



# **Synology DiskStation DS1618+**

## **Hardware Installation Guide**

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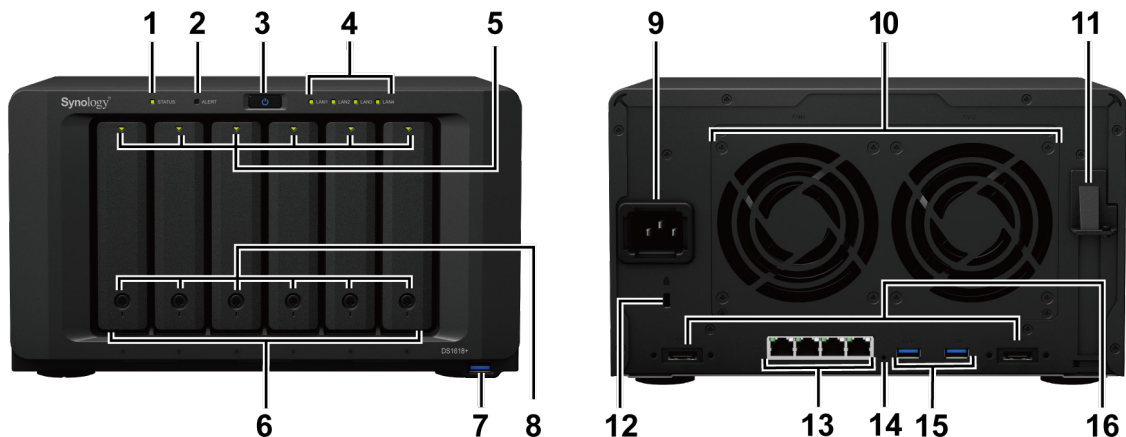
# Before You Start

Thank you for purchasing this Synology product! Before setting up your new DiskStation, 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 DiskStation.

## Package Contents

| Main unit x 1   | AC power cord x 1   |
|---|---|
|     |    |
|   | <b>RJ-45 LAN cable x 2</b>  |
|   |   |
|   | <b>Screws for 2.5" hard drives x 28</b>   |
|   |  |
| <b>Hard drive tray key x 2</b>  |   |
|  |   |







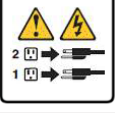

## Synology DiskStation at a Glance



| No. | Article Name               | Location | Description  |
|-----|----------------------------|----------|--|
| 1   | Status Indicator           | Front    | Displays the status of the system. For more information, see "Appendix B: LED Indicator Table".  |
| 2   | Alert Indicator            |          | Displays warnings regarding fan or temperature. For more information, see "Appendix B: LED Indicator Table".   |
| 3   | Power Button               |          | <ol style="list-style-type: none"> <li>Press to power on the DiskStation.</li> <li>To power off the DiskStation, press and hold until you hear a beep sound and the Power LED starts blinking.</li> </ol>  |
| 4   | LAN Indicator              |          | Displays the status of the network connection. For more information, see "Appendix B: LED Indicator Table".  |
| 5   | Drive Status Indicator     |          | Displays the status of the installed drives. For more information, see "Appendix B: LED Indicator Table".  |
| 6   | Drive Tray                 |          | Install drives (hard disk drives or solid state drives) here.  |
| 7   | Front USB 3.0 Port         |          | Connect external hard drives or other USB devices to the DiskStation here.   |
| 8   | Drive Tray Lock            |          | Lock or unlock drive trays.  |
| 9   | Power Port                 | Back     | Connect the AC power cord here.  |
| 10  | Fan                        |          | Disposes of excess heat and cools the system. If the fan malfunctions, the DiskStation will emit a beeping sound.  |
| 11  | PCI Express Expansion Slot |          | Supports one PCIe x8 slot (x4 link) add-on card.   |
| 12  | Kensington Security Slot   |          | Attach a Kensington security lock here.  |
| 13  | LAN Port                   |          | Connect network cables here.   |
| 14  | RESET Button               |          | <ol style="list-style-type: none"> <li>Press and hold until you hear a beep sound to restore the default IP address, DNS server, and password for the <b>admin</b> account.</li> <li>Press and hold until you hear a beep sound, then press and hold again until you hear three beep sounds to return the DiskStation to "Not Installed" status so that DiskStation Manager (DSM) can be reinstalled.</li> </ol> |
| 15  | Rear USB 3.0 Port          |          | Connect external hard drives or other USB devices to the DiskStation here.   |
| 16  | eSATA Port                 |          | Connect external SATA drives or Synology Expansion Unit <sup>1</sup> to the DiskStation here.  |

<sup>1</sup> For more information about Synology Expansion Unit supported by your DiskStation, please visit [www.synology.com](http://www.synology.com).

