

# User Guide

# External Hard Disk

with USB 1.1/2.0 and  
IEEE 1394 connection

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## SAFETY AND INSTALLATION

Please read this chapter carefully and observe all listed notes. This will ensure reliable operation and long life expectancy of your product. Keep these instructions with your product at all times. The proper set up, use and care can help extend the life of your product. In the event that you transfer ownership of this product, please provide these instructions to the new owner.

- ▶ Changing the hard disk must only be performed by a person who is experienced in repairing and upgrading PCs.
- ▶ Should you not possess the **necessary qualifications**, call in a technician.
- ▶ Hard disks are extremely **fragile**. Never drop or shake the hard drive - this could irreversibly damage the data on the hard disk. Be **especially careful when transporting** the hard disk. We provide **no guarantee** for this type of damage.
- ▶ Follow the user guide for your PC.
- ▶ Only use the hard disk with the original power supply unit. The socket must be located near the equipment and be easy to reach. If the power adapter plug is pulled out, the external hard disk will be disconnected from the mains.
- ▶ **Do not insert any objects** through the slits and openings **into the interior of the hard disk**. This could lead to a short circuit or even cause a fire.
- ▶ Never open the hard disk casing. If you do so, the hard disk will no longer be covered by the guarantee.
- ▶ **Do not let children play unattended** with electrical devices. Children cannot always recognize the possible danger.
- ▶ The hard disk is not designed for use in commercial applications/situations.
- ▶ After **transportation**, wait until the equipment is at room temperature before turning it on. If there is a large difference in temperature or humidity, damp can build up through condensation and cause an **electrical short circuit**.
- ▶ In order to avoid damage from a fall, place the hard disk on a stable and level surface which does not vibrate.

- Keep your hard disk and all connected equipment away from **damp** and avoid **dust, heat** and direct sunlight in order to prevent operational problems.
- The slits and openings in the hard disk are for air circulation. Do not cover these openings, as this could lead to overheating.
- For additional safety, we recommend using power connection through a power surge protection unit in order to protect your equipment from power surges and lightning strikes.
- The voltages and interfaces used in the equipment are in line with the low voltage protection guidelines set out in EN60950. Connections to other equipment may only be made using similar interfaces with low voltage protection in accordance with EN 60950.
- Please use our Service Center if you have any technical problems with your hard disk. If repairs are needed, please use exclusively our authorised service partners.

## ELECTROMAGNETIC COMPATIBILITY

- On connecting the hard disk, you must **keep to the guidelines** for electromagnetic compatibility.
- Make sure that it is located at least **one meter away** from sources of high frequency and magnetic **disturbance** (TVs, speakers, mobile telephones, etc. ) in order to avoid operational problems and data loss.

## CLEANING

As a rule, it is not necessary to clean the equipment. Before cleaning, always pull out the plug and all connection cables.

- **Caution!** This equipment **does not include any parts** that need **servicing** or cleaning.
- Make sure that the hard disk casing does not get dirty. Do not use any **solvents, corrosive** or **gaseous** cleaning products.

## DATA SECURITY

Every time you update your data make back-up copies on an external storage medium. MEDION does not assume liability for data loss or damage to data storage units, and no claims can be accepted for damages resulting from the loss of data or consequential losses.

# INTRODUCTION

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## WHAT'S INCLUDED

Please check to ensure that your product is complete and inform us within 14 days of purchase if anything is missing. The following should be included with the hard drive:

External 3.5" hard disk in compact casing

USB 2.0/1.1 connection cable

IEEE 1394 (FireWire/iLink) connection cable

Power supply unit

User guide, guarantee documents

Driver software for Windows® 98SE

## SYSTEM REQUIREMENTS

|                         |                             |
|-------------------------|-----------------------------|
| <b>Computer</b>         | PC/AT compatible computer   |
| <b>Processor</b>        | Pentium class above 200 MHz |
| <b>Operating system</b> | Windows® 98SE/2000/ME/XP    |
| <b>Working memory</b>   | 32 MB or more               |
| <b>Connection</b>       | USB or IEEE1394 interface   |

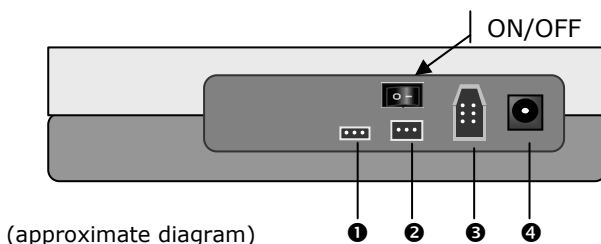
# SETTING UP

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## CONNECTING THE CABLES

You can connect the external hard disk to your computer using a free USB or IEEE 1394 (Firewire) port. If your computer supports USB 2.0, it does not make a big difference if you connect the hard disk using a USB or IEEE1394. The speed of transmission is more or less the same for both systems.

