



DX513 User's Guide

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Get Started with DX513

Congratulations on your purchase of Synology DX513. This product is specially designed for the storage expansion of Synology DiskStation. This user's guide will guide you through the installation.

Package Contents

Before installation, please check the package contents to verify that you have received the items below.

Main Unit



AC power Cord



User's Guide



Screws for 3.5" Hard Drives x 24



Screws for 2.5" Hard Drives x 24



Hard drive tray key x 2



Expansion Cable



Hardware Specifications

Internal HDD	5X SATA(II)
Expansion Port #	1
Max Capacity (Internal HDD)	5X 4TB
Hot Swappable HDD	Yes
Size (HxWxD) (mm)	157 x 248 x 233mm
Weight	3.91 kg
System Fan	2X (80x80mm)
Noise Level (Fan-only)	30dB (2500rpm)
Power Recovery	Sync with the connected DiskStation (Default Mode)
AC Input Power Voltage	100V to 240V AC
Power Frequency	50 / 60Hz, Single Phase
HDD Temperature (Room: 27°C)	46°C
HDD Temperature (Room: 40°C)	55°C
Operating Temperature	5°C ~ 35°C (40°F ~ 95°F)
Storage Temperature	-10°C ~ 70°C (15°F ~ 155°F)
Relative Humidity	5% to 95% RH
Maximum Operating Altitude	10,000 feet
Certification	FCC Class B, CE Class B, BSMI Class B
Supported Models	DS710+, DS712+, DS1010+, DS1511+, DS1512+, DS1812+ (Used as independent volume: DS112, DS112+, DS212+, DS213+, DS412+, DS413)

Note:

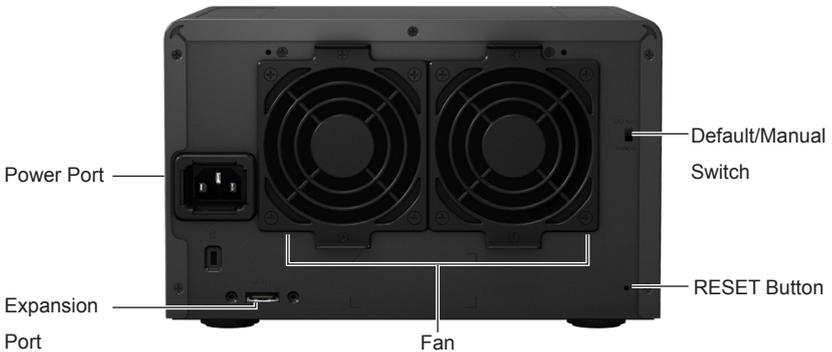
- 1 Please visit www.synology.com for the latest compatible models.
- 2 DSM needs to be upgraded to version 4.0-2240 or above.

Appearance

Front View



Back View



Article Name	Location	Description
POWER Button	Front	The POWER button is used to turn DX513 on or off. Press and hold the button for 7 seconds to shut down DX513. Note: DX513 will be turned on or off automatically when the connected Synology DiskStation powers on or off. However, the POWER button has no power-off function when volume is created to prevent accidental volume damage.

Article Name	Location	Description
LED Indicators	Front	The LED indicators are used to display the status of the internal disks and the system. For complete details, please refer to the table: LED Indication Table .
Hard Drive Tray	Front	The hard drive tray is designed for loading the hard drives with DX513.
Hard Drive Tray Lock	Front	Each hard drive tray is equipped with one tray lock to lock or unlock the tray to DX513.
Default/Manual Switch	Back	In the default mode, DX513 can auto power on/off with the connected Synology DiskStation, while in the manual mode, DX513 cannot auto power on with the DiskStation when using its independent volume. For more details, please refer to the table: Default/Manual Switch Behavior .
Expansion Port	Back	The expansion port is used to connect any Synology DiskStation listed in the table: Supported Models .
Fan	Back	The fan is built to exhaust waste heat out of DX513. If the fan is not working, DX513 will "beep" every few seconds.
RESET Button	Back	The RESET button is used to restore the settings to the factory default.
Power Port	Back	The power port is where you connect the power cord to DX513.

