

NOTES ON THIS MANUAL

Keep these instructions with your computer at all times. The proper set up, use and care can help extend the life of your computer. In the event that you transfer ownership of this computer, please provide these instructions to the new owner.

This manual is divided into sections to help you locate the information you require. Along with the Table of Contents at the beginning of this manual, an Index has been provided to help you find topical information.

If you want to start up your PC immediately, please read the chapters **Operational Safety** (page 3) and **Setting up and Getting Started** (page 10).

We strongly recommend you read this entire manual to ensure the proper set-up and operation of your PC.

Many application programs incorporate extensive help functions. As a general rule, you can access help functions by pressing F1 on the keyboard. These help functions will be available to you while you are using the Microsoft Windows® operating system or the respective application program.

We **strongly recommend** that you read the Online Manual for your PC, which can be found in the **Start Menu**.



Information about your PC

This interactive manual is designed to provide additional information about your PC as well as useful links accessible via the World Wide Web.

Windows^{XP} invites you to a **tour** (notes on the task bar) to familiarize yourself with the operating system. We listed further useful sources of information starting on page 61.

AUDIENCE

These instructions are intended for both the novice and advanced user. Regardless of the possible professional utilisation, this PC is designed for day-to-day household use. The functions and applications for use with this PC have been designed with the entire family in mind.

PURCHASE DETAILS

Enter your purchase details below for quick reference.

Serial Numbers

(i.e. Microsoft®)

Place and date of Purchase

You will find the PC serial number on the Service Hotline card. The serial number also appears on the rear of the PC.

QUALITY

Medion has selected the components in this computer for their high level of functionality, ease of use, safety and reliability.

Through balanced hardware and software design we are able to provide you with an innovative personal computer useful for applications relating to both work and leisure.

We are pleased to welcome you as our newest customer. **Thank you for choosing our products.**

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MAKING COPIES OF THIS MANUAL

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■ Chapter 1

Safety and Maintenance

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SAFETY AND MAINTENANCE

OPERATIONAL SAFETY

Please read this chapter carefully and observe all listed notes. This ensures a reliable operation and long life expectancy of your PC.



- **DO NOT allow children to play unattended with electrical equipment.**
- **DO NOT open the PC casing or use the PC with the casing removed.** When the casing is open there is a **danger to life** from electric shock.
- **DO NOT insert objects through the slots and openings of the PC.** This may lead to electric shock or an electrical short-circuit or fire that will damage your PC.
- Connect the PC **ONLY** to an **earthed**, easy accessible **power socket**. For disconnecting the PC from the mains, unplug the power cord from the mains socket.



- **DO NOT cover the slots and openings in the PC casing.** These openings are for ventilation purposes. Covering these vents may lead to overheating.
- **This PC is NOT designed for use within industrial environments.**



- CD-ROM-/CDRW-/DVD-drives are **Laser Class 1** devices. These lasers **must** remain in their sealed PC casing. **DO NOT remove the drive covers, as exposure to the lasers may prove harmful.**
- **DO NOT look directly into the laser, even when wearing eye protection.**

For U.S. / Canadian purposes:

Danger — Invisible laser radiation when open. Avoid direct exposure to beam.

Danger — radiations invisibles du laser en cas d'ouverture. Eviter toute exposition directe au faisceau.

This product is certified by the manufacturer to comply with DHHS rules 21CFR, Chapter 1, Subchapter J, applicable at date of manufacturer. Refer to optical drive labels for additional details.

Please contact **Customer Service** when:

- ... the **power cord or** the attached **plug is worn** or damaged. Have the defective power cord replaced with an original cable. Never try to repair a defective cable.
- ... the **housing** of the PC **is damaged** or **liquids have penetrated**. Have the PC checked by Customer Service first. Otherwise it is possible the PC cannot be operated safely which might cause danger to life by electric shock! The power cord is worn or damaged.

DATA SECURITY



Every time you update your data make back-up copies on an external storage medium. The supplier 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.

IMPORTANT ADDITIONAL SAFETY INSTRUCTIONS

When using any electronic equipment, basic safety precautions should always be taken. Following the guidelines below can reduce the risk of fire, electric shock and injury to person:

- Do not use this product near water (e.g., near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool).
- Avoid using a telephone/modem (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone/modem to report a gas leak in the vicinity of the leak.
- Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.
- Keep batteries away from children at all times.
- **Caution:** To reduce the risk of fire, use only No. 26 AWG or larger telecommunication cords (applies to American Standards).
- **Caution:** Lithium batteries can not handle intense pressure, high temperatures or fire. Danger of explosion if replaced incorrectly. Replace batteries with a compatible type (Sony™, CR 2032) as recommended by the manufacturer. Lithium batteries are **hazardous waste** and require proper disposal. Contact your **Service Center** for additional information on battery disposal.

■ Chapter 2

Setting Up & Getting Started

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INCLUDED WITH YOUR PC

Please check that the contents listed below are supplied with your package and notify us within 14 days of purchase if this is not the case. You MUST provide your PC's serial number when contacting a customer service representative.

Your PC bundle should include the following components:

1 x PC and power cord

1 x Windows-compatible keyboard⁺

1 x Mouse⁺

1 x Remote Control Set (optional)

1 x Microsoft Windows® Getting Started Manual + Recovery CD
(for re-installing the operation system, for factory roll-back refer to page 73)

1 x Application and Support CD (Drivers etc.)

This instruction manual

Warranty Card

1 x Setting-up poster (optional)

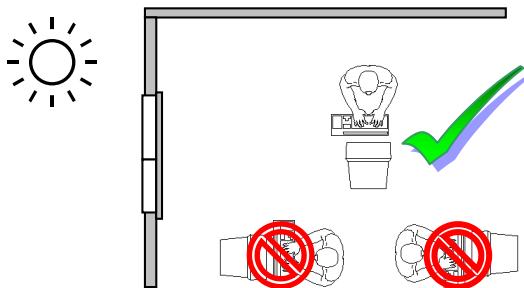
⁺ As a USB radio kit these devices may optionally be equipped with a radio receiver.

SETTING UP

Remember that choosing the proper location for your PC is just as important as connecting it correctly. Place your PC in a stable, vibration-free area. Detailed below are additional guidelines on setting up your PC.

POSITIONING THE MONITOR

Ensure that the monitor is set up in such a way that reflections, glare and light/darkness contrast are avoided.



- Hand rest: 2" – 4"
- Top line of screen at eye level or slightly below
- Viewing distance: 20" – 27.5"
- Legroom (vertical): minimum 25.5"
- Legroom (horizontal): minimum 23.6"



WORKING IN COMFORT

- ⇒ Take **regular breaks** from the work at your screen to prevent tenseness and exhaustion.

Sitting in one position for long periods can be uncomfortable. To minimize the potential for physical discomfort or injury, it's important that you maintain proper posture.

- **Overall:** Change your position frequently and take regular breaks to avoid fatigue.
- **Back:** While sitting at your work surface, make sure your back is supported by the chair's backrest in erect position or angled slightly backwards.
- **Legs:** Your thighs should be horizontal or angled slightly downward. Your lower legs should be near a right angle to your thighs. Your feet should rest flat on the floor. If necessary, use a footrest, but double check that you have your seat height adjusted correctly before getting a footrest.
- **Arms:** Your arms should be relaxed and loose, elbows close to your sides, with forearms and hands approximately parallel to the floor.
- **Wrists:** Your wrists should be as straight as possible while using the keyboard, mouse or trackball. They should not be bent sideways, or more than 10 degrees up or down.
- **Head:** Your head should be upright or tilted slightly forward. Avoid working with your head or trunk twisted.

SET-UP LOCATION

- Keep your PC and all units connected to it away from **moisture, dust, heat** and **direct sunlight**. Failure to observe these instructions can lead to malfunctions or damage to the PC.
- To prevent damage to your PC from a fall, place and operate the PC and all connected units on a **stable, balanced** and **vibration-free surface**.

AMBIENT TEMPERATURE

- The PC can be operated at an ambient temperature of between **10° C** and **35° C** (+41° and +95° F) and at a relative humidity of between **30%** and **70%** (without condensation).
- When powered off, the PC can be stored at temperatures between **-20° C** and **50° C** (-40° and +158° F).
- To provide additional **protection against electric shock, power surges, lightning strikes**, or other electrical damage to your PC, we recommend the use of a **surge protector**.
- Wait until the PC has reached ambient (room) temperature before turning it on or connecting it to the power adapter. Drastic **variations in temperature** and **humidity** can create condensation within the PC and may cause it to **short-circuit**.

CONNECTING

For a better guidance, open up the left inner page of the cover with the diagrams to find the location of the described connections.

➲ **Note:** The devices listed are not necessarily included with your PC.

CABLING

Please follow the instructions below in order to correctly connect your PC:

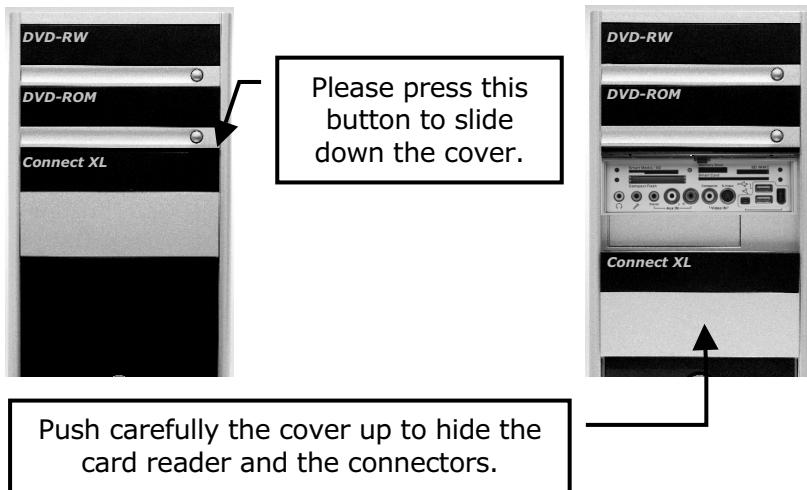
- Arrange cables in such a way that no one can tread on or trip over them.
- **DO NOT place objects on the cables.**
- To avoid damage to your PC, connect your peripherals (e.g., keyboard, mouse and monitor) whilst your PC is powered **off**. Some devices can be connected whilst your PC is in use. These devices usually have a USB or IEEE 1394 connector. **Please follow the appropriate instructions for each device.**
- Keep the PC at least one meter (approximately three feet) away from **high frequency** and **magnetic interference sources** (e.g., televisions, loudspeaker cabinets, mobile telephones, etc.) in order to avoid malfunctions and/or loss of data.
- To avoid EMC issues, make sure that all devices are connected to each cable or that cables not in use are removed from the computer.
- Please note that only **shielded** cables shorter than 3 metres (9.84 ft) should be used for the LPT, COM, USB, IEEE 1394, audio, video and network interfaces with this PC.

