

# Synology Router RT1900ac

**User's Guide** 

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**Appendix A: Specifications** 

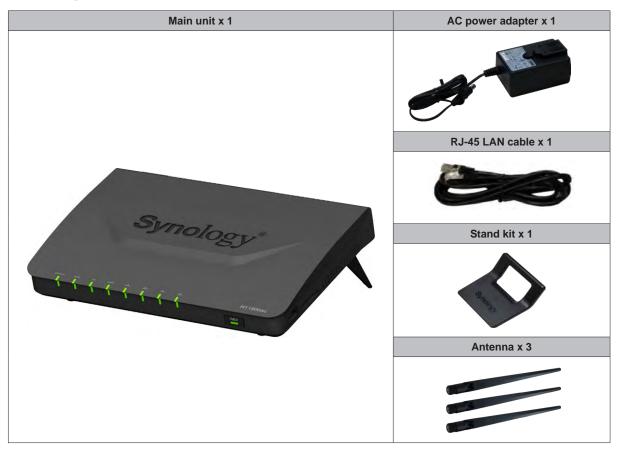
Appendix B: LED Indicator Table

# **Meet Your Synology Router**

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

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

# **Package Contents**



# **Synology Router at a Glance**



No.	Article Name	Location	Description
1	Antenna Base	Rear Panel	Install the included antennas here.
2	Power Button		Press to power on/off the Synology Router.
3	Power Port		Connect the AC power adapter here.
4	WAN Port		Connect a network cable from the ISP modem into this port to establish WAN connection.
5	LAN Port		Connect network cables into these ports to establish LAN connection.
6	RESET Button	Bottom Panel	Press and hold for four seconds (Soft Reset) or for ten seconds (Hard Reset). For more information, see "Reset Synology Router".
7	STATUS Indicator	Front Panel	Displays the status of the system.
8	2.4G Wi-Fi Indicator		Displays the status of 2.4G Wi-Fi connection.
9	5G Wi-Fi Indicator		Displays the status of 5G Wi-Fi connection.
10	WAN Indicator		Displays the status of WAN connection.
11	LAN Indicator		Displays the status of LAN connection.
12	Eject Button		Press to eject USB/SD external storages.     Displays the status of USB/SD external storages.
13	WPS Button	Lett Daniel	Press to start WPS.
14	Wi-Fi Switch	Left Panel	Switch to turn on/off the Wi-Fi network.
15	USB 3.0 Port	Right Panel	Connect an external drive, USB printer, or other types of USB devices here. For more information, see "Manage External Devices and Privileges".
16	SD Card Slot		Insert the SD card here.

Note: For LED indicator information, please refer to "Appendix B: LED Indicator Table".

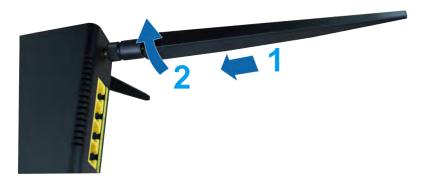
# **Safety Instructions**

	Keep away from direct sunlight and away from chemicals. Make sure the environment does not experience abrupt changes in temperature or humidity.
(Bojour's	Place the product right side up at all times.
	Do not place near any liquids.
	Before cleaning, unplug the power cord. Wipe with damp paper towels. Do not use chemical or aerosol cleaners.
	To prevent the unit from falling over, do not place on carts or any unstable surfaces.
	The power cord must plug in to the correct supply voltage. Make sure that the supplied AC voltage is correct and stable.
2 11 → =	To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.
**	Risk of explosion if battery is replaced with an incorrect type. Dispose of used batteries appropriately.

# **Set up Your Synology Router**

## **Install Antennas**

- 1 Point the antenna at the antenna base.
- 2 Turn clockwise until the antenna is secured.



**3** Repeat Steps 1 and 2 to install the other two antennas. For optimal Wi-Fi performance, tilt the antennas so that they are 45 degrees apart from each other.



# **Position Your Synology Router**

For optimal performance, it is recommended to position the Synology Router as advised below:

- · On a stable surface (e.g. an elevated shelf) from any possible physical interruptions during use
- Close to the center of the area where the wired/wireless client devices are placed, and within a visible distance from the wireless devices
- · In a position where few walls and ceilings are between your Synology Router and its client devices
- Away from any potential electrical signal sources, such as other Wi-Fi routers, 3G/4G bases, and microwave ovens
- · Away from large expanses of metal or other materials, such as metal doors, glass panels, and concrete.

Your Synology Router can be set in any of the following positions.

#### Place Flat on a Surface

Simply place the Synology Router flat on a horizontal, stable surface.

### Stand Upright with the Stand Kit

To place your Synology Router upright for better ventilation and space maximization, please follow the steps below:

1 Join the stand kit to the holes on the bottom shell of your Synology Router.





2 Apply even, firm pressure to push the stand kit upward until it is secured.



3 Place the kit-attached Synology Router on a horizontal, stable surface.

# **Start up Your Synology Router**

1 Push the button on the adapter provided in the package and pull out the plug case as illustrated below.

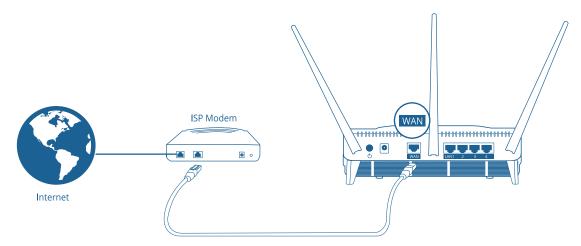


2 Slide the plug adapter provided into the slots by pushing it downward. Note that the plug adapter that comes with your Synology Router varies depending on your region. The image below is for reference only.

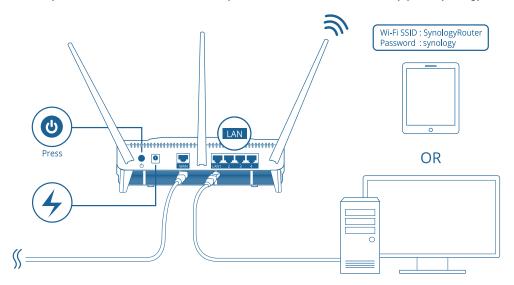


# **Connect to Your Synology Router**

1 Use the included network cable to connect your Synology Router (at the WAN port) to the ISP modem.



- 2 Connect one end of the power adapter to the power port on your Synology Router, and the other end to the power outlet. Press the power button to power on your Synology Router. Wait for up to two minutes until the STATUS and WAN LED indicators turn green.
- 3 Connect wired/wireless client devices to your Synology Router:
  - For wired devices: Use network cables to connect devices to the LAN ports. The corresponding LAN LED indicators should turn orange/green to indicate successful connection.
  - For wireless devices:
    - 1 Turn on the Wi-Fi switch on the Synology Router, and wait until the 2.4G/5G LED indicators turn static green to indicate it is ready to connect to other devices.
    - 2 Use your wireless device to scan and join the Wi-Fi network created by your Synology Router.



