Frequency: 50/60 Hz	
Environment Requirement	<ul> <li>Operating Temperature: 32 to 104°F (0 to 40°C)</li> </ul>	
	<ul> <li>Storage Temperature: -5 to 140°F (-20 to 60°C)</li> </ul>	
	Relative Humidity: 5% to 95% RH	

Note: Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.

<sup>1</sup> Support for exFAT can be enabled by purchasing and downloading exFAT Access in Package Center.

## **Spare Parts**

Visit www.synology.com/products/spare\_parts if you need to replace system fans, disk trays, or power supply units.

Model Name	Picture	Description
Disk Tray (Type D6)		3.5"/2.5" Drive Tray With Lock
Fan 120*25_5		System Fan 120*120*25 mm
PSU 250W_5		PSU 250W 24p+12p+8p

## **Optional Accessories**

With Synology accessories, you can customize your Synology NAS to fit different business environments without worrying about compatibility and stability. Visit www.synology.com/compatibility for more information.

## Safety Instructions

	Keep away from direct sunlight and from chemicals. Make sure the environment does not experience abrupt changes in temperature or humidity.
(Bopours)	Place the product right side up at all times.
	Do not place near any liquids.
	Before cleaning, unplug the power cord. Wipe with damp paper towels. Do not use chemical or aerosol cleaners.
	To prevent the unit from falling over, do not place on carts or any unstable surfaces.
	The power cord must plug in to the correct supply voltage. Make sure that the supplied AC voltage is correct and stable.
	To remove all electric current from the device, ensure that all power cords are disconnected from the power source.
25	Risk of explosion if battery is replaced with an incorrect type. Dispose of used batteries appropriately.

# **Hardware Setup**

## **Tools and Parts for Component Installation**

Please prepare the following tools and parts before setting up your Synology NAS:

- A screwdriver (only for 2.5" drives)
- At least one 3.5" or 2.5" SATA drive (please visit www.synology.com/compatibility for compatible drive models)

**Warning:** If you install a drive that contains data, the system will format the drive and erase all existing data. Please back up any important data before installation.

## **Install Drives**

**1** Press the lower part of the hard drive tray to unlock the handle.



2 Pull out the hard drive tray handle as shown below to remove the hard drive tray.



- 3 Load drives in the drive trays.
  - For 3.5" drives: Remove the fastening panels from the sides of the drive tray. Place the drive in the drive tray. Then insert the fastening panels to secure the drive in place.



• For 2.5" drives: Remove the fastening panels from the sides of the drive tray and store them in a safe place. Place the drive in the area of the drive tray indicated by a blue rectangle below. Turn the tray upside down and tighten the screws to secure the drive in place.



**4** Insert the loaded hard drive tray into the empty hard drive bay and push it into position by the upper half of the handle.



**Note:** Make sure that the drive tray is completely inserted. Otherwise, the drive might not function properly.

- 5 Press the handle back into the front panel until you hear a click to secure the hard drive tray in place.
- 6 Insert the hard drive tray key into the hard drive tray lock, turn the key clockwise (to the "I" position) to lock the hard drive tray handle, and then remove the key.



- 7 Repeat the steps above to install the other drives you have prepared.
- 8 Drives are numbered as shown below.



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

## Start Up Your Synology NAS

- 1 Use the LAN cable to connect the Synology NAS to your switch, router, or hub.
- **2** Connect one end of the AC power cord to the power port of your Synology NAS. Connect the other end to a power outlet.



3 Press the power button to turn on your Synology NAS.



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

## Add a Memory Module 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.

A0	B0	Total Memory
4 GB	-	4 GB
4 GB	4 GB	8 GB
8 GB	8 GB	16 GB
16 GB	16 GB	32 GB

The following table shows the memory configuration for best practice:

Follow the steps below to install, check, or remove a memory module on your DS1821+.

#### To install the memory module

- 1 Shut down your Synology NAS. Disconnect all cables from your Synology NAS to prevent possible damage.
- 2 The memory modules are located at the bottom of your Synology NAS.
- **3** Remove the two screws on the cover that protecting the modules. Lift up the cover and put it aside. You will see one pre-installed 4 GB memory module.