- The connection of devices is limited to equipment that complies with EN60950 "Safety of information technology equipment" or EN60065 "Audio, video and similar electronic apparatus. Safety requirements".

➲ **Note:** You only need to connect those components to your computer you require. If you do not have the described device (e. g. printer) you may skip the respective item and carry it out later, if necessary.

FRONT CONNECTORS

Here is how you can access the (optional) card reader and some further connectors on the front of your PC casing.



(Diagram the same)

CONNECTING THE MONITOR

Diagram reference: **W, W2**

- If your graphics card has two VGA sockets), you can use either port to connect to the monitor. Your PC may optionally be equipped with a digital connector (DVI, **W2**). With the help of an adapter you can also use this connector for your VGA monitor.
- Because of its asymmetric form the plug only fits into the socket in one position.
 1. Connect the data cable of the monitor to the socket on the graphics card (reference **W** or **W2**). If necessary, remove the white guard-ring on the monitor plug and ensure that the plug and socket mate together precisely.
 2. Hand-tighten the screws on the monitor cable.

⌚ **CAUTION!** Your PC monitor is preconfigured for a screen resolution of **1024 x 768** pixels and an optimal refresh rate of 75 hz. If your monitor does not support these settings it may become damaged or malfunction during use.

You can change the screen resolution and configuration of your monitor as follows (See also your monitor's User Manual):

1. Once you have powered on the PC, press the F8 key to select **Safe Mode**.

⌚ If you don't hit the F8 key on time, you won't see the start menu which gives you the option to run in **Safe Mode**. Reboot your PC and retry if you have missed this.

2. Select **Display Properties** to designate the screen resolution for your monitor.

You can then adjust the "**Display Features**" to your monitor.

CONNECTING WIRELESS KEYBOARD & MOUSE

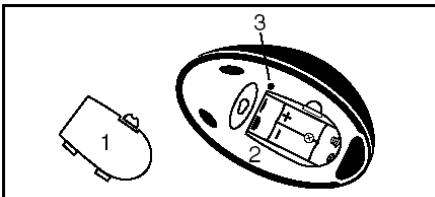
These devices are optional. The wireless keyboard and mouse operate with digital radio technology to ensure no hinder communication between the keyboard, the mouse and your computer without connecting cable. The transmission and receiving of keyboard and mouse are free from angle restriction. There are two frequency channels each for keyboard and mouse to prevent malfunctions when you operate several radio transmission devices simultaneously.

Before working with your new keyboard and mouse, take a few one-time preparations.

☞ **Beware:** Please read and follow the security advices concerning the use of batteries on page 81.

INSERTING BATTERIES IN MOUSE

The mouse requires two alkaline batteries (Type: AAA).



1 = Cover
2 = Battery compartment
3 = Channel setting button

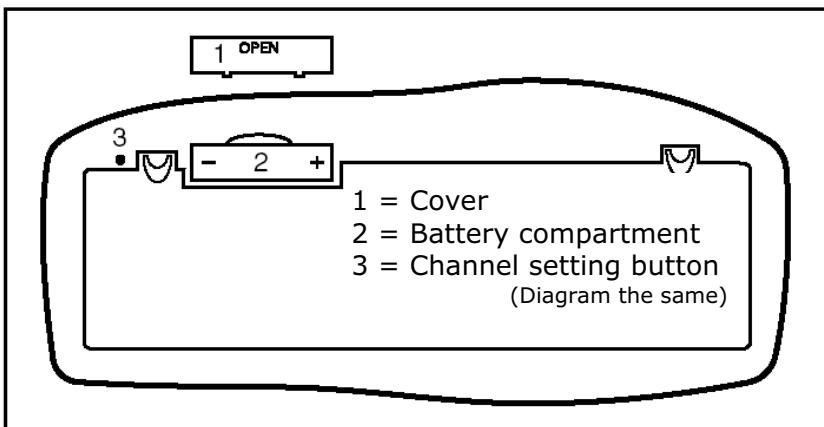
(Diagram the same)

1. Remove the battery compartment cover (1) on the bottom of the keyboard.
2. Insert the two alkaline batteries (AAA) in the battery compartment.
3. Fix the battery compartment cover (1) on the bottom of mouse again.

☞ **Note:** Please do not push the channel setting button (3) at one side of the battery compartment cover. It may cause the channel or ID change.

INSERTING BATTERIES IN KEYBOARD

The keyboard requires two alkaline batteries (AA).



1. Remove the battery compartment cover (1) on the bottom of the keyboard by pushing it in the direction of the arrow.
2. Insert two AA batteries. The illustration in the battery compartment (2) shows how to insert the batteries properly.
3. Recover the battery compartment by pushing the locking lug (2) under the battery compartment.

➲ **Note:** Please do not push the channel setting button (3) at one side of the battery compartment cover. It may cause the channel or ID change.

SETTING FREQUENCY CHANNEL OR ID

☞ **NOTE:** Please make the following setting **only after** installing your PC as described on the other chapters in this manual.

For the radio connection, set the keyboard to receiver, and mouse to receiver, with the same frequency channel and ID.

Different ID can keep the keyboard and mouse working well with the same frequency channel. There are 255 IDs each for keyboard and mouse. Change the frequency channel may prevent interference between two devices.

SETTING FREQUENCY CHANNEL ON KEYBOARD AND MOUSE

1. Push the connect button on the top of receiver. The indicator will be blinking.
2. Push the button on the bottom of keyboard or mouse. The channel will be changed after the button released.

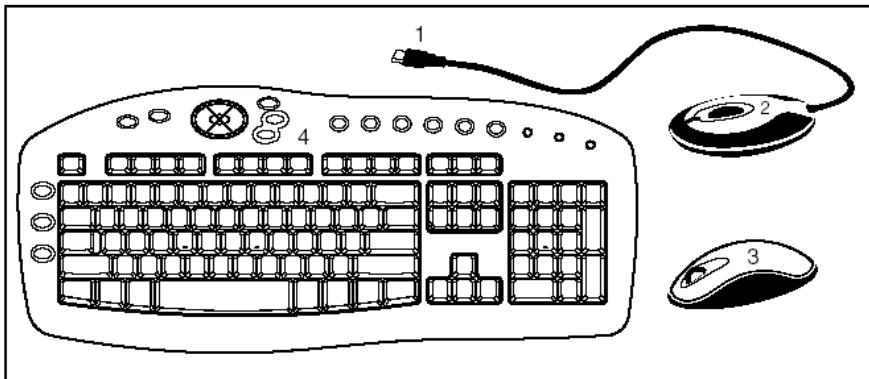
☞ **NOTE:** Please do not hold the button longer than 3 seconds.

It will change the ID, instead of channel.

SETTING ID ON KEYBOARD AND MOUSE

1. Push the connect button on the top of the receiver. The indicator on the top of the receiver will be blinking.
2. Hold down the button on the bottom of keyboard and mouse for approx. 3 seconds. The ID will be changed after the button released.

CONNECT THE KEYBOARD AND MOUSE



1 = USB Receiver plug (black)

2 = Receiver

3 = Mouse

4 = Keyboard

1. Plug the plug (1, black) of the receiver into an USB port of your computer. The computer will activate your mouse and keyboard after 10 seconds.
2. Place the receiver at least 20 cm (8 inches) from other electrical devices (e.g. monitor) to achieve optimum performance. The distance between the keyboard, mouse and receiver should not exceed 5 feet. Do not place the receiver on metal surfaces.

- ➲ The driver for these devices has already been installed on your PC.
- ➲ The operation of the mouse and the keyboard is described on page 35.

CONNECTING A USB KEYBOARD

Diagram reference: **E**

1. Connect the USB keyboard to a USB port.

CONNECTING A USB MOUSE

Diagram reference: **E**

1. Connect the USB mouse to a USB port.

CONNECTING PARALLEL DEVICES

Diagram reference: **P** (optional)

- Because of its asymmetric form the plug only fits into the socket in one position.
 1. If you wish to connect a printer with a parallel (25-pin) connecting cable, connect the printer cable from your printer to the red printer socket **P** on the rear of your PC.
 2. Hand-tighten the screws.

If you wish to use a **scanner**, which also connects to the PC via the parallel interface, follow the instructions above. With the PC parallel port in use, the printer can be connected directly to the scanner. You will have use of both devices if they are connected in this manner.

CONNECTING SERIAL DEVICES

Diagram reference: **S** (optional)

- Because of its asymmetric form the plug only fits into the socket in one position. Hand-tighten the screws.
1. In order to connect an external modem, card reader or other serial device, connect the serial cable with the turquoise-coloured connection socket **(S)** on the rear of your PC.
 2. Hand-tighten the screws.

MODEM/ISDN CONNECTION

Diagram reference: **Z**

If your computer is fitted with a modem or ISDN card, connect the matching end of the communications cable with port **Z** of your PC. The socket is identified as **Line**. Plug the other end into of the communications cable to the telephone wall socket or into the network port provided.

MODEM

The modem cable has an **RJ11** plug, which is plugged into the modem of your PC, and a **TAE** plug, which fits an N-coded, analogue telephone socket. For further information please refer to the **Modem** section.

ATTENTION! Please observe that the modem may only be connected to an **analogue** telephone line. The connection of a digital system (ISDN etc.) to an analogue telephone line can possibly cause damage to the modem or the connected devices and the telecommunication network.