## Safety Instructions

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

# Hardware Setup

## Tools and Parts for Drive Installation

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- A screwdriver (only for 2.5" drives)
- At least one 3.5" or 2.5" SATA drive (please visit [www.synology.com](http://www.synology.com) 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

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- 1 Press the lower part of the hard drive tray to pop out the handle.



- 2 Pull the hard drive tray handle in the direction as indicated below to remove the hard drive tray.

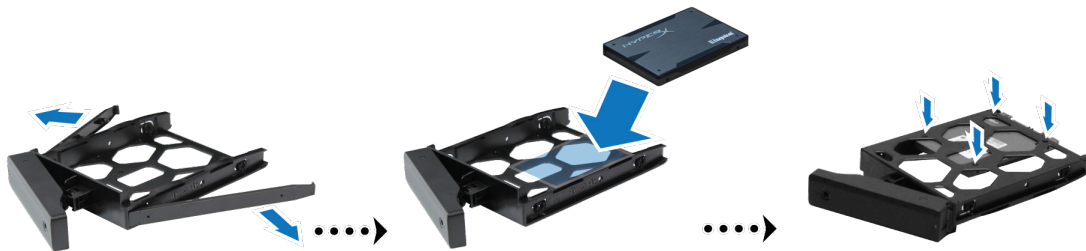


**3** Load drives in the drive trays.

- **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 blue area (shown below) of the drive tray. 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.



**Note:** Make sure the tray is pushed in all the way. Otherwise, the drive might not be able to function properly.

5 Press the handle in flush with the front panel to hold 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 handle of the hard drive tray, and then remove the key.



7 Repeat the steps above to assemble the other drives you have prepared.

8 Drives are numbered as shown below.



**Note:** If you want to create a RAID volume, we recommend that all installed drives are of the same size to make the best use of drive capacity.



## Start Up Your DiskStation

---

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



- 3 Press the power button.



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

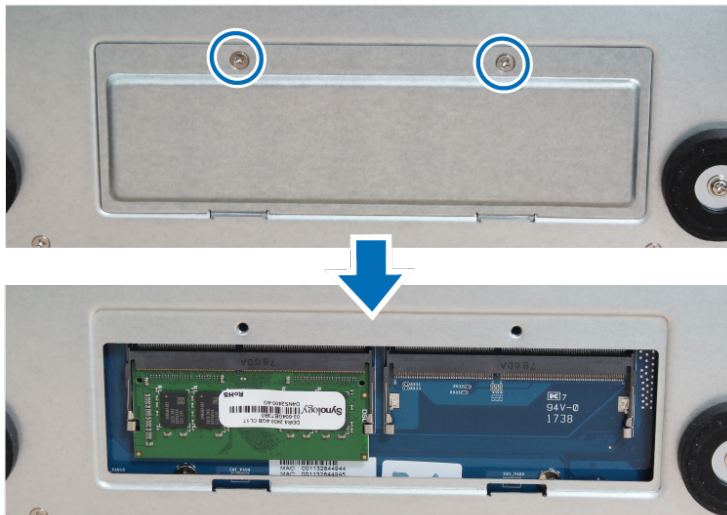
## Add a RAM Module on DiskStation

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The optional Synology DDR4 RAM module is designed for DiskStation memory expansion. Follow the steps below to install, check, or remove a RAM module on your DiskStation.

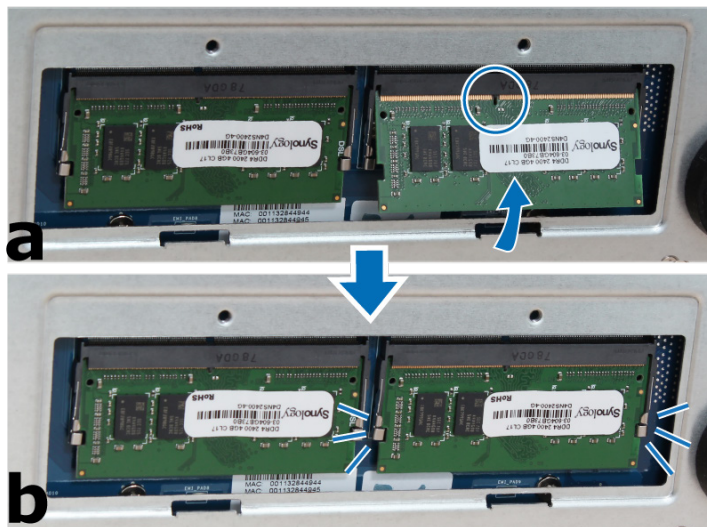
### To install the RAM module:

