



Medion Electronics Ltd.

120 Faraday Park
Faraday Road
Dorcan
Swindon SN3 5JF
GB-Wiltshire
Hotline: 0870 72 70 370 (UK)
1800 99 25 08 (EIRE)
To contract us by email please visit the
"Service and Support" section of our website at

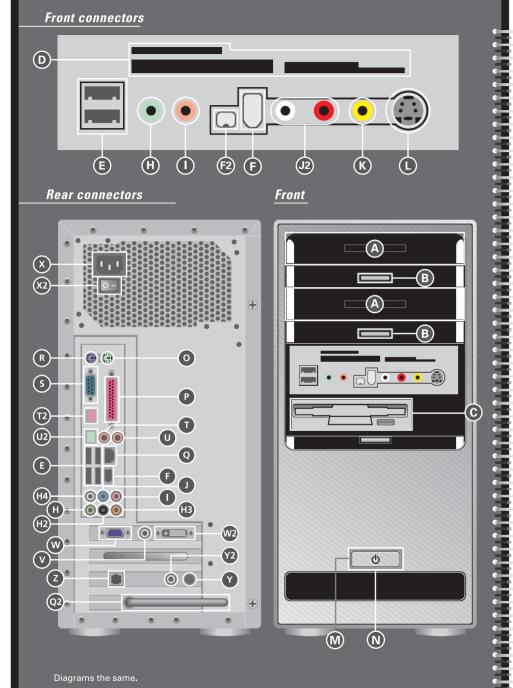


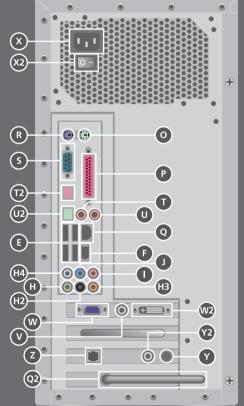
www.medion.co.uk

BMS Tölvulausnir Sudurlandsbraut 8 108 Reycjavik ICELAND Hotline: 565-7080

bms@bms.is









#### Diagrams the same.

Attention: Depending on the features of your PCV model, some connections may vary.

| POS | Description                                  | see<br>Page |
|-----|--|-------------|
| А   | Optical Drive (CD-/DVD-/-RW)                 | 36          |
| В   | Ejectbutton of Optical Drive                 | 36          |
| С   | Floppy Disc Drive, optional                  | -           |
| D   | Memory Card Reader, optional                 | 40          |
| Е   | USB-Ports (e.g. Scanner, Digital Camera)     | 15, 22, 44  |
| F   | IEEE 1394 (FireWire) 6-polig, optional       | 23, 45      |
| F2  | IEEE 1394 (FireWire) 4-polig, optional       | 23, 45      |
| Н   | Speakers (Front) Headphone / Line out        | 19, 43      |
| H2  | Speakers (Surround, Side Surround)           | 19, 43      |
| Н3  | Speakers (Surround, Center/Subwoofer)        | 19, 43      |
| H4  | Speakers (Surround, Back surround), optional | 19, 43      |
| I   | Microphone Input, optional                   | 20, 43      |
| J   | Audio Input (Line in, Recording)             | 20, 43      |
| J2  | Audio Input (Cinch), optional                | 20, 43      |
| K   | Video Input Composite (Cinch), optional      | 20          |
| L   | Video Input S-Video, optional                | 20          |
| M   | Power-LED (is lit when the PC is turned on)  | -           |
| N   | Main Power Switch (switches the PC on/off)   | 25          |
| 0   | PS/2 Mouse                                   | 15, 31      |
| Р   | Parallel Port (e.g. Printer), optional       | 16, 51      |
| Q   | Fast-Ethernet Network (RJ-45)                | 17, 47      |
| 02  | LAN wireless, optional                       | 17, 48      |
| R   | PS/2 Keyboard                                | 15, 32      |
| S   | Serial Port, optional                        | 18, 51      |
| T   | Digital Audio (SPDIF coax. In), optional     | 20, 43      |
| T2  | Digital Audio (SPDIF opt. In), optional      | 20, 43      |
| U   | Digital Audio (SPDIF coax. Out ), optional   | 19, 43      |
| U2  | Digital Audio (SPDIF opt. Out), optional     | 19, 43      |
| V   | Video Output, optional                       | 21, 41      |
| W   | VGA-Monitor                                  | 14, 41      |
| W2  | DVI-Port, optional                           | 14, 41      |
| Χ   | Mains Connector (Power Supply)               | 24          |
| X2  | Power Switch, optional                       | 24          |
| Υ   | Antenna Input Radio, optional                | 21, 46      |
| Y2  | Antenna Input TV, optional                   | 21, 46      |
| Z   | Modem RJ-11, optional                        | 18, 51      |

# **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 8).

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 $^{\otimes}$  operating system or the respective application program.