ISDN

The ISDN cable has **RJ45** plugs at either end. It makes no difference which end is plugged into which socket.

1. Connect the matching plug of the enclosed communication cable to jack **Z** of your computer. Usually the jack is marked with "Line".
2. Then connect the other plug to the telephone or ISDN outlet.

☞ **ATTENTION!** Operate the **ISDN** unit only with **digital** telephone systems. This prevents an inadmissible operation possibly causing damage to the unit or the connected devices.

LAN CONNECTION

Diagram reference: **Q**

According to the features your PC can be equipped with a network connection, in order to prepare it for network operation. The network cable usually has two **RJ45** plugs so that it is unimportant which plug is connected to which jack.

1. Connect the one plug of the cable to the PC jack.
2. Connect the other plug to the other PC or hub/switch.

For further information refer to chapter "**The Network**" starting at page 54.

CONNECTING SPEAKERS/AUDIO OUTPUT

Diagram reference: **H, H2, H3, H4, U, U2**

Connect your **headphones** or **active speakers** by plugging the cable with the **3.5 mm stereo** jack plug into the green socket (reference **H**).

PCs WITH SURROUND SOUND

➲ **NOTE:** You will find information about placing speakers by starting the sound software in the task bar

If your PC is equipped with it the following connection is required:

1. Connect the **Front** speaker to the green socket (reference **H**).
2. Connect your rear speaker to the **Rear** connector (**H2**).
3. Your centre speaker or subwoofer can be connected to the socket **Centre/Subwoofer** (**H3**).
4. Connect to the optional **Back Surround** socket (**H4**) two more speakers for the back surround.
5. In order to use the (optional) **digital audio outlet** plug the cinch cable in the jack at location **U**. The optical digital audio outlet is positioned at location **U2**. Connect the cable with an audio device with a digital cinch inlet according to the **SPDIF standard**.

CONNECTING A SOUND SOURCE/AUDIO INPUT

Diagram reference: **J, J2, T, T2**

This port is used to accommodate a connecting cable for external audio sources (i.e. stereo system, keyboard/synthesizer).

1. Connect the cable with the **3.5 mm stereo** jack plug to the light-blue coloured socket (reference **J**). You can also connect a stereo Cinch cable (position **J2**).
2. If you want to record a digital audio source use the (optional) audio input **T** or **T2**. A **SPDIF**-Cinch cable will also be necessary for the **T** while **T2** is an optical output.

CONNECTING A MICROPHONE

Diagram reference: **I**

1. You can use the pink socket **I** to connect a microphone with a 3.5 mm mono jack plug.
2. Position the microphone in such a way that it does not point directly at the speakers. If you hear feedback, characterised by loud whistling noises, reposition the microphone until the sound stops.

ANTENNA CONNECTION FOR TV / RADIO RECEIVER

Position in the flap-out overview: **Y, Y2**

Should your PC be equipped with a TV tuner card, then you must connect the corresponding 75 Ohm coaxial cables (aerial or cable) for radio and TV reception.

1. Connect the supplied radio antenna with the corresponding connector (**Y**) on the TV card.
2. Connect the TV connector on your TV card (**Y2**) with the aerial antenna or cable TV.

CONNECTING THE PC TO A TELEVISION

Diagram reference: **V** (Cinch), **V2** (S-Video), **V3** (SCART)

If your computer's VGA card is equipped with a TV-Out socket you can establish a connection to a TV. You can use either a cinch an S-Video or optionally a SCART cord.

➲ **NOTE:** These sockets are only for output purpose.

1. Connect your PC and your television with the cord required (available separately) for your TV.

CONNECTING A RECORDING SOURCE / VIDEO INLET

Diagram reference: **K** (Cinch), **L** (S-Video)

Your PC may be fitted with a TV-input, depending on the model you selected. You can transfer data from your video camera to your PC and edit the images using this connection.

1. Connect the plug of the cord to the jack (position **K** for cinch and **L** for S-Video).

➲ **ATTENTION:** These two front connectors cannot be used simultaneously.

USB/IEEE 1394

➲ **Warning:** Connect your USB-/IEEE 1394 devices **after initial set-up** of your new PC. This will prevent unnecessary confusion during installation. These devices can generally be connected during operation. Read the manual for your peripheral device first.

The voltage outputs of your PC for IEEE 1394 as well as for USB are protected by a fuse (limited power source according to EN60950). This ensures that a malfunction of the PC will not damage the peripheral devices connected to the respective jacks.

CONNECTING IEEE 1394 (FIRE WIRE) DEVICES

Diagram reference: **F** (6-pole), **F2** (4-pole)

☞ Peripheral devices can have different connecting cables (6-pole = **F**, 4-pole = **F2**). Please check what kind of cable you need for your peripheral device.

Important: The connectors of the front side are not configured for parallel use.

CONNECTING USB DEVICES

Diagram reference: **E**

You have a choice of several connection sockets. It does not matter which you use.

1. If you wish to use a **printer**, **scanner** or other device with a USB port, connect the cable to the USB socket on your PC.

☞ **Note:** Connect your devices always to the same port otherwise your operating system will give a new ID and asks for driver installation.

CONNECTING THE POWER SUPPLY

Diagram reference: **X, X2**

1. Finally, connect the power supply to your PC and monitor, by plugging the power cord into the outlet.

Observe the following **safety precautions**:

- The power socket must be in the vicinity of the PC and within reach of the power cables. **DO NOT stretch the power cables tightly to reach a power socket.**
- In order to disconnect your PC from the power source, or set the PC to voltage free, remove the power cord from the socket.
- Use **only** the supplied power cord.
- To provide additional protection against electric shock, power surges, lightning strikes, or other electrical damage to your PC, we recommend the use of a **surge protector**.
- If you are using an **extension cord**, ensure that the cord meets your local safety requirements. If in doubt, ask an electrician.
- The power supply unit has an On/Off switch (**X2**) that can be used to power off the PC. When the switch is **Off** no power is being consumed.

DO NOT Start Your PC Yet!

First, read the following section to find out what you need to know in order to get started.

GETTING STARTED

The software on this PC comes **fully pre-installed**.

You do not have to load any of the CD's/DVD's supplied.

With many programs (e.g., telephone-CD's or encyclopaedias), however, it is necessary to insert the corresponding CD/DVD in order to call up the data which is stored on it. The software will ask you to do this as necessary.

Once you have made all the connections and secured the necessary connectors you can turn on the monitor, the other peripherals and finally the PC itself.

Step 1

1. Power on the monitor and your peripherals.

SWITCH

Diagram reference: **X2**

2. Power on your PC by pressing the **Switch** to position **[1]**. (You will interrupt the current entry by pressing the switch to position **0**)



MAIN POWER SWITCH

Diagram reference: **N**

3. Press **Main Power Switch** briefly to start loading the operating system. You are now ready to setup the (optional) wireless keyboard / mouse set (p. 16).

You can program the function of the main switch in the power management of Windows® (please refer to on-line help). The PC will always be switched off, if the main switch is pressed for more than 4 seconds.

☞ **Warning!** If the operating system is not shut down properly (through ⇒ Shut Down), then there is a risk of data loss.

Step 2

The PC starts and now goes through a number of phases:

- ➲ Note: Ensure that there is no bootable CD (e.g. the Recovery-CD) in the CD-ROM drive. Such disks will prevent the operating system from loading directly off the hard drive.

The **operating system** is loaded from the hard disk. During the initial set-up, the loading process takes slightly longer than normal to register the operating system and the individual components completely. Your operating system is finished loading when a welcome screen is shown on your display.

Follow the instructions on the screen. Dialogue boxes will explain any steps that need to be taken. The greeting procedure will guide you through the following screens and dialogues.

Should you have any questions just click on .

License Agreement

Explanation:

Please read through the license agreement carefully. It contains important legal information on the use of your software.

In order to see the full text, use the mouse and the scroll bar to move downwards until you have reached the end of the document. You accept the agreement by clicking on the **I accept the agreement** option field. Only by doing so will you be entitled to use the product under lawful terms and conditions.

Computer Name

Please note, that when assigning a name to a computer, the **computer name** and the **user name** may not be identical.

Step 3

After the login procedure the Windows® desktop appears on your screen.

This can be adjusted so that the screen of your computer looks different. The basic operation, however, is ensured.

SHORT DESCRIPTION OF THE WINDOWS® DESKTOP

(The respective illustration is shown on the next page.)

1 The Start button

Click once on this button with your left mouse key to call the illustrated start menu.

2 Program bar

The most commonly used programs are listed here. The operating system recognizes them automatically. If you press the right mouse key on an entry you can determine which entry is kept and which is deleted from the list. The program associated with the entry will **not** be deleted.

3 All programs

Here you find the entries to every program installed on your PC. Here, too, you can edit entries with the right mouse key.

4 Information about your PC

Click on this button once with the left mouse key to receive important information about your PC as well as valuable hints and additional assistance.

5 Switching off

Click on this button with the left mouse key to switch off the PC.

6 Task bar

Here you receive information and status reports about the operating system and the running programs.

7 “Icons” on the “Desktop”

Icons are program links used to start the respective programs. A **double click** (press the left mouse key quickly twice) on the symbol starts the application.

