

TERRAMASTER D2-320

TERRAMASTER D2-320 2-Bay USB Hard Drive Enclosure Instruction Manual

Model: D2-320

1. INTRODUCTION

The TERRAMASTER D2-320 is a 2-bay USB 3.2 Gen 2 (10Gbps) Type-C hard drive enclosure designed for high-speed data transfer and flexible storage solutions. It supports various RAID modes including RAID 0, RAID 1, Single Disk, and JBOD, allowing users to optimize for performance, data redundancy, or capacity. This manual provides essential information for setting up, operating, and maintaining your D2-320 enclosure.

2. SETUP

2.1 Package Contents

- TERRAMASTER D2-320 Enclosure
- USB Type-C to Type-C Cable
- Power Adapter
- Accessory Kit (screws, screwdriver if needed)
- Quick Installation Guide

2.2 Installing Hard Drives

The D2-320 features a unique push-lock design for tool-free drive installation, making the process simple and quick.

1. Gently press the release button or lever on the drive bay to unlock it.
2. Slide out the empty drive tray.
3. Insert your 3.5-inch or 2.5-inch SATA HDD/SSD into the tray. Ensure the connectors align correctly. For 2.5-inch drives, use the provided screws to secure them to the tray. For 3.5-inch drives, the tool-free mechanism should secure them.
4. Slide the loaded drive tray back into the enclosure until it locks into place.
5. Repeat for the second drive if applicable.

Next-Gen **NAS Performance** Powered by TOS 6



Image: Tool-free drive installation with a push-lock design.

2.3 Connecting to Your Computer

Connect the D2-320 to your computer using the provided USB Type-C cable. Ensure your computer has a USB 3.2 Gen 2 (10Gbps) compatible port for optimal performance. Connect the power adapter to the enclosure and plug it into a power outlet.

USB 3.2 Gen2 10Gbpsインターフェース

Thunderbolt 4/3、USB 4/3.2/3.1/3.0デバイスに対応
RAID 1、0、JBOD、Singleをサポート



Image: Rear panel with USB 3.2 Type-C port and RAID mode selector.

2.4 RAID Mode Configuration

The D2-320 supports RAID 0, RAID 1, Single Disk, and JBOD modes. The RAID mode is configured via a switch on the rear panel of the device. **Always configure the RAID mode BEFORE initializing or formatting your drives. Changing the RAID mode after data has been written will result in data loss.**

- **Single Disk:** Each drive operates independently.

- **JBOD (Just a Bunch Of Disks):** Drives are combined into a single large volume, but data is written sequentially. No redundancy.
- **RAID 0 (Striping):** Data is split across both drives for maximum performance. No redundancy; failure of one drive results in total data loss.
- **RAID 1 (Mirroring):** Data is duplicated across both drives for redundancy. Provides data protection; capacity is limited to the size of one drive.

After selecting the desired RAID mode, power on the device. Your operating system will detect the new storage. You may need to initialize and format the drives through your operating system's disk management utility.

強力なハードウェアRAID

D2-320をTerraMaster NASに接続してNASストレージスペースを拡張できる

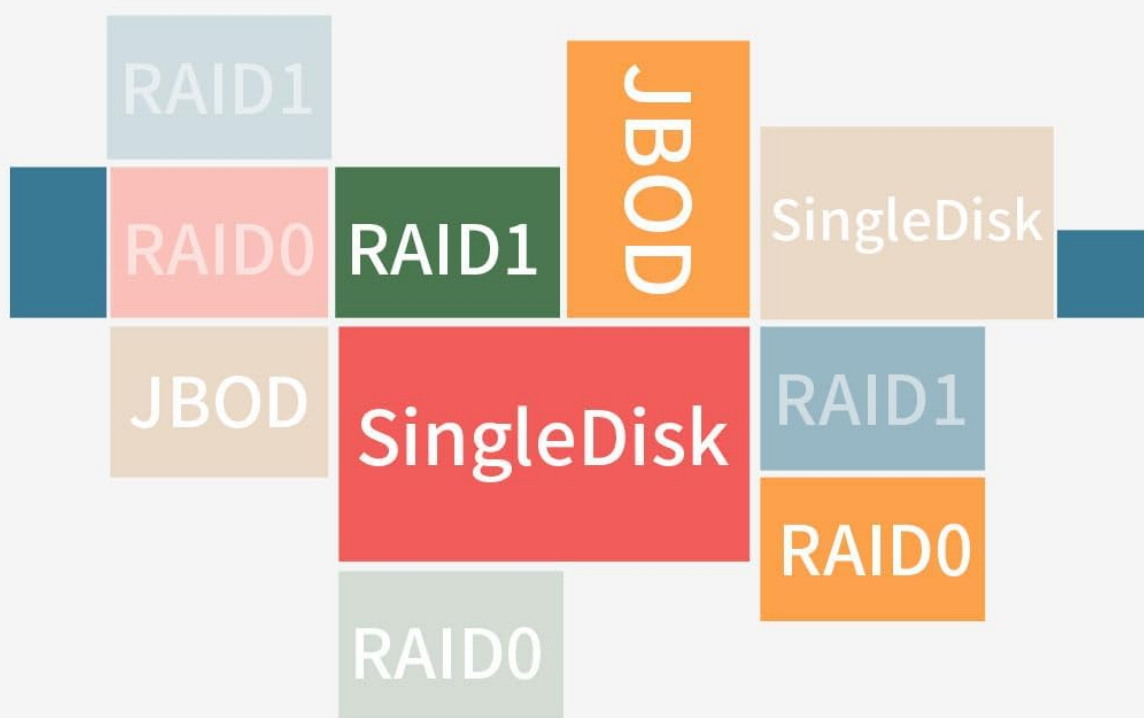


Image: Visual representation of supported RAID modes.