**Note:** When you remove the cover, sensitive internal components are exposed. Avoid touching anything other than the memory assembly when removing or adding memory.

4 Insert the new memory module into the empty slot:

- **a** Align the small gap between the gold connectors of the memory module with the notch on the empty slot. Insert the memory module into the slot. Make sure that the module is properly inserted.
- **b** Gently push down the memory module until you hear a click.



#### Note:

- · Hold the memory module by its edges and avoid touching the gold connectors.
- Synology will not provide full product warranty or technical support if a non-Synology memory module is used for memory upgrade.
- 5 Replace the cover and tighten the two screws that removed.
- 6 Reconnect the cables that removed, then press the power button to turn on your Synology NAS.

#### To make sure 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 module

- **1** Follow step 1 to 3 of the **"To install the memory module"** section to shut down your Synology NAS, disconnect the cables and remove the cover.
- **2** Push the levers on both sides of the memory module outward. The memory module will be released from its slot.



- **3** Hold the memory module by its edges and remove it from the slot.
- 4 Replace the cover and tighten the two screws that removed.
- 5 Reconnect the cables that removed, then press the power button to turn on your Synology NAS.

## Add an M.2 NVMe SSD to Synology NAS

You can install up to two M.2 NVMe 2280 SSDs on your Synology NAS to create an SSD cache volume. Follow the steps below for SSD module installation and removal.

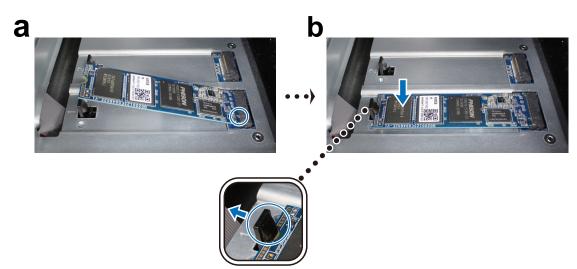
#### To install an M.2 NVMe SSD module

- 1 Shut down your Synology NAS. Disconnect all cables from your Synology NAS to prevent possible damage.
- **2** Remove the hard drive trays from the drive bays. You will see two empty SSD slots located on the inner left side of your Synology NAS.
- 3 SSD slots are numbered as shown below.



Note: Hold the SSD module by its edge and avoid touching the gold connectors.

- 4 Start from the slot 1. Insert your SSD module into the empty slot:
  - **a** Align the small gap between the gold connectors of the SSD module with the notch in the empty slot. Insert the module into the slot. Make sure that the module is properly inserted.
  - **b** Push the lever outward as shown below. While holding the lever, push down the SSD module, then release the lever to secure the SSD module.



- 5 If needed, repeat the steps above to install a second SSD module into the second slot.
- 6 Insert the drive trays back into the drive bays.
- 7 Reconnect the cables removed in step 1, then press the power button to turn on your Synology NAS.

#### To remove the M.2 NVMe SSD module

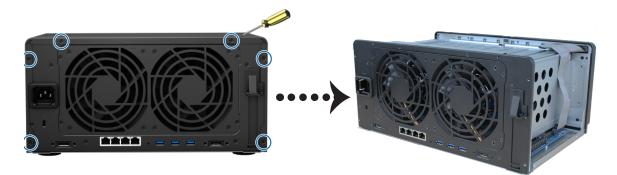
- 1 Shut down your Synology NAS. Disconnect all cables from your Synology NAS to prevent possible damage.
- 2 Remove the hard drive trays from the drive bays.
- 3 Push the lever outward. The module will pop up and be released from the slot.
- 4 Hold the SSD module and remove it from the slot. Insert the drive trays back into the drive bays.
- 5 Reconnect the cables removed in step 1, then press the power button to turn on your Synology NAS.