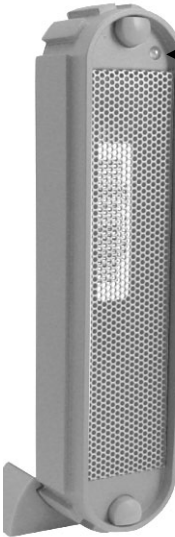
You can also connect the hard disk to computers with a USB 1.1 port. The speed of transmission is then somewhat slower.



- ❶ Connection for USB 1.1/2.0
- ❷ Connection for IEEE 1394 (FireWire,iLink, 4 pole)
- ❸ Connection for IEEE 1394 (FireWire,iLink)
- ❹ Connection for power adapter

1. Start your computer and wait until Windows<sup>®</sup> has been fully loaded.
2. Connect the desired data connection cable to the corresponding connection (❶, ❷ or ❸) on your external hard disk.
3. Connect the other end of the connection cable to your computer.
4. Now connect the power adaptor to a socket that can easily be reached. Plug the power adaptor plug into the corresponding socket (❹) in the hard disk.

## TURNING ON THE HARD DISK



1. Push the on/off button on the back of the hard disk. The LED display turns orange as soon as the hard disk is turned on. The LED display turns green when the hard disk is ready.
2. With Windows® ME/2000/XP the hard disk is now automatically recognised and connected.

If you have Windows® 98SE, you will need to use the included data media with the driver on. Insert this in order to install the required driver and follow the instructions on the screen.

## INSTALLING THE HARD DISK

- **CAUTION!** Partitioning or formatting a disk drive deletes data. We assume **no responsibility** for lost data.

### BEFORE YOU INSTALL YOUR HARD DISK ...

We would like to remind you once again that when installing the new hard disk some programs are used that could cause your data to be irreversibly lost if used incorrectly.

- Make a backup of all your data and check that the recovery procedure works.

## PARTITIONING PROGRAMS

With Windows® 2000/XP use the **data media management** help program in order to install the hard disk. You can find the program in the **computer management**.

With some operating systems you must have administration rights to install a hard disk.

With Windows® 98SE/ME the hard disk is installed with the DOS program FDISK. Look under help in Windows for detailed information on using this program.

## PARTITIONING THE DRIVE

Partitioning a drive divides the space into different areas which can be accessed as separate logic drives (with letters C:, D:, E: etc.). Read the operating system manual to find out to partition hard drives.

## FORMATTING THE DRIVE

In order to remove data from the hard disk, the partitions must be formatted.

➔ CAUTION! You must be totally sure about which drive letter to enter so that you don't format a drive that contains data you wish to keep.

You can carry out the partitioning using Windows® Explorer (right click on the drive and select format).  
Read which formatting options you have in the next section.



## **CHOOSING BETWEEN NTFS, FAT, AND FAT32**

When you use Windows XP and Windows 2000 you can choose between three file systems for disk partitions: NTFS, FAT, and FAT32. Use the information below to compare the file systems. NTFS is the recommended file system for the following reasons:

NTFS is more powerful than FAT or FAT32, and includes features required for hosting Active Directory as well as other important security features. You can use features such as Active Directory and domain-based security only by choosing NTFS as your file system.

It is easy to convert partitions to NTFS. The Setup program makes conversion easy, whether your partitions used FAT, FAT32, or the older version of NTFS. This kind of conversion keeps your files intact (unlike formatting a partition). If you do not need to keep your files intact and you have a FAT or FAT32 partition, it is recommended that you format the partition with NTFS rather than convert from FAT or FAT32. Formatting a partition erases all data on the partition and allows you to start with a clean drive.

Whether a partition is formatted with NTFS or converted using the convert command, NTFS is the better choice of file system. (For more information about Convert.exe, after completing Setup, click Start, click Run, type cmd, and then press ENTER. In the command window, type help convert and then press ENTER.)

In order to maintain access control on files and folders and support limited accounts, you must use NTFS. If you use FAT32, all users will have access to all files on your hard drive, regardless of their account type (administrator, limited, or standard.)

NTFS is the file system that works best with large disks. (The next best file system for large disks is FAT32.)