Windows Vista offers you an additional aid to learning about the operating system and your PC in the **Welcome**. We listed further useful sources of information starting on page 52.

# **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 <sup>®</sup> ) |  |
| Place and date of Purchase     |  |

You will find the PC serial number on the rear of the PC. Also copy this number into your guarantee documents, if necessary.

# 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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Information in this document is subject to change without notice.

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# **Chapter 1**

# Safety

| Subject            | Page |
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| Operational Safety | 3    |
| Data Security      | 4    |

# **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. Children are incapable of judging potential risks properly.
- Keep the packing materials, such as foil away from children. The danger of suffocation could arise in the case of misuse.
- 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.
- Optical 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 insert objects through the slots and openings of the PC. This may lead to electric shock or an electrical shortcircuit or fire that will damage your PC.
- Do not cover the slots and openings in the PC casing. These openings are for ventilation purposes. Covering these vents may lead to overheating. Please keep free a minimum distance of 20 cm on all sides when setting up the PC.

**Switch off your PC immediately** or do not switch it on at all and contact customer service ...

- ... if the power cord or the connectors attached to it are burnt or damaged. Replace the defective power cord with an original power cord. Under no circumstances may a defective power cord be repaired.
- ... if the housing of the PC is damaged or fluids have leaked into it. Have the PC checked by customer service first, because the PC may not be safely operated otherwise and there may be a life-threatening risk of electrocution!

# **Data Security**

#### Attention!

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.

# **Chapter 2**

# Setting Up & Getting Started

| Subject               | Page |
|-----------------------|------|
|                       |      |
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| Setting Up            | 8    |
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| Getting Started       | 25   |

# **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:

- PC and power cord
- Windows-compatible keyboard & mouse
- OEM Version of Operating System
- Application-/ Support Disc
- Documentation

## **Optional**

Depending on the configuration, the following accessories are bundled with your PC:

- Remote control type OR24 or
- Remote control type OR24E
- Remote control receiver type CM20E

Take the precise equipment of your PC and the technical data from packaging. Printing errors reserved.

# Setting Up

Remember that choosing the proper location for your PC is just as important as connecting it correctly.

# **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.

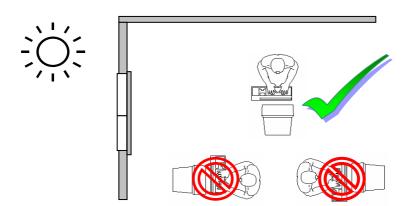
# **Ambient Temperature**

- The PC can be operated at an ambient temperature of between 10° 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° and 50°C (-40° and +158°F).
- Unplug the cable during thunderstorms and make especially sure to remove the antenna cables, if present. We recommend the use of a surge protector for additional safety, in order to protect your PC from being damaged by power peaks or lightning strikes through the power network.
- Delay operating a PC after transport until the device has adjusted to the ambient temperature. In situations of large temperature or humidity differences condensation may build up moisture inside the PC, which might cause an electrical short circuit.

# **Ergonomics**

#### Note

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



You should not position the monitor in close proximity to a window, because this is the brightest area of the room because of daylight. This brightness impedes the adjustment of the eyes to the darker monitor.

Always position the monitor in a line of sight that runs parallel to the window front (see picture).

You should also apply a parallel line of sight with respect to artificial lighting. This means that in a room lit by artificial light essentially the same criteria and objectives apply. Should it not be possible to arrange the monitor as outlined above, the following measures might be helpful:

- · Turn, lower or incline the monitor.
- Place horizontal or vertical shades at the windows.
- · Working in Comfort

#### Note

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:

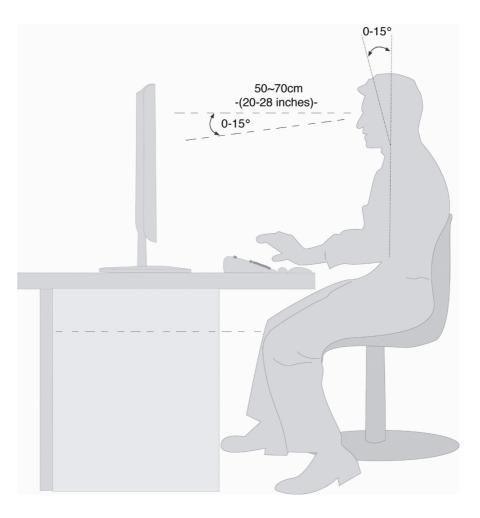
Your arms should be relaxed and loose, elbows close to your sides, with forearms and hands approximately parallel to the floor.

#### 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.



- 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"

# **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.

All the connections listed are optional and will not inevitably be available on 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.
- 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.
- 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.

