

Synology RackStation RS3412xs/RS3412RPxs

Quick Installation Guide

Synology_QIG_RS3412xs&RS3412RPxs_20140114

Table of Contents

Chapter 1: Before You Start

Package Contents	3
Synology RackStation at a Glance	4
Safety Instructions	6

Chapter 2: Hardware Setup

Tools and Parts for Hard Disk Installation	7
Install Hard Disks	7
Add a RAM Module on RackStation	8
Add a Network Interface Card on RackStation	10
Start Up Your RackStation	12

Chapter 3: Install DSM on RackStation

Install from Windows	
Install from Mac OS X	
Install from Linux	
Learn More	

Appendix A: Specifications

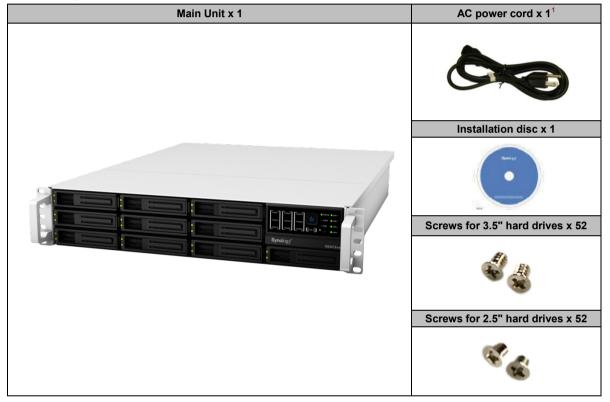
Appendix B: LED Indication Table

Chapter

Before You Start

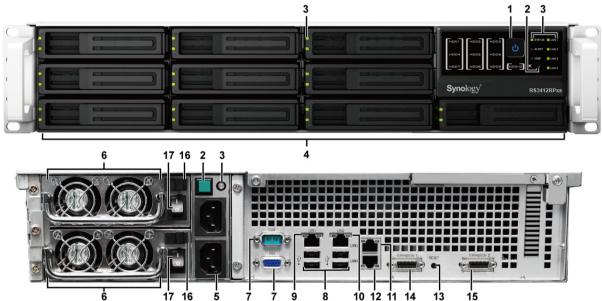
Before you start setting up RackStation, please check the package contents to verify that you have received the items below. Please also read the safety instructions carefully before use to prevent your RackStation from any damages.

Package Contents



¹ AC power cord: RS3412xs x 1; RS3412RPxs x 2

Synology RackStation at a Glance



No.	Article Name	Location	Description	
			The Power Button is used to turn Synology RackStation on or off.	
1)	Power Button	Front Panel	To turn off Synology RackStation, press the Power Button and hold it until you hear a beep sound and the Power LED starts blinking.	
2)	Beep off Button	Front & Back Panel	The Beep off Button is used to turn off the beep sound of Synology RackStation.	
3)	LED Indicators	Front & Back Panel	The LED indicator is used to display the status of the internal disk and the system. For more information, see "Appendix B: LED Indication Table" on Page 20.	
4)	Hard Drive Trays	Front Panel	The hard drive tray is designed for loading the hard drives used in Synology RackStation.	
5)	Power Port	Back Panel	The power port is where you connect the power cord to Synology RackStation.	
			The power fans are built to exhaust waste heat out of the power supply.	
6)	Fan	Back Panel	The system fans (inside RackStation) are built to exhaust waste heat out of RackStation. If the fan is not working, the RackStation will "beep" every few seconds.	
7)	Console Port & VGA Port	Back Panel	This port is used for manufacturing use only.	
8)	USB Port	Back Panel	The Synology RackStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.	
9)	LAN 1			
10)	Back Panel The LAN Port is V	The LAN port is where you connect RJ-45 cable to		
11)		Synology RackStation.		
12)	LAN 4			
13)	RESET Button	Back Panel	 To restore IP, DNS, passwords for the admin account to default value. To reinstall the Synology RackStation. 	