- 1 Press and hold the power button until you hear a beep sound to shut down your DiskStation. Disconnect all cables from your DiskStation to prevent any possible damage.
- 2 The RAM modules are located at the bottom of DS1618+.
- 3 Remove the 2 screws that secure the bottom lid. Lift off the lid and place it to the side. You will see one 4GB module pre-installed.



**Important:** When you remove the lid, you expose sensitive internal components. Avoid touching anything other than the memory assembly when you remove or add memory.

- 4 Insert the new memory module in the slot:
  - a Align the notch on the gold edge of the module with the notch in the memory slot.
  - b Tilt the card and insert the module into the slot. Make sure the module is properly inserted.
  - c Push the memory module with moderate pressure into the memory slot until you hear a click.



**Important:** You must utilize the same type of memory on all slots. The default memory is non-ECC SO-DIMM DDR4. If you expand utilizing ECC SO-DIMM DDR4 memory, you must remove the original.

**Note:**

- Hold the memory module by its edges, and do not touch the gold connectors.
- When memory capacity is changed, the device will perform a memory check upon the next start up. This will prolong the start up time by up to ten minutes. This behavior is normal and will only occur once.

**Note:** Synology offers RAM modules<sup>1</sup> for memory upgrade. For more information, please visit [www.synology.com/products/accessories/ram\\_railkit](http://www.synology.com/products/accessories/ram_railkit).

- 5 Replace the bottom lid. Replace and tighten the 2 screws you removed in step 3.
- 6 Reconnect the cables you removed in step 1, and then press and hold the power button to turn on your DiskStation.

**To make sure DiskStation recognizes the new memory capacity:**

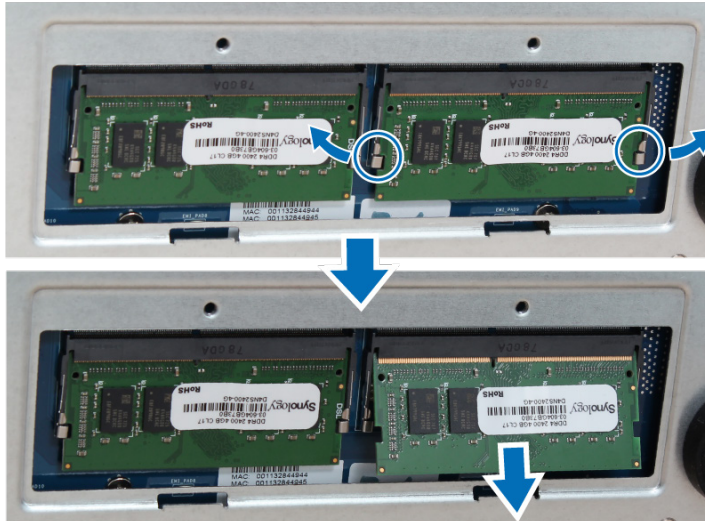
- 1 Install DiskStation Manager (DSM). (See the next chapter for more information.)
- 2 Log in to DSM as **admin** or a user belonging to the **administrators** group.
- 3 Check **Total Physical Memory** in **Control Panel > Info Center**.

If your DiskStation does not recognize the memory or does not start up successfully, confirm that the memory is installed correctly.

<sup>1</sup> Synology will not provide complete product warranty or technical support if non-Synology RAM modules are used for memory upgrade.

### To remove the RAM Module:

- 1 Follow step 1 to 3 of the "To install the RAM module" section to shut down your DiskStation, disconnect the cables, and then remove the bottom lid.
- 2 Push the levers on both sides of the memory module outwards. The module will be released from the slot.
- 3 Hold the memory module by its notches and remove it from the slot.