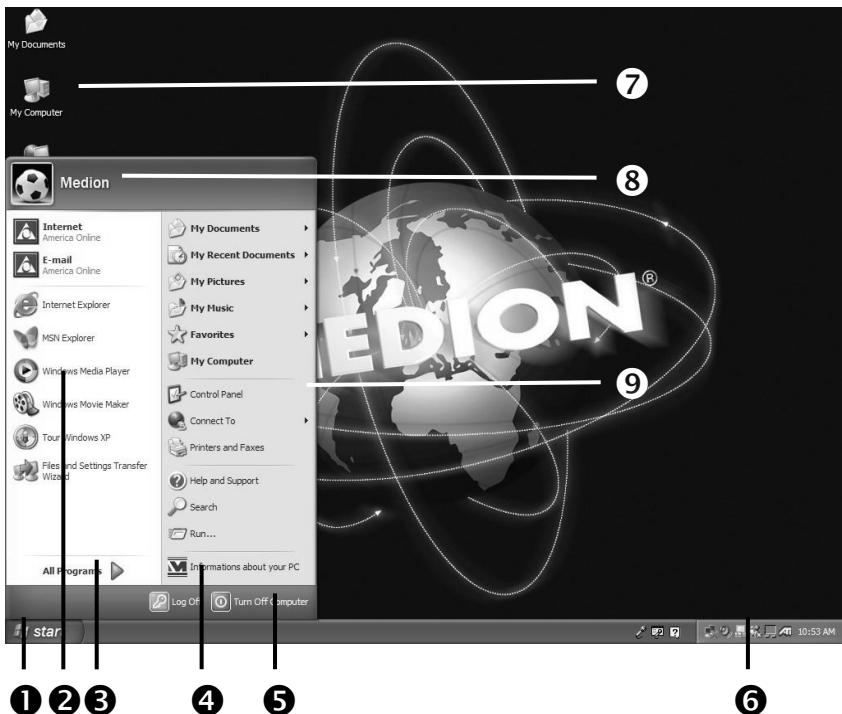
The **Desktop** includes almost the complete screen and is the filing area for those entries or other links you would like to access quickly.

8 Logged in user

This shows the logged in user. The image is changed by clicking on it.

9 Control Panel

This is the central control of your computer. Here you are able to configure your computer at will. However, you should read about the implications of possible changes in "Help and Support".



■ Chapter 3

Operation

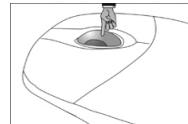
Subject	Page
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The Radio-/TV- Tuner Card	54
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OPERATION

THE MOUSE

The mouse has beside the two key a wheel that can be used as:

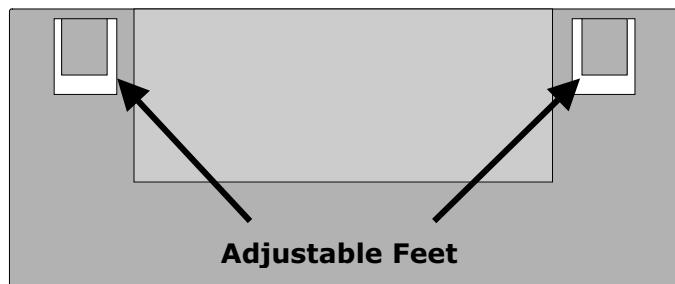
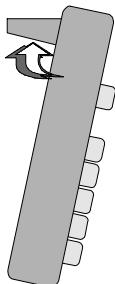
- To scroll through a document or internet pages.



THE KEYBOARD

This section contains useful information on using the keyboard. All diagrams are schematic.

On the base of the keyboard are two folding feet that let you adjust the angle of the keyboard.



THE ALT AND CTRL KEYS

The left **Alt** key performs certain functions in conjunction with other keys. The application program determines these functions. In order to enter a combination of keys that include the **Alt** key, hold the **Alt** key down while pressing the other key. The right **Alt** key operates in a similar way but selects certain special characters. The **Ctrl** key, like the **Alt** key, carries out program functions.

Useful key combinations (software-dependent):

Key Combination	Function and Description
Alt + F4	As a rule ends the program selected or closes the window opened.
Alt + Print screen	Copies the image of the window currently active to the clipboard.
Shift + 2	Generates the @ character required for e-mails (pronounced: at).
Ctrl + Alt + Del	Windows security is launched.

(Country-specific variances are possible.)

MULTIMEDIA FUNCTIONS

Some keyboards are provided with multimedia keys. These keys have the following functions:

Symbol	Function
	Standby Mode Depending on the settings in the BIOS Setup or operating system the computer switches to a standby mode.
	Internet With this key you can start the standard browser.
	E-Mail Use this key to start the standard e-mail program.
	Favourites Opens the folder "Favourites".
	Calculator Activates the Windows default calculator.
	Search Activates the OS default search function.

	Back Switches to the previous web page/folder.
	Forward Switch to the next web page.
	Previous Track Use this key to skip to the forward title in the active player.
	Stop Use this key to end the playback of a title.
	Play/Pause Use this key to start or pause for a short time the playback of a title just as you would with a normal CD player.
	Next Track Use this key to skip to the next title in the active player.
	Decrease the volume This key decreases the volume of the soundcard.
	Mute Use this key to switch on/off the soundcard.
	Increase the volume This key increases the volume of the soundcard.
	Cut Cuts the content you selected.
	Copy Copies the content you selected.
	Paste Pastes the content you have been copied or cut.

THE HARD DRIVE

The hard drive is the main storage medium combining large storage capacity and rapid data access.

The hard drive contains the operating system of the computer, other application programs and backup files. These programs and files are pre-installed on your PC, so you may note that some of the space on your hard drive is already taken.

The Windows operating system cannot use the full capacity of the hard drive, which means that there will be a difference between the capacity that the BIOS displays and what the operating system displays. The operating system of the PC, further application programs and backup files are located on the hard drive and reduce its total capacity.

The hard drive is addressed as drive C, D and E.

- ☛ Never switch off the computer while the busy indicator is lit since this may result in loss of data.

Usually your hard disk is divided into more partitions, but there can also be some minor variations.

Partition	Drive	Type	Capacity (approx.)
Boot	C:	NTFS or FAT32	50%
Backup	D:	NTFS or FAT32	40%
Recover	E:	NTFS or FAT32	10%

In your first partition (**Boot**) you will find your operating system, application programs and the users' documents and settings.

The second partition (**Backup**) serves for data security and contains additional drivers and tools.

The third partition (**Recover**) contains the copies of your Windows-installation in the delivery state.

IMPORTANT DIRECTORIES

In the following we listed the most important directories describing their contents.

☞ **Attention!** Do not delete or modify these directories or their contents since data could be lost or the functionality of the system could be at risk.

C: The master directory of drive C: includes important files required to start Windows. In the factory setting these files are hidden for safety reasons.

C:\Programs As the name suggests, in this directory programs install the files belonging to the application.

C:\Windows The main directory of Windows.
This is where the files of the operating system are saved.

C:\Documents and Settings This folder includes the settings and documents of all the PC users.

D:\Driver This folder includes the drivers required by your computer (pre-installed).

D:\Tools Here you find additional programs and other documentation for your PC.

E:\Recover Here the backup files are located enabling you to recover the factory setting (see page 73).

THE OPTICAL DRIVE

Depending on the model of your PC it will have a **CD-ROM**, a **CD-ReWriter**, a **DVD**, a **DVD-ReWriter** or a combination of these drives. The drives installed in your PC are appropriately labeled to allow you to easily select the desired drive.

The table below shows which media you can use in which drive:

Medium	CD-ReWriter	DVD	DVD-ReWriter
CD	✓	✓	✓
DVD	✗	✓	✓
CD-R/-RW	✓	✓	✓
DVD-R/-RW	✗	✓*	✓*

Whether or not you can use a disc in a particular drive depends on whether the format is supported by the drive and the operating system. So for example, a CD that has been created for another operating system may not be readable.

* Writable media for DVD (DVD-R/RW) **must** be **compatible** with your drive type. There are various formats (DVD-R, DVD+R, etc.), which are not compatible with each other. The specified writing speed must also be supported by your drive.

Since this technology is still very new, incompatibilities may still occur even if the correct media are used.

We therefore recommend that you use **only branded blank media** and that you check these for compatibility with your devices. Blank CD's, however, do not really cause any problems and can generally be written to without hesitation with your CD- or DVD-writer (where present).

Nevertheless, we recommend that you check which media suit your devices best.

LOADING A DISK:

⌚ **Attention:** Do not place protective foils or other stickers on your CD's. To avoid damage to your drive, do not use deformed or damaged CD's. Attention: Do not use scratched or dirty disks, discs with pieces broken off or disks of poor quality. Because of the high speeds in the drive the disks might break and damage your data as well as your drive. Examine the disks before you enter them. If damage or dirt is visible, you should not use them. Damage caused by faulty media is excluded from warranty and their repair must be charged.

Diagram reference: **A**

1. Press the eject button (Diagram reference, **B**) on the front of the CD-ROM-drive to open the tray.
2. Place the disk on the tray so that it lays flat with the label facing upward.
3. Press the eject button again to close the tray.

⌚ Many CD's start automatically when they are inserted.

PLAYING BACK AND RETRIEVING DATA FROM DISCS

Your PC is able to playback and to retrieve Audio CDs, DVD Movies and Data discs.

After loading the disc your operating system will open a selection window with different options for playback. Normally the following programs are provided:

- Windows® Media Player
- Power DVD
- Power Cinema

If your operating system doesn't open the selection window you still have the possibility of the access via the explorer or "My Computer".

HOW TO REMOVE A DISC:

1. Press the eject button (Diagram reference, **B**) at the front of the CD-ROM drive to open the drawer.
2. Remove the disc and store it in the CD cover in a safe place.

☞ Do not try to remove the CD from the drive while the computer is accessing the disk.

THE CD-ROM/DVD DRIVE AS BOOT DRIVE

The optical drives can be used for booting the operating system. If the PC does not boot, it is possible that **autostart** is turned off in the BIOS or the CD is not bootable.

DVD TECHNOLOGY

The Compact Disc (CD) was introduced in 1982.

Who could imagine doing without the CD as a storage medium for data, multimedia, computer games and video now? A CD can hold up to 700 MB of data, but that amount is too small to store a high-quality encoding of an entire feature film. The DVD (**Digital Versatile Disc**) has the same dimensions as a CD but stores more data at a greater density. In some cases, both sides of the DVD can be used to store information. Furthermore, each side can contain two layers of information (dual layer).

Thanks to high data density, the transfer speed is considerably higher than for a CD, so that a DVD drive with 6 times speed can transfer considerably more data than a 6-speed CD drive.

A DVD drive can also read both DVD-ROMs and CD-ROMs, providing the user access to an astounding amount of media.