No.	Article Name	Location	Description
14)	Expansion 1	Back Panel	The Expansion port is used to connect Synology Expansion Unit ¹ to
15)	Expansion 2	Dack Fallel	Synology RackStation.
16)	Power Supply Safety Latch ²	Back Panel	The power supply safety latch is used to secure the power supply in place.
17)	Power Supply On/Off Switch	Back Panel	The power supply on/off switch is used to turn on/off the power supply.

¹ For more information about Synology Expansion Unit supported by your RackStation, visit www.synology.com. ² RS3412RPxs only.

Safety Instructions

Keep away from direct sunlight and away from chemicals. Make sure the environment does not experience abrupt changes in temperature or humidity.
Keep Synology product upright. Do not lay it down horizontally.
Do not place the Synology product close to any liquid.
Before cleaning, unplug the power cord first. Wipe Synology product with damp paper towels. Do not use chemical or aerosol cleaners to clean it.
Do not place the Synology product on a cart, table, or desk, which is not stable to avoid the product from falling over.
The power cord must plug in to the right supply voltage. Make sure that the supplied AC voltage is correct and stable.
To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.

Hardware Setup

Chapter

Tools and Parts for Hard Disk Installation

- A screwdriver
- At least one 3.5" or 2.5" SATA hard disk (Please visit www.synology.com for compatible hard disk models.)

Warning: If you install a hard disk that contains data, system will format the hard disk and erase all data. If you still need the data, please back it up before installation.

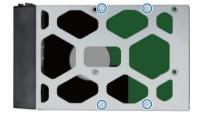
Install Hard Disks

1 Pull the hard drive try handle in the direction as indicated below to remove the hard drive tray.

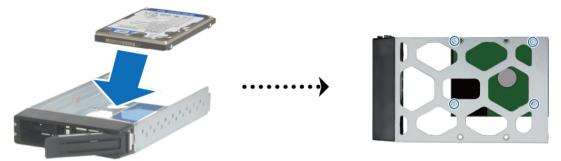


- 2 Load the hard disk in the hard drive tray.
 - For 3.5" Hard Disk: Place the hard disk in the hard drive tray, turn the tray upside down, and then tighten the screws to secure the hard disk.





• For 2.5" Hard Disk: Place the hard disk in the blue area (shown below) of the hard drive tray, turn the tray upside down, and then tighten the screws to secure the hard disk.



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



Important: Make sure the tray is pushed in all the way. Otherwise, the hard disk might not be able to function properly.

- 4 Push the hard drive tray handle to secure the hard drive tray.
- 5 Repeat the steps above to assemble all hard disks you have prepared.

Note: If you want to set up a RAID set, it is recommended that all installed hard disks are of the same size to make the best use of hard disk capacity.

Add a RAM Module on RackStation

Synology RAM module 1GB/2GB is designed for RackStation memory expansion, and is optional for your choice. Follow the steps below to install, check, or remove your RAM module.

Install the RAM Module

1 Shut down your RackStation. Disconnect all cables connected to your RackStation to prevent any possible damages.

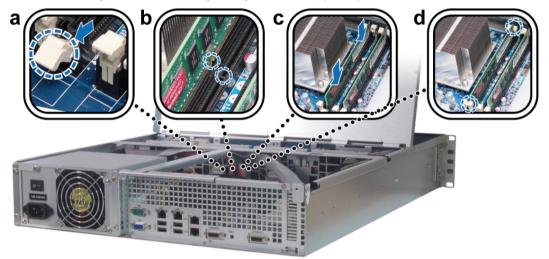
Important: Before installing the RAM module, please wait for at least 30 seconds after detaching the power cord(s) from the RackStation to ensure complete discharge. Also, please remove any static electricity before installation by touching water pipes, a metal conduit, or another person to get rid of excess charge and avoid damaging the motherboard, peripherals, and other components.

2 Remove the 2 screws on the back of RackStation, and then pull the top cover.



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

- 3 Insert the new memory module in the slot:
 - a Open the ejectors on the memory slot and push them out to the sides.
 - **b** Align the notch on the gold edge of the module with the notch in the memory slot.
 - **c** Use two fingers with firm, even pressure to push down on the memory module.
 - **d** When the memory is inserted correctly, the ejectors will snap into place.



Important: Hold the memory module by its edges, and do not touch the gold connectors.