#### Note:

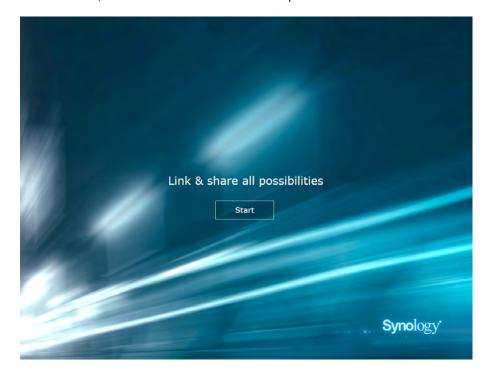
Below are the default credentials for the Wi-Fi network:

- 1. Wi-Fi SSID: SynologyRouter
- 2. Password: synology

The default credentials can be changed during the initial SRM setup.

# Set up Synology Router Manager (SRM)

- 1 Use a computer or wireless device connected to the Synology Router's local network. If you use a wireless device, scan and join the Wi-Fi network (SSID: **SynologyRouter**; Password: **synology**).
- 2 Open a web browser, and enter either URL into the address bar:
  - a http://router.synology.com
  - **b** http://192.168.1.1:8000
- 3 Once connected, click Start to launch the SRM Setup Wizard.



4 Fill in the information to set up the administrator account. Click Next to continue.



5 Fill in the information to set up the Wi-Fi network. Click Next to continue.



**6** Set up the operation mode. When choosing the Wireless Router mode, you can also enable External access to SRM so that only external access via the HTTP(S) port (e.g. 8000/8001) can reach SRM.



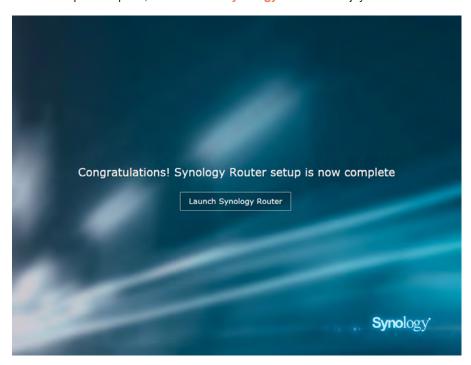
- 7 Choose an Internet connection type:
  - PPPoE: Choose this option if you have obtained PPPoE credentials from the ISP.
  - Manual IP: Choose this option if you have obtained an available IP address for use.
  - Auto IP: Choose this option if you rely on an ISP modem for automatic IP assignment.



**8** The wizard will continue to set up your Synology Router, and it may take up to three minutes to complete the setup.



9 After the setup is complete, click Launch Synology Router to enjoy SRM and its various features.



#### Note:

- Above is a general demonstration of the SRM setup steps. The steps and available options may somewhat vary depending on your device type (e.g. PC or wireless device), access type (LAN, WAN, or Wireless LAN), and chosen operation mode (Wireless Router or Wireless AP).
- 2. If the setup is completed with a wireless device, remember to download DS router for anywhere management of your Synology Router. To know more about this mobile application, see "DS router".

# **Choose the Operation Mode**

This chapter introduces the three wireless operation modes available to your Synology Router to suit your networking needs. To find the operation modes, please go to **Network Center > Administration > Operation Modes**.

## The Wireless Router

Under this mode, your Synology Router works as a regular router that transfers data between two networks (e.g. between a local network and the Internet) and finds the optimal path for data delivery. This mode also provides wireless connection to wireless devices for continuous access.

The Wireless Router mode is recommended in the scenarios below:

- When you need extra connection security (e.g. firewall, NAT, and DMZ)
- · When the connected client devices need wireless connection
- · When you need to create subnets within the local network

Below are the suggested usages:

#### If you have an ISP modem:

- 1 Connect your Synology Router (at the WAN port) with a network cable to the ISP modem (at the LAN port).
- 2 Configure basic network settings:
  - Decide how your Synology Router obtains the IP address (at Network Center > Internet > Connection >
     Connection Type).
  - Decide whether your Synology Router assigns IP addresses to its clients (at Network Center > Local Network > General > DHCP Server).
- 3 Configure advanced network settings (at Network Center > Internet or Local Network). For setting details, refer to the SRM help.

#### If you do not have an ISP modem:

- 1 Connect your Synology Router (at the WAN port) to the Internet (e.g. the Internet port on the wall/ground) with a network cable.
- 2 Decide how your Synology Router obtains the IP address (at Network Center > Internet > Connection > Connection Type).
- 3 Configure advanced network settings (at Network Center > Internet). For setting details, refer to the SRM help.

# The Wireless AP (Access Point)

Under this mode (also known as the Bridge mode), your Synology Router bridges all network interfaces (LAN, wireless LAN, and WAN) and therefore has five LAN ports (LAN 1-4 and WAN) available to wired clients.

As a wireless AP, the router cannot assign IP addresses to the clients (the **DHCP Server** is disabled) and works only as a wireless transmission device, sending/receiving data via Wi-Fi between wireless and wired networks.

The Wireless AP (Access Point) mode is recommended in the scenarios below:

- When your Synology Router (at LAN 1-4 or WAN port) is already connected to an ISP modem (at the LAN port) for Internet access
- · When the connected devices need wireless connection

**Note:** Under this mode, the Synology Router will not provide the following functions/settings under **Network Center:** Local Network, Traffic Control, and Parental Control.

## **The Wireless Client**

Under this mode, your Synology Router works as a Wi-Fi dongle (that is, a Wi-Fi client) and relies on the Wi-Fi signal from another router or access point for Internet access.

The Wireless Client mode is recommended in the scenario below:

• When you need Internet access, but a wired connection is hard to set up between your Synology Router and another router/ISP modem

Below is the suggested usage:

• Clients have to connect to the Synology Router (at the LAN port) with a network cable for Internet access.

#### Note:

- 1. Under this mode, your Synology Router must be within the range of the Wi-Fi source (e.g. a Wi-Fi router). If not, the received Wi-Fi signal may be weak and affect the connection quality.
- 2. Wireless client devices cannot connect to the Synology Router to access the Internet.

# Set up Your Wi-Fi Connection

This chapter introduces how to create Wi-Fi networks hosted by your Synology Router. Two types of Wi-Fi networks can be created: 2.4GHz and 5GHz.

- 2.4GHz: A 2.4GHz Wi-Fi network is used by most wireless devices and tends to have broader signal coverage than a 5GHz Wi-Fi network. However, signal interference is likely to occur because most wireless devices rely on this wireless frequency for connection.
- **5GHz**: Many wireless devices do not rely on this wireless frequency, and signal interference is less likely to occur. Besides, a 5GHz Wi-Fi network has narrower signal coverage than a 2.4GHz Wi-Fi network, and its signal strength may weaken due to nearby obstacles.