- Do not replace the cables supplied with the machine by any others. Use the cables belonging to the scope of the delivery exclusively, because they will have been tested extensively in our laboratories.
- Also only use the connection cable supplied with the devices for the connection of your peripheral devices.
- Make sure that all connection cables have been connected to the peripheral devices associated with them, in order to avoid disruptive radiation. Remove unneeded cables.
- 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".
- In the first hours of operation, new devices may emit a typical, unavoidable but completely harmless smell, which will decline increasingly in the course of time.
   We recommend you to ventilate the room regularly, in order to counteract the formation of the smell. During the development of this product, we have made sure that the applicable limits are clearly fallen below.

#### 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**

Some connections are located behind the front flap. This offers you the great advantage of creating frequently used connections quickly and conveniently, without turning the PC round. The flap, which can be slid, also protects the connections.

# **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**). You will be able to connect the VGA plug of your monitor to the DVI connection with the help of an adapter (not in the scope of the delivery).

#### Note

Take care that the connector and the socket fit exactly to avoid damaging the contacts. Because of its asymmetric form the plug only fits into the socket in one position.

- 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).

You can change the screen resolution and configuration of your monitor as follows:

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

#### Note

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.

1. After this you can go to "Control Panel", "Personalization" where you can customize the display options to match your monitor.

# **Connecting a USB Keyboard**

Diagram reference: E

You can omit this step if you want to connect a PS/2 keyboard.

1. Connect the USB keyboard to a USB port.

# Connecting a PS/2 Keyboard

Diagram reference: **R** (optional feature)

You can omit this step if you want to connect a USB keyboard.

1. Connect the keyboard to the left, blue PS/2 port.

# Connecting a USB Mouse

Diagram reference: E

You can omit this step if you want to connect a PS/2 mouse.

1. Connect the USB mouse to a USB port.

# Connecting a PS/2 Mouse

Diagram reference: **O** (optional feature)

You can omit this step if you want to connect a USB mouse.

1. Connect the mouse cable to the right, green PS/2 port.

# **Connecting Parallel Devices**

Diagram reference: **P** (optional feature)

#### Note

Take care that the connector and the socket fit exactly to avoid damaging the contacts. Because of its asymmetric form the plug only fits into the socket in one position.

Use a doubly screened, parallel connection cable (25-pin) to connect a printer:

- 1. Connect the printer cable from your printer to the red printer socket **P** on the rear of your PC.
- 2. Hand-tighten the screws of the printer cable.

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.

# **LAN Connection**

Diagram reference: Q

Your PC is 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 47.

# **Connecting the Wireless LAN Aerial**

Diagram reference: Q2

Wireless LAN is **optional** feature. The components (mini-PC Module) will already be integrated and activated in your computer if your PC is equipped with this functionality. You will only have to screw on the aerial optionally supplied to the wireless LAN aerial input. Please read the Safety Information and the requirements from Page 48 under all circumstances.

# **Connecting Serial Devices**

Diagram reference: **S** (optional feature)

You can connect an external modem or another serial device using this port.

#### Note

Take care that the connector and the socket fit exactly to avoid damaging the contacts. Because of its asymmetric form the plug only fits into the socket in one position.

- 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 of the serial cable.

# **Modem Connection**

Diagram reference: **Z** (optional feature)

Connect the modem cable as follows, if your PC is equipped with an analogue modem card:

- 1. The **RJ11** plug is plugged into the modem of your PC.
- 2. The **TAE** plug fits an N-coded, analogue telephone socket.

#### 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.

# **Connecting Speakers/Audio Output**

Diagram reference: H

Here you can connect your **headphones**, **active speakers** or **audio connection cables** for recording. Please refer to the user's guide of your stereo installation for information about which connector you should use (usually **Line In** or **Aux**).

 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**

Diagram reference: **H, H2, H3, H4, U, U2** (optional feature)

#### **Note**

You will find information about placing speakers by starting the sound software in the task bar.

Connect your surround equipment as follows:

- Connect the **Front** speaker to the green socket (reference **H**).
- 2. Attach the rear loudspeakers to the connector **Rear** (Position **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.

An (**optional**) **digital audio output (SPDIF)** can be connected to an optical and/or a coaxial cable.

- 3. Plug the Cinch cable to the socket at Position **U**. Connect the optical cable to Position **U2**.
- 4. Connect the other end of the cable to an audio device with a corresponding digital input.

# **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.

# **Connecting a Sound Source/Audio Input**

Diagram reference: J, J2, T, T2

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

Connect the cable with the 3.5 mm stereo jack plug to the light-blue coloured socket (reference J).
 Optionally, you can connect a stereo Cinch cable (position J2).

You will be able to connect **digital audio sources** according to the version.

Connect a Cinch connection cable to the audio input at Position T. Connect an optical connection cable to the input at Position T2.

# Connecting a Recording Source / Video Inlet

Diagram reference: K, L

You can connect an external video source to your PC using an S-Video or composite (cinch) cable. These connections enable you to record and, if necessary, edit video data.