4 Replace the top cover. Replace and tighten the 2 screws you removed in step 2.

Make Sure RackStation Recognizes the New Memory Capacity

After installing the memory module on RackStation, it's recommended that you check whether the server recognizes the new memory.

To check the memory of your RackStation:

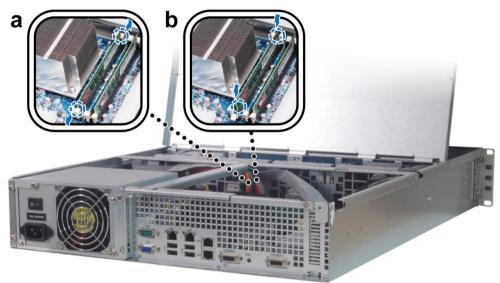
- 1 Start up your RackStation. (See "Start Up Your RackStation" on Page 12 for more information.)
- 2 Install DSM. (See "Chapter 3: Install " on Page 13 for more information.)
- **3** Log in to Synology DiskStation Manager (DSM).
- 4 Check Total Physical Memory in Main Menu > System Information.

Basic information		
Server name	RackStation	
Serial number	A4G7N00620	
Model name	RS3412xs	
Total Physical Memory	4096 MB	

If your RackStation doesn't recognize the memory or doesn't start up correctly, check out if the memory is installed correctly.

Remove the RAM Module from RackStation

- 1 Follow step 1 to 2 of the "Install the RAM Module" section to open the cover of your RackStation.
- 2 Remove the RAM module.
 - **a** Open the ejectors on the memory slot and push them out to the sides.
 - **b** Hold the memory module by its notches and remove it from the slot.



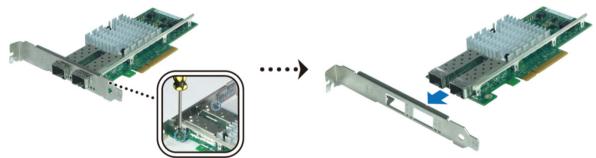
3 Replace the top cover. Replace and tighten the 2 screws you removed in step 1.

Add a Network Interface Card on RackStation

Your RackStation has a PCI Express expansion slot which allows you to install 10G/E or Gigabit network interface card for LAN port expansion.¹ You need to replace the long bracket (suited for PC) in your network interface card with the short bracket (suited for 2U RackStation) before installing the card on your RackStation.

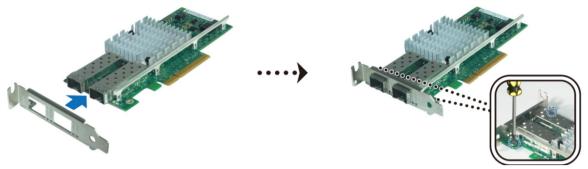
To replace the long bracket with the short one:

1 Unscrew the 2 screws in the long bracket on your network interface card, and then remove the bracket.



¹ For more information about supported 10G/E or Gigabit network interface cards, visit www.synology.com.

2 Replace the long bracket with the short one, and tighten the 2 screws to secure the short bracket.

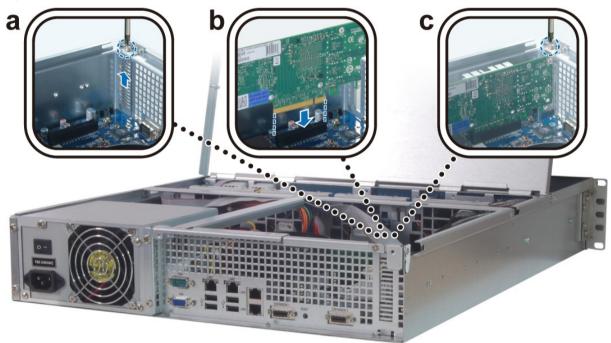


To install the network interface card:

- 1 Follow step 1 to 2 of "Install the RAM Module" on Page 8 to open the cover of your RackStation.
- 2 Install the network interface card.
 - a Unscrew the screw in the port access cover on your RackStation, and then remove the access cover.
 - **b** Align the card's connector with the expansion slot, and then insert the card into the slot.

