

MANUAL



FANTEC mobiRAID X2U31 2x 2.5" SSD & HDD Enclosure JBOD / RAID0 / RAID1

1. Introduction

Thank you for purchasing your new FANTEC mobiRAID X2U31 2X SSD & HDD RAID enclosure. This device supports very flexible RAID (Redundant Array of Independent Disks) configuration. Due to the USB 3.1 (USB-C) interface (USB 3.0 compatible), data transfer rates up to 10.0 Gbit/s are possible and as a special advantage, the operation without additional power supply has to be mentioned. These features guarantee exceptionally flexible application options for your RAID enclosure.

Before you start installing and setting up the device, please read this manual carefully.

2. Scope of delivery FANTEC mobiRAID X2U31

Your package contains the following components



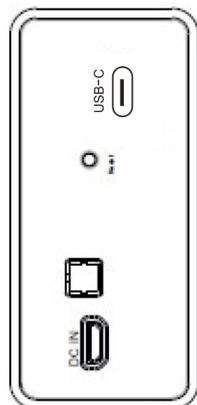
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3. LED displays



Display	Status
Blue glowing Installed	Installed
Flashing blue Ac- cess	Access
Off Standby / Not installed	Standby / Not installed
Red flashing De- fective	Defect

4. Interfaces

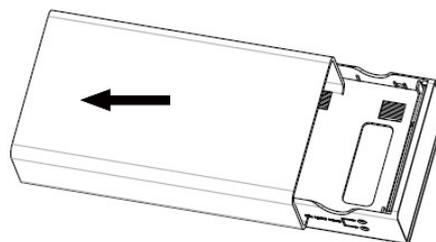


Nr.	Interface	Description
1	USB-C	Data transfer to PC
2	Reset button	To change the RAID mode
3	RAID	Switch For setting the RAID mode
4	DC IN	Additional power supply if the power supply at the USB 3.1 slot is not suf- ficient

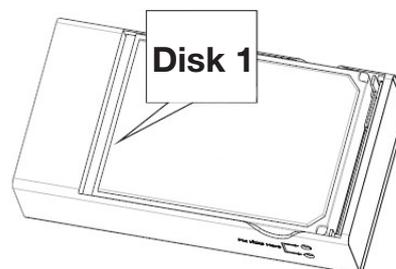
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5. Hard disk installation

a) Pull the inner frame out of the aluminum case.

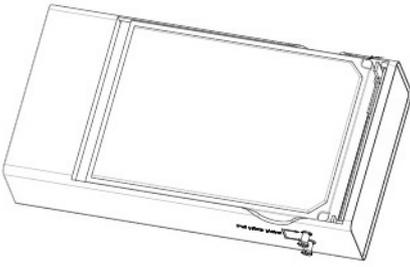


b) First install the hard disk in the bay of disk 1 and only then install another hard disk in the bay of disk 2. At this point we also recommend marking the hard disks accordingly with the supplied stickers disk 1 and disk 2. If there is damage to one of the hard disks later, the hard disks can be identified more easily.

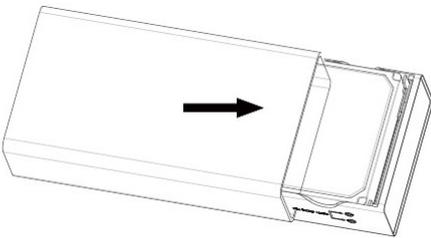


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c) Fix the HDDs to the top of the inner frame with the **shorter** screws. You will also find the imprint „**Fix HDD here**“ at this point.



d) Slide the aluminum cover from the back to the front over the inner frame and screw the cover tight at the bottom with the longer screws. This process completes the hard drive installation.



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RAID Mode Explanation

The FANTEC mobiRAID X2U31 supports 3 different RAID settings. Before you can copy data to the device, please choose between JBOD, RAID 0 or RAID 1 mode according to your preferred security level or storage strategy.

Important Notice:

Once the RAID mode is set, it is not possible to change it without losing data. Before changing the RAID mode, please back up your data. After the RAID configuration is changed, the hard drives must be reformatted.

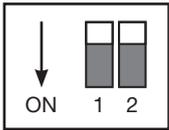
To help you decide which RAID mode is best for your purpose, please see the chart below. There, the different RAID settings are rated according to available storage capacity, security level and data transfer speed.

RAID Modus	Capacity	Security	Speed
JBOD	100%	★ ★ ☆ ☆	★ ★ ☆ ☆
RAID0	100%	★ ☆ ☆ ☆	★ ★ ★ ★
RAID1	50%	★ ★ ★ ★	★ ★ ☆ ☆

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7. RAID Setup mode

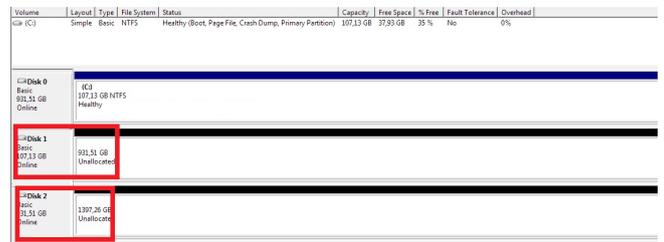
JBOD Modus



To set the JBOD mode, please set both dip switches upwards as shown in the graphic above. In this mode, both hard disks work individually and two individual drives are also displayed on your computer. Normally, this mode is used when 2 hard disks of different manufacturers or storage capacities are used.