# Create Wi-Fi Networks (2.4GHz & 5GHz)

To create a Wi-Fi network, please follow the steps below:

- 1 Make sure your Synology Router is powered on and well-connected to the Internet.
- 2 Make sure the Wi-Fi button is "ON" on your Synology Router.
- 3 Go to Network Center > Wireless > Wi-Fi.
- **4** Select **Enable wireless radio** under 5GHz/2.4GHz, and continue the setup. Click Advanced options to display more setup items.
- 5 Use your wireless device to scan and join the Wi-Fi network hosted by your Synology Router.

## Create Guest Wi-Fi Networks (2.4GHz & 5GHz)

A guest Wi-Fi network is typically time-limited network (from one hour to one week) created by small and mediumsized businesses for visitors/non-regular users. The visitors can only access the guest network but not the host Wi-Fi network, to prevent unauthorized access to the host network.

To set up a guest Wi-Fi network, go to Network Center > Wireless > Guest Network for the setup.

# Create WPS Networks (2.4GHz & 5GHz)

WPS (Wi-Fi Protected Setup) is a standard promoted by the Wi-Fi Alliance to simplify Wi-Fi security settings for users. Though the setup is quick, the WPS network may not be secure. To keep the WPS network safe, you can use a push button or a PIN code.

Three ways are available to quickly set up a Wi-Fi network via WPS:

#### By push button:

- 1 Go to Network Center > Wireless > WPS, and select Enable WPS. Alternatively, press the WPS button on your Synology Router.
- 2 Enable the WPS function on your wireless device. Your wireless device and the Synology Router will be paired up.

#### By AP PIN code:

- 1 Go to Network Center > Wireless > WPS > Device PIN > By AP PIN code, and click Enable to generate an AP PIN code.
- 2 Enter the generated PIN code into your wireless device. Your wireless device and the Synology Router will be paired up.

#### By client PIN code:

- 1 Enter the PIN code of your wireless device at Network Center > Wireless > WPS > Device PIN > By client PIN code.
- 2 Click Register. Your wireless device and the Synology Router will be paired up.

Note: Client iOS devices cannot join a WPS network because iOS does not support WPS.

# **Manage Client Devices**

This chapter introduces various features to manage client devices.

### **Monitor Device Status**

To grasp the real-time status of all client devices under your Synology Router, go to Network Center > Status.

## **Apply Parental Control**

Parental Control allows you to control client devices, and regulate their time for Internet access and their ranges of accessible websites/domains.

To tailor-make your access policies for client devices, go to Network Center > Parental Control.

#### Web-filters

With web-filters, you can create access policies for specific client devices, and determine their ranges of accessible websites/domains. Undesirable websites can be kept away from specific users' access.

To regulate users' Internet access to certain websites/domains, go to Network Center > Parental Control > Web-filter.

**Note:** The specified content for Allow access to custom websites will be unanimously applied to all client devices under the Custom web-filter.

#### **Schedule**

After adding devices under Parental Control, you can schedule their Internet access time by hour and by day. What's more, you can apply the web-filters to specific client devices to allow/disallow them access to the predefined categories of websites/domains.

To schedule the users' Internet access, go to Network Center > Parental Control > Schedule.

# **Apply Traffic Control**

Traffic Control allows you to regulate client devices' individual network bandwidth. Several control mechanisms are offered to suit your needs:

- Banned: The banned devices can only access resource in the same local network.
- Beamforming: Beamforming enhances the Wi-Fi signal for client devices with poor signal strength.
- **High/Low Priority**: Given limited network bandwidth, the high/low priority devices will be the first/last to satisfy their basic network bandwidth on the LAN/Wireless LAN and the Internet.
- Custom Speed: You can specify the upper and lower limits of upload/download traffic for client devices.

For finer management, you can also regulate network usage of specific applications (e.g. SSL or YouTube) running on certain devices.

To regulate network usage for client devices/applications, please go to Network Center > Traffic Control.

#### Note

- 1. To enhance Wi-Fi signal for client devices, please make sure the devices have an 802.11ac profile to support beamforming.
- 2. Beamforming can be applied to up to six client devices at once, and High/Low Priority can be applied to three devices at most.

You can also monitor the network usage history by device and by application. To access the usage log, please go to Network Center > Traffic Control > Monitor. You can identify the source of usage anomalies, such as malicious software/websites, or identify users that misuse network resource.

Regulatory measures on devices/applications and usage logs together help you monitor the network traffic.

## **Apply Wake-On-LAN**

With Wake-On-LAN (WOL), you can remotely wake up the wired devices from shutdown. The devices joined to the WOL service can be waken up via the MAC addresses or the connection list.

If you have a Synology NAS (e.g. DiskStation or RackStation) joined to the Synology Router's local network, you can simply wake it up with the QuickConnect ID, without using its MAC address or the connection list.

To use the WOL-related service, please go to Network Tools > Wake on LAN.

#### Note:

- 1. Please make sure the target device supports WOL.
- 2. Under different operation modes, your Synology Router has a varied range of devices that can be joined to the WOL service.

# **Enhance Connection Security**

This chapter introduces various security features to protect your Synology Router and the client devices from potential cyber threats and unwanted information leakage.

## **Secure Your Connections**

SRM can secure the Internet connection in the following ways.

#### **HTTP and HTTPS**

HTTP is the unsecured, common protocol for web browsers to communicate with web servers. As the secured version of HTTP, HTTPS protects your Synology Router and client devices from cyber threats and unauthorized access

By default, SRM provides HTTP and HTTPS connections. You may change the HTTP/HTTPS ports to avoid malicious attacks

To change the HTTP/HTTPS ports, please go to Network Center > Administration > SRM Settings.

To access SRM via HTTP(S) connection, please add the HTTP(S) port after the IP address:

Synology\_Router\_IP\_Address:8001 (8001 is the default HTTPS port.)
 Example: 192.168.1.1:8001

#### **HTTPS-related Measures**

At Network Center > Administration > SRM Settings, two other HTTPS-related measures are available:

- Automatically redirect HTTP connections to HTTPS: All the Internet connections via HTTP will be switched
  to HTTPS to access SRM
- Enable HSTS: Only web browsers using HTTPS connection can access SRM, while HTTP-using browsers are
  denied access.

#### **DoS Protection**

DoS (Denial of Service) attacks bombard a computer system with numerous requests exceeding the target's capability. The attacked computer may miss important data/service requests (e.g. email messages) from outside, and suffer from limited Internet bandwidth and system resource.

To enable DoS protection, please go to Network Center > Security > Security.

### **VPN Pass-through**

When a VPN server exists behind your Synology Router, you can allow specific types of VPN client traffic (PPTP, L2TP, and IPSec) for pass-through to reach the server. This feature helps prevent potential cyber threats from sneaking into the server via specific VPN protocols.

To enable the pass-through function, please go to Network Center > Security > Security.