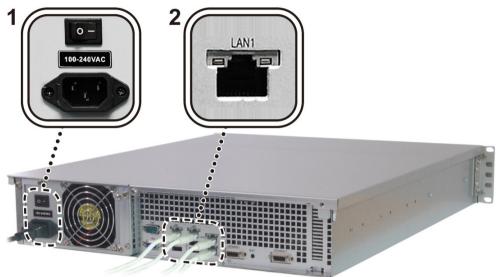
Important: Make sure the connector is fully inserted. Otherwise, the network interface card might not be able to function properly.

c Tighten the screw to secure the network interface card.



Start Up Your RackStation

- 1 Connect one end of the power cord to the Power port of RackStation, and the other to the power outlet. Make sure the Power Supply On/Off Switch is turned on ("-").
- 2 Use the LAN cable to connect RackStation to your switch/router/hub.



3 Push the Power button to turn on your RackStation.



Your RackStation is now online and detectable from a network computer.

Install DSM on RackStation

On a network computer, follow the steps in this chapter to install DSM on your RackStation. After DSM is installed, you can manage all features of your RackStation by logging in to DSM with a web browser.

Install from Windows

1 Insert the installation disc into your computer, and click Start. Follow the onscreen instructions to complete the setup process.



2 Synology Assistant will be installed and launched on your computer. It will search and find your RackStation within LAN, and the status of your RackStation should be **Not Installed**. Double-click your RackStation to start the setup process.

Management						Syn	ology
🔍 Search 🛛 🖁 Ins	tall 🛛 🗮 Map Driv	e 🖨 Add Prin	ter 🙂 Set Up W	′OL		*	0
Server name	IP address	IP status	Status	MAC address	Version	Model 🛆	Seria
cn1010p	192.168.35.166	DHCP	Not Configured	00:11:32:05:EA:E8	3.0-1337	DS1010+	A1GA
Diesel-DS1010p	192.168.32.40	Manual	Ready	00:11:32:07:48:2E	3.0-1335	DS1010+	A5GA
Diesel-DS1010p	192.168.37.132	DHCP	Ready	00:11:32:07:48:2F	3.0-1335	DS1010+	A5GA
RackStation	192.168.36.248	DHCP	Not installed	00:11:32:06:64:EF	3.2-1955	RS3412xs	A5GA

3 Click Browse to locate the DSM_[model name]_[number].pat installation file in the DSM folder of your installation disc. You can also download the latest version of DSM from Synology Download Center.

Synology Assistant - Setup Wizard	
Welcome to the Setup Wizard!	
Your DiskStation has not installed any DSM. Setup Wizard will help you install DSM and complete the b configurations.	pasic
Note! All data in the hard drive(s) will be deleted.	
Please input the path of installation file.	
D:\DSM\DSM_RS3412xs_3.2-1955.pat	Browse
Next >	Cancel

4 Follow the onscreen instructions to complete the setup process.

After the installation process is finished, you can manage your RackStation with Synology DiskStation Manager (DSM). For more information about managing your RackStation with DSM, refer to Synology DiskStation User's Guide available at Synology Download Center.

Install from Mac OS X

1 Insert the installation disc into your computer, and then double-click the **SynologyInstall** icon on the desktop.



2 In the window that appears, double-click the MacOSX folder, and then double-click Synology Assistant-[number].dmg.



3 Double-click the Synology Assistant.app in the window that appears.



4 Follow step 2 to 4 of the "Install from Windows" section to finish setup.

Install from Linux

The Linux version is optimized for **Ubuntu** distribution version 8 and 9. You can still try installation on other Linux distributions (for evaluation purpose only).

Install and Run Synology Assistant

You can install and run Synology Assistant using the command lines or the GUI.

If you want to install using the command lines:

Run the script install.sh in the Linux folder of the installation disc, which will guide you through the steps below.