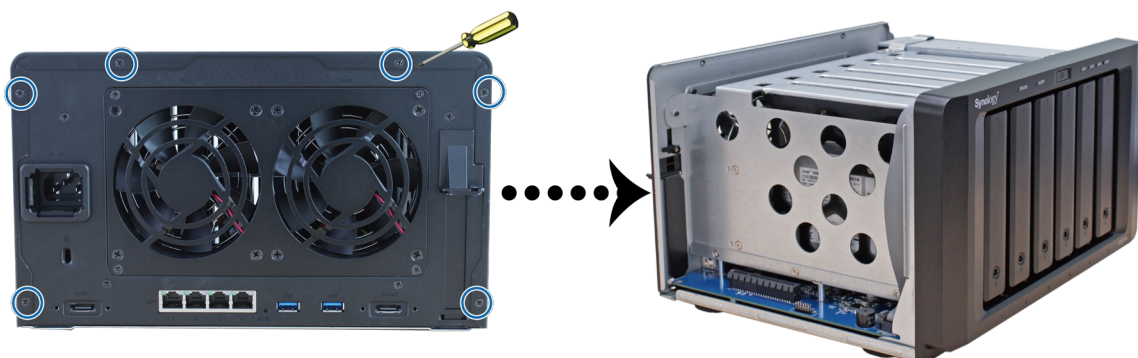
- 4 Replace the bottom lid. Replace and tighten the screws removed in step 1.
- 5 Reconnect the cables removed in step 1. Now, you may turn on your DiskStation.

## Attach M2D17 Adapter Card to DiskStation

Your DiskStation supports one M2D17 adapter card. To replace the long bracket with the M2D17 adapter card, please follow the instructions below.

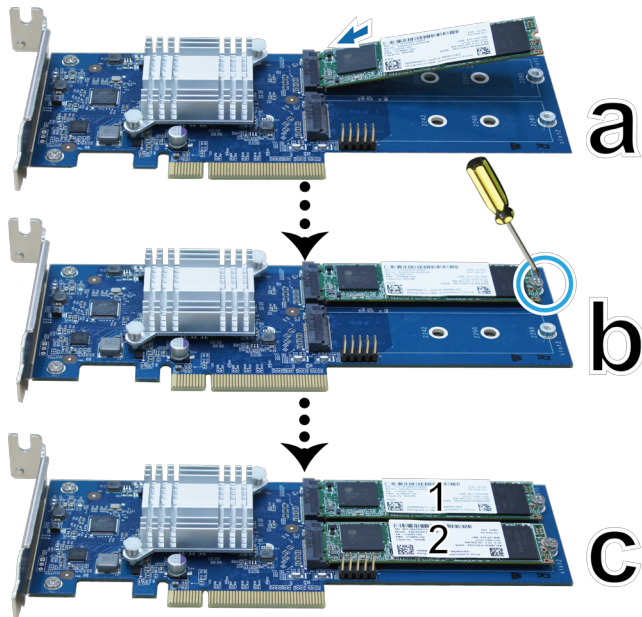
### To install the M2D17 adapter card:

- 1 Press and hold the power button until you hear a beep sound to shut down your DiskStation. Disconnect all cables from your DiskStation to prevent any possible damage.
- 2 Open the top cover of DiskStation by removing the 6 screws that secure the main unit.



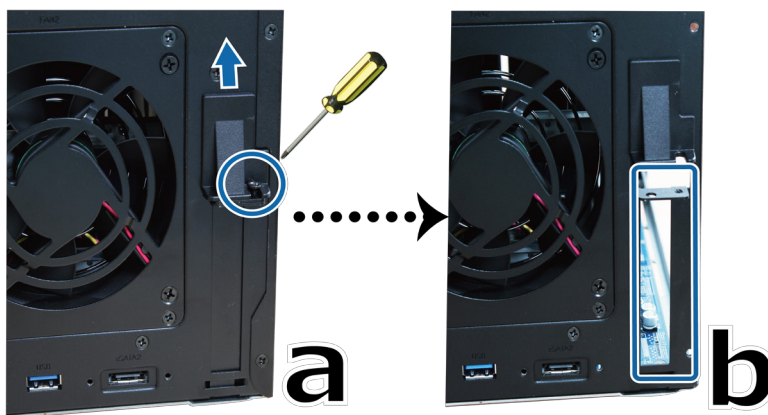
**3** Add M.2 SSD to M2D17 adapter card:

- a Insert M.2 SSD into the slot. Make sure the card is fully inserted.
- b Tighten the SSD with a screw.
- c Repeat previous two steps if installing another optional SSD is needed. Slot numbers are shown as below.