VARIOUS DVD FORMATS

Format	Side A	Side B	Max. capacity
DVD-5	SL	-	4.7 GB
DVD-9	DL	-	8.5 GB
DVD-10	SL	SL	9.4 GB
DVD-14	DL	SL	13.2 GB
DVD-18	DL	DL	17.0 GB

SL=Single Layer, DL=Dual Layer

DVD-VIDEO

Special characteristics of DVD-Video:

- Up to 8 hours of feature films on a single DVD.
- Up to 8 audio tracks and 32 subtitle tracks.
- Greater picture quality than VHS or SVHS.
- Time-frame navigation and picture stills.
- Selection of different camera angles in some media.
- **Parental Control**, in which certain scenes or an entire film or rating of films can be made accessible only to certain age groups. DVD players can, for example, be set so that scenes or films which have not been approved for younger audiences will not play.

In spite of the high storage capability of the DVD the data must be extremely compressed in order for a complete feature film to be stored.

REGIONAL PLAYBACK INFORMATION FOR DVD

The playback of DVD movies includes the decoding of MPEG2 videos, digital AC3 audio data and the deciphering of CSS protected contents.

CSS (sometimes called copy guard) is the name of a data protection program incorporated by the movie industry as an action against illegal copies.

Among the numerous regulations for CSS licensees the most important ones are the country specific playback restrictions.

In order to facilitate the geographically restricted release of movies, DVD titles are released for certain regions.

Copyright laws require the restriction of each DVD movie to a certain region (usually the region, in which it is sold).

DVD movie versions can be published in several regions but the CSS regulations require that each CSS decipherable system may only be used in one region.

☞ **Attention:** The decoding software included with your PC may be changed for regional DVD decoding up to five times, after which the drive will only play DVD movies for the region setting last entered. Changing the region code after that will require factory resetting which is **not** covered by warranty. If resetting is desired, shipping and resetting costs will be billed to the user.

SUBJECTS CONCERNING THE CD/DVD-REWRITER

You receive information on the so-called **blank discs**.

These media, requiring a CD rewriter (burner) to produce CDs are called CD recordable (CD-R) or CD rewritable (CD-RW).

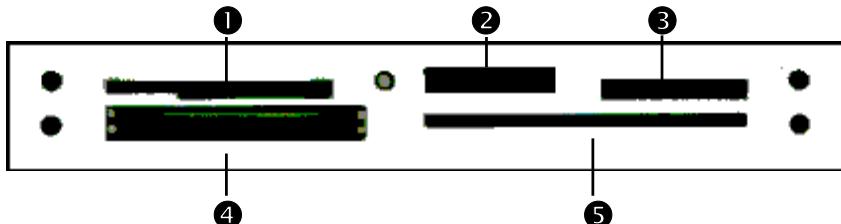
RECORDABLE/REWRITEABLE DISCS

Normal Discs are pressed from a digital, glass master and then sealed. In the case of blank disc, the information is burnt onto the disc with the laser of the Rewriter. Therefore these discs are more sensitive than normal CDs.

Please avoid the following when using recordable/rewriteable discs - especially blanks - that have never before been used:

- radiation by direct sunlight (UVA/UVB)
- scratches and damage to the disk surface
- extreme temperatures

THE CARD READER



(Diagram the same)

If your PC is provided with a Card Reader (Diagram reference: **C**), you can handle different memory card types. The following table refers to the use of the Card Reader:

Slot	Card type	Contacts
1	SmartMedia / XD	point to bottom
2	Memory Stick / Memory Stick Pro	point to bottom
3	SD (Secure Digital) MMC (MultiMediaCard)	point to bottom
4	CF (Compact Flash) IBM® Microdrive	point to front
5	SmartCard (GSM, HBCI etc.)	point to top

If a card is inserted, a free drive will be assigned* by Windows® and the LED next to the slot is lit.

The optional SmartCard port is for home banking (HBCI) and access control. IF you want to use the home banking function, please ask your banc if your account supports the SmartCard access.

THE GRAPHICS CARD

Your computer is fitted with an A.G.P. high performance graphics card, one of the most technologically advanced and best-equipped VGA cards available.

PERFORMANCE CHARACTERISTICS

- A.G.P. (Accelerated Graphic Port)
- High Performance Acceleration
- Interactive Direct3D Acceleration
- Video Acceleration for DirectDraw/DirectVideo, MPEG-1, MPEG-2, DVD and Indeo® Video Technology
- ACPI Power Management

CURRENT IMAGE PLAYBACK FREQUENCIES

The graphic card can, depending on the set resolution, display vertical image playback frequencies of between 60 Hz and 240 Hz.

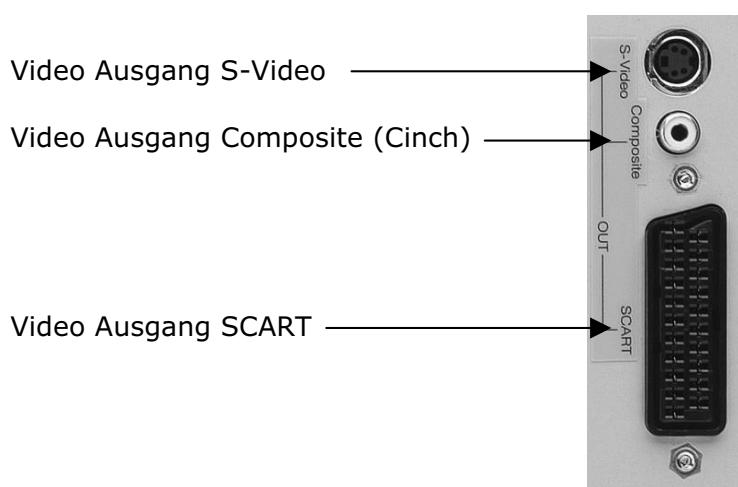
Resolution	Colors	Resolution	Colors
640 x 480	8-, 16-, 32-bit	1600 x 900	8-, 16-, 32-bit
800 x 600	8-, 16-, 32-bit	1600 x 1200	8-, 16-, 32-bit
1024 x 768	8-, 16-, 32-bit	1920 x 1080	8-, 16-, 32-bit
1152 x 864	8-, 16-, 32-bit	1920 x 1200	8-, 16-, 32-bit
1280 x 960	8-, 16-, 32-bit	1920 x 1440	8-, 16-, 32-bit
1280 x 1024	8-, 16-, 32-bit	2048 x 1536	8-, 16-, 32-bit

You can change the graphics setting using the **Display Properties** help program. For optimum image reproduction we recommend an image playback frequency of between 75 Hz and 85 Hz, provided that your monitor can support this. An image playback frequency of less than 70 Hz will generate a flickering image, unless an LCD monitor is being used.

CONNECTING THE PC TO A TELEVISION

- The graphics card shown here is symbolic. Your graphics card possibly has more or less jacks. For detailed information refer to the online help “**Information about your PC**”.

With the help of the video output connector at the back of your PC, you can transfer the image from your PC to the television set.



- In order to connect your TV to the PC you will need a SCART cable, an S-Video cable or a composite video cable. This cable is **not** included with your computer but may be obtained from an audio/video specialist or dealer. Read the operating instructions for your television set to find out which cable you need.

HOW TO CONNECT THE PC TO A TELEVISION:

☞ To use the TV function you must **first connect** the TV to the graphics card **before starting** up the PC.

1. Shut down Windows and power off the PC.
2. Connect an S-Video, a SCART or a Composite cable to on the respective connector of your PC (reference **V/V2/V3**) and on your TV set.

Switch on the television to see the PC image on your TV set.

1. Start up the PC and wait for Windows to fully load.
2. In the **Display Properties** program set up the configuration.
3. End configuration by clicking on **OK**.

☞ The Video Output connectors at the **back** of your PC are only for **playback**. For **video recording** please use the Video Input (composite or S-Video) connectors at the **front** of your PC.

THE SOUND CARD

Your PC has an integrated stereo sound card.

The sound card is compatible with the industry standard *Sound Blaster* and *Microsoft Sound System Version 2.0*.

This guarantees optimal support for all popular programs and games.



NOTE: The speaker/headphones output is designed for active speaker systems or headphones. Passive speakers cannot be used or if they are the quality will be significantly reduced.

If your PC is equipped with a surround sound you can set it with the enclosed software as required.

For this purpose click on the symbol



USB PORT

- Devices connected directly to the USB bus should not draw more than 500 mA. The voltage output is protected by a fuse (Limited Power Source according to EN 60950). Should the devices need more power than this, it will be necessary to provide a hub (distributor / booster).

On the USB it is possible to connect up to 127 devices which correspond to the USB standard (1.1 and 2.0 supported).

The data transfer speed is 1.5 Mbit or 12 Mbit, depending on the device connected. USB 2.0 can reach up to 480 Mbit.

⇒ **NOTE:** If possible, connect your USB devices always to the same port where it has been installed. Otherwise you will get a new ID and your operating system asks for a new installation of the driver.

IEEE 1394 (FIRE WIRE)

The IEEE 1394 connector, also known as iLink® or Fire Wire, is a serial bus standard used for rapid digital data exchange.

APPLICATION OPTIONS FOR IEEE1394

- Connection of digital devices of the entertainment industry, such as set-top speakers, digital video and camcorder, 'Digital Versatile Disk' (DVD), television etc.
- Multimedia applications and video processing.
- Input and output devices such as printers, scanners, etc.

TECHNICAL SPECIFICATIONS

- Depending on the application, the maximum data transfer is about 100, 200 or 400 Mbit/s, corresponding to a data throughput of up to 50 MB per second.
- The device can be plugged in or unplugged during operation (hot plugging).
- The standardised cord ('Shielded Twisted Pair' - STP) includes 6 strands. Two lines are live (8V up to 40V, 1.5 A max.) and can be used as an external power supply. The four signal lines transfer data or control information. Some devices do not require a power supply via the cord so that four pole plugs are used.
- The voltage output of the 6-pole IEEE 1394 jack is protected by a fuse (limited power source according to EN60950).

➲ **NOTE:** The IEEE 1394 ports located at the front of your PC can only be used separately. A simultaneous use is not possible.

THE RADIO-/TV- TUNER CARD

The Radio-/TV- Tuner Card is an **optional** feature. Possibly your PC is equipped with a so-called Combo board. You recognise this at the modem or ISDN jack on the outside in addition to the TV/Radio antenna sockets. Then both devices are located on one Combo board requiring a special Combo slot.