1 Remove the beta version of Synology Assistant (if any).

```
sudo rm -rf /usr/local/Synology /usr/local/bin/SynologyAssistant
```

2 Extract SynologyAssistant-[number].tar.gz to the directory you want, such as "/usr/local" or "."

tar -C ./ -zxvf SynologyAssistant-[number].tar.gz

3 If you are using 64bit Ubuntu, install the 32bit libraries.

sudo apt-get install ia32-libs

4 Create the shortcut to /usr/local/bin.

sudo ln -sf /path/install/SynologyAssistant/SynologyAssistant \

/usr/local/bin/SynologyAssistant

5 To run Synology Assistant, you can either use the following command:

/path/install/SynologyAssistant/SynologyAssistant

Or run the shortcut:

/usr/local/bin/SynologyAssistant

If /usr/local/bin exists in your environment variable \$PATH, just type:

SynologyAssistant

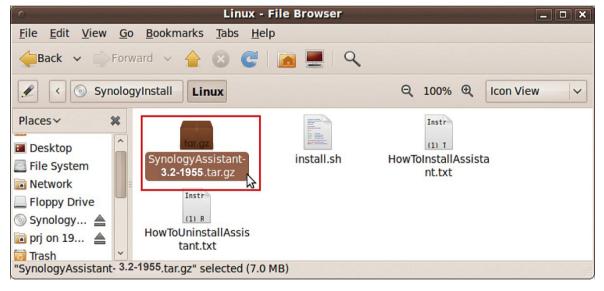
If you want to install using the GUI:

- 1 Go to /usr/local and /usr/local/bin and delete the following folders (if any): Synology, SynologyAssistant
- 2 Insert the installation disc into your computer, and then double-click the SynologyInstall icon on the desktop.



SynologyInstal

3 In the File Browser window that appears, double-click the Linux folder, and then double-click Synology Assistant-[number].tar.gz.



4 Click Extract, and then extract the SynologyAssistant directory to /usr/local or any other path.

	x		
on: 📄 /			
Size	Туре	Date Modified	
15.8 MB	Folder	03 November 2009, 14:41	
	Size	Size Type	Size Type Date Modified

Important: If you are using 64bit Ubuntu, you have to install the 32bit libraries before proceeding. To install, type the following command in Terminal:

```
sudo apt-get install ia32-libs
```

5 Go to /usr/local/SynologyAssistant (or [the path you just specified]/SynologyAssistant), double-click SynologyAssistant, and then select Run in Terminal in the dialog box that appears.

	SynologyAssistant - File B	rowser _ 🗆 🗙
<u>File Edit View Go</u> Bo		
Back V Forward	✓	9
🖉 🔄 usr local Sy	vnologyAssistant	Q 100% € Icon View ∨
Places ✓ ¥ i chris4461 I i Desktop I i File System I	lib SynologyAssi:	stant SynologyAssistant.
 Network Floppy Drive Synology prj on 19 "SynologyAssistant" selected 	or display its co	run "SynologyAssistant", ntents? s an executable text file.
	Run in <u>T</u> erminal <u>D</u> ispla	y <u>Cancel R</u> un

Install DSM on RackStation

When you have activated Synology Assistant, follow step 2 to 4 of the "Install from Windows" section to finish setup.

Learn More

Congratulations! Your RackStation is set up now. Refer to the User's Guide in the installation disc for advanced settings and management. For more information or online resources about your RackStation, please visit www.synology.com.

CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

Specifications



Item	RS3412xs/RS3412RPxs
Internal HDD	3.5" or 2.5" SATA (II) x 10
	• 30TB (10 x 3TB hard drives)
Max. Capacity	 100TB with RX1211/RX1211RP (expansion unit)
Hot Swappable HDD	Yes
External HDD Interface	• USB 2.0 x 4
	 Expansion port x 2 (Infiniband)
LAN Port	Gigabit x4 (optional 10 GbE X2 add-on card is supported)
Copy Button	No
Size (HxWxD) (mm)	88 X 445 X 570
Maight (Kg)	• RS3412xs: 12.77
Weight (Kg)	• RS3412RPxs: 14.87
	Windows XP onward
Supported Clients	Mac OS X 10.5 onward
	Ubuntu 9.04 onward
Max. User Accounts	4096
Max. Group Accounts	512
Max. Shared Folders	512
Max. Concurrent Connections	1024
Max. Supported IP Cameras	50
File System	• EXT4
	EXT3 • FAT • NTFS (External Disk, Read/Write)
Volume Type	 Basic → JBOD → RAID 0 → RAID 1 RAID 5 → RAID 5+Spare → RAID 6 → RAID 10 Synology Hybrid RAID
Agency Certifications	FCC Class A · CE Class A · BSMI Class A
HDD Hibernation	Yes
Deep Sleep for Expansion Unit	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・繁體中文・简体中文
Power Consumption And Environment Requirements	 Line voltage: 100V to 240V AC Frequency: 50/60Hz Operating Temperature: 40 to 95°F (5 to 35°C) Storage Temperature: 15 to 155°F (-10 to 70°C) Relative Humidity: 5% to 95% RH Maximum Operating Altitude: 10000 feet (3048m)