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

# **TV-out**

Diagram reference: **V** (optional feature)

If your computer's graphics card is equipped with a TV-Out socket you can establish a connection to a TV. You will be able to use a composite cable (Cinch) or an S-video cable.

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

# Antenna Connection for TV/Radio Receiver

Diagram reference: Y, Y2

(optional feature)

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

- 5. Connect a projecting radio aerial to the matching connection (Y) on the TV card.
- Connect a terrestrial aerial or cable television to the TV socket (Y2) of your TV card.

# **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 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 IEEE 1394 (Fire Wire) Devices**

Diagram reference: F, F2

(optional feature)

#### Note

Peripheral devices can have different connecting cables  $(6\text{-pole} = \mathbf{F}, 4\text{-pole} = \mathbf{F2})$ . 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 the Power Supply**

Diagram reference: X, X2

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

Observe the following safety precautions:

#### Please note

Even with the power switch switched off some parts of the device receive current. **You must unplug the power plug** from the socket, if you want to interrupt the power supply to your PC or **cut off your device from current** entirely.

- 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.
- Only operate the PC on grounded plugs of the domestic power net.
- 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 (0) 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: Power On

1. Power on the monitor and your peripherals.

#### **Switch**

Diagram reference: X2

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



# On/off Switch

Diagram reference: **N** 

3. Press the On/off switch briefly to start loading the operating system. You can now use an optional wireless keyboard/mouse.

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  $\implies$  **Shut Down**), then there is a risk of data loss.

# **Step 2: Starting Initial Setup**

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

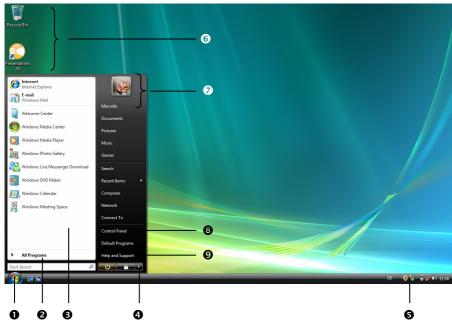
Please read through the license agreement carefully. It contains important legal information on the use of your software. In order to see the full text, use the mouse and the scroll bar to move downwards until you have reached the end of the document. You accept the agreement by clicking on the **I accept the agreement** option field. Only by doing so will you be entitled to use the product under lawful terms and conditions.

# Step 3: Finalizing

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



## 1. Start Button

Clicking the Start button brings up a menu where you can access help, software programs, files, and settings.

# 2. All Programs

All of the software programs installed on your PC are ordinarily listed here. Click **All Programs** to reveal an extensive menu.

# 3. Program Bar

The most commonly used software programs are listed here.

## 4. Turn Off Computer

Click on this interface with the left mouse button and select the **Shut Down** option, in order to switch the Notebook off..

#### 5. Task Bar

Here you receive information and status reports about Windows® Vista and which programs are running.

#### 6. Desktop Icons

Desktop icons link to their respective programs. To start a program, double-click its desktop icon.

## 7. Logged in User

This tells you which user is logged in to your PC.

#### 8. Control Panel

You can use the icons in Control Panel to change the appearance and functionality of Windows<sup>®</sup> Vista. These icons represent options for configuring your PC.

# 9. Windows® Vista Help

Here you can find information on using your PC, networking, backup, and many other tasks.

## **Chapter 3**

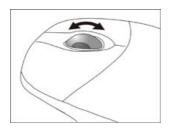
## **Operation**

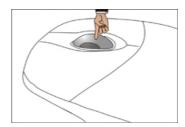
| Subject                         | Page |
|---------------------------------|------|
|                                 |      |
| The Mouse                       | 31   |
| The Keyboard                    | 32   |
| The Hard Drive                  | 34   |
| The Optical Drive               | 36   |
| The Card Reader (optional)      | 40   |
| The Graphics Card               | 41   |
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| The USB Port                    | 44   |
| IEEE 1394 (FireWire) (optional) | 45   |
| The TV Tuner Card (optional)    | 46   |
| Network                         | 47   |
| Parallel Interface              | 51   |
| Serial COM Port                 | 51   |
| Modem (optional)                | 51   |
| Software                        | 52   |

## The Mouse

Connection possibility: **O** (via PS/2) **E** (via USB)

The mouse has beside the two key a wheel that can be used as: To scroll through a document or internet pages.





If the mouse course moves jerkily on the screen, try a different surface (mouse pad). Glass and metallic surfaces might cause problems.

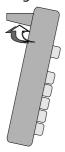
## The Keyboard

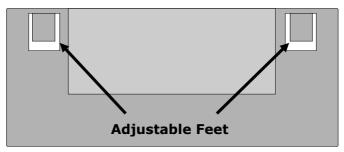
Connection possibility: R (via PS/2)

**E** (via USB)

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. Pull them forward to adjust the angle of the inclination.





