Professional Computer

Manual

NOTATIONAL CONVENTIONS

The meanings of the symbols and fonts used in this manual are as follows:

Warning dangerous voltage.

Pay particular attention to texts marked with this symbol. Failure to do so may endanger your life.

➲ Texts which follow this symbol describe supplementary information, remarks and tips.

`Texts in this typeface` are activities that must be performed in the order shown.

WARRANTY

The receipt is used as 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 receipt and warranty information.
Medion warrants to the end user customer that each product including related software, accessories, media and supplies, shall be free from defects in material and workmanship for twelve months from date of purchase. This warranty covers only those defects which arise as a result of normal use of the product and does not cover any other problems including those which arise as a result of improper maintenance or modification; software, accessories, media or supplies not provided or supported by Medion; or operation outside the products' specifications.
Any exchanged parts will be covered under the original warranty period. Should you send in this PC under the warranty agreement, make sure to back up programs and data. Do not leave any media in the drives. Products send in without accessories will be returned without accessories. Any replacement product may be either new or like new, provided that it has functionality at least equal to that of the product being replaced.

LIMITATION OF WARRANTY

To the extent allowed by local law, neither Medion nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the covered products and specifically disclaim the implied warranties or conditions of merchantability, satisfactory quality and fitness for particular purpose. 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 Medion or its 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 to personal data of you PC.

LOCAL LAW

This warranty statement gives the customer legal rights. The customer may also have other rights, which vary from state to state in the United States, from province to province in Canada and from country to country elsewhere in the world. To the extent this warranty statement is inconsistent with local law. Under such local law certain disclaimers and limitations of this statement may not apply to the customer.

MAKING COPIES OF THIS MANUAL

Contents

Chapter 1

Safety Instructions and maintenance

SAFETY INSTRUCTIONS

Please read through this section carefully and follow all the instructions given. In this way you will guarantee reliable operation and a long life for your PC.
Always keep these instructions handy and close by your PC.
Keep this Instruction Manual and the packaging safe so that in the event that you sell the PC you can pass it on to the new owner.

PERSONAL DETAILS

Enter here your purchase details:

Serial number .....
Date of purchase .....
Place of purchase .....

You will find the serial number of your PC on the Service Hot-line card. If you have already posted this, the number also appears on the rear of the PC

OPERATIONAL SAFETY

- **Never open the housing** of the PC. When the housing is open there is a **danger to life** from electric shock. Never use the PC with open housing.

- Do not insert any **objects** through the slots and openings **into the inside of the PC**. This may lead to an electrical short-circuit or even fire resulting in damage to your PC.

- The slots and openings in the PC casing are for ventilation purposes. **Do not cover these openings**, as otherwise this may lead to overheating.

- Do not allow **children** to play **unattended** on electrical equipment. Children may not always correctly recognize danger.

- The PC **is not** intended for use in **heavy industry**.

- CD-ROM-/CDRW-/DVD-drives are **Laser Class 1** devices, provided that these devices are used in a sealed PC housing. Do not remove the drive covers, since **invisible laser beams** are given off. Do not look into the laser beam, even using optical instruments.

Please proceed as outlined in the "**Customer Service**" section (see page 73):

- if the power cord is worn or damaged
- if liquid is spilled on the unit
- if the PC fails to work properly
- if the PC is dropped or the housing is damaged

DATA SECURITY

Whenever you edit any of your data, make a backup copy on an external medium (disk, tape). No claims can be accepted for damages resulting from loss of data or consequential losses.

POINT OF USE

- Keep your PC and all units connected to it, away from **moisture** and avoid **dust**, **heat** and **direct sunlight**. Failure to observe these instructions can lead to malfunctions or damage to the PC.
- Place and operate all units on a **stable**, **even** and **vibration-free surface** in order to avoid the PC falling.

AMBIENT TEMPERATURE

- The PC can be operated at an ambient temperature of between +41° F and +95° F and at a relative humidity of between 30% and 70% (without condensation).
- When switched off, the PC can be stored at between -40° F and 158° F.

TRANSPORT

Please observe the following instructions when transporting the PC:

- In order to avoid transport damage, pack the PC in the original packaging. In addition, consult with the carrier you are using.
- After transporting the PC, before using it wait until the unit has reached ambient temperature. In the event of **extreme variations in temperature or humidity** moisture may accumulate inside the PC due to condensation, which may cause an **electrical short-circuit**.

ERGONOMICS

- Where applicable, this system complies with the relevant regulations on video terminals. If this PC is used on a data processing network, then these regulations must be adhered within the entire system.
- Take **regular breaks** from working in front of the screen, in order to prevent stress or tiredness. **Avoid glare, reflection** and excessive **light/dark contrast** in order to protect your eyes. For more detailed information on workplace ergonomics, see page 29.