LED Indication Table

Appendix

LED Indication	Color	Status	Description
STATUS	Green	Static	Volume Normal
		Off	HDD Hibernation
	Orange	Static -	Available volume space < 1GB
			Available volume space < 1 %
		Blinking	Volume degraded or crashed
			No volume
LAN	Green	Static	Gigabit Link
		Blinking	Network is active
		Off	Network is down
	Orange	Static	10/100 Link
10G/E ¹	Blue	Static	10G/E card is inserted
10G/E	Off	Off	No 10G/E card
Hard Drive Status Indicator (on tray)	Green	Static	Disk ready
		Off	No internal disk
	Orange	Static	Cannot Read/ Write
Hard Drive Activity Indicator	Green	Blinking	Disk is being accessed
(on tray)		Off	Disk is idle
POWER	Blue	Static	Power ready
		Blinking	Booting up
			Shutting down
		Off	Power off
RPS-STATUS ²	Green	Static	Both power supplies are working
		Blinking	1 power supply is not working
		Off	Power off

¹ For more information about supported 10G/E or Gigabit network interface cards, visit www.synology.com. ² RS3412RPxs only

LED Indication	Color	Status	Description
ALERT	Orange	Blinking	System fan is not working
			Over temperature
		Off	System fan normal
			Temperature normal

SYNOLOGY, INC. END USER LICENSE AGREEMENT

IMPORTANT-READ CAREFULLY: THIS END USER LICENSE AGREEMENT ("EULA") IS A LEGAL AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR A SINGLE ENTITY) AND SYNOLOGY, INC. AND ITS AFFILIATES, INCLUDING SYNOLOGY AMERICAN CORP AND SYNOLOGY UK LTD., (COLLECTIVELY, "SYNOLOGY") FOR ANY SYNOLOGY SOFTWARE, TOGETHER WITH ANY OTHER ASSOCIATED FIRMWARE, MEDIA, PRINTED MATERIALS AND "ONLINE" OR ELECTRONIC DOCUMENTATION (COLLECTIVELY, THE "SOFTWARE") AVAILABLE FOR DOWNLOAD AT WWW.SYNOLOGY.COM OR PROVIDED WITH OR INSTALLED ON A SYNOLOGY PRODUCT (THE "PRODUCT").

YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA BY OPENING THE PACKAGE CONTAINING THE SOFTWARE, INSTALLING THE SOFTWARE NOT OTHERWISE PRE-INSTALLED BY SYNOLOGY ON A PRODUCT OR OTHERWISE USING A PRODUCT THAT INCLUDES PRE-INSTALLED SOFTWARE. IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, DO NOT OPEN THE BOX CONTAINING THE PRODUCT, INSTALL THE SOFTWARE OR USE THE PRODUCT CONTAINING THE SOFTWARE. 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. Limited Software License. Subject to the terms and conditions of this EULA, Synology grants you a limited, non-exclusive, non-transferable, personal license to install, run and use one copy of the Software on the Product solely in connection with your authorized use of the Product.

Section 2. Documentation. You may make and use a reasonable number of copies of any documentation provided with the Software; provided, that such copies will only be used for internal business purposes and are not to be republished or redistributed (either in hard copy or electronic form) to any third party.

Section 3. Backup. You may make a reasonable number of copies of the Software for backup and archival purposes.