### **Create Firewall Rules**

Firewall rules filter external access to your Synology Router by the specified conditions (e.g. ports and source IP addresses). With firewall rules, you can fine-tune security policies for better care of your Synology Router.

To create firewall rules, please go to Network Center > Security > Firewall.

Note: Firewall rules can only apply to external access from the Internet.

#### **External Access Restriction**

This function allows external access to SRM via the HTTP/HTTPS ports (e.g. 8000/8001). External access via other ports will be denied.

To enable this function, please go to **Network Center > Administration > SRM Settings** and select **Allow external access to SRM**.

**Note:** For security reasons, if you enable this option and disable it later, your Synology Router will deny all external access even via the HTTP/HTTPS ports.

## **Enforce Auto Block**

Auto block automatically blocks certain IP addresses with too many failed login attempts. Such IP addresses will be identified as a source of potential malicious attacks that try to find out the password.

To enable auto block, please go to Network Center > Security > Auto Block.

## **Create Certificates**

Creating a certificate from your Synology Router is equal to issuing a certified ID. If you import the certificate (a .crt file) to another device (e.g. your mobile phone), your Synology Router can identify and communicate with the device via a secured connection (e.g. HTTPS or SSL).

You can also import a certificate from a certificate authority so that your Synology Router can access another server.

To create certificates, please go to Network Center > Security > Certificate.

# **Use More Security Measures**

More security measures are available to fine-tune SRM security policies at Network Center > Security > Security. There you can set up a logout timer, help your browser skip IP checking, and do much more.

You are also recommended to use Security Advisor, an SRM security application that scans your SRM settings and Synology Router. Security Advisor will check your settings and recommend changes that help keep your Synology Router safe.

# **Update and Restore Your Synology Router**

This chapter introduces how to update SRM and its packages, back up/restore SRM, and reset SRM to its default settings.

# **Update SRM and Packages**

Synology periodically releases free SRM updates and package updates to fix reported issues, enhance system and package performance, and offer whole new features.

#### SRM

You can manually update SRM if you have obtained a .pat update file. The system will display the current SRM version and check if a newer SRM update is available.

To update SRM and tailor-make the update settings, please go to Network Center > Administration > Update & Restore.

Note: You cannot downgrade SRM using a version older than the current version running on your Synology Router.

### **Packages**

At Package Center, the system will display packages that have any updates for download. With an .spk update file, you can manually update packages.

To update packages and tailor-make the update settings, please go to Package Center.

**Note:** You cannot downgrade packages using a version older than the current version running on your Synology Router.

# **Back up and Restore SRM**

By backing up and restoring SRM, you can preserve important settings for future use. We suggest you regularly back up SRM configurations and store the configuration file (.dss) on your Synology NAS or local computer.

To back up SRM configurations, please go to Network Center > Administration > Update & Restore.

To restore previous SRM configurations, please go to Network Center > Administration > Update & Restore and import the .dss file.

**Note:** If you click **Restore factory default settings**, all user data stored on the external storages will be erased and the entire system will be restored to default settings. Please refer to **SRM Help** for more information.

## **Reset Synology Router**

If you forgot the administrator/Wi-Fi password or the Synology Router becomes unreachable, you can fix the situations by pressing the RESET button on the bottom shell.

- 1 Use a pencil or ball pen to press and hold the RESET button.
- 2 Press and hold the RESET button for four or ten seconds:
  - For four seconds (Soft Reset): The system will reset passwords of the admin and the administrator with equal privileges but other users' credentials will remain unchanged. The system will also reset the following settings (firewall, DHCP services, Wi-Fi, Parental Control, and Traffic Control) and start the SRM Setup Wizard

Note: During Soft Reset, the LED indicators behave as below:

- 1. The STATUS LED turns **static** orange, and the other LEDs become inactive for up to 30 seconds until the reset is complete.
- 2. The STATUS LED turns green (Soft Reset is complete), and the other LEDs become active and behave as stated in the "LED Indicator Table".
- For ten seconds (Hard Reset): The system will be reset to the factory default. The data stored in the external storages will remain intact.

Note: During Hard Reset, the LED indicators behave as below:

- 1. The STATUS LED turns **blinking** orange, and the other LEDs become inactive for up to four minutes until the reset is complete.
- The STATUS LED turns green (Hard Reset is complete), and the other LEDs become active and behave as stated in the "LED Indicator Table".

# **Register Synology Account**

Synology Account is a service-integrated platform that allows you to register and manage the personal account. With your personal Synology Account, you can enjoy various services from Synology, and subscribe to Synology eNews to know about important software updates and promotional events in your local area.

To register/access your Synology Account, please go to SRM > Synology Account, or go to Synology's official website.

# **Manage Internet Connection**

This chapter introduces various features for easy and safe access to the Internet.

# **Internet Connection Types**

At Network Center > Internet > Connection, you can choose how to connect your Synology Router to the Internet:

- Auto: Choose this option if you rely on an ISP modem for automatic IP assignment.
- PPPoE: Choose this option if you have obtained PPPoE credentials from the ISP.
- Manual: Choose this option if you have obtained an available IP address for use.

## ISP/VPN/IPv6 Settings

You can manage the following three Internet-related settings of your Synology Router.

### **ISP Settings**

This function allows you to send the MAC address of your Synology Router to the ISP for successful registration. To do so, please go to Network Center > Internet > Connection > ISP settings.

### **VPN Settings**

A VPN (Virtual Private Network) helps you securely access resources on your private network from the Internet.

To use your Synology Router as a VPN client, please go to **Network Center > Internet > Connection** to modify the VPN settings.

Note: Synology Router can only connect to OpenVPN servers which support tun-style tunnels on Layer 3.

## **IPv6 Settings**

To help your Synology Router acquire an IPv6 address, please go to **Network Center > Internet > Connection > IPv6 setup**.

## **QuickConnect & DDNS**

#### QuickConnect

QuickConnect is a connection technology developed by Synology that helps you effortlessly access your Synology Router from everywhere, only with your personal QuickConnect ID.

Enter the URL as below in a web browser to access your Synology Router via QuickConnect:

quickconnect.to/QuickConnect\_ID
 Example: quickconnect.to/synologist

For more information about the QuickConnect service, please refer to this white paper.

#### **DDNS**

DDNS (Dynamic Domain Name Service) matches the hostname and the IP address of your Synology Router for quick access. If you do not have a hostname, register one from Synology or other DDNS providers. To find your Synology Router with its DDNS hostname (e.g. john.synology.me), please enter the registered hostname in the web browser.

### **DMZ**

A DMZ (as a "demilitarized zone") is part of the network directly exposed to the Internet or other external untrusted networks. All external access will be directed to the host device in the DMZ. The DMZ host can directly connect to the Internet and is free from firewall limitations and protection. It is useful to set up servers as the DMZ host.

To enable DMZ, please go to Network Center > Internet > DMZ.

**Note:** To connect to a host in the DMZ from an external network, you need the host's external IP address retrieved by your Synology Router.