In regard to a Combo board the following must be observed:

- The installation, removal and conversion of a board require the necessary technical training. Please read the chapter "**Safety precautions**", starting on p. 1 or consult a PC technician.
- If you would like to use a different modem or ISDN board, the built-in modem/TV Tuner Combo board **must not be removed or plugged into a different slot**.
- The built-in modem/TV Tuner Combo board only works properly **in the intended blue Combo slot**.

☞ **ATTENTION:** In another slot the PC may not be able to start.

SOFTWARE FOR YOUR RADIO/TV TUNER CARD

The Software to watch TV and listen to Radio broadcasts is already installed and can be found in **All Programs, Home Cinema**. You can control the program with the **optional** remote controller (see Online help and/or separate Operating Instructions). Get additional help by pressing the F1 Key. Please keep in mind that recording broadcasts can occupy up to 2.4 GB per hour.

THE NETWORK

If your PC is provided with a Fast Ethernet-Network connector, you can connect it to a network. The following explanation refers to PCs with a network connector. You will find further information about networking in the **Help** section within the **Start** menu.

WHAT IS A NETWORK?

A network means connecting your PC to another or several other PCs. Users can transfer information and data between computers and share resources such as printers, modems and hard disk drives.

Here are some practical examples:

- You can exchange Email and manage appointments in an office.
- Users share a printer in a network and save their data on a central server.
- Share one modem or one ISDN card among computers for Internet access.
- Two or more PCs can be connected to play network games or share data.

WHAT DO YOU NEED FOR NETWORKING?

Some requirements have to be fulfilled if you want to make PCs communicate with one another.

1. The PCs must have the same network cards that support the same network technology. Unless otherwise stated your PC will support the current standard, **Fast Ethernet** (10/100 Mbit).
2. The network cards must be connected to one another. All you need is a Shielded Twisted Pair cable (CAT5) which has an **RJ-45** connector.
 - If you want to connect two PCs you need a **Cross-Link** cable.
 - If more PCs must be connected you need a supplementary distributor (**Hub** or **Switch**) and a **Patch** cable.
3. All connected PCs need a networking **operating system**. That's the case with Windows®.
4. All network PCs must speak the same "language" to understand one another. For this purpose they use protocols.
 - The **network protocol** is determined by the integration of the client server. Loading all PCs with the same client, for example "**Client for Microsoft® Networks**", meets the first prerequisite. Your PC, if equipped with a network connection, has been pre-configured with this server in the factory.
 - A transport protocol is required so data can be transported via the network. Your network PC has **TCP/IP** preconfigured. It is the most common protocol and mandatory for internet access. You need **IPX/SPX** usually only, if access is required to Novell® networks.

5. The setting of protocols, therefore, must be correct. In your network computer, TCP/IP is preconfigured so that the required settings are automatically taken from a so-called **DHCP server**.

Since usually only large networks are equipped with it, Windows® ME and Windows® XP offer a mechanism automating this function and accepting this setting automatically.

You can call these settings in the input request with `ipconfig /all`.

6. The correct protocols must be enabled to make shared access possible. This requires the installation of the server "**File and printer release for Microsoft® networks**". It is also factory installed.

The release is awarded on the PC where the resource (folders or printers) are located.

Here the release name or, if necessary, a required password can be determined.

A successful release is indicated by a stretched out hand below the icon:



HP CLJ 8500 - PS

7. The released resources can be shown and linked via the network environment.

WIRELESS LAN

Wireless LAN is an **optional** feature. This function allows you to create a wireless network link with a partner.

SAFETY NOTES

⌚ **ATTENTION:** Don't use this feature in environments where highly sensitive devices are placed such as in hospitals etc.. To avoid any interference disable this option in your device manager.

CONDITIONS

The partner used can be a wireless **access point**. An access point is a wireless transmitter that communicates with your notebook and controls access to the network connection (e.g., a home network or a broadband connection such as DSL).

Wireless access points are often found in offices, airports, universities or Internet cafés. They offer access to enterprise services and networks or to the Internet. **Access authorizations** are normally needed. A fee may be required to use a public access point.

To set up a wireless network to share Internet access, files, and printers at home, you will need an access point, a router, and a broadband (DSL or cable) modem. Some access points can also serve as a router and/or a broadband modem. Check with your retailer to find the best solution for your needs.

A link to another computer with wireless LAN functionality can also be created **without an access point**. This will allow you to share files, but you will need an access point and a router to share an Internet connection.

The wireless network link works according to standard **IEEE 802.11g** and is compatible to the standard **IEEE 802.11b**. Other standards (802.11a etc.) are not supported.

If encrypted transmission is used, this must operate according to the **same principle on all devices**. Encryption is a method of protecting the network from unauthorized access.

The transmission speed (max. 54 Mbps) can vary according to distance and other factors. If i.e. the other devices support the 802.11b standard the transmission speed can be max. 11 Mbps.

Search for "wireless networking" in Windows Help and Support for more information.

TROUBLESHOOTING WITHIN THE NETWORK

-  Why does the network environment not show the releases?
-  The network environment is delayed in time. Check the release by searching for the respective **computer name**.
-  Why does an error message appear when I click on the network environment?
 -  The **computer name** must be unique on the network and may not be the same as the **task group**.
-  It appears that the network boards are unable to communicate. What might be the problem?
 -  Maybe one of the used network boards works with a **different speed** (e. g. 10 instead 100 Mbit) and your network computer is unable to recognize this. If necessary, set the network driver to the compatible speed.
If two PCs should be linked you require a **cross-link cable**, otherwise use a **patch cable**.
In addition, check the **protocols** and the **configuration**.
-  The data transmission is incorrect or very slow. What might be the problem?
 -  Maybe you have the wrong cable (UTP / CAT3 or lower) or the problem is the proximity of a power cord or another source of interference.

For further hints on troubleshooting refer to the Windows help under "**Network errors**".

MODEM / ISDN

This chapter is intended for systems equipped with a modem or ISDN jack.

WHAT IS A MODEM?

The term "modem" is an abbreviation of **M**odulator/ **D**EModulator. A modem changes the bit stream of the PC into analogue signals which then can also be transmitted via the telephone line (modulation). The modem on the other side reverses the conversion (demodulation). Simplified, a modem converts outgoing data into tone and tone incoming via the telephone line back into data.

The built-in modem is able to receive data according to the ITU standard for V.90 transmissions with up 56 Kbit/s.

Since the power output of modems is restricted due to the regulations of some telecommunication providers, the possible maximum download speed can be restricted. The actual speed may be dependent on the online conditions and other factors. Data sent from the user to the server are transmitted with 31.2 Kbit/s. Prerequisite for this high speed reception is an analogue telephone line compatible with the V.90 standard and a corresponding compatible Internet provider or company-owned host computer.

Contrary to the modem, **ISDN** data are transmitted digitally.

The modem is fitted with an RJ-11 interface, into which a standard telephone lead can be plugged. If your modem is a combo card please make sure that it is used only with the appropriate port.

➲ **WARNING!** Use only analogue telephone sockets. The modem cannot withstand the voltage levels of digital telephone systems such PABX or lines such as ISDN or Broadband services

SERIAL COM-PORT

The **optional** 9-pin serial interface is used as the port for serial devices such as modems, card readers or mice. The interfaces are addressed as **COM1** or **COM2** and are FIFO 16550-compatible. To use these ports it is necessary, as standard, to have a so-called null-modem cable which is usually supplied with the device to be connected.

SOFTWARE

This section deals with software, differentiating between **BIOS**, **application programs** and **operating systems**.

GETTING TO KNOW WINDOWS XP

Windows XP offers different options to understand its operation. We will mention only a few of those options here:

WINDOWS XP HOME EDITION – FIRST STEP

This manual will provide general information about the operating system. We recommend that all beginning users or users of previous versions of Windows read this information.

WINDOWS^{XP} HELP AND SUPPORT



Help and Support

An answer to almost every question can be found in this program. You'll find it in the Start menu or you can launch it by simply pressing the F1 key.

MICROSOFT INTERACTIVE TRAINING – STEP BY STEP

Training is the best way to get skills which helps you to perform a specific task save and effectively.

You'll find it in "**All Programs**", "**Accessories**". It is also linked up in "**Information about your PC**".

This is a very good feature.

WRITING CDs/DVDs

We describe the writing process with the software **Nero – Burning ROM**. Please follow this instruction only if you use this software.

➲ **Note:** A writing process should always take place on its own. Please terminate all running programs (fax reception, screen savers, Power-Management etc.).

STARTING NERO - EXPRESS

To start nero - Express proceed as follows:

1. Click



2. Now select



3. The program is located in the "**Nero Burning ROM**" folder and can be started by clicking "**Nero – EXPRESS**".
4. An interface appears that allows you to easily create different media. Follow the instructions on the screen.

➲ **Note:** The nero - BURNING ROM program has enhanced functions and is particularly suitable for the more experienced user. You can also start this program from the ahead Nero folder or switch directly to it from the Express program.

➲ For detailed information, read the extensive On-line Help (F1 key).

INSTALLATION OF SOFTWARE



It happens that during installation procedure important files can be changed or even cancelled. To avoid eventual problems in using older files after installation, make sure to safeguard your hard disk.

The software included in delivery is **already pre-installed** in the factory.

Note: If your operating system is configured that the installation procedure accepts only signed drivers (default) and software this information screen will appear:



Although the software lacks the digital signature it may work properly. Click on "Tell me why this testing is important" to get detailed information.

Confirm by clicking on "**Continue Anyway**".

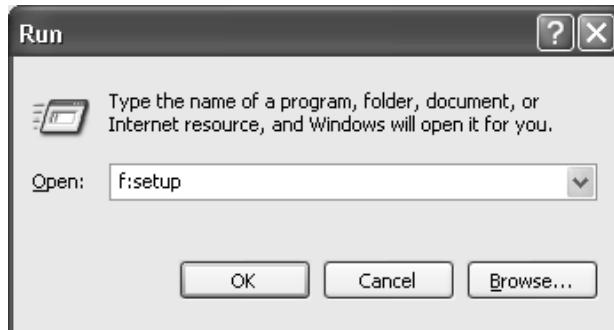
THIS IS HOW TO INSTALL YOUR SOFTWARE:

Please follow the instruction of the software vendor. We will describe a typical installation. Once you insert a CD, the installation menu is started automatically.