## 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<br>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 emails (pronounced: at).   |
| Ctrl + Alt + Del   | Windows security is launched.                                     |

(Country-specific variances are possible.)

## 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 and D.

#### Note

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.

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 backup files are also found here (**D:\Recover**). They allow you to reset your computer to its original factory-set configuration. (Please see page 70.)

## **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.

#### 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.

#### D:\Recover

Here the backup files are located enabling you to recover the factory setting (see page 62).

## The Optical Drive

Diagram reference: A

### **Loading a Disc:**

#### Attention!

Do not place protective foils or other stickers on your CD's. To avoid damage to your drive, do not use deformed of 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.

- 1. Push the eject button (Diagram reference, **B**) on the right of the optical drive to open the tray.
- 2. Place the disc on the tray so that it lays flat with the label facing upward.
- 3. Push the eject button again to close the tray.

#### **Note**

Many CD's start automatically when they are inserted. This depends on the operating system and the corresponding settings.

## 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.

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

#### How to Remove a Disc

- 1. Push 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.

#### Note

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

## The Optical 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.

## **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

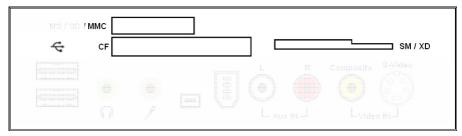
Normal Discs are pressed from a digital, glass master and then sealed. In the case of blank disc, the information is burnt onto the disc with the laser of the Rewriter. Therefore these discs are more sensitive than normal CDs.

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 (optional)

Diagram reference: **D** 



(similar diagram)

If your PC is equipped with a card reader (Diagram reference  $\mathbf{D}$ ), you can handle different memory card types. The following table refers to the use of the card reader:

| Slot  | Card type   | Contacts        |
|-------|---|-----------------|
| MS    | Memory Stick<br>Memory Stick Pro                  | point to bottom |
| SD    | SD (Secure Digital)                               |                 |
| MC    | MMC (MultiMediaCard)                              |                 |
| CF    | CF (Compact Flash)<br>IBM <sup>®</sup> Microdrive | point to front  |
| SM/XD | SmartMedia / XD                                   | point to bottom |

If a card is inserted, a free drive will be assigned\* by Windows<sup>®</sup>.

<sup>\*</sup> Only if this concerns a removable disk.

## The Graphics Card

Diagram reference: V, W, W2

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

#### **Performance Characteristics**

- High Performance Acceleration
- Interactive Direct3D Acceleration
- Video Acceleration for DirectDraw/DirectVideo, MPEG-1, MPEG-2, DVD and Indeo<sup>®</sup> 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-, 32bit | 1600 x 900  | 8-, 16-, 32bit |
| 800 x 600   | 8-, 16-, 32bit | 1600 x 1200 | 8-, 16-, 32bit |
| 1024 x 768  | 8-, 16-, 32bit | 1920 x 1080 | 8-, 16-, 32bit |
| 1152 x 864  | 8-, 16-, 32bit | 1920 x 1200 | 8-, 16-, 32bit |
| 1280 x 960  | 8-, 16-, 32bit | 1920 x 1440 | 8-, 16-, 32bit |
| 1280 x 1024 | 8-, 16-, 32bit | 2048 x 1536 | 8-, 16-, 32bit |

You can change the graphics setting using the **Personalization** help program in the **Control Panel**. The graphics driver will ensure that it will not be possible to set any resolution unsuitable for the graphics system at the same time. Recommended vertical scanning rates for tubed devices (CRT) are 75 -85 Hz and 60-75 Hz for LCD monitors. Read the Operating Instructions of your monitor as well.

## Connecting the PC to a Television

The optional **Video outputs** (TV-out) are located on the **back** of your PC. They offer you comprehensive possibilities of transferring the image on your PC to the television.

#### Note

You will need a SCART, S-video, composite or a component cable for connecting your device to the PC according to the equipment. This is **not** included in the scope of the delivery, but it can be obtained through a specialist shop.

Read precisely which cable you need in the Operating Instruction of your TV device.

#### How to Connect the PC to a Television:

#### Note

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

- 1. Shut down Windows and power off the PC.
- 2. Connect the composite or S-video input on your device to the corresponding output (folded down overview: **V**) on your PC.
- 3. Switch on the television to see the PC image on your TV set.
- 4. Start up the PC and wait for Windows to fully load.
- 5. In the **Personalization** program set up the configuration.
- 6. End configuration by clicking on **OK**.

#### **Note**

Video **outputs** are only planned for **playback**. Use the video inputs for **recordings**.

## The Sound Card

Diagram reference: H, I, J, J2, T, T2, U, U2

Your PC has an integrated audio sound chip.

It is compatible with industry standards 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.

You can make the necessary settings for configuring the loudspeakers, etc. by means of the software supplied with the PC. You open the configuration program, to make user-defined settings, by means of the symbol on the right in the task strip.