There is one situation in which you might want to choose FAT or FAT32 as your file system. If it is necessary to have a computer that will sometimes run an earlier version of Windows and other times run Windows XP, you will need to have

a FAT or FAT32 partition as the primary (or startup) partition on the hard disk. Most earlier versions of Windows cannot access a partition if it uses the latest version of NTFS. The two exceptions are Windows 2000 and Windows NT 4.0 with Service Pack 4 or later. Windows NT 4.0 with Service Pack 4 or later has access to partitions with the latest version of NTFS, but with some limitations: It cannot access files that have been stored using NTFS features that did not exist when Windows NT 4.0 was released.

For anything other than a situation with multiple operating systems, however, the recommended file system is NTFS.

➤ **Important:** Once you convert a drive or partition to NTFS, you cannot simply convert it back to FAT or FAT32. You will need to reformat the drive or partition which will erase all data including programs and personal files on the partition.

The following table describes the compatibility of each file system with various operating systems.

| NTFS   | FAT  | FAT32   |
|--|--|---|
| A computer running Windows XP or Windows 2000 can access files on an NTFS partition. A computer running Windows NT 4.0 with Service Pack 4 or later might be able to access some files. Other operating systems allow no access. | Access is available through MS-DOS, all versions of Windows, Windows NT, Windows 2000, Windows XP, and OS/2. | Access is available only through Windows 95 OSR2, Windows 98, Windows Millennium Edition, Windows 2000, and Windows XP. |

The following table compares disk and file sizes possible with each file system.

| NTFS  | FAT   | FAT32   |
|---|---|---|
| Recommended minimum volume size is approximately 10 megabytes (MB). Volumes much larger than 2 terabytes (TB) are possible. Cannot be used on floppy disks. | Volumes from size up to 4 gigabytes (GB). Does not support domains. | Volumes from 512 MB to 2 TB. In Windows XP, you can format a FAT32 volume up to 32 GB only. Does not support domains. |
| File size limited only by size of volume.   | Maximum file size is 2 GB.  | Maximum file size is 4 GB.  |

➤ **Note:** Some older programs may not run on an NTFS volume, so you should research the current requirements for your software before converting.

## DELETING HARD DISKS FROM THE SYSTEM

Depending on the operating system, the external hard disk must be disconnected before it can be deleted. This is usually the case for Windows 2000. Read how this works in the help files of your operating system.

1. Disconnect the hard disk from the operating system if necessary.
2. Press the on/off button on the hard disk.
3. Now pull out the plug and disconnect all the connection cables from the external hard disk.

- **Caution:** While accessing the hard disk, the hard disk must not be deleted or turned off. This can lead to data loss.
- You can see that data is being transmitted when the **LED display flashes orange**. When the LED display is green, no data is being transmitted. However, you should make sure that all files that you have opened from the hard disk (documents, etc.) have been closed again before you delete or turn off the hard disk.
- When the hard disk is turned off, the **plug can be pulled out of the socket** so it does not consume any electricity.

# CUSTOMER SERVICE

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## REQUIREMENTS FOR OPTIMAL PERFORMANCE:

1. a stable, trouble-free computer
2. a correctly installed operating system
3. cables correctly attached to the hard disk
4. regular execution of the Windows® **defragmenter** and **scandisk** programs to remove sources of error and increase the system performance.

Defragmenting your hard drive can take some time (several hours even on a fast PC), and you cannot use your PC during this time. It's advised that you leave your PC defragmenting over night. To defragment your drive in Windows 2000/XP:

1. Close down all applications and disable your virus scanner if possible. Also switch turn off any screensavers.
2. Click Start and then Programs->Accessories->System Tools->Disk Defragmenter
3. Select a drive and click Analyze.
4. Defragment if it is recommended.

ScanDisk is not present in Windows XP. Instead, use Check Disk. To start Check Disk:

1. Open My Computer, right-click a drive, and then click Properties.
2. On the Tools tab, under Error-checking, click Check Now

Sometimes Defragmenter or Scandisk works on 10% or 30% of a hard drive and then hangs. This is usually caused by Windows programs running in the background. If this happens, you can prevent force Windows to not run automatic background programs. To run ScanDisk/Defrag successfully:

1. Go to **Start->Run** and type **msconfig** in the Open: box.
2. On the General tab, uncheck all items listed under **Selective startup** (make sure that **Selective startup** is selected).
3. Hit **apply** and **OK** and restart Windows. This starts Windows with only the basics running; Insures nothing will interfere with ScanDisk and Defragmenter.
4. Run ScanDisk and Defrag.
5. Go to **Start->Run** and type **msconfig** in the Open: box. Select Normal Startup.
6. Restart Windows.