STANDARDS/ELECTROMAGNETIC COMPATIBILITY

The PC meets the requirements on electromagnetic compatibility and electrical safety of the following standards:

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 60950	Safety of information technology equipment
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 rated current up to 16 A

- Keep at least one meter away from **high frequency** and **magnetic interference sources** (televisions, loudspeaker cabinets, mobile telephones, etc.) in order to avoid malfunctions and loss of data.
- Please note also, that only **screened** cables should be used for the LPT / COM / USB / IEEE 1394 / audio / video / network interfaces with this PC.
- When connecting additional or other components the *Guidelines on Electromagnetic Compatibility* (**EMC**) must be observed.

FCC COMPLIANCE STATEMENT

For American purpose:

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 radio / television technician for help.

The 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.

CONNECTIONS

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

POWER SUPPLY

- Only use the PC with grounded sockets operating at **AC 115V~/ 60 Hz.** In European countries use the PC at **AC 220-240V~/ 50 Hz.** For details of the power consumption, please refer to the rating plate on the rear of your PC. If you are unsure of the power supply at the point of use, ask your power supplier.
- Use only the power cord **supplied**.
- In order to disconnect your PC from the power, remove the power cord from the socket.
- For additional security, we recommend the use of a **surge protector**, in order to protect your PC from **surge voltages** or **lightning strike** from the power network.
- The **socket** must be in the vicinity of the PC and be easy to **reach**.
- If you are using an **extension cord**, ensure that this meets the **VDE** requirements. If in doubt, ask an electrician.

INSTRUCTIONS ON USING A MODEM

- If your system has a modem fitted, please ensure that this is connected only to an **analog** telephone line. Connection to a digital PBX, digital line such as Broadband services or ISDN, shared service line or a payphone line is not permitted and may under certain circumstances lead to damage to the modem or to the devices it is connected to.

CABLING

- Arrange the cable in such a way that no one can tread on or trip over it.
- Connect your peripherals such as keyboard, mouse and monitor while your PC is turned off to avoid any damages. Some devices can be connected while your PC is in use. These devices usually have a USB or a IEEE 1394 connector. Please follow the instructions of every single device.
- Do not place **any objects on the cable**, as these may damage it.

INSTRUCTIONS FOR CONNECTING THE MONITOR

> ➲ The system is preconfigured for a screen resolution of **1024 x 768** pixels and a optimal refresh rate.
>
> ➲ **CAUTION!** If your monitor does not support these settings, it might get damaged!

If your monitor cannot support these values, you can change the configuration in the following way (Refer to your monitor's User Manual):

1. Once you have powered up the system, press the F8 key (see page 45) to select "**Safe mode**".
2. Then you can adapt the "***Display Characteristics***" for your monitor.

CLEANING AND CARE

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

- **Warning!** There are no **user-serviceable** or -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.
- To clean your CD-ROM-/ CDRW-/DVD-drive **do not use CD-ROM cleaning disks** or similar products which clean the lens of the laser.

UPGRADES AND REPAIRS

- Upgrades and repairs to your PC should **only be performed by a qualified engineer**.
- If you do not have the necessary qualifications, go to a suitable **Service Engineer**. Please contact our **Service Center** if you are experiencing technical problems with your PC.
- Should a repair be necessary, please consult one of our authorized **service partners** only.

NOTES FOR SERVICE ENGINEERS

- Before opening up the housing, **remove all power and connecting cables**. If the PC has not been disconnected from the power outlet before being opened up, 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. Damage sustained by inappropriate handling will be repaired by us at a charge.
- Use only **original spare parts**.

Instructions on laser radiation :

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

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

- The CD-ROM-/CDRW-/DVD-drives installed contain **no user-serviceable** parts.
- Repairs to the CD-ROM-/CDRW-/DVD-drives must be performed **only by the manufacturer**.
- **Do not look into the laser beam**, even with optical instruments.
- Do not allow yourself to be exposed to the laser beam.
- Avoid **exposure** of the eyes or skin to direct or stray radiation.

Chapter 2

Introduction

NOTES ON THIS MANUAL

We have divided this manual into sections so that by reference to the table of contents you can always find the information you require on a particular subject.

An index is placed at the end of this manual.

If you want to start up your PC straight away, please read the chapters "**Safety Instructions**" (page 3) and "**Setting up and Getting Started**" (page 29).

To get more information in detail we recommend to read also the other chapters.