## **USB Port**

Diagram reference: E

#### Note

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/s or 12 Mbit/s, depending on the device connected. USB 2.0 can reach up to 480 Mbit/s.

#### Note

If possible, connect your USB devices always to the same port were 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)

Diagram reference: F, F2

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 standardised cord ('Shielded Twisted Pais' –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 use.
- 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 you PC can only be used separately. A simultaneous use is not possible.

## The TV Tuner Card

Diagram reference: Y, Y2

(optional feature)

#### Listen to the Radio and Watch TV

In order to be able to play or record radio or television programs on your PC a corresponding application is required.

The software is coordinated to the installed TV-Radio tuner card and the delivered motherboard. Other hardware combination may lead to malfunctions.

#### Attention!

Please keep in mind that recording broadcasts can occupy up to 2.4 GB per hour. Save data which you don't need permanently on external media or swap them to the D:drive.

## The Network

Diagram reference: Q

Your PC is provided with a Fast Ethernet-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.

#### Wireless LAN

Diagram reference: Q2

Wireless LAN is an **optional** feature. Wireless LAN is **optional** equipment. The components (mini-PC Module) will already be integrated and activated in your computer if your PC is equipped with this functionality. You will only have to screw on the aerial optionally supplied to the wireless LAN aerial input. You can turn off the wireless LAN function with the help of the Windows® Device Manager.

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.

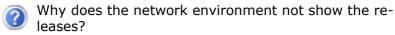
The wireless network link works according to standard **IEEE 802.11g** and is compatible to the standard **IEEE 802.11b**. Other standards (802.11a etc.) are not supported.

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 Mbp/s) 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 Mbp/s.

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

## Troubleshooting within the Network



- 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 **configu-** ration.
- 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**".

## **Parallel Interface**

Diagram reference: P

You can connect a printer or a device such as a scanner to this 25-pin parallel interface.

The parallel interface supports Standard EPP (Enhanced Parallel Port) and ECP (Extended Capabilities Port).

## **Serial COM Port**

Diagram reference: S

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.

## Modem

Diagram reference: **Z** (optional feature)

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

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.

## Software

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

## **Getting to Know Windows Vista**

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

#### Windows Vista - Quickstartguide

This Handbook will give you a brief overview of the operation of your operating system.

The following themes are dealt with in it:

- Initial steps
- The Welcome Center
- Innovations
- Help displays

We recommend this reading matter to beginners and those switching from other versions of Windows.

#### Windows Vista - Help and Support

An answer to almost every question can be found in this program.

This help function fully covers the Windows operating system.

It is helpful for both beginners and professionals. You can print or bookmark the information,

which is categorized into topics. You start like this:

1. Click on Start 🔮

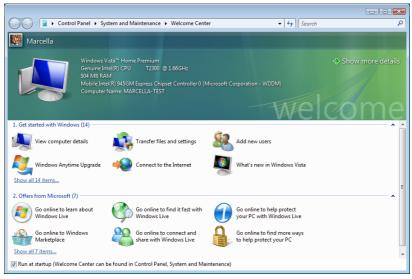


2. Now select **Help and Support** ?



#### Windows Vista - Welcome Center

You will see the Welcome Center at the first display of the Windows Vista Desktop. This contains useful links that will make it easier for you to start using Windows.



It is the aim of this feature to enable both beginners and experienced users to make additional setting for the optimal use of Windows Vista after first bringing the Notebook into operation.

The Welcome Center has been subdivided into many small groups of subjects, so that the user will have the possibility of adjusting the content optimally to his or her knowledge. There are some of the links in the following:

- View computer details (Find information about you computer, the type of your graphics card and the Windows Vista version here)
- Transfer files and settings (Transfer data and settings of your old PC with this)
- Add new users
   (Administrate and open user accounts for each user of the Notebook with this)

- Windows Anytime Upgrade (WAU)
   (Carry out upgrades to higher versions of Windows Vista, in order to be able to use the expanded digital features, through this)
- Connect to the Internet (Configure your internet access with this)
- What's new in Windows Vista (Learn how Windows Vista is different in comparison to older versions)
- The use of the email program
- ...and much more!

Use the Welcome Center to understand your Notebook better and in order to be able to use it optimally. It will also serve you as an additional source of information for recognizing and removing potential problems.

You will call up the Welcome Center as follows, if you closed it after the start:

- 1. Click on Start
- 2. Select **Welcome Center** in the program list.

#### Windows Vista - User Account Control

The User account control contributes to the prevention of unauthorized changes to the Notebook.

A window with the message that 'If you started this action, continue.' will appear as soon as you carry out an unauthorized change.

- Click on Continue, in order to continue the procedure.
- Click on Cancel, in order to end the procedure.

#### **Installation of Software**

#### Note

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

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

#### Attention!

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. See page 61 for further information regarding data backup.