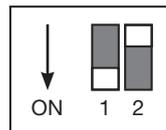
Place the two hard disks in the inner frame and connect the device to your PC via USB 3.1 cable. Set the JBOD mode and then press the reset button for about 10 seconds. The PC will now automatically detect a new USB device and after a short time two new drives should be displayed. If no new drives are displayed, the hard disks must first be initialized and formatted (Attention: after formatting, all data is deleted). To do this, please open the Disk Management by clicking on the Windows Start icon (Windows 10 right-click) and enter „diskmgmt.msc“ in the search window and confirm with ENTER. After that the Disk Management opens and you should find two new hard disks marked as „Unknown/Not initialized“.

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Make a right click on the unknown drive and select „Initialize“, now you can format the disk with a right click on „Unallocated“. Select „New Simple Volume“ and follow the process via the Next button until you reach the Finish button.

RAID 0 mode



To set the RAID 0 mode, please set only dip switch 1 to „ON“ as shown in the graphic above. In this mode, both hard disks are combined into one large hard disk and only a single drive is displayed on your computer. The available storage capacity is twice the storage capacity of the smaller hard disk (when using two different hard disks) Normally this mode is used when the data transfer speed is to be increased by means of „striping“. „Striping“ combines several drives into one large virtual drive as one logical unit.

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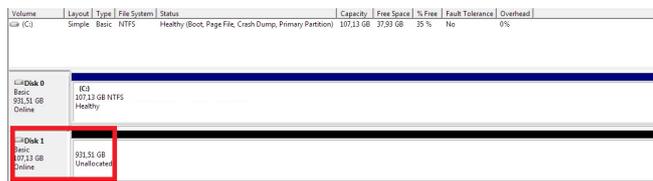
Data is written to all hard drives in parallel, resulting in an increase in data transfer rate.

Important notice:

In case of failure of one hard disk in the „striping“ network, all data of the entire network will be lost.

Place the two hard disks in the inner frame and connect the device to your PC using a USB 3.1 cable. Set the RAID 0 mode and press the reset button for about 10 seconds. The PC will now automatically detect a new USB device and after a short time a new disk should be displayed. This new disk must first be initialized and formatted (Attention: after formatting, all data is deleted). To do this, please open the disk management by clicking on the Windows Start icon (Windows 10 right-click) and enter „diskmgmt.msc“ in the search window and confirm with ENTER.

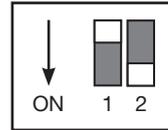
After that, Disk Management will open and you should find a new hard drive marked as „Unknown/Not Initialized“.



Make a right click on the unknown drive and select „Initialize“, now you can format the disk with a right click on „Unallocated“.

Select „New Simple Volume“ and follow the process via the Next button until you reach the Finish button.

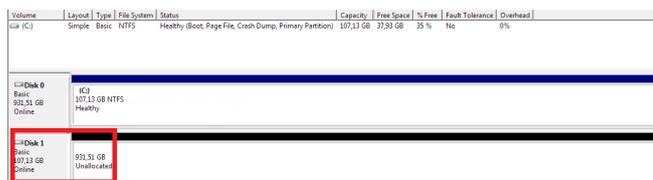
RAID 1 mode



To set the RAID 1 mode, please set only dip switch 2 to „ON“ as shown in the graphic above. In this mode, both hard disks are combined into one mirrored hard disk and only a single drive is displayed on your computer as well.

The available storage capacity is equal to the storage capacity of the smaller hard disk (when using two different hard disks) Normally this mode is used when data security by means of „mirroring“ has the highest priority. Mirroring is the automatic distribution of data to several hard disks. This ensures a high level of data security. If one hard disk fails, access is still possible and after replacing the defective hard disk, the data mirror is restored.

Place the two hard disks in the inner frame and connect the device to your PC via USB 3.1 cable. Set the RAID 1 mode and press the reset button for about 10 seconds. The PC will now automatically detect a new USB device and after a short time a new disk should be displayed. This new disk must first be initialized and formatted. If no new drive is displayed, the hard disk must first be initialized and formatted (Attention: after formatting, all data is deleted). To do this, please open the Disk Management by clicking on the Windows Start icon (Windows 10 right-click) and enter „diskmgmt.msc“ in the search window and confirm with ENTER. After that, Disk Management will open and you should find a new hard drive marked as „Unknown/Not Initialized“.



Right click on the unknown drive and select „Initialize“, now you can format the disk by right clicking on „Unallocated“. Select „New Simple Volume“ and follow the process via the Next button until you reach the Finish button.