In order to use the application programs and the operating system you can make use of the extensive help functions, which the programs offer you at the press of a button (usually F1) or a click of the mouse.

These help functions will be available to you while you are using the Microsoft Windows® operating system or the respective application program.

QUALITY

When we select components we pay special attention to a high level of functionality, ease of use, safety and reliability.

Through balanced hardware and software design we are able to provide you with a trend-setting PC which will provide you much pleasure during both your working life and your leisure time.

Thank you for your faith in our products. We are pleased to welcome you as a new customer.

SERVICE

Through individual customer care we are able to support you in your work. Please get in touch with us and we shall be pleased to help you out. In this manual you will find a separate section on Customer Service, starting on page 73.

AUDIENCE

This manual is aimed both at first-time and more experienced users. Irrespective of the possibilities for business applications, the PC is designed for home use. In this way the many application possibilities are available to your entire family.

Chapter 3

Brief description of your PC

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. In this event you MUST quote the serial number.

The PC you have bought consists of the following components:

1 x PC and power lead
1 x Monitor* and power cord
1 x Windows keyboard
1 x Mouse
1 x Mouse pad
1 x Microsoft Windows® Getting Started Manual + Recovery CD (for restoring the factory settings)
1 x Back-up CD with drivers
1 x Application software CD
This instruction manual
Warranty Card

* for systems with monitor only

FAMILIARIZATION

In the following a description is given of the controls and ports of your PC.

- **Important notice:** Please open out the left-hand cover fold to find the drawings of your computer. The descriptions of the items which follow refer to these drawings which are intended to provide you with a quick overview.

- **Attention**! Depending on the settings of your PC some features are not provided.

CD-ROM-/ CD-RW-/ DVD-DRIVES

Drawing reference: **A**

Depending on the design your PC may be fitted with a CD-ROM-, CD-Rewriter or DVD-drive.
A combination of various devices is also possible.

- You will find more detailed information on the respective devices in the section entitled "**The optical drive**"

FLOPPY DISK DRIVE

Drawing reference: **B**

- You will find more detailed information on the floppy disk drive in the section "***Floppy disk drive***".

THE CONTROLS OF YOUR PC

SWITCH

Drawing reference: **W**

The switch is used to power up your PC.

MAIN POWER SWITCH

Drawing reference: **C**

The main power switch is used to power up the PC. Before starting up your PC make sure you have followed all the instructions contained in the "**Start-up**". Depending on the operating system and the Power Management setting, the main power switch can be programmed to operate in various ways. The basic functions, irrespective of Power Management, are:

Status before	Action	Status after
OFF	Press once	ON
ON	Press once and hold for 4 seconds	OFF

RESET BUTTON

Drawing reference: **F**

Use this button to restart your PC. This may be necessary if the *operating system* of your PC is no longer responding to input.
Instead of powering down the PC, pressing this button will perform a so-called *warm start*.

> ➲ **Warning!** If you do not close down the operating system correctly, there is a risk of losing data.

LED DISPLAYS

On the front of the PC you will find the following indicators. Indicators for the floppy disk drive and the various CD-drives are explained in the respective sections.

STATUS DISPLAY

Drawing reference: **D**

This LED lights when the PC is in operation.

HARD DRIVE ACTIVITY

Drawing reference: **E**

This LED lights when the hard drive of your PC is transferring data. You will find more detailed information on your hard drive in the "**Hard drive**" section.

PC PORTS

This section initially describes the positions of the ports and then the options and methods for using them.

GAMES PORT

Drawing reference: **G**

This port is needed for using joysticks, game pads, steering wheels or MIDI-adapters.

PARALLEL PORT (LPT 1)

Drawing reference: **H**

You can connect a printer or other device (such as a scanner or ZIP drive) to the 25-pin parallel interface. The parallel interface supports Standard/EPP/ECP. You can set the desired mode according to your printer in the *BIOS*. Basically this parameter will already be correctly preset.

PS/2 MOUSE PORT

Drawing reference: **I**

A PS/2 mouse can be connected to this port.

PS/2 KEYBOARD PORT

Drawing reference: **J**

This port can be used to connect a keyboard which corresponds to the PS/2 standard.

SERIAL COM-PORT

Drawing reference: **L**

The 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.

USB PORTS

Drawing reference: **K**

On both the USB ports it is possible to connect up to 127 devices which correspond to the USB standard.
Devices connected directly to the USB bus should not draw more than 500 mA. Should the devices need more power than this, it will be necessary to provide a hub (distributor / booster). The data transfer speed is 1.5 Mbit or 12 Mbit, depending on the device connected.