#### 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.

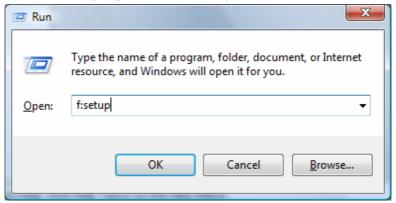
#### Note

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 **Start**
- 2. Click on > All Programs.
- 3. Open the **Accessories** program point.
- 4. Select the item <a> Run</a>.

5. Now enter the letter of the CD-ROM drive followed by a colon and the program name setup:



- 6. Click on "OK".
- 7. Follow the instruction given by the program.

#### Software de-installation

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

- 1. Click on **Start** 2.
- 2. Click on **Control Panel**.
- 3. Then select the **Programs** 🗓 option.
- 4. Select the respective program, start the deinstallation and follow the instructions on the screen.

#### **Windows Activation**

Microsoft is committed to the protection of intellectual property rights and the reduction of software piracy. Therefore Windows Vista contains software-based product activation technology. Your copy of Windows Vista 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 Vista as often as requested.

You will probably need to activate Windows Vista by telephone even if Internet Activation is available. This is due to the preactivated 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 Vista. 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.
- Now click on Change Product Key. A new window appears. Enter the product key. This is located on the Certificated 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**

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.

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## **Chapter 4**

# Customer Service & Self Help

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## **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.

Please also read the notes on page 4.

## **Data Security**

Back up data regularly on external media such as a CD-R or CD-RW. Windows offers **Backup Status and Configuration**.

This program is found in **Accessories** ⇒ **System Tools** within the Start menu. You should 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 Restore**

Windows Vista provides a useful function (**System Restore**) 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 Tools**.

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 Vista 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.

## Windows® Update

**Windows Update** is the online updating of Windows. Use Windows Update to download elements such as security updates, important updates, the newest help files, drivers and Internet products from the Internet.

The website is regularly augmented by new content, so that you can download the newest updates and error corrections at any time, to protect the Notebook and guarantee its functioning.

Windows Update will search through the Notebook and provide a list of individual updates especially for the configuration of your Notebook.

Each update that Microsoft regards as important for the operation of the operating system, programs or hardware components will be classified as an "important update" and automatically selected for installation for you.

Important updates will be provided to remove known problems and to protect the Notebook against known security risks.

Carry out four simple steps, to download the updates needed and to keep your computer on the current status of technology:

- 1. Click on Start 0
- 2. Click on > All Programs.
- 3. Open Windows Update 4.
- 4. Click on **Check for update**.
- 5. Click on **Add** to select the desired update and to add it to the updates to be installed, while you are searching through the available updates in each category. You can also read a complete description of each individual element by clicking on the **Read further** Link.
- Click on Check and install updates, when you have selected all the desired updates, and then click on Install now.

#### **Windows Update Information for Data Security**

Windows Update needs certain information about the respective Notebook, so that a suitable list with updates can be provided for you. This information will include the following:

- Version number of the operating system
- · Version number of Internet Explorer
- · Version numbers of additional software programs
- Plug & Play identification key of the hardware devices

Windows Update will stand up for the protection of your private data and will not record your name, address, email address or other forms of personal data. The information collected will only be used during the time that you are visiting the website. It will also not be stored.

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

# System Restore powered by Symantec



If your system is not functioning properly and Windows Vista System Restore did not solve the problem, then you should use the Application Support Disc to restore your system.

#### **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. (Pay absolute attention to the notes on Page 4 and Page 61).

This recovery will reset your system to its condition at delivery. Printer installations or other additional software must be reinstalled.

#### 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.
- 3. Select the option **Boot from CD-ROM**.
- 4. Follow the on-screen instructions.

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?
  - 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.

- Oo I still have to install the enclosed CDs/DVDs?
  - No. Basically all programs are already preinstalled. The disks are only intended as backup copies.
- When is the recovery of the factory setting recommended?
  - This method should be chosen as the last resort. Read chapter "**System Restore**" on page 62 concerning the alternatives possible.
- 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**

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.

#### **Localise the Cause**

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.

The tool "System Information", available in the program folder "System Tools" is also very useful.

#### **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.

#### **Wrong Date and Time:**

 Double-click the clock on the taskbar and correct the date and time.

# After a system restart a new drive letter is assigned to the cards in the card slots.

 This can happen, when the card reader re-initializes the slots during a system start. New IDs might be assigned, which can lead to new drive letters for some cards.

#### No data can be accessed from the optical drive.

- Check whether the disc is inserted correctly.
- Is the optical drive 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?

#### There is not enough room on the HDD.

 Audio and video recording require a lot of storage capacity (up to 2.4 GB / hour). Back up unnecessary files of "My Documents" onto CD-R's or move them to drive D:.