➲ **Note:** If the automatic start does not work, it is likely that the so-called **Autorun** function has been deactivated. Read the respective chapter in Windows Help on how to activate this function.

An example for the manual installation without the autorun function:

1. Click on  and select the item  Run...
(Or hit  + R to launch the corresponding dialog).
2. Now enter the letter of the CD-ROM drive followed by a colon and the program name setup:



3. Click on "OK".
4. Follow the instruction given by the program.

SOFTWARE DEINSTALLATION

In order to remove installed software from your PC, follow the next steps:

1. Click on



2. Click on



3. Then select the following program:



Select the respective program, start the deinstallation and follow the instructions on the screen.

If the system becomes unstable due to a certain software or driver, you are able to recover the stability of the system with various methods (see starting on page 72).

Then you do not need to uninstall the driver.

WINDOWS ACTIVATION

Microsoft is committed to the protection of intellectual property rights and the reduction of software piracy. Therefore Windows XP contains software-based product activation technology. Your copy of Windows XP has already been **activated for your PC**.

Product activation is needed if some components of your PC have been replaced or you use a non-authorized BIOS. If necessary you can activate Windows XP as often as requested.

You will probably need to activate Windows XP by telephone even if Internet Activation is available. This is due to the pre-activated SLP version which runs with a special Product-ID. However, activation needs your unique Product ID which can be found on the **Certificate of Authenticity** sticker on your PC housing. When you call, please inform your agent that you are running an OEM-(SLP) version of the software.

PRODUCT ACTIVATION ON YOUR PC

In few cases it may still be required to activate **Windows XP**. If an activation via the **internet** is acknowledged with an error message you should perform the following steps.

1. Please select the **telephone activation** and click until the related screen appears.
2. Now click on **Change Product Key**. A new window appears. Enter the product key. This is located on the **Certificate of Authenticity (COA)**, on the computer's casing.
3. Acknowledge your entry and follow the instructions on the screen. Notify your Microsoft consultant, if necessary, that you have an OEM license.

BIOS SETUP

THE BIOS SETUP PROGRAM

In the BIOS set up (your PC's Basic Configuration) you have a number of parameter settings available for your PC. For example, you can change the operating mode of the interfaces, security features or power management.



The PC is factory pre-set to guarantee optimum operation. Please only modify the parameters if this is absolutely essential and if you are familiar with the configuration possibilities.

EXECUTION OF THE BIOS SETUP

You can only execute the configuration program when starting the system. If the PC has already been started exit Windows® and reboot. Prior to rebooting the PC press the key »Del« and keep it pressed until the message »Entering Setup« appears.

■ Chapter 4

Customer Service & Self-Help

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SELF-HELP

DATA AND SYSTEM SECURITY

The programs described below are part of your Windows operating system. You will additional information on these programs in the Windows Help file.

DATA SECURITY

Back up data regularly on external media such as a CD-R or CD-RW. Windows offers both a **Backup** program and a **Files and Settings Transfer Wizard**.

You will find both programs in **Accessories/System Tools** within the Start menu. Make a backup disk with all your passwords and the operating system's original configuration.

MAINTENANCE PROGRAMS

You can avoid some hardware and software errors with the help programs such as **Disk Defragmenter** and **Disk Cleanup**. The help program **System Information** can also be helpful since it gives you detailed information about your system configuration. You will find these programs in **Accessories/System Tools** too.

PASSWORD RESET FILE

To protect individual user accounts from complications resulting from lost passwords, users should create a password reset disk and keep it in a safe place. If the user should forget his/her password, the password can be reset with the password reset disk so that the user has access again to his/her local user account.

Windows Help describes how to create a password reset file.

SYSTEM RECOVERY

Windows^{XP} provides a useful function enabling the storage of the so-called **Recovery points**.

The system remembers the current configuration as a snapshot and returns to this, if necessary. The advantage is that an unsuccessful installation can be cancelled.

Recovery points are created automatically by the system, but they can also be set manually.

You can determine and configure yourself the maximum memory taken up by this. You find this program in the program file under **accessories, system programs**.

We recommend setting a **recovery point** before installing a new software or driver. If the system does not run stable any longer this enables you usually to return to a workable configuration without deleting newly created documents. In the next paragraph read your options for a repair of an incorrect installation.

CORRECTION

Windows^{XP} includes various functions ensuring that the PC as well as the installed applications and devices work correctly. These functions assist you in solving the problems which might occur by adding, deleting or replacing files required for the functionality of the operating system, the applications and devices. The recovery function or functions you use depend on the type of occurring problem or error. For detailed information refer to the Windows help.

Enter the search word "**Overview over the repair**" in order to evaluate which of the following functions is the safest way to correct your problem:

Backup, Recovery of the driver, Deactivation of the device, System recovery, Last function known to work, Secured mode and system recovery, Recovery console, Windows installation CD.

Please refer to the  Help and Support tool.

WINDOWS® UPDATE Windows Update

To keep your notebook up to date to the latest version, we recommend to regularly run Windows Update from the Internet. To select this option go to **Start** ⇒ **Programs** ⇒ **Windows Update**.

- The update can only be executed via the Internet. Ensure that you are on-line with your notebook when downloading the updates.

RESTORING THE FACTORY SETTINGS



PROVEN SOLUTIONS FOR STORAGE MANAGEMENT

Should your system not function correctly, you have the opportunity to recover the original set-up.

Use the included application/support disk to do this. This recovery method offers you several possibilities for system recovery:

System recovery from hard disk

1. Rebuild start files
2. Rebuild system and driver files
3. Return to shipping status

LIMITS OF THE RECOVERY

- Changes made to the original configuration (RAS, Desktop or Internet settings) and installed Software will be ignored by this Recovery and will not be reloaded.
- Driver Updates or hardware installed by you will be ignored by this Recovery.
- **Beware!** All data on drive C will be erased. If necessary, backup all required data on drive D.

This recovery will reset your system to its condition at delivery. Printer installations or other additional software must be reinstalled. You will also need to enter the **Product Key** (License Number) again.

☞ **Attention!** If you delete the directory **E:\Recover** or the files located there a recovery is no longer possible. For safety reasons you can copy the file **FACTORY.PQI** and all other **FACTORY.00X** files to a CD-Recordable.

CARRYING OUT A RESTORE

1. First, please read the entire **Restore** section of the Windows Help file.
2. Insert the Support-CD and reboot the PC.

☞ **Attention!** Do not use the **Product Recovery CD-ROM** for restoration purposes. This disk does not restore the original set-up. You can use it when an individual set up is required.

3. Select the option **Start from CD-ROM**.
4. Follow the on-screen instructions
5. The PC restarts to its original factory settings.

FAQ – FREQUENTLY ASKED QUESTIONS



When do I have to activate Windows?



Your software has been preactivated in the factory.
An activation will only be required, if ...
... several components are replaced by others.
... you install a new motherboard.
... a different BIOS version has been installed.
... you install the software to another computer.



What is the Windows activation?



Your operating instructions include a chapter about this subject.



How do I perform a data backup?



Use the program Backup for this.

It is important that you follow the operating instructions of this program.

Make a backup and another backup of selected data to an external medium (CD-R), to familiarise yourself with the technique.

A backup is unsuitable if you are not able to recover the data, the medium (CD-R, CD-RW) is defective or no longer available.

- ① Do I still have to install the enclosed CDs/DVDs?
 - ! No. Basically all programs are already preinstalled.
The disks are only intended as backup copies.
- ② When is the recovery of the factory setting recommended?
 - ! This method should be chosen as the last resort.
Read chapter “**System recovery**” on page 72 concerning the alternatives possible.
- ③ Why is the boot partition missing when booting from the support/ application CD?
 - ! The first partition is formatted with the file system NTFS. Compared to FAT32 this file system offers more security and a more efficient access. However, NTFS partitions can only be read from operating systems supporting this. This is not the case in the aforementioned CD.

CUSTOMER SERVICE

TROUBLESHOOTING

LOCALISE THE CAUSE

Errors can have simple causes, but sometimes they are caused by faulty equipment. We would like to give you some ideas to solve common problems. Should these instructions not lead to success, please feel free to call us.

Check Cables and Connections

Visibly check all cables and connections. Should all lights be off, check whether all equipment is supplied with power.

- Check power points, power cable and all power switches.
- Switch off the PC and check all cable connections. Check the connections to peripherals. Do not exchange cables, even though they may look similar. The polarity in those cables may be different. When it is confirmed that the computer has power and all connections are correct, turn the computer on again.

Frequent use of the programs **Disk Defragmenter** and **Disk Cleanup** will help you to avoid problems with your operating system.

ERRORS AND POSSIBLE CAUSES

The monitor is blank:

- Confirm that the system is not in stand-by mode. Press any key on the keyboard to test this out.
- Check that the cable is fully connected.

Wrong Date and Time:

- Double-click the clock on the taskbar and correct the date and time.
- Check that Regional Settings are set to English (British/United Kingdom)

No data can be accessed from the optical Drive:

- Check whether the disc is inserted correctly.
- Is the optical drive (Drive E) displayed in Windows Explorer? If so, test another disc.

The mouse does not work.

- Check the cable.
- Does your mouse work with other programs? Is your mouse activated?
- Check the batteries. If they are empty change them by using batteries of the same type.
- Set for your mouse and keyboard a new ID as described on page 18.

DRIVER SUPPORT

This PC has been extensively tested in our laboratories with a large number of compatible devices. It fulfils all required standards and complies with the standard "Designed for Windows", which certifies utmost compatibility.

However, often the software drivers for individual components are updated from time to time. This is a regular process provided by the manufacturer to mend possible compatibility problems that may occur with components (e.g., programs or hardware) that were not tested at the time of your PC's manufacture. Driver updates and the latest information on your product are available on the Internet.