# **Port Forwarding**

Port forwarding redirects data flow between different ports and has the following advantages:

- It can improve performance for applications which might otherwise rely on a relay service.
- It protects the ports for services/client devices from direct exposure to cyber threats.
- It can offer open ports to resolve port conflicts between multiple services/client devices

To set up port forwarding rules, please go to Network Center > Internet > Port Forwarding.

## **Port Triggering**

Port triggering requires you to set up one static port (the outgoing/trigger port) and one dynamic port (the incoming port) for a service/device in the local network for data transmission. Once the data come out to an external host through the trigger port, the incoming port is then triggered and opened to receive data from the host. If no data come out, the incoming port turns off, shutting down a possible opening for malicious attacks.

To set up port triggering rules, please go to Network Center > Internet > Port Triggering.

## **IPv6 Tunneling**

IPv4 and IPv6 are two protocols not mutually compatible. To help IPv6 devices communicate with each other over an IPv4 network, via IPv6 tunneling you can wrap up IPv6 data within IPv4 packets, so that IPv6 data can travel through an IPv4 network.

To enable IPv6 tunneling, please go to Network Center > Internet > IPv6 Tunneling.

**Note:** Your external IPv6 address may be automatically updated by the service provider. However, your Synology Router will not remove the old IPv6 address immediately.

# **Manage Local Network Connection**

The chapter introduces various features to efficiently manage the local network.

## Set up an IPv6 Router

By default, your Synology Router works as an IPv4 router assigning IPv4 addresses to client devices. It can also become a mixed IPv4/IPv6 router to assign IPv6 addresses.

To set up your Synology Router as an IPv6 router, please go to Network Center > Local Network > IPv6 and specify the relevant settings.

Note: Only IPv6-supported devices can receive IPv6 addresses assigned by your Synology Router.

## **Set up DHCP Services**

As a DHCP (Dynamic Host Configuration Protocol) server, your Synology Router can assign dynamic IP addresses to DHCP clients (i.e. network devices) within your local network.

To find a list of DHCP clients and their network configurations (e.g. MAC and IP addresses), please go to **Network Center > Local Network > DHCP Clients**.

To reserve the assigned IP addresses for the clients, please go to Network Center > Local Network > DHCP Reservation.

**Note:** Your Synology Router can assign both IPv4 and IPv6 IP addresses. To assign IPv6 IP addresses to DHCP clients, please enable the IPv6 function at Network Center > Internet > Connection first.

## **Set up Static Routes**

A static route is a routing path manually configured to pass data to and from a specific destination service/device. The static route does not automatically change with the network configuration, and its routing information is not exchanged between other routers.

Setting up static routes can benefit you in the following scenarios:

- · When the network (e.g. a home local network) is small and may not grow fast into a complex network
- When you do not wish to share routing information (e.g. IP addresses and network configuration) with other routers for security reasons

To set up static routes, please go to Network Center > Local Network > Static Route.

#### Note:

- 1. We advise you not to use static routes when the network is large and complex, because maintaining static routes in this environment can be time-consuming.
- 2. You can set up IPv6 static routes after enabling the IPv6 function on your Synology Router.

# **Manage External Devices and Privileges**

## **Install & Manage USB/SD Storage**

With a USB/SD storage, your Synology Router can turn into a storage device for personal data and multimedia files.

To install external USB/SD storage to your Synology Router, please attach the storage to the corresponding slot.

At **Storage & Printer > Storage**, you can find out the total available external storage (e.g. USB drives & SD cards) on your Synology Router. There you can also format and manage the storage to suit your needs.

#### Note:

- 1. Please refer to the compatibility list for approved USB/SD storage.
- Some system services and packages may create temporary files on USB/SD storage devices. To safely eject the USB/SD storage for system stability and prevent accidental data loss, press the Eject button on your Synology Router or eject the storage at Storage & Printer > Storage.

## **Define User/Folder Privileges**

After external storage is established on your Synology Router, you can create shared folders for public use (e.g. "public") and home folders for individual users.

To create shared folders, please go to **Storage & Printer > Privileges > Shared Folder**. There you can also set users' access privileges to the folder.

To create users, please go to **Storage & Printer > Privileges > User**. There you can also set the user's access privilege to shared folders.

# **Install & Manage Network Printers**

Your Synology Router can become a printer server, allowing you to print out documents such as photos and articles over the network. You can also set up Google Cloud Print to print out needed documents from everywhere.

To install a network printer, please attach it to the USB slot.

To manage a network printer connected to your Synology Router, please go to Storage & Printer > Printer.

Note: Please refer to the compatibility list for approved network printers.

# **Install & Manage 3G/4G Dongles**

With a 3G/4G dongle, your Synology Router can still provide Internet access to client devices via a 3G/4G network. The dongle can transform your Synology Router into a Wi-Fi hotspot.

To install a 3G/4G dongle to your Synology Router, please attach it to the USB slot. The installed dongle will be right available. If not, please check/modify the settings.

To manage the dongle settings, please go to Network Center > Internet > 3G & 4G.

Note: Please refer to the compatibility list for approved 3G/4G dongles.

# **Discover SRM Packages**

This chapter introduces various Synology-developed packages to go with your Synology Router. The featured packages are all available via Package Center or Synology Download Center.

### **DNS Server**

Domain Name System (DNS) helps users find Internet applications, computers, or other network devices by translating domain names into IP addresses. With DNS Server, your Synology Router can host multiple zones as well as provide name and IP address resolution services.

## **Download Station**

Download Station is a web-based download application which allows you to search and download files from the Internet through BitTorrent (BT), FTP, HTTP, NZB, Thunder, FlashGet, QQDL, and eMule, and subscribe to RSS feeds to keep you updated on the most popular or latest BT. It offers the auto unzip service to help you extract compressed files to your Synology Router whenever files are downloaded.

### Media Server

Media Server provides a multimedia service for you to browse and play the multimedia contents on the Synology Router via DLNA/UPnP home devices.

With Media Server, you can easily connect those DLNA-certified devices such as smart TV sets and stereo systems to your home network, and stream multimedia files stored on your Synology Router to the devices to enjoy music, photos, and videos.

Note: Please refer to the compatibility list for approved DLNA devices.

### RADIUS Server

Remote Authentication Dial-In User Service (RADIUS) is a networking protocol that provides centralized authentication, authorization, and accounting for wired and wireless network access.

## **VPN Server**

VPN Server offers an easy VPN solution that turns your Synology Router into a VPN server, providing a secure connection method for devices on remote networks. Synology VPN Server currently supports PPTP, OpenVPN, and L2TP/IPSec.

# **Discover Synology Mobile Applications**

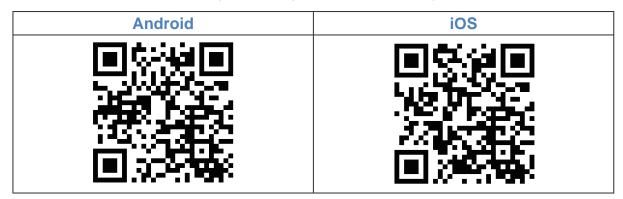
This chapter introduces useful Synology mobile applications to go with your Synology Router.