Default/Manual Switch Behavior

Mode	Expand DiskStation Internal Volume	Independent Volume
Default	Auto power on/off	Auto power on/off
Manual	Auto power on/off	Auto power off

LED Indication Table

LED	Behavior	Description
POWER	Solid Blue	Power is on
	Off	Power is off
eSATA	Solid Green	Synology DiskStation is connected
	Off	Synology DiskStation is disconnected
RAID	Solid Green	Volume is created
	Flashing Green	Volume is degraded
	Off	Volume is crashed or not created

LED	Behavior	Description
STATUS	Solid Green	System is functioning
	Off	System is not working
ALERT	Solid Orange	Fan is not working
	Off	Fan is functioning
Hard Disk Status (on tray)	Solid Green	Disk is ready and idle
	Flashing Green	Disk is being accessed
	Solid Orange	Read/write or other errors are encountered
	Off	No internal disk is found

Safety Instructions

To use your Synology product safely, please follow these instructions and warnings at all time.



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.



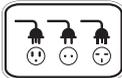
Do not place the Synology product close to any liquid.



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.

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

Set Up DX513

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 need the data in the future, please back it up before installation.

Install Hard Disks

- 1 Insert the hard drive tray key into the hard drive tray lock, turn the key counter-clockwise to unlock the handle of the hard drive tray, and then remove the key.



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

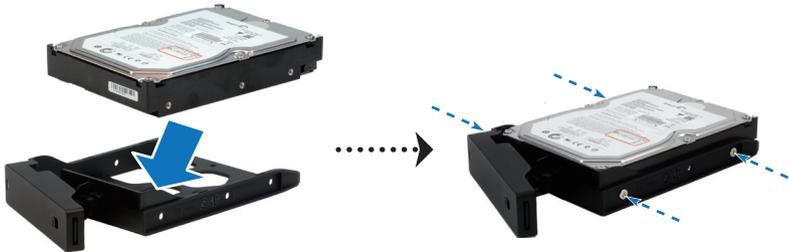


3 Pull the handle to remove the hard drive tray from DX513.

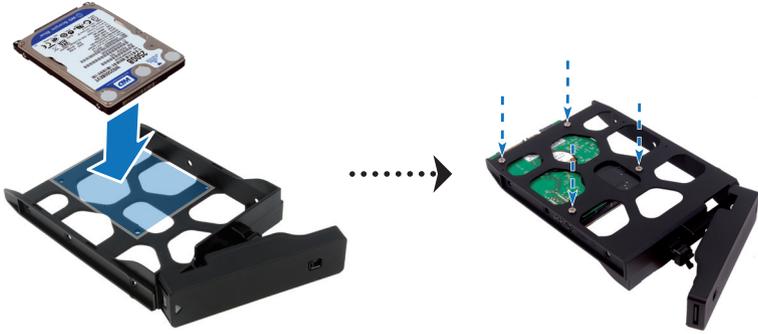


4 Load the hard disk in the hard drive tray.

- **For 3.5" Hard Disk:** Place the hard disk in the hard drive tray, and then tighten the screws to secure the hard disk.



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



- 5 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.

- 6 Press the handle in flush with the front panel to hold the hard drive tray in place.

- 7 Insert the hard drive tray key into the hard drive tray lock, turn the key clockwise (to the "I" position) to lock the handle of the hard drive tray, and then remove the key.



- 8 Repeat the above steps to install all the other disks on your DX513.

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.

Connect with Synology DiskStation

- 1 Connect one end of the power cord to the power port of DX513, and the other to the power outlet.



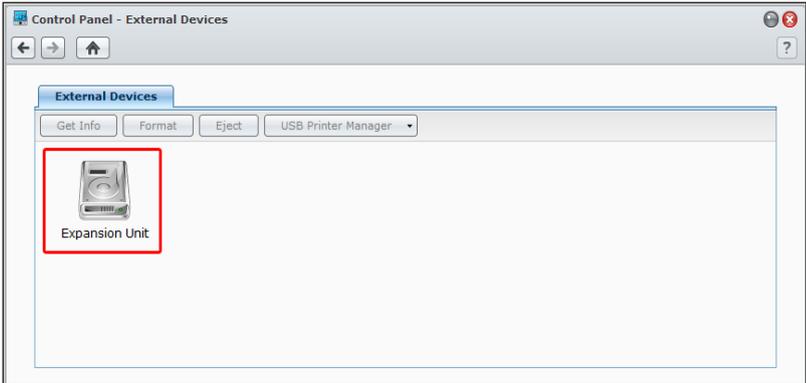
- 2 Connect the expansion cable to the expansion ports of DX513 and Synology DiskStation. You can connect up to 2 expansion units by expansion ports to DS1512+/DS1812+.