## Add a Network Interface Card

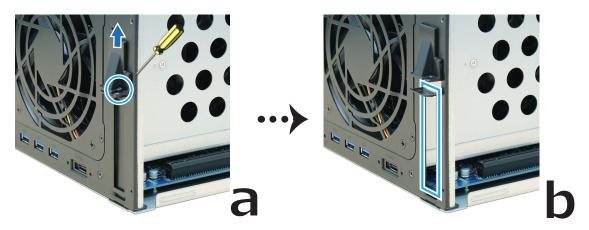
Your Synology NAS has a PCI Express expansion slot which allows you to install 10GbE or Gigabit network interface card for LAN port expansion.

#### To install a network interface card:

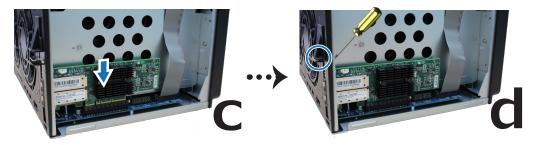
- 1 Shut down your Synology NAS. Disconnect all cables from your Synology NAS to prevent possible damage.
- 2 Remove the six screws that secure the top cover.



- 3 Install the network interface card:
  - a Remove the screw that secures the adapter slot's cover.
  - **b** Remove the adapter slot's cover.



- c Align the card's connectors with the adapter slot, and insert the card into the slot.
- d Put back and fasten the screw that you removed in step 3-a so as to secure the newly inserted card.



4 Put back the top cover that you removed in step 2 and tighten the srcews.

**Note:** Make sure the connectors are fully inserted. Otherwise, the network interface card might not be able to function properly.

Chapter

# **System Maintenance**

## **Replace System Fan**

If the cooling fan located on the back of the Synology NAS malfunctions, please follow the steps below to remove the malfunctioning fan and replace it with a new one.

- 1 Power off your Synology NAS and remove the power cord.
- 2 Fans are numbered as shown below:



**3** Remove the four screws that secure the fan panel.



- **4** Remove the malfunctioning fan:
  - a Pull out the fan panel from your Synology NAS.
  - **b** Carefully unplug the power cords located at the bottom of the fan socket as shown below.



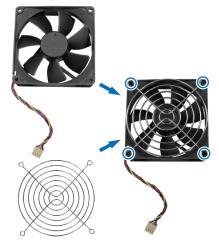
 ${\bf c}\,$  Remove the screws that secure the fan from the fan case.



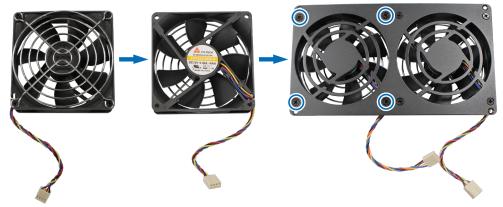
**d** Remove the screws that secure the fan guard from the malfunctioning fan.



- 5 Install a new fan:
  - **a** Attach the fan guard to the new fan, then tighten the screws to secure the fan guard.



**b** Attach the fan case (with the fan cable within the fan pointing at the bottom-right corner) to the new fan, then tighten the screws to secure the fan case.



c Plug the fan cables into your Synology NAS as shown below.



6 Replace and tighten the four screws removed in step 3.

# Install DSM on Synology NAS

After hardware setup is completed, please install DiskStation Manager (DSM) – Synology's browser-based operating system – on your DS1821+.

### **Install DSM with Web Assistant**

Your DS1821+ comes with a built-in tool called **Web Assistant** that helps you download the latest version of DSM from the Internet and install it on your DS1821+. To use Web Assistant, please follow the steps below.

- 1 Power on your DS1821+.
- 2 Open a web browser on a computer connected to the same network as the DS1821+.
- 3 Enter either of the following into the address bar of your browser:
  - a find.synology.com
  - b synologynas:5000
- 4 Web Assistant will be launched in your web browser. It will search for and find the Synology NAS within the local network. The status of the DS1821+ should be Not Installed.