## TROUBLESHOOTING

PROBLEM: Windows stops responding when I disconnect the external hard drive.

ANSWER: This may occur because Windows is trying to access a file that is on external hard drive. Make sure that none of the files on the disk are open when you unplug the drive. Be sure to stop the drive before disconnecting the power or adapter cable to prevent any data loss.

PROBLEM: The drive is not recognized by my computer.

ANSWER: Restart your computer.

PROBLEM: The hard drive does not seem to have as much storage capacity as I allocated.

ANSWER: Check that your operating system and file system support the desired amount.

PROBLEM: ScanDisk reports an unrecoverable error.

ANSWER: The Scandisk program tests drives for errors. If ScanDisk finds a problem and is unable to fix it, there may be a problem with the hard disk

## DO YOU REQUIRE ADDITIONAL SUPPORT?

If the suggestions in the previous section have not solved your problem, please contact the hotline. We will try and help you over the telephone. However, before you contact your nearest MEDION Technology Centre, please have the following information available:

- How is your computer configured?
- What additional peripherals do you use?
- What messages, if any, appear on your screen?
- What software were you using when the error occurred?
- What steps have you already undertaken to solve the problem?
- If you have already been given a customer number, please have this available.

For fast answers to common questions, visit us online at **[www.medion.com](http://www.medion.com)**. You can find FAQs and Knowledge Base articles, or email customer support.

You can also reach us at our toll-free telephone number:  
1-866-633-4660

# WARRANTY

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MEDION warrants to our customers that this product is free from defects in materials and workmanship as follows: for a period of one (1) year from the date of original purchase, defective parts or a defective product returned to a MEDION repair facility or a MEDION Authorized Service Center ("ASC") for such product, as applicable, and proven to be defective upon inspection, will be exchanged for new or comparable rebuilt parts, or a refurbished product, as determined by the MEDION repair facility or the ASC.

Limited warranty repair or replacement shall not extend the original limited warranty period of the defective product. This limited warranty does not cover any supplies or accessories.

EXCLUSIONS: this limited warranty does not apply, and you will have no remedy hereunder with respect to (a) products that have been modified, opened, repaired or otherwise altered, except by MEDION or an ASC, (b) products that have been damaged or destroyed after delivery to the customer, (c) any third party software, interfaces, parts, supplies, peripherals or other products or any defects resulting from use of the product in connection with such third party products, (d) defects resulting from improper or inadequate maintenance, calibration or site preparation, (e) defects resulting from any misuse, abuse, accident, neglect, negligence or any use other than in accordance with the handling or operating instructions provided by MEDION, (f) defects resulting from exposure to unusual physical or electrical stress or from any operation other than in accordance with the published environmental specifications for the product.

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MEDION's limited warranty is valid in any country or locality where MEDION has a support presence for this product and where MEDION has marketed this product. The level of warranty service you receive may vary according



to local standards. MEDION will not alter form, fit or function of the product to make it operate in a country for which it was never intended to function.

TO THE EXTENT ALLOWED UNDER APPLICABLE LAW, THE REMEDIES IN THIS LIMITED WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL MEDION OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. IN NO EVENT SHALL RECOVERY OF ANY KIND AGAINST MEDION BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT SOLD BY MEDION WHICH CAUSED THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, YOU ASSUME ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO YOU AND YOUR PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF USE OR MISUSE OF, OR INABILITY TO USE THE PRODUCT NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF MEDION. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT AS LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Please note the following:

Be sure to keep your purchase receipt in a safe place. MEDION, at its option, may require a copy of the receipt to validate the warranty period effective date (i.e. date of purchase). Warranty liability only applies to material or factory faults. It does not apply to damage due to breakage, for example, a crack in the housing. Our service includes unit exchange or send-in repair:

#### Unit Exchange

In locations where Unit Exchange is available, MEDION will send you a replacement product. You must return the defective product to MEDION (using the shipping carton that the new one came in.)

#### Send-In Repairs

In locations where Send-In Repair Service is available, repair service can be obtained by shipping your product to the MEDION Repair Center. The product will be repaired and returned to you.

For either Unit Exchange or Send-In Repairs, you must have an authorized RMA number from Medion support before shipping your defective product.

Replacement products may be either new or equivalent in performance to new. MEDION replacement or repaired products may contain remanufac-

tured parts equivalent to new in performance or may have been subject to incidental use.

#### Out-of-Warranty Support

In addition to providing free technical support during the warranty period, MEDION is also available to support your product after the warranty period has ended. This out-of-warranty support will be provided on a fee basis.