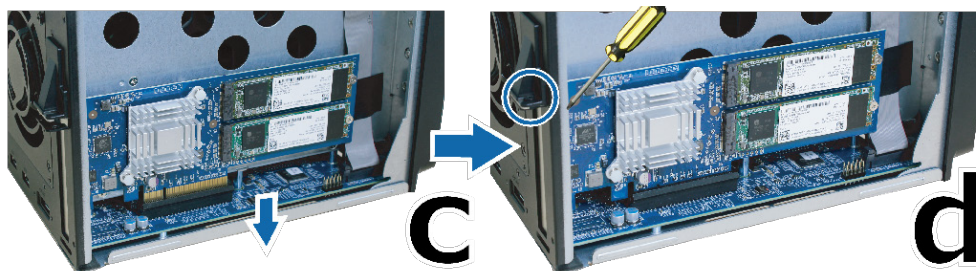


**4** Install the M2D17 adapter card:

- 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 4-a so as to secure the newly inserted card.



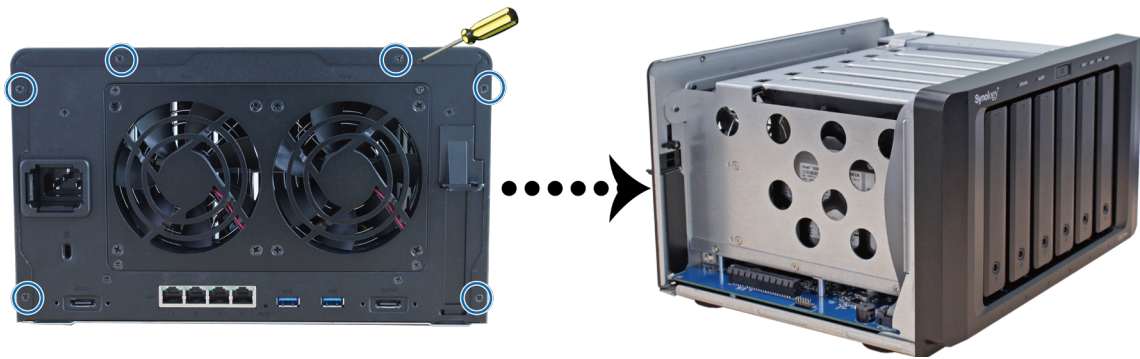
**5** Put back the top cover that you removed in step 2 and tighten the screws.

## Add a Network Interface Card

Your DiskStation has a PCI Express expansion slot which allows you to install 10GbE or Gigabit network interface card for LAN port expansion.<sup>1</sup>

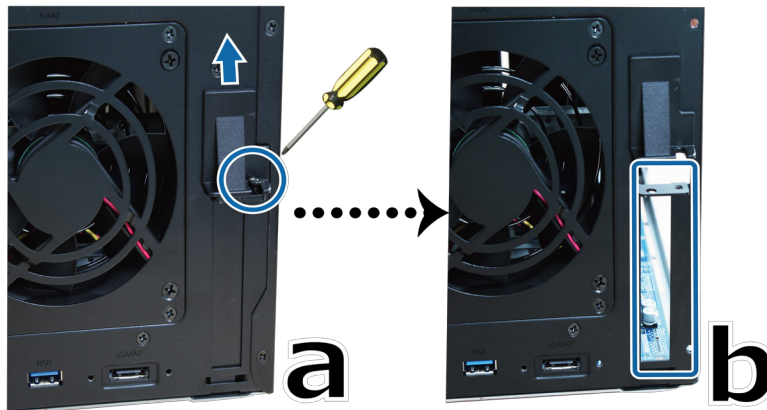
### To install a network interface card:

- 1 Press and hold the power button until you hear a beep sound to shut down your DiskStation. Disconnect all cables from your DiskStation to prevent any possible damage.
- 2 Open the top cover of DiskStation by removing the 6 screws that secure the main unit.

