Synology®

DX513 User's Guide

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CHAPTER 1

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 2.5" Hard Drives x 24	Hard drive tray key x 2	Expansion Cable
		

Hardware Specifications

Internal HDD	3.5” or 2.5” SATA(II) X 5
Max. Capacity	20 TB (4 TB HDD X 5)
Hot Swappable HDD	Yes
Expansion Port #	1
Size (HxWxD) (mm)	157 x 248 x 233
Weight (Kg)	3.91
AC Input Power Voltage	100V to 240V
Power Frequency	50 Hz to 60 Hz, Single Phase
Operating Temperature	40°F to 95°F (5°C to 35°C)
Storage Temperature	15°F to 155°F (-10°C to 70°C)
Relative Humidity	5% to 95% RH
Maximum Operating Altitude	6,500 feet (2,000 m)
Certification	FCC Class B, CE Class B, BSMI Class B
Supported Models	Cross-volume models: DS710+, DS712+, DS713+, DS1010+, DS1511+, DS1512+, DS1513+, DS1812+, DS1813+ Independent-volume models: 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.

3 Cross-volume models refer to those models designed to be paired with expansion units, such as DS1513+.
Independent-volume models refer to those models which, when paired, do not support expanding existing volumes across the main unit and expansion units, such as DS213+. Expansion units paired with independent-volume models can only form independent volumes.

Appearance

Front View



Back View



No.	Article Name	Location	Description
1	**LED Indicators**	Front Panel	Displays the status of internal disks and the system. For more information, see ***LED Indication Table*** on Page 5.

No.	Article Name	Location	Description
2	**Power Button**	Front Panel	***In default mode:*** DX513 will be turned on or off automatically when the connected Synology DiskStation powers on or off. ***In manual mode:*** 1. When DX513 is connected to cross-volume models, the power button has no power-on/off functions. 2. When DX513 is connected to independent-volume models, press the power button to power it on. To power off DX513, press and hold the button until the Power LED starts blinking. ***Note:*** For cross-volume and independent volume models, please refer to the ***Hardware Specifications*** table on Page 2.
3	**Hard Drive Tray Lock**		Lock or unlock the trays to DX513.
4	**Hard Drive Tray**		Install hard disks here.
5	**Power Port**	Back Panel	Connect power cords here to supply power to your DX513.
6	**Expansion Port**		Connect any Synology DiskStation listed in the ***Supported Models*** table on Page 2.
7	**Default/Manual Switch**		Switch between power modes to turn DX513 on/off automatically or manually. For more details, please refer to the ***Default/Manual Switch Behavior*** table on Page 4.
8	**RESET Button**		Reboot DX513 and restore its settings to factory default.
9	**Fan**		Disposes of excessive heat and cools the system. If a fan malfunctions, DX513 will emit a beeping sound.

Default/Manual Switch Behavior

Mode	With cross-volume models	With independent-volume models
Default	Auto power on/off	Auto power on/off
Manual	Auto power on/off	No auto power on/off

LED Indication Table

LED	Color	Status	Description
ALERT	**Orange**	**Static**	System fan is not working
		Off	System fan normal
eSATA	**Green**	**Static**	Connected to a Synology NAS
		Off	Disconnected from a Synology NAS
Hard Disk Status (on tray)	**Green**	**Static**	Disk is ready and idle
		Blinking	Disk is being accessed
	Orange	**Static**	Cannot read/write Errors occur
		Off	No internal disk
POWER	**Blue**	**Static**	Powered on
		Off	Powered off
STATUS	**Green**	**Static**	RAID created
	Orange	**Blinking**	RAID degraded
		Off	No RAID or RAID crashed

Safety Instructions

	Keep away from direct sunlight and away from chemicals. Make sure the environment does not experience abrupt changes in temperature or humidity.
	Place the product right side up at all times.
	Do not place near any liquids.
	Before cleaning, unplug the power cord. Wipe with damp paper towels. Do not use chemical or aerosol cleaners.
	To prevent the unit from falling over, do not place on carts or any unstable surfaces.
	The power cord must plug in to the correct supply voltage. Make sure that the supplied AC voltage is correct and stable.
	To remove all 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.

CHAPTER 2

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



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

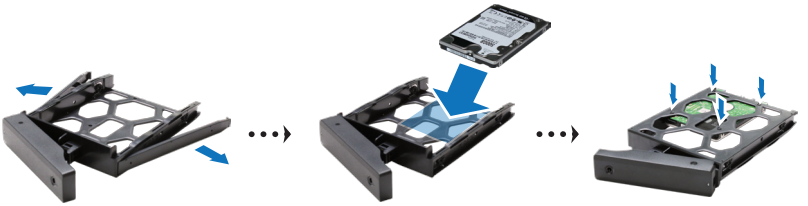


3 Load the hard disk in the hard drive tray.

- ***For 3.5" Hard Disk:*** Remove the fastening panels from the sides of the hard drive tray. Place the hard disk in the hard drive tray. Then insert the fastening panels to secure the hard disk in place.