#### The PC does not start up.

• If all cable connections are correct, then try to reset the power supply of the PC. Set the power switch at the rear of the PC to position 0 (OFF). Now press down the main switch at the front of the PC for 10 seconds. Wait 5 more seconds and the restart the PC.

### **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.

#### **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 manufactured 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

### **Transporting the PC**

Please observe the following guidelines when transporting the PC:

To avoid damage during transport, store the PC in its original packaging.

### **Cleaning and Care**

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

#### Warning!

There are **no user-serviceable** or user-cleanable parts inside the PC housing.

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

# **Recycling and Disposal**



Device

At the end of its life, the appliance must not be disposed of in household rubbish. Enquire about the options for environmentallyfriendly disposal



Do not dispose of used batteries in the household rubbish! They must be deposited at a collection point for used batteries.



To avoid damage during transport, the PC is stored in a packaging. Packaging is produced mostly from materials which can be disposed of in an environmentally friendly manner and be professionally recycled.

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!



### **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.

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

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

The aerial connection of the optional TV card complies with EN55013 and EN55020.

# **Electrical Safety**

Electrical safety requirements according to the following standards:

| EN 60950-1 | Safety of information technology equip- |
|------------|---|
|            | ment.                                   |

# **Ergonomics**

Ergonomic requirements according to the following standards:

| DIN EN ISO | Ergonomic requirements for office work with display devices: |
|------------|--|
| 9241-3     | Part 3: Requirements for visual displays                     |
| 9241-4     | Part 4: Requirements for keyboards                           |
| 9241-8     | Part 8: Requirements for colour represen-                    |
| 9241-9     | tation   |
|            | Part 9: Input devices except keyboards                       |

#### **Noise Emission**

Requirements for noise emission according to the measurement procedure in accordance with the following standard:

| ISO 7779<br>(ISO 9296) | Acoustics. Measurement of airborne noise emitted by information technology and |
|------------------------|--|
| (130 3230)             | telecommunications equipment.  |

This PC fulfils the requirements of noise emissions according to ISO 7779 with following values:

| Operating Mode                     | Max. Sound power level L <sub>WAd</sub> (B/A) (declared according to ISO 9296)     |
|------------------------------------|--|
| Idling                             | 4.8  |
| Operating                          | 5.2  |
|                                    | Max. Sound pressure level $L_{\text{pAm}}$ (dB/A) (declared according to ISO 9296) |
| At bystander position Idling       | 40   |
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# Information about the Regulatory Compliance according to R&TTE

The following remote equipments may have been supplied with this PC:

- Remote control (optional)
- Remote control transmitter (optional)
- Wireless LAN (optional)
- Wireless keyboard (optional)
- Mouse (optional)

MEDION AG declares herewith that these devices are in agreement with the fundamental requirements and the other relevant terms of the 1999/5/EG Guideline. Complete declarations of conformity are available under <a href="https://www.medion.com/conformity">www.medion.com/conformity</a>.

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

## **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

The receipt serves as proof of first purchase and should be kept in a safe place. Your legal rights **are not limited** by these warranty conditions. It is required should you need to make use of the guarantee.

We guarantee that this equipment is in perfect working order. Upon production of the receipt, the remaining period of guarantee shall pass on from the original parts to the respective replacement parts. If you hand in this equipment to make use of the guarantee, you must remove all programs, data and removable storage media. Products which are sent without accessories will be replaced without accessories. The warranty obligation does not apply in the case of the problem being caused by an accident, a catastrophe, vandalism, misuse, incorrect use, ignoring the safety and maintenance regulations, changes by software, viruses or another piece of equipment or accessories or by other modifications not approved by ourselves. This limited guarantee declaration replaces all other guarantees of express or implied nature. This includes the quarantee of saleability or the suitability for a certain purpose but is not limited to this. In some countries the exclusion of implied quarantees is not permissible upon principle. In this case the validity of all express and implied guarantees is limited to the guarantee period. Once this period has expired, all quarantees become invalid. In some countries limiting the period of validity for implied guarantees is not permitted, so that the above limitation does not come into force. If you have any guestions with regard to these guarantee conditions, please contact us.

### **Liability Limitations**

The contents of this manual are subject to unannounced changes caused by technical progress. Manufacturer and sales shall not be responsible for any damages which have been caused as a result of omissions or errors in the information provided in this manual.

Under no circumstances shall we be liable for any of the following:

- Claims made against you by third parties based on loss or damage.
- 2. Loss or damage to your blanks, recordings or data.
- 3. Economic follow-on damage (including lost profit or savings) or associated damage even in the case that we have been informed of the possibilities of this type of damage.

In some countries the exclusion or limitation of accompanying or follow-on damage is not legally accepted so that the above limitations do not come into force.

### **Making Copies of this Manual**

This manual contains information protected by law. All rights reserved. Duplicating this information in mechanical, electronic, or any other form, without the written approval by the manufacturer, is prohibited by copyright law.

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