8. General Notes

1. changing RAID mode will result in data loss.
2. please follow the instruction manual when you want to change the RAID mode, otherwise the setup may fail.
3. if the power supply is not enough or you notice a clicking sound from the hard drives, please use the included USB cable for additional power supply.
4. hard drives of the same size, brand and model number is recommended.
5. using multiple partitions is not recommended.
6. when using storage capacities larger than 2TB, Windows 7/8/10 users may initialize hard disks as GPT disks. However, older operating systems might not recognize this mode. For more information about GTP disks, please visit the following page: http://www.microsoft.com/whdc/device/storage/GPT_FAQ.msp.

If you have accidentally used MBR disks, you need to switch the device to another RAID mode and make all settings according to the selected RAID mode. After that, you can set the device back to the originally desired RAID mode and initialize the disks as GPT disks. The data will be lost in the process.

9. FAQ (Frequently Asked Questions)

1: In RAID 1 MODE, if a hard disk fails, is it possible for the device to rebuild the data after replacing it with a new hard disk?

Answer: Yes, the device automatically starts rebuilding (rebuild) after a new hard disk is installed. No additional settings or configurations are required. To start the data recovery in RAID 1 mode, please proceed as follows:

- Turn off the device and remove the defective/corrupted hard disk.
- Install a factory new hard disk into the empty bay.
- Turn on your PC. Connect the USB 3.1 cable first to the PC and only then to the FANTEC mobiRAID X2U31.
- After a few seconds, both status LEDs will start flashing, indicating that the recovery process has begun.
- The speed of the rebuild is about 250GB/h, i.e. with a hard disk of 500GB the rebuild would take about 2h minimum, or maybe more.
- When both status LEDs are solid blue, the recovery has been completed successfully.

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4: How can I backup my data if the FANTEC mobiRAID X2U31 itself fails?

Answer: If you are using the FANTEC mobiRAID X2U31 in JBOD or RAID 1 mode, you can simply remove the hard drives from the enclosure and install them in another external enclosure or connect them directly to the internal interface in the PC to access the data. For example, you can plug the hard drives into a USB docking station and then back up the data.

If your device is operating in RAID 0 mode, you will need to replace the FANTEC mobiRAID X2U31 with a new one yourself. To do this, remove the hard drives and mark them with the supplied DISK 1 and DISK 2 labels if you have not already done so, to avoid confusion later when you put them back into a new enclosure.

After your device has been replaced, please connect the new (repaired) FANTEC mobiRAID X2U31 without hard disks (empty) to a running PC using a USB 3.1 cable. Then set the dip switches to RAID 0 mode. Now press the reset button for about 10 seconds and then disconnect the USB 3.1 cable from the case again. Now place the hard disks into the corresponding trays DISK1 and DISK2 and reconnect the USB 3.1 cable to the PC. Now you should be able to access your data again without data loss.

5: What is the cause when my PC does not recognize the FANTEC mobiRAID X2U31?

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Important note

- In order to recover your data as safely as possible, we recommend that the new hard disk is also from the same manufacturer and has the same model number, or at least a factory-new hard disk with a larger capacity than the defective hard disk.

- Do not disconnect the USB cable during the recovery process.

2: Can I copy data to the hard disk during RAID 1 recovery?

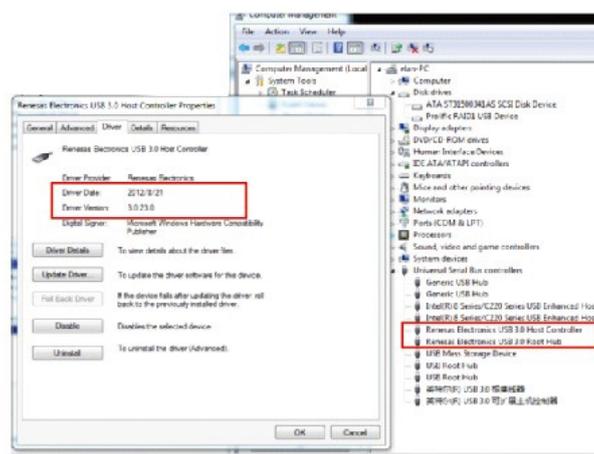
Answer: Yes, but it is not recommended and it will also increase the duration of the recovery.

3: In RAID 1 mode, if one hard drive fails due to a defect, can I still access the data on the other hard drive?

Answer: Yes, the PC can still access the data on the working hard disk. If you want to be absolutely sure, you can save the data of the hard disk elsewhere and only then start the RAID 1 recovery process.

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Answer: a) Please check if your USB 3.1 driver or firmware is up to date, otherwise please try to update it.



b) Your hard disk(s) might need too much power. Please connect the additional supplied USB cable to the DC-IN jack on the device and to a free USB port on your PC.

For more information, please visit our homepage:

www.fantec.de

If you have any further questions or need help with this device, please contact our Fantec Support:

Email: service@fantec.de

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