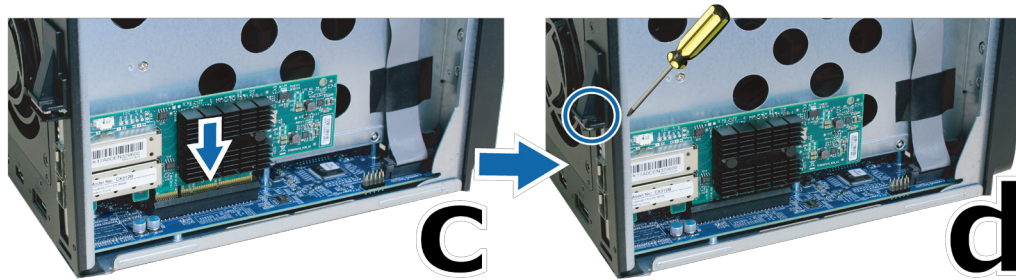


<sup>1</sup> For more information about supported 10GbE or Gigabit network interface cards, please visit [www.synology.com](http://www.synology.com).

- 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 screws.

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

## Replace System Fan

---

Your DiskStation will beep if either of the system fans is not working. Follow the steps below to replace the malfunctioning fan with a good one.

### To replace the system fan:

- 1 Press and hold the power button until you hear a beep sound to shut down your DiskStation. Disconnect all cables from your DiskStation to prevent any possible damage.
- 2 Fans are numbered as follows:



- 3 Remove the 4 screws that secure the fan panel.





**4** Remove the malfunctioning fan:

- a** Pull the fan panel out of your DiskStation.
- b** Disconnect the 2 fan cables from the connectors located near the bottom of the fan socket, and then remove the fan panel.



- c** Remove the 4 screws that secure the malfunctioning fan, and then remove the fan.



**5** Install the new fan:

- a** Replace the malfunctioning fan with a good one (with the fan cable within the fan pointing at the bottom-right corner), and then tighten the 4 screws to secure the new fan.



- b** Connect the 2 fan cables to the connectors located near the bottom of the fan socket, and then replace the fan panel.



**6** Replace and tighten the 4 screws you removed in step 3.

- 7** Reconnect the cables you removed in step 1, and then press and hold the power button to turn on your DiskStation.

# Install DSM on DiskStation

After hardware setup is finished, please install DiskStation Manager (DSM) – Synology’s web-based operating system – on your DiskStation.

## Install DSM with Web Assistant

Your DiskStation 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 DiskStation. To use Web Assistant, please follow the steps below.

- 1 Power on the DiskStation.
- 2 Open a web browser on a computer connected to the same network as the DiskStation.
- 3 Enter either of the following into the address bar of your browser:
  - a [find.synology.com](http://find.synology.com)
  - b `diskstation:5000`
- 4 Web Assistant will be launched in your web browser. It will search for and find the DiskStation within the local network. The status of the DiskStation should be **Not installed**.



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

**Note:**

1. The DiskStation must be connected to the Internet to install DSM with Web Assistant.
2. Suggested browsers: Chrome, Firefox.
3. Both the DiskStation and the computer must be in the same local network.

## Learn More

Congratulations! Your DiskStation is now ready for action. For more information or online resources about your DiskStation, please visit [www.synology.com](http://www.synology.com).

# Specifications

| Item                          | DS1618+   |
|-------------------------------|---|
| Internal Drives               | 3.5" / 2.5" SATA x 6  |
| Maximum Internal Raw Capacity | <ul style="list-style-type: none"> <li>• 72 TB (6 x 12 TB HDD)</li> <li>• 192 TB with DX517 (expansion unit) x 2</li> </ul>   |
| External Device Ports         | <ul style="list-style-type: none"> <li>• USB 3.0 x 3</li> <li>• Expansion port (eSATA) x 2</li> </ul>   |
| LAN Ports                     | Gigabit x 4   |
| PCIe Slot                     | PCIe 3.0 x8 slot (x4 link) add-on card (optional)   |
| Size (H x W x D) (mm)         | 166 x 282 x 243   |
| Weight (kg)                   | 5.05  |
| Supported Clients             | <ul style="list-style-type: none"> <li>• Windows 7 and 10</li> <li>• Mac OS X 10.11 onward</li> </ul>   |
| File Systems                  | <ul style="list-style-type: none"> <li>• Internal: Btrfs, ext4</li> <li>• External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT<sup>1</sup></li> </ul>  |
| Supported RAID Types          | <ul style="list-style-type: none"> <li>• Basic • JBOD • RAID 0 • RAID 1</li> <li>• RAID 5 • RAID 6 • RAID 10</li> <li>• Synology Hybrid RAID (Up to 2-Disk Fault Tolerance)</li> </ul>  |
| Agency Certifications         | • FCC Class B • CE Class B • BSMI Class B   |
| HDD Hibernation               | Yes   |
| Scheduled Power On/Off        | Yes   |
| Wake on LAN                   | Yes   |
| Language Localization         | <ul style="list-style-type: none"> <li>• English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk</li> <li>• Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu</li> <li>• Türkçe • Český • 日本語 • 한국어 • 繁體中文 • 简体中文</li> </ul>    |
| Environment Requirements      | <ul style="list-style-type: none"> <li>• Line voltage: 100V to 240V AC</li> <li>• Frequency: 50 / 60 Hz</li> <li>• Operating Temperature: 32 to 104°F (0 to 40°C)</li> <li>• Storage Temperature: -5 to 140°F (-20 to 60°C)</li> <li>• Relative Humidity: 5% to 95% RH</li> </ul> |