Source	Find Your Synology NAS We dealar long total purpose within the LON- ence on <u>Symmed Lances</u> and <u>Symmed Lances</u> for dealed	b provide services, Synology	collects IP address and port informe	tion. Please		
McCaderes Send number Obtivereen Moder same Statue Rent instated		Server name	Chall Challion			
Sanda nambar >		IP address	10.17.44.94			
COT verdon Rold danka 201211 Saton Ref indeked		MAC address	00 11 12 00 00 10 Ta			
Podel name 20121-> Satus for installed	5,7%2).	Serial number	1740701403	>		
Datus Ret installed		DSH version	7.0-40779			
		Model name	D\$1821+			
Greet		Status	Not installed			
		Connect				

5 Click Connect to start the setup process and follow the onscreen instructions.

#### Note:

- · The Synology NAS must be connected to the Internet to install DSM with Web Assistant.
- · Recommended browsers: Chrome, Firefox.
- Both the Synology NAS and the computer must be in the same local network.
- 6 If you accidentally leave the installation process before it is finished, sign into DSM as **admin** (default administrative account name) with the password left blank.

### Learn More

Your DS1821+ is now ready for action. For more information or online resources about your DS1821+, please visit **Synology's official website**, which contains **step-by-step tutorials and frequently asked questions**.



Chapter

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Section 13. Limitation of Liability. SYNOLOGY'S AND ITS SUPPLIERS' LIABILITY ARISING OUT OF OR RELATING TO THE USE OF OR INABILITY TO USE THE SOFTWARE OR OTHERWISE UNDER OR IN CONNECTION WITH THIS EULA OR THE SOFTWARE IS LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE PRODUCT REGARDLESS OF THE AMOUNT OF DAMAGES YOU MAY INCUR AND WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHER THEORY. The foregoing disclaimer of warranties, 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 the exclusion of implied warranties or the exclusion or limitation of certain damages. To the extent that those laws apply to this EULA, the exclusions and limitations set forth above may not apply to you.

Section 14. Export Restrictions. You acknowledge that the Software is subject to U.S. export restrictions. You agree to comply with all applicable laws and regulations that apply to the Software, including without limitation the U.S. Export Administration Regulations.

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 preinstalled 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.

#### SYNOLOGY, INC. 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.

#### 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 <u>Product Support Status</u>.

(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) 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 see the Warranty Period for each New Product at <u>Product Support Status</u>. For the Refurbished Product or repaired parts, it's 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; except for those sold as "as is" or with "no warranty" by any stores. Without presenting such purchase receipt or invoice, the warranty period shall commence on the date of manufacture based on our internal record.

(b) "Extended Warranty Period": For Customer purchasing EW201/ EW202 optional service for applicable Products specified in Section 1 (b), the Warranty Period specified in Section 2 (a) of the applicable Product registered with EW201/EW202 optional service will be extended by two years. You may see the applied model at Extended Warranty.
(c) "Immediate termination of Warranty Period": As to the Synology drive product, its warrant period will terminate immediately upon either of following situations occurs: (a) for solid-state drive, its lifespan wear-out indicator is equal to 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 is equal to or exceeds the operating temperature limit of the drive, which is specified in the "product specifications" attached with 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 to Refurbished Product sold as "as is" or with "no warranty". (c) This Limited Warranty is NOT transferable and applies only to the customers who directly purchase products from Synology's affiliate, the resellers, and distributor that Synology authorized. The warranty set forth in Section 3 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.

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 it returns the Product to Synology, Synology may weed up all information or data in the Product while it performs the warranty services and shall not be responsible or liable for any data loss therein.

3.4 Return. Any Product return by Customer under Section 3.3 must be made in accordance with Synology's then-current return procedures with the purchase receipt or invoice. You may see more information about the return procedure at <u>How do I make a warranty claim for my Synology product?</u> For warranty claims, the Customer must return the complete Product to Synology in accordance with this Section 3.4. Any returned Product that (a) has been disassembled (except under the direction of Synology); or (b) serial number has been removed or defaced from Product, resulting in not able to identify, or (c) was damaged on the way of return due to 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. Customer is responsible for insurance and risk of loss/damage with respect to returned items until they are properly received by Synology.

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 Product, 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.

#### 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.

### 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 B 機器です。この装置は、住宅環境で使用することを 目的 としていますが、この装置がラジオやテレビジョン受信機に近接して使 用され ると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B