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



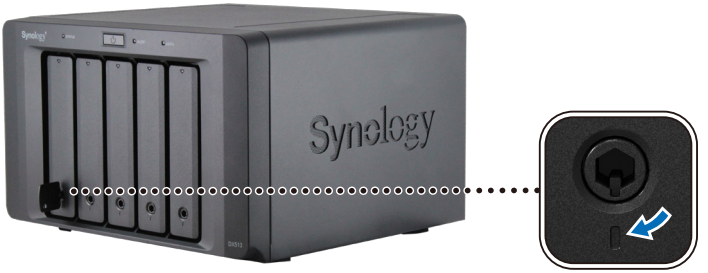
4 Insert the loaded hard drive tray into the empty hard drive bay.



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

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

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



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

8 The disks' positions are numbered as shown below.



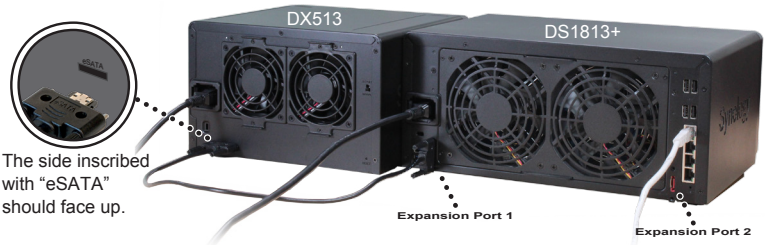
Note: If you want to set up a RAID set, it is recommended that all installed hard disks are of the same size to make the best use of hard disk capacity.

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.



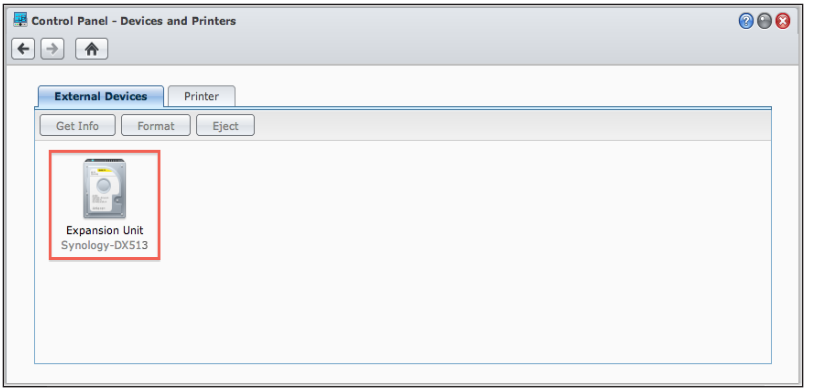
2 Connect the expansion cable to the expansion ports of DX513 and Synology DiskStation. You can connect up to 2 expansion units by expansion ports to DS1513+/DS1813+.



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

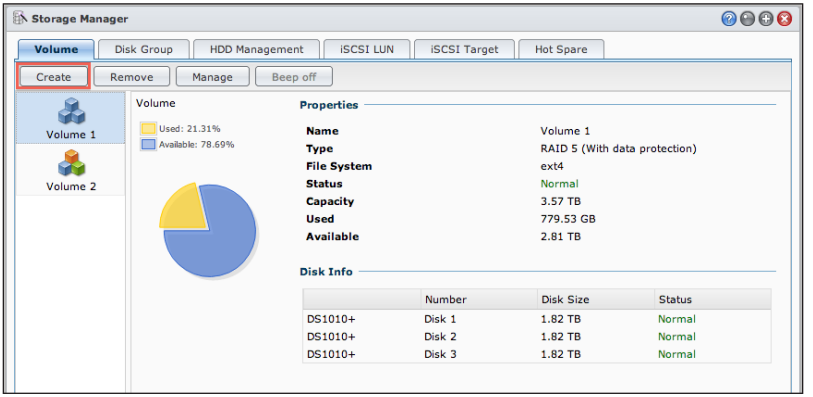
Work with Synology DiskStation

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

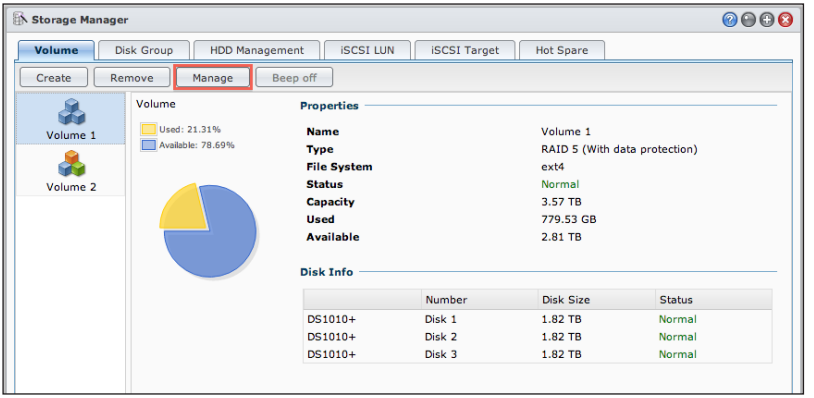


2 Go to **Main Menu** > **Storage Manager** to manage DX513 for storage creation or expansion.

- ***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 vise 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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