**Note:** Model specifications are subject to change without notice. Please refer to [www.synology.com](http://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.

# LED Indicator Table

| LED Indicator                       | Color  | Status   | Description                      |
|-------------------------------------|--------|----------|----------------------------------|
| STATUS                              | Green  | Static   | Volume normal                    |
|                                     | Orange | Blinking | Volume degraded / Volume crashed |
|                                     |        |          | Volume not created               |
|                                     |        |          | DSM not installed                |
|                                     | Off    |          | HDD Hibernation                  |
| ALERT                               | Orange | Blinking | Fan failure / Over temperature   |
|                                     |        | Off      | System normal                    |
| Power                               | Blue   | Static   | Powered on                       |
|                                     |        | Blinking | Booting up / Shutting down       |
|                                     |        | Off      | Powered off                      |
| Front LAN                           | Green  | Static   | Network connected                |
|                                     |        | Blinking | Network active                   |
|                                     |        | Off      | No network                       |
| Rear LAN<br>(on right side of jack) | Green  | Static   | 1 Gbps connected                 |
|                                     | Orange | Static   | 100 Mbps connected               |
|                                     |        | Off      | 10 Mbps connected / No network   |
| Rear LAN<br>(on left side of jack)  | Green  | Static   | Network connected                |
|                                     |        | Blinking | Network active                   |
|                                     |        | Off      | No network                       |
| Drive Status<br>(on tray)           | Green  | Static   | Drive ready and idle             |
|                                     |        | Blinking | Accessing drive                  |
|                                     | Orange | Static   | Drive error <sup>1</sup>         |
|                                     |        | Off      | No internal drive                |

**Note:** Model specifications are subject to change without notice. Please refer to [www.synology.com](http://www.synology.com) for the latest information.

<sup>1</sup> Please try to restart your DiskStation or re-insert the drive(s), and then run the HDD/SSD manufacturer's diagnostic tool to check the health status of the drive(s). If you can log into DSM, please run the built-in S.M.A.R.T. test to scan the drive(s). If the problem remains unresolved, please contact Synology Technical Support for help.

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request.

Section 11. Disclaimer of Warranties. EXCEPT AS EXPRESSLY SET FORTH ABOVE, THE SOFTWARE IS PROVIDED "AS IS" AND WITH ALL FAULTS. SYNOLOGY AND ITS SUPPLIERS HEREBY DISCLAIM ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, ARISING BY LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, TITLE AND NONINFRINGEMENT, WITH REGARD TO THE SOFTWARE. WITHOUT LIMITING THE FOREGOING, SYNOLOGY DOES NOT WARRANT THAT THE SOFTWARE WILL BE FREE OF BUGS, ERRORS, VIRUSES OR OTHER DEFECTS.

Section 12. Disclaimer of Certain Damages. IN NO EVENT WILL SYNOLOGY OR ITS LICENSORS BE LIABLE 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 OF OR INABILITY TO USE THE SOFTWARE OR OTHERWISE UNDER OR IN CONNECTION WITH THIS EULA OR THE SOFTWARE, WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHER THEORY EVEN IF SYNOLOGY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

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 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 waives those rights and agrees 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. 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.