## **DS** router

DS router is designed as your Personal Network Control Center on your Android/iOS device. From the initial setup of your Synology Router, to applying parental control settings to protect your children from inappropriate websites, monitoring network usage by device/application, or even fine-tuning your network's firewall settings, DS router makes network management truly easy, intuitive and mobile.

#### **Install DS router**

You can download DS router by clicking the operating system name or scanning the QR code:



## **Other Synology Mobile Applications**

Synology presents two mobile applications – DS file and DS download – to help you manage File Station and Download Station on your Synology Router.

#### **DS** file

DS file is ideal to manage files stored on your Synology Router, upload or download between your Router and your wireless device, or do basic editing tasks. Besides file management, DS file is also a useful tool to do anything from browsing pictures, watching videos or checking work documents when you are on the go.

DS file is available for Android, iOS, Windows Phone.

#### **DS** download

DS download allows you to access Download Station remotely from your wireless devices. You can easily find content online with the keyword search or simply by browsing your favorite websites: With a simple tap, you'll start the downloading directly to the storage of your Synology Router. You can also view and manage your downloads, as well as manage basic settings such as transfer speed limits, right from the app.

DS download is available for Android, iOS, Windows Phone.

# **Diagnosis Tools**

This chapter introduces the features on your Synology Router to diagnose system and connection problems.

## **Check Connection Status**

To grasp its current status and pin down the possible causes of a down connection, you need a quick, well-rounded checkup on the wired and Wi-Fi connections at **Network Center > Status**. There you can also find the real-time network, CPU, memory usage, and device status.

For a detailed traffic log (up to one month long) of devices and applications, please go to **Network Center** > **Traffic Control** > **Monitor**.

## **Check Notifications**

The Synology Router sends instant notifications to have you informed of system/connection errors via various media (e.g. SRM desktop, SMS, and email). You can quickly zero in on the errors and find remedies.

To tailor-make the notification service, please go to Network Center > Notification.

## **Diagnose with Ping**

Ping (Packet Internet Groper) is a utility used to diagnose throttling connections. Ping works by sending out a request packet to a target website or IP address and calculating the time lapse for receiving a response packet from the target.

- Normal connection: The response packet comes from the target instantly.
- Slow connection: The response packet comes from the target with significant delay.

Delayed packet transmission may occur in the suggested scenarios below:

- · The target is busy dealing with huge traffic to and from other hosts/clients
- The target website/IP address is down/not working.
- The Internet/local network connection of your Synology Router is not properly configured.
- The ISP service is down.

If the problem is identified as extraneous to your Synology Router, you may consult the ISP or other relevant service providers for assistance.

To diagnose connection problems with Ping, please go to Network Tools > Ping.

# **Diagnose with Traceroute**

Traceroute is a utility used to diagnose throttling connections, and works by tracing the physical route of the packets sent from your Synology Router to the target website/IP address. The physical route will be displayed on a Google Map, along with the time lapse spent between two adjacent route points.

With Traceroute, you can find out where the traffic is currently throttling. If the problem lies extraneous to your Synology Router, you may consult the ISP or other relevant service providers for assistance.

To diagnose connection problems with Traceroute, please go to Network Tools > Traceroute.

# **Find Technical Support**

If there remain problems unresolved, you may go to Support Center or Synology's official website to seek help from Synology Technical Support.

# **FAQ**

# **SRM Operation**

### Why can't I log in to SRM?

- Make sure you use the correct IP/QuickConnect/DDNS address. Add the correct port number if you use the IP
  or QuickConnect address.
- Make sure you use the correct username and password.
- Check if the network connection between the router and the enquiring device works properly.

### What can I do if I forgot my SRM password?

· As the administrator:

Perform Soft Reset to reset the administrator password.

- · As a non-administrator user:
  - a Ask the administrator to select Allow non-administrator users to reset forgotten passwords via email.
  - **b** The user should go to the SRM login page, and click Forgot your password?.
  - c Open the SRM-issued email at the previously specified email address and continue to reset the password.

#### Why can't I update SRM successfully?

- Check if the update is newer than the current version running on the router.
- Check if you use a .pat update file officially released by Synology.

#### What's the difference between Soft Reset and Hard Reset?

Please see "Reset Synology Router".

#### How should I eject the USB/SD storage from my router?

To safely eject the external storage, please see "Install & Manage USB/SD Storage".

### **Network**

### Why can't I access the Internet?

- · Make sure your wireless device is not banned under Traffic Control.
- · Make sure your device's Internet access is not scheduled to be unavailable under Parental Control.
- Go to Network Center > Status > Internet Connection, and check if the status is "Connected".

# Why can't I connect to certain sites or send/receive emails when connecting through my router?

If your device has been added to Parental Control, check its level of protection and if the websites in question have been added to the Custom web-filter.

### Why is the upload/download traffic slow?

- If Traffic Control is enabled, network speed promotion will be disabled and general transmission speed may be lower. To disable Traffic Control, please go to Network Center > Traffic Control > Advanced > Settings for management.
- Check if your device's custom speed settings have been modified. Please go to Network Center > Traffic Control > General > Custom speed for checkup.
- If you have created a large number of firewall or port forwarding rules, your Wi-Fi transmission may become slower. To remove firewall rules, please go to Network Center > Security > Firewall. To remove port forwarding rules, please go to Network Center > Internet > Port Forwarding.

### What can I do if port-forwarding doesn't work properly?

- Go to Network Center > Internet > DMZ, enable DMZ, and specify the DMZ host IP address. Then, see if the
  devices in the DMZ can be accessed from the Internet. As a specialized form of port forwarding, DMZ helps
  you find out whether the problem lies in port forwarding itself.
- If firewall is enabled on the router, suspend the firewall function for a while.
- Contact the ISP to know if the service port is blocked for any reason.

#### Why can't I find my router via router.synology.com?

- You can only access your router via router.synology.com when the enquiring device is in the router's local network.
- Make sure the enquiring device (e.g. your PC) and the router are well-connected to each other via network cables or Wi-Fi connection.
- Re-connect your PC to the original port or anothe port on the router in case of poor contact between the network cable and the port socket.
- Simplify the network configuration by connecting your router and the PC directly, without hubs/switches in between, and try again.

### Why do I have abnormal incoming/outgoing traffic?

- Go to Network Center > Traffic Control > Monitor, and select Enable traffic statistics and Enable
  application detection to check which device/application overuses network bandwidth. Locate the device/
  application in question and disconnect/stop it.
- Go to Security Advisor and perform system scan to see if there is any malware overusing the network bandwidth.

#### Does the router have SPI firewall?

Yes. In SRM, the SPI firewall is always enabled by default so no related management options are provided.