Section 4. Updates. Any software provided to you by Synology or made available on the Synology web site at www.synology.com ("Web Site") that updates or supplements the original Software is governed by this EULA unless separate license terms are provided with such updates or supplements, in which case, such separate terms will govern.

Section 5. License Limitations. The license set forth in Section 1 applies only to the extent you have ordered and paid for the Product and it states the entirety of your rights with respect to the Software. Synology reserves all rights not expressly granted to you in this EULA. Without limiting the foregoing, you will not, and you will not authorize or permit any third party to: (a) use the Software for any purpose other than in connection with the Product; (b) license, distribute, lease, rent, lend, transfer, assign or otherwise dispose of the Software or use the Software in any commercial hosted or service bureau environment; (c) reverse engineer, decompile, disassemble or attempt to discover the source code for or any trade secrets related to the Software, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation; (d) adapt, modify, alter, translate or create any derivative works of the Software; (e) remove, alter or obscure any copyright notice or other proprietary rights notice on the Product; or (f) circumvent or attempt to circumvent any methods employed by Synology to control access to the components, features or functions of the Product or Software.

Section 6. Open Source. The Software may contain components licensed to Synology under the GNU General Public License ("GPL Components"), currently available at http://www.gnu.org/licenses/gpl.html. The terms of the GPL will control solely with respect to the GPL Components to the extent that this EULA conflicts with the requirements of the GPL with respect to your use of the GPL Components, and, in such event, you agree to be bound by the GPL with respect to your use of such components.

Section 7. Audit. Synology will have the right to audit your compliance with the terms of this EULA. You agree to grant access to Synology to facilities, equipment, books, records

and documents and to otherwise reasonably cooperate with Synology in order to facilitate any such audit.

Section 8. Ownership. The Software is valuable property of Synology and its licensors and is protected by copyright and other intellectual property laws and treaties. Synology or its licensors own all right, title and interest in and to the Software and all copyright and other intellectual property rights in the Software.

Section 9. Limited Warranty. Synology warrants that for a period of ninety (90) days after either your (a) installation of the Software on Products that do not include pre-installed Software or (b) use of a Product that includes pre-installed Software, as applicable, (the "Warranty Period"), the Software will substantially conform to Synology's published specifications for the Software, if any, or otherwise set forth on the Web Site. Synology will use commercially reasonable efforts to, in Synology's sole discretion, either correct any such nonconformity in the Software or replace any Software that fails to comply with the foregoing warranty, provided that you give Synology written notice of such noncompliance within the Warranty Period. The foregoing warranty does not apply to any noncompliance resulting from any: (w) use, reproduction, distribution or disclosure not in accordance with this EULA; (x) any customization, modification or other alteration of the Software by anyone other than Synology; (y) combination of the Software with any product, services or other items provided by anyone other than Synology; or (z) your failure to comply with this EULA.

Section 10. Support. During the Warranty Period, Synology will make available to you the support services. Following the expiration of the applicable Warranty Period, support for Software may be available from Synology upon written request.

Section 11. Disclaimer of Warranties. EXCEPT AS EXPRESSLY SET FORTH ABOVE, SYNOLOGY AND ITS SUPPLIERS PROVIDE THE SOFTWARE "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 WARRANTIES OF IMPLIED MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, TITLE AND NONINFRINGEMENT, WITH REGARD TO THE SOFTWARE. WITHOUT LIMITING THE FOREGOING, DOES NOT WARRANT THAT SYNOLOGY 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 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 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 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. U.S. Government License Rights. All Software provided to the U.S. Government is provided with the commercial license rights and restrictions described in this EULA. By installing, copying or using the Software, the U.S. Government agrees that the Software is "commercial computer software" or "commercial computer software documentation" within the meaning of FAR Part 12.

Section 16. 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 17. Assignment. You may not transfer or assign your rights under this EULA to any third party. Any such transfer or assignment in violation of the foregoing restriction will be void.

Section 18. Applicable Law. Unless expressly prohibited by local law, this EULA is governed by the laws of the State of Washington, U.S.A. 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.