 Visit Medion on the Web at
www.medion.com

ADDITIONAL SUPPORT

If the suggestions in the above section have not solved your problem, please contact the service hotline and we will attempt to help you solve the problem. Before you contact the Technology Centre, however, 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?
- Have you upgraded or removed drivers or hardware?
- Can you manually repeat the problem?
- If you have been given a customer number previously, please quote this.

CLEANING AND CARE

The lifetime of the PC can be extended by taking the following measures:

- Before cleaning, **always remove the power** plug and all connecting cables.
- Clean the PC with a damp, lint-free cloth.



- **Warning!** There are no user-serviceable or user-cleanable parts inside the PC housing.
- **DO NOT use any solvents, corrosive or gaseous cleaning agents.**
- **DO NOT use CD-ROM cleaning disks or similar products that clean the lens of the laser to clean your CD-ROM/CDR-W/DVD-drive.**

RECYCLING AND DISPOSAL

This PC and its packaging was produced mostly from materials which can be disposed of in an environmentally friendly manner and be professionally recycled.

After its use the computer will be taken back and recycled or use will be made of its useful material, if it is returned in a condition corresponding to its intended use.

Parts not usable will be properly disposed of.

➲ **ATTENTION!** There is a lithium battery (Type: Sony™, CR 2032) on the motherboard. No type of battery belongs in the household waste. All are taken back free of charge by the manufacturer, dealer or their representatives for a proper method of utilisation or disposal.

Should you have any questions concerning the disposal please contact your dealer or our service.

BATTERY TREATMENT

Batteries may contain combustible materials. By misuse, this may cause battery **leakage, heat, explosion or ignition**, bringing about **injury or damage** to the device.

Please observe strictly the following matters:

- **KEEP CHILDREN AWAY** from batteries.
If by any chance, the batteries are swallowed, consult a doctor immediately.
- **DO NOT CHARGE** batteries (except rechargeable batteries).
- **DO NOT FORCIBLY DISCHARGE** batteries.
- **DO NOT SHORT-CIRCUIT** batteries.
- **DO NOT HEAT** or **DISPOSE OF IN FIRE.**
- **DO NOT DISASSEMBLE** or **DEFORM** batteries.
Your hands and fingers may be injured, or the liquid of the battery may get into your eyes or adhere to your skin. If this happens, rinse with a large quantity of water immediately and consult a doctor.
- **DO NOT** expose batteries to **strong impact** by dropping or throwing the batteries.
- **DO NOT** reverse the positive (+) and negative (-) **terminals** to avoid short-circuit.
- **Do NOT MIX** used and new or different types of batteries together.
Your equipment may not operate properly. In addition, the battery exhausted first may be excessively drained (over-discharged).
- **REMOVE PROMPTLY** the **used batteries** from the device.
- **REPLACE ALL BATTERIES** with new batteries of the same type at the same time.
- **INSULATE THE TERMINAL** parts with tape or the like at the **storage or disposal** of the batteries.
- **DO NOT throw** rundown batteries in the domestic refuses! Respect the environment and throw them in the specific containers for separate collection. If necessary, turn to your reseller or to our service assistance. Thank you!



TRANSPORTING THE PC

Please observe the following guidelines when transporting the PC:

- To avoid damage during transport, store the PC in its original packaging.
- Wait until the PC has reached ambient (room) temperature before connecting it to the power supply. Drastic variations in temperature and humidity can create condensation within the PC and may cause it to **short-circuit**.

UPGRADES AND REPAIRS

- Only a qualified engineer should perform upgrades and repairs to your PC.
- If you do not have the necessary qualifications, go to an appropriate **Service Engineer**. Please contact our **Service Centre** if you are experiencing technical problems with your PC.

NOTES FOR SERVICE ENGINEERS

- Before opening the housing, **disconnect the PC from all power sources and remove any connecting cables**. If the PC has not been disconnected from the power outlet before being opened, there is a **danger to life** through electric shock. There is also a risk of damage to the components.
- Internal components of the PC may be damaged by **electrostatic discharge** (ESD). Carry out system upgrades and changes in an **ESD-protected workshop**. If no such workshop is available, wear an **antistatic wrist strap** or touch a highly conductive metal object. Medion can repair damage sustained by inappropriate handling for a fee.
- Use only **original spare parts**.

⌚ **Caution:** Lithium batteries can not handle intense pressure, high temperatures or fire. Danger of explosion if replaced incorrectly. Replace batteries with a compatible type as recommended by the manufacturer. Lithium batteries are hazardous waste and require proper disposal. Contact the Service Centre for additional information on battery disposal.

Notes on Laser Radiation:

Laser devices of Laser Class 1 to Laser Class 3b may be used in the PC. Where the PC housing remains closed, the device meets the requirements of **Laser Class 1**. By opening the PC housing you will gain access to laser devices of up to Laser Class 3b.

The CD-ROM-/CDRW-/DVD-drives installed contain **no user-serviceable** parts.

When removing and/or opening laser devices, the following guidelines must be observed:

- Only the **manufacturer** should perform repairs to the CD-ROM-/CDRW-/DVD-drives.
- **DO NOT look into the laser beam**, even while wearing optical protection.
- **DO NOT allow yourself to be exposed to the laser beam**. Avoid exposure of the eyes or skin to direct or stray radiation.

■ Chapter 5

Appendix

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STANDARDS

This PC meets the requirements of the following standards:

ELECTROMAGNETIC COMPATIBILITY

This PC meets the following requirements for standards of electromagnetic compatibility and electrical safety:

EN 55022	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement.
EN 55024	Information technology equipment - Immunity characteristics - Limits and methods of measurement.
EN 61000-3-2	Limits - Limits for harmonic current emissions (equipment input current up to and including 16 A per phase).
EN 61000-3-3	Limits - Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with a rated current up to 16 A.

- Keep the PC at least one metre (approximately three feet) away from **high frequency** and **magnetic interference sources** (e.g., televisions, loudspeaker cabinets, mobile telephones, etc.) in order to avoid malfunctions and/or loss of data.
- Please note that only **shielded** cables shorter than 3 metres (9.84 ft) should be used for the LPT, COM, USB, IEEE 1394, audio, video and network interfaces with this PC.
- When connecting additional components, please observe the *Guidelines on Electromagnetic Compatibility (EMC)*.

ELECTRICAL SAFETY

EN 60950	Safety of information technology equipment.
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- The connection of devices is limited to equipment that complies with EN60950 "Safety of information technology equipment" or EN60065 "Audio, video and similar electronic apparatus. Safety requirements"
- For U.S. / Canadian purposes:
The PC should only be connected to equipment which complies with UL 60950 / CAN CSA 22.2 No 60950

ERGONOMICS

EN 29241-3	Ergonomic requirements for office work with visual display terminals (VDTs). Visual display requirements.
EN ISO 9241-8	Ergonomic requirements for office work with visual display terminals (VDTs). Requirements for displayed colours.

NOISE EMISSION

ISO 7779 (ISO 9296)	Acoustics. Measurement of airborne noise emitted by information technology and telecommunications equipment.
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This PC fulfils the requirements of noise emissions according to ISO 7779 with following values:

Operating Mode	Max. Sound power level L_{WAd} (B/A) (declared according to ISO 9296)
Idling	4.8
Operating	5.2
	Max. Sound pressure level L_{pAm} (dB/A) (declared according to ISO 9296)
At bystander position Idling	40
St bystander position Operating	47

INFORMATION ABOUT THE REGULATORY COMPLIANCE OF THE MODEM

This PC, if equipped with a modem, has been tested according and complies with the European regulatory guidelines for radio equipment and telecommunication installations (R&TTE 1999/5/EG).

The modem meets the requirements of TBR21 (01/1998) and EG201120/V1.1.1/01/98 regarding connection with an analog telephone network.

INFORMATION ABOUT THE REGULATORY COMPLIANCE OF WIRELESS KEYBOARD / MOUSE AND WIRELESS LAN

The following low power radio equipment, which has separately been tested and approved according R&TTE guideline (1999/5/EC), is bundled with this PC:

- Wireless keyboard / mouse / receiver
- Wireless LAN

These radio devices are marked individually with the CE mark. The declarations of conformity of these radio devices are available under www.medion.com/conformity.

FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded interface cables, if any, must be used in order to comply with the emission limits.

WARRANTY

PLEASE READ THIS LIMITED WARRANTY CAREFULLY TO UNDERSTAND YOUR RIGHTS AND OBLIGATIONS.

The receipt is considered valid proof of purchase and should be kept in a safe place. This receipt will be required for receiving any warranty service. This warranty is transferable. When transferring ownership to a third party, please provide the receipt and warranty information.

We warrant to the end user that each product, including related software, accessories, media and supplies, shall be free from defects in materials and workmanship for the warranty time from date of purchase. This warranty covers only those defects that arise as a result of normal use of the product. This warranty does not cover any other problems, including problems that arise as a result of improper maintenance or modification; software, accessories, media or supplies not provided or supported by us; or operation outside the manufacturer's specifications.

Any parts in this PC repaired or exchanged by a valid service representative will be covered under the original warranty period. Back up all programs and data before shipping this PC for repair under the warranty agreement. Do not leave any media in the disk drives. Products shipped without accessories will be returned without accessories. Any replacement product or component may be either new or like new, provided that its functionality is at least equal to that of the product being replaced.

LIMITATION OF WARRANTY

To the extent allowed by local law, no other warranties are made with respect to this personal computer or the warranty services by any person, including but not limited to us and our suppliers. The express warranty stated above is the only express warranty made to you and is provided in lieu of all other express or implied warranties and conditions (if any) including any created by any other documentation or packaging. For additional warranty information, please refer to enclosed warranty card.

LIMITS OF LIABILITY

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event shall we or our third party suppliers be liable for direct, indirect, special, incidental, or consequential damage, whether based on contract or any other legal theory and whether advised of the possibility of such damages. This includes loss or damage of personal data on your PC.

LOCAL LAW

This warranty statement gives you legal rights. You may also have other rights which vary from jurisdiction to jurisdiction. To the extent this warranty statement is inconsistent with local law, certain disclaimers and limitations of this statement may not apply to the customer.

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