### Can the VPN Server package work on my router if I use IPv6 connection?

If the router provides IPv6 connection, you can only use VPN Server as an OpenVPN server. The other types of VPN (i.e. PPTP and L2TP/IPSec) are not supported under an IPv6 environment.

#### What can I do if I can't connect to the router via VPN connection?

Make sure you enable the VPN pass-through function and select the corresponding options of the VPN protocols (PPTP, L2TP, IPSec) that you use.

# Why does a message keeps popping up telling me I do not have a valid certificate when I visit some HTTPS websites?

When you visit an HTTPS website, the website will continuously send a request to SRM for a valid certificate. If the website or some of its elements is in the block list, SRM cannot answer the request with a valid certificate, and the message will keep popping up.

To work around this issue (due to the HSTS concerns), you can continue to visit the website or add the website to the allow list (at Network Center > Parental Control > Web-filter > Edit Allow List) so that the message will not pop up again.

### What can I do if I forgot the Wi-Fi SSID and its password?

- As the administrator, log in to SRM via wired connection and go to Network Center > Wireless > Wi-Fi to find
  out the Wi-Fi SSID and password.
- If you forgot the administrator's login credentials, you may perform Soft Reset to reset the Wi-Fi SSID and its password. For more information, please see "Reset Synology Router".

### Why did my Wi-Fi SSID disappear?

- Check if the Wi-Fi network is enabled (at Network Center > Wireless > Wi-Fi) and if the Wi-Fi switch is set "ON" on the Synology Router.
- Check if the SSID status is "Show" (at Network Center > Wireless > Wi-Fi). Then disable the Wi-Fi network
  and enable it again.

### Why can't my device connect to the Synology Router wirelessly?

- Check if the Wi-Fi button on your router is set "ON", the Wi-Fi feature is enabled in SRM, and the antennas are well-installed.
- Check if the device is too far away from the router or if there is any obstacle/electrical signal source that may
  interrupt the Wi-Fi connection.
- Check if your wireless device is connected to the Wi-Fi network hosted by the router. If the device is not in the
  router's local network, you cannot access SRM via router.synology.com or its local IP address.
- Move your wireless device closer to the router and reconnect again.

# Why can't my wireless devices communicate with each other though they are in the same Wi-Fi network?

AP isolation may have been enabled (at Network Center > Wireless > Wi-Fi > Advanced options). AP isolation prevents wireless client devices that join the same Wi-Fi network (2.4GHz or 5GHz) from communicating with each other.

### Why is the Wi-Fi signal weak and how can I improve it?

Weak Wi-Fi signal may come from the following reasons:

- · The router is too distant from the client devices.
- The router's Wi-Fi transmit power is not strong enough. Go to Network Center > Wireless > Wi-Fi > Advanced options, and change the Transmit power level (Low, Middle, High).
- There might be intervening barriers (e.g. a large expanse of metal) that can block Wi-Fi signals. 5GHz Wi-Fi is more sensitive to such barriers than 2.4GHz, as mentioned in "Set up Your Wi-Fi Connection".
- Nearby devices (e.g. microwaves/wireless phones) using the same frequency band may interfere with the router's 2.4GHz Wi-Fi transmission.

To improve Wi-Fi signal strength, you may try the following solutions:

- Adjust the antennas to make them 45 degrees apart from each other as recommended in "Install Antennas". If the Wi-Fi strength is not boosted, you may try other angles to find out the best antenna placement.
- Relocate your router to the center of the area where the client devices are placed, or to a position where the
  router and the devices are within a visible distance without interfering barriers. However, the two locations may
  not always work, and you may try other locations to find out the best router placement.
- If there are radio transmitting devices near the router, to avoid channel overlapping, re-assign their operation channels to channels 1, 6, or 11 (for devices using 2.4GHz Wi-Fi); to any non-overlapping channels (for devices using 5GHz Wi-Fi).

## Why can't I boost a device's signal with beamforming?

- Only six devices can concurrently receive beamforming.
- Make sure your device supports beamforming too. This means the device must conform to the 802.11ac standards.

## Which Wi-Fi frequency (2.4GHz and 5GHz) should I choose?

Please see "Set up Your Wi-Fi Connection".

## Why can't I find the router's 5GHz Wi-Fi network?

Due to previous NCC (National Communications Commission) regulations, in Taiwan wireless devices manufactured before 2009 cannot make use of the 5GHz Wi-Fi channels 36-48. To help such wireless devices connect to the 5GHz Wi-Fi network, you should use alternative channels rather than channels 36-48 (at Network Center > Wireless > Wi-Fi > 5GHz > Advanced options).



# **Specifications**

Item	RT1900ac			
	• USB 3.0 (5V, 1.5A power output) x 1			
External Ports	• SD card slot x 1 (SDHC, SDXC/UHS-I)			
WAN Port	Gigabit (RJ-45) x 1			
LAN Ports	Gigabit (RJ-45) x 4			
Size (H x W x D) (mm)	38 x 206 x 146 (without antennas)			
Weight (kg)	0.51 KG (with 3 antennas)			
	Windows XP onward			
Supported Clients	Mac OS X 10.5 onward			
(for SRM management)	Ubuntu 9.04 onward			
File Systems	External: EXT4, EXT3, FAT, NTFS, HFS+ (Read-only)			
	• 2.4GHz: 802.11 b/g/n			
Wireless Standards	• 5GHz: 802.11 a/n/ac			
On a ration Francisco Dance	• 802.11n (2.4GHz): Up to 600 Mbps			
Operating Frequency Range	• 802.11ac (5GHz): Up to 1300 Mbps			
	Wireless Router			
Wireless Operation Modes	Wireless AP (Access Point)			
	Wireless Client			
	• 64/128-bit WEP • WPS support			
Wireless Security	WPA2-Personal    WPA/WPA2-Personal			
	WPA2-Enterprise    WPA/WPA2-Enterprise			
Antennas	3T3R Omni-directional high-gain dipole (2.4GHz/5GHz)			
D	• Power • WPS • Wi-Fi On/Off			
Buttons & Switches	Reset • USB/SD Eject			
	• English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk			
Language Localization	• Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu			
	・Türkçe ・Český ・日本語・한국어・繁體中文・简体中文			
Environment Requirements	Line voltage: 100V to 240V AC			
	• Frequency: 50/60Hz			
	<ul> <li>Operating Temperature: 40 to 104°F (5 to 40°C)</li> </ul>			
	• Storage Temperature: -5 to 140°F (-20 to 60°C)			
	<ul> <li>Relative Humidity: 5% to 95% RH</li> </ul>			