3. OPERATING INSTRUCTIONS

3.1 Data Transfer

The D2-320 utilizes a USB 3.2 Gen 2 interface, offering data transfer speeds up to 10Gbps. With two SATA III HDDs (8TB x 2) in RAID 0, read/write speeds can reach up to 521MB/s. With two SATA III SSDs (1TB x 2) in RAID 0, read speeds can reach up to 1075MB/s. Actual speeds may vary based on your system configuration, drive type, and data being transferred.

スーパースピード 884MB/s

RAID 0でHDDを2つ使用 - 読み取り521MB/s、書き込み524MB/s

RAID 0でSSDを2つ使用 - 読み取り854MB/s、書き込み884MB/s



Image: High-speed data transfer demonstration.

3.2 NAS Storage Expansion

The D2-320 can be connected to a TerraMaster NAS device to expand its storage space, providing additional capacity for your network-attached storage system.

Expansion of NAS Storage Space

Plug the D2-320 to a TerraMaster NAS to expand
NAS storage space



Image: D2-320 used to expand NAS storage.

4.1 Intelligent Disk Sleep

The D2-320 supports intelligent disk sleep functionality. When the connected computer's operating system enters sleep mode or when there is no disk activity for a certain period, the drives within the enclosure will spin down to save power and extend drive lifespan.

インテリジェントディスクスリープ

コンピュータのOSと共に休止状態に入り、電力を節約します



Image: Intelligent disk sleep feature in action.

4.2 Drive Compatibility

The D2-320 is compatible with various types of 3.5-inch and 2.5-inch SATA hard drives and solid-state drives. Each bay supports up to 22TB, allowing for a total capacity of up to 44TB in RAID 0 mode.

様々な種類のハードドライブと 互換性がある

各ベイに最大22TBのHDD（RAID 0で合計44TB）を使用できる



Image: Compatibility with various hard drive types.

5.1 Connection Issues Under High Load

If you experience connection interruptions during high data transfer loads, consider the following:

- Ensure you are using the provided high-quality USB Type-C cable.
- Connect the enclosure directly to a USB 3.2 Gen 2 port on your computer, avoiding USB hubs if possible.
- Verify that your computer's USB drivers are up to date.
- Check the power supply connection to ensure it is secure and providing stable power.

5.2 Hot-Swap Behavior on Windows

On Windows operating systems, hot-swapping drives (inserting a new drive after safely removing another without powering down the enclosure) may not always result in immediate recognition of the new drive. If a new drive is not detected after insertion:

- Perform a 'Safely Remove Hardware and Eject Media' for the entire enclosure.
- Power off the D2-320.
- Insert the new drive into the desired bay.
- Power on the D2-320. The new drive should now be detected and available for initialization/formatting.

5.3 Drive Not Detected

If a drive is not detected by your system:

- Ensure the drive is properly seated in its tray and the tray is fully inserted into the enclosure.
- Verify the power and USB cables are securely connected.
- Check the drive's health by connecting it directly to a computer if possible.
- Confirm the RAID mode switch is set correctly and has been applied (power cycle if changed).

6. SPECIFICATIONS

Feature	Specification
Brand	TERRAMASTER
Model	D2-320
Color	Black
Product Dimensions (L x W x H)	11.9 cm x 15.4 cm x 22.2 cm (4.69 x 6.06 x 8.74 inches)
Product Weight	1.3 kg
Maximum Storage Capacity	44 TB (2 x 22TB drives)
Compatible Devices	Notebooks, Personal Computers
Number of Supported Devices	2 (drives)
Data Transfer Speed	10 Gigabits per second (USB 3.2 Gen 2)
Communication Interface	USB Type-C

コンパクトな設計

コンパクトなサイズ・最小限のスペースを最大限に活用し、
どんな場所でもいい



N.Weight:
1.3 kgs

Image: Product dimensions of the D2-320 enclosure.

The TERRAMASTER D2-320 comes with a 2-year limited warranty from the date of purchase. Please retain your proof of purchase for warranty claims. The warranty covers manufacturing defects and malfunctions under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or natural disasters.

8. SUPPORT

For technical assistance, driver downloads, firmware updates, or further information, please visit the official TERRAMASTER support website. You can typically find FAQs, user forums, and contact information for customer service there.

Official Website: www.terramaster.com

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question