Section 19. Dispute Resolution. Any dispute, controversy or claim arising out of or relating to this Warranty, the Software or services provided by Synology with respect to the Software or the relationship between you and Synology will be resolved exclusively and finally by arbitration under the current commercial rules of the American Arbitration Association if you reside in the United States, except as otherwise provided below. In such cases, the arbitration will be conducted before a single arbitrator, and 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 classwide 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. 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 classaction 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 19. If you do not reside 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 EULA relating to Synology's intellectual property rights.

Section 20. 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 21. 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 22. 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 AND SYNOLOGY UK LTD., (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. Definitions. (a) New Product, including: (1) "<u>Category I Product</u>" means Synology product models RS810+, RS810RP+, and RX410 (2) "<u>Category II Product</u>" means Synology product models RS3411xs, RS3411RPxs, RS2211RP+, RS411, RS409RP+, RS409+, RS409, RS408-RP. RS408. RS407. DS3611xs. DS2411+. DS1511+. DS1010+, DS710+, DS509+, DS508, RX1211, RX1211RP, RX4, DX1211, DX510, DX5, VS240HD and RAM Module (1GB/2GB/4GB/8GB). (3) "Category III Product" means Synology product models that apply with the following requirements: 12 and newer DS, DX series products with 5bay and above, or 12 and newer RS, RX series products. (4) "Category IV Product" means all other Synology product models purchased by Customer after March 1, 2008. (5) "<u>Category V Product</u>" means all other Synology product models purchased by Customer before February 29, 2008. (b) "<u>Refurbished Product</u>" 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. (c) "Customer" means the original person or entity purchasing the Product from Synology or an authorized Synology distributor or reseller. (d) "Online Store" means a online shop operated by Synology or Synology's affiliate. (e) "Product" means a New Product or a Refurbished Product and any hardware incorporated into the Product by Synology and any accompanying documentation. (f) "<u>Software</u>" means the Synology proprietary software that accompanies the Product when purchased by Customer, is downloaded by Customer at 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. (g) "Warranty Period" means the period commencing 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 Products; or (3) two years after such date for Category III Products; or (4) one year after such date for Category IV 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. (h) "Web Site" means the Synology web site located at www.synology.com.

Section 2. Limited Warranty and Remedies

2.1 Limited Warranty. Subject to Section 2.7, Synology warrants to 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. Synology warrants the Software as set forth in 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.

2.2 Product Registration. Customers may register Products with Synology and may obtain the manufacturing date for Category I Products, Category II Products and Category III Products at the Web Site. The failure to register a Product at the Web Site will not diminish the warranty rights set forth in Section 2.1. Synology is not responsible for Customer's failure to identify the manufacturing date of any Product.

Exclusive Remedy. If Customer gives notice of 2.3 noncompliance with any of the warranties set forth in Section 2.1 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 2.4 The foregoing sets forth Synology's entire liability and Customer's sole and exclusive remedy for any breach of warranty under Section 2.1 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 2.1 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.

Return. Any Product returned by Customer under 24 Section 2.3 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 2.4 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 A Product issued a RMA number must be Synology. returned within fifteen (15) days after issuance of the applicable RMA number.

2.5 **Replacement by Synology.** If Synology elects to replace any Product under this Warranty set forth in Section 2.1, 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 2.4 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").

2.6 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.

27 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 2.1 will terminate upon Customer's sale or transfer of the Product to a third party.

28 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 OTHER AND DISCLAIMS, ALL 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 PÉRFORMANCE, COURSE OF DEALING, OR USAGE OF TRADE; (C) CLAIM OF INFRINGEMENT OR MISAPPROPRIATION; OR (D) CLAIM TORT IN (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 THE PRODUCT. ON SOME STATES/JURISDICTIONS DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO CUSTOMER.

Section 3. Limitations of Liability

3.1 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).

3.2 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.

Limitation of Liability. SYNOLOGY'S AND ITS 3.3 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 4. Miscellaneous

4.1 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.

4.2 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.

4.3 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.

4.4 Applicable Law. Unless expressly prohibited by local law, this Warranty is governed by the laws of the State of Washington, U.S.A. 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.

4.5 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 4.5. 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.

4.6 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.

4.7 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.

4.8 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.

4.9 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.