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

## **LED Indicator Table**

LED Indicator	Color	Status	Description	
STATUS	Green	Static	Powered on	
	Green	Blinking	Booting up	
		Static	Restoring settings (Soft Reset)	
	Orange	Blinking	Restoring to factory default (Hard Reset)	
	Off		Powered off	
=	Green	Static	Wi-Fi on	
Wi-Fi (2.4G & 5G)	Green	Blinking	Wi-Fi active	
(2.40 & 30)		Off	No Wi-Fi	
	Green	Static	Network connected	
WAN	Green	Blinking	Network active	
	Off		No network	
	Green	Static	Gigabit connection	
		Blinking	Network active	
LAN (1-4)	0	Static	10/100 Mbps connection	
()	Orange	Blinking	Network active	
	Off		No network	
	Green	Static	Storage detected	
USB/SD <sup>1</sup>		Blinking	Copying data	
	0	Static	Ready for ejection	
	Orange	Blinking	Ejecting storages	
	Off		No storage	

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

<sup>&</sup>lt;sup>1</sup> The USB/SD LED does not reflect the status of the 3G/4G dongle or printer attached to your Synology Router

## **Radio Frequency Specifications**

802.11 abgn and 802.11ac up to 80MHz Bandwidth, Support beamforming and TPC Function and MIMO 3\*3 Frequency and output power details for maximum EIRP

Frequency Band	Channel No.	Frequency	Channel No.	Frequency	
	1	2412 MHz	7	2442 MHz	
	2	2417 MHz	8	2447 MHz	
2400-2483.5MHz	3	2422 MHz	9	2452 MHz	
2400-2463.3WITZ	4	2427 MHz	10	2457 MHz	
	5	2432 MHz	11	2462 MHz	
	6	2437 MHz	-	-	
	36	5180 MHz	44	5220 MHz	
5150-5250 MHz	38	5190 MHz	46	5230 MHz	
(Band 1)	40	5200 MHz	48	5240 MHz	
(Dana 1)	42	5210 MHz	-	-	
5250-5350 MHz	52	5260 MHz	60	5300 MHz	
	54	5270 MHz	62	5310 MHz	
(Pand 2)	56	5280 MHz	64	5320 MHz	
(Band 2)	58	5290 MHz	-	-	
	100	5500 MHz	112	5560 MHz	
5470 5705 1411	102	5510 MHz	116	5580 MHz	
5470-5725 MHz	104	5520 MHz	132	5660 MHz	
(Band 3)	106	5530 MHz	134	5670 MHz	
(Ballu 3)	108	5540 MHz	136	5680 MHz	
	110	5550 MHz	140	5700 MHz	
	149	5745 MHz	157	5785 MHz	
5725-5850 MHz	151	5755 MHz	159	5795 MHz	
(Band 4)	153	5765 MHz	161	5805 MHz	
(Balla 4)	155	5775 MHz	165	5825 MHz	

### Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

When suing IEEE 802.11a wireless LAN, this product is restricted to indoor use, due to its operation in the 5.15 to 5.25GHz frequency range.

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.

#### **FCC RF Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **IC Statement**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

This device and its antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

Dynamic Frequency Selection (DFS) for devices operating in the bands 5250- 5350 MHz, 5470-5600 MHz and 5650-5725 MHz

Sélection dynamique de fréquences (DFS) pour les dispositifs fonctionnant dans les bandes 5250-5350 MHz, 5470-5600 MHz et 5650-5725 MHz

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.

le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.

The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.

le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5850 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

For indoor use only.

Pour une utilisation en intérieur uniquement.

### **IMPORTANT NOTE:**

#### **IC Radiation Exposure Statement:**

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance xx cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de xx cm de distance entre la source de rayonnement et votre corps.

This radio transmitter RT1900ac has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio RT1900ac a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

#### Antenna list:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	ACON	ARMEE-000000	Dipole Antenna	Revised SMA	3.5	4.6
2	ACON	ARMEE-000000	Dipole Antenna	Revised SMA	3.5	4.6
3	ACON	ARMEE-000000	Dipole Antenna	Revised SMA	3.5	4.6

Note: The EUT has three Antennas.

## NCC 警語

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

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Section 6. Open Source. The Software may contain components licensed to Synology under the GNU General Public License ("GPL Components"), currently available at <a href="http://www.gnu.org/licenses/gpl.html">http://www.gnu.org/licenses/gpl.html</a>. 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

Synology a right to access to your facilities, equipment, books, records and documents and to otherwise reasonably cooperate with Synology in order to facilitate any such audit by Synology or its agent authorized by Synology.

**Section 8. Ownership.** The Software is a valuable property of Synology and its licensors, protected by copyright and other intellectual property laws and treaties. Synology or its licensors own all rights, titles and interests in and to the Software, including but not limited to copyright and any other intellectual property rights.

Section 9. Limited Warranty. Synology provides a limited warrant that the Software will substantially conform to Synology's published specifications for the Software, if any, or otherwise set forth on the Website, for a period required by your local law. 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 period specified in the Section 9, Synology will make available to you the support services. Following the expiration of the applicable period, support for Software may be available from Synology upon written request.

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 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 Republic of China (R.O.C. or Taiwan) 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 R.O.C. Arbitration Law and related enforcement rules. 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, 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 iurisdiction. 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. Definitions. (a) "New Product", including: (1) "Category I Product" means Synology product models RS810+, RS810RP+, RX410, all DS/RS NAS models with the XS+/XS suffix (except RS3413xs+) in or after 13-series, all DX/RX expansion units with 12 drive bays in or after 13series, E10G15-F1, ECC RAM Module Kit (4GB/8GB/16GB). and DDR3 RAM Module (4GB). (2) "Category II Product" means Synology product models RS3413xs+, RS3412xs, RS3412RPxs, RS3411xs, RS3411RPxs, RS2211RP+, RS411, RS409RP+, RS409+, RS409, RS408-RP, RS408, RS407, DS3612xs, DS3611xs, DS2411+, DS1511+, DS1010+, DS710+, DS509+, DS508, EDS14, RX1211, RX1211RP, RX4, DX1211, DX510, DX5, VS360HD, VS240HD, DDR2/DDR3 RAM Module (1GB/2GB), and ECC RAM Module (2GB). (3) "Category III Product" means Synology product models that apply with 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. (b) "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. (c) "Customer" means the original person or entity purchasing the Product from Synology or an authorized Synology distributor or reseller. (d) "Online Store" means an 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) "Software" 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 & III Products; or (3) two years after such date for Category IV Products; or (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. (h) "Web Site" the Synology means web site located www.synology.com.

#### Section 2. Limited Warranty and Remedies

2.1 Limited Warranty. Subject to Section 2.6, 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.

- Exclusive Remedy. If Customer gives notice of 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 2.3 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 Section 2.2 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 2.3 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 A Product issued a RMA number must be Synology. returned within fifteen (15) days after issuance of the applicable RMA number.
- **2.4** 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 2.3 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").
- **2.5 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.

- **Exclusions.** The foregoing warranties and warrantv 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
- 2.7 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 OTHER 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 (C) CLAIM OF INFRINGEMENT 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 ON THE PRODUCT. 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 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

- 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.