### Section 1. Products

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

(b) "New Product", includes: (1) "Category I Product" means Synology product models RS810+, RS810RP+, RX410, all FS-series models, all DS/RS NAS models with the XS+/XS suffix (except RS3413xs+) in or after 13-series, all DX/RX/RXD expansion units with 12 or more drive bays in or after 13-series, 10GbE NIC, ECC DDR4 and ECC DDR3 memory modules. (2) "Category II Product" means Synology product models RS3413xs+, RS3412xs, RS3412RPxs, RS3411xs, RS3411RPxs, RS2211+, RS2211RP+, RS411, RS409RP+, RS409+, RS409, RS408-RP, RS408, RS407, DS3612xs, DS3611xs, DS2411+, DS1511+, DS1010+, DS509+, DS508, EDS14, RX1211, RX1211RP, RX4, DX1211, DX510, DX5, NVR1218, NVR216, VS960HD, VS360HD, VS240HD, M2D17, and all other non-ECC memory modules not included in Category I. (3) "Category III Product" means Synology product models that match the following requirements: all DS NAS models without the XS+/XS suffix and with 5 and more drive bays in or after 12-series, all RS NAS models without the XS+/XS suffix in or after 12-series, and all DX/RX expansion units with 4 or 5 drive bays in or after 12-series. (4) "Category IV Product" means all other Synology product models purchased by Customer after March 1, 2008. (5) "Category V Product" means all other Synology product models purchased by Customer before February 29, 2008 and any "spare parts" purchased directly from Synology.

(c) "Refurbished Product" means all Synology products which have been refurbished and sold directly by Synology through Online Store, not including those sold by an authorized Synology distributor or reseller.

(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 date the Product is purchased by customer and ending (1) five years after such date for Category I Products; (2) three years after such date for Category II & III Products; (3) two years after such date for Category IV Products; (4) one year after such date for Category V Products; or (5) 90 days after such date for Refurbished Products, except for those sold as "as is" or with "no warranty" on Online Store.

(b) "Extended Warranty Period" : For Customer purchasing EW201 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 optional service will be extended by two years.

### Section 3. Limited Warranty and Remedies

3.1 Limited Warranty. Subject to Section 3.6, 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 which shall be subject to the accompanying end user license agreement provided with the Product, if any. Synology provides no warranty to Refurbished Product sold as "as is" or with "no warranty" on Online Store.

3.2 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, or (b) replace the noncomplying Product or part thereof upon return of the complete Product in accordance with Section 3.3 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. The warranty set forth in Section 3.1 does not include: (1) any warranty relating to the Software; (2) physical installation or removal of the Product from Customer's site; (3) visits to Customer's site; (4) labor necessary to effect repairs or replace defective parts other than during Synology's or its contracted service providers' normal local business hours, exclusive of weekends and service providers' holidays; (5) any work with any third party equipment or software; (6) any warranty of the hard disk if installed by Customer or any other third party; or (7) any warranty of compatibility with the hard disk.

3.3 Return. Any Product returned by Customer under Section 3.2 must be assigned a Return Merchandise Authorization



("RMA") number by Synology before shipment and must be returned in accordance with Synology's then current RMA procedures. Customer may contact any authorized Synology distributor or reseller or Synology Support to obtain assistance in obtaining an RMA, and must provide proof of purchase and product serial number when asking for such assistance. For warranty claims, Customer must return the complete Product to Synology in accordance with this Section 3.3 to be eligible for coverage under this Warranty. Any Product returned without an RMA number, or any Product that has been disassembled (except under the direction of Synology) will be refused and returned to Customer at Customer's expense. Any Product that has been assigned a RMA number 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 and with the RMA number prominently displayed on the outside of the box. Customer is responsible for insurance and risk of loss with respect to returned items until they are properly received by Synology. A Product with a RMA number must be returned within fifteen (15) days after issuance of the applicable RMA number.

3.4 Replacement 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 3.3 and validation by Synology that the Product does not conform to the warranty. 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").

3.5 Support. During the Warranty Period, Synology will make available to Customer the support services. Following the expiration of the applicable Warranty Period, support for Products may be available from Synology upon written request.

3.6 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; (b) has been repaired, modified or altered by anyone other than Synology or its agent or designee; (c) has been in any way misused, abused, or damaged; (d) has been used with items not provided by Synology other than the hardware or software for which the Product is designed; or (e) otherwise fails to conform to the Product specifications and such failure is attributable to causes not within or under Synology's control. Further, the foregoing warranties will be void if (1) Customer disassembles the Product except as authorized by Synology; (2) Customer fails to implement any correction, modification, enhancement, improvement or other update made available to Customer by Synology; or (3) Customer implements, installs or uses any correction, modification, enhancement, improvement or other update made available by any third party. The warranty set forth in Section 3 will terminate upon Customer's sale or transfer of the Product to a third party.

3.7 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.