After the connection is complete, DX513 will be turned on or off automatically when the connected DiskStation powers on or off.

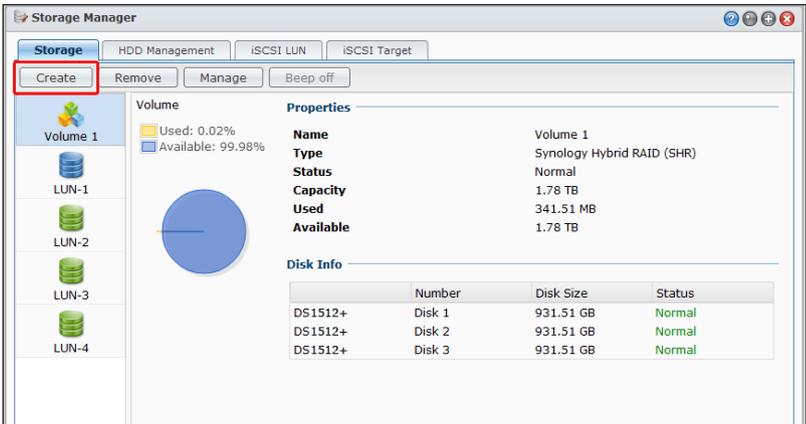
Work with Synology DiskStation

- 1 Open your DiskStation Manager with a web browser. Go to **Main Menu > Control Panel > External Devices** to confirm DX513 is connected to your DiskStation.

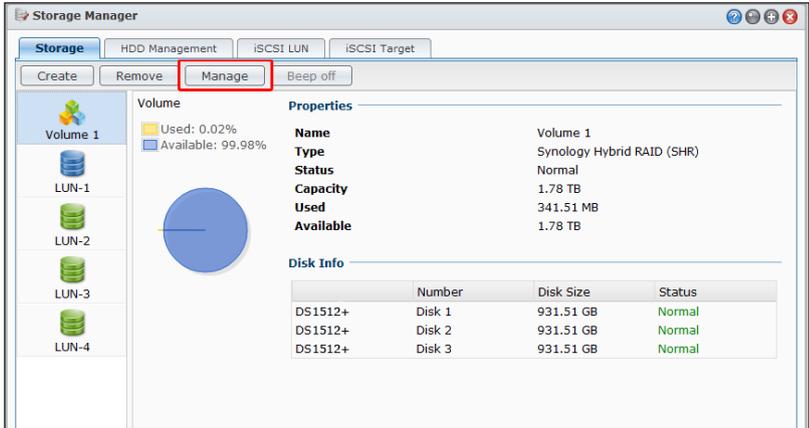


- 2 Go to **Main Menu > Storage Manager** to manage DX513 for storage creation or expansion.

- **If you want to create a new volume with DX513**, click **Create** and follow the Volume Creation Wizard to complete the creation.



- **If you want to expand the existing volume with DX513**, select the volume you want to expand from the volume list, click **Manage**, and follow the Volume Manager Wizard to complete the expansion.



For detailed information about volume management, please go to **Main Menu > Storage Manager** and see the help page by clicking the help button at the top-right corner.

Important: Before starting to use DiskStation with DX513, please see the following limitations of DX513.

- DX513 can be paired with only one DiskStation.
- The data of applications (such as Photo Station and Audio Station) can be stored on DX513 only if you expand DiskStation internal volume with DX513. They will not be stored on DX513 if you create a new independent volume with it.
- Hard drives previously used in DiskStation will not be readable by directly inserting them into DX513, and vice versa.

Learn More

Congratulations! Your DX513 is set up now. For more information or online resources about DX513, please visit www.synology.com.

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