SPEAKER PORT / AUDIO OUT (ANALOG)

Drawing reference: **M**

This port can be used to connect active **loudspeakers** (with amplification capability) or low-resistance **headphones**.
They must be fitted with a 3.5 mm stereo jack plug.
This port can also be used with the audio in of your stereo. Read the instructions of your stereo which input should be used. Usually it is indicated as **Line In** or **Aux**.
If your PC is provided with a surround system, the speaker port (**M**) is named **Front**. To realize the surround quality your PC will be provided with other ports.
These have also a 3.5 mm stereo jack port and need a further amplification (e.g. active loudspeakers). For the rear acoustic irradiation the system provides the **Rear** port:

Drawing reference: **M2**

A subwoofer or a center speaker can be connected:

Drawing reference: **M3**

The control of surround effect depends on the software. Please read the information given in the section "**The Sound Card**".

AUDIO OUT PORT (DIGITAL)

Drawing reference: M4
If your PC is provided with a digital audio out port, you can use it to transfer digital music to an audio device with digital in port (**SPDIF/Cinch**).

AUDIO IN PORT

Drawing reference: **N** (analog) **N2** (digital)

This port allows you to playback recordings from external sound sources. Typically an external cassette player or **CD-Player** will be connected here.
Again, the connection must be via a 3.5 mm stereo jack plug and the output level is dependent upon the input device.
You can connect to the digital audio in port an audio device with digital out port (**SPDIF/Cinch**).

MICROPHONE PORT

Drawing reference: **O**

This port can be used to connect an external microphone with a 3.5 mono jack plug.

MONITOR PORT

Drawing reference: **P**

The monitor is connected to the socket on your graphic card.

> ➲ Please read the "**Graphic Card**" section on page 62, to ensure that the monitor being connected is compatible with your graphic card, otherwise you risk damaging your monitor.

MODEM-/ISDN-PORT

Drawing reference: **Q**

Depending on the equipment, your PC may be fitted with a modem- or an ISDN-card.
The corresponding connecting cable is connected here.

LAN-PORT

Drawing reference: **R**

If your PC is fitted with a LAN-port you can connect your PC with a network.

IEEE-1394-PORT (FIRE WIRE)

Drawing reference: **S**

If your PC is fitted with an IEEE 1394 port you can transfer high levels of data in real-time such as digital video cameras.

S-VIDEO/COMPOSITE OUTPUT

Drawing reference: **T**

Optionally, your PC may be fitted with a TV-output. You can transfer the image from your PC to the television set.

S-VIDEO/COMPOSITE INPUT

Drawing reference: **U**

Optionally, your PC may be fitted with a TV-input. You can transfer data from your video camera to your PC and edit the images.

POWER LEAD PORT

Drawing reference: **V**

This is where the power lead which comes with your PC is connected.

Chapter 4

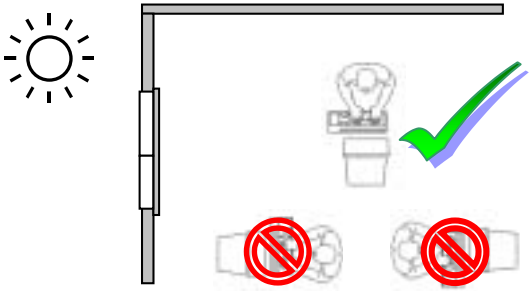
Setting Up and Getting Started

SETTING UP AND GETTING STARTED

In the previous section we explained where you can find the ports of your PC.
Now we shall provide you with a step-by-step explanation of how to set up your PC
One aspect which should not be overlooked is the point of use of your PC.
So, we shall deal with this matter first:

POSITIONING OF THE MONITOR

Please ensure that the monitor is set up in such a way that reflections, glare and light-dark contrast are avoided (no matter how attractive the look out of the windows might be).



- Hand rest: 1.97” – 3.94”
- Top line of screen at eye level or slightly below
- Viewing distance: 19.69” – 27.56”
- Legroom (vertical): minimum 25.59”
- Legroom (horizontal): minimum 23.62”

CONNECTION OF CABLES

Please read the "**Safety Instructions**" section and follow the instructions given before starting to connect the cables of your PC. **Please open out the left-hand cover fold to see the relevant drawings.**
You need only connect the components which you operate on your PC. If you do not have the device mentioned (e.g. printer) you can skip the point and if necessary go back to it at a later date.

- **Note:** The devices listed are not necessarily included with the PC.

- **Warning!** All connections are to be made when the PC is fully powered down, unless otherwise instructed.
  Otherwise the device components may be **damaged** by the operating voltages which are circulating.

CONNECTING THE MONITOR

Drawing reference: **P**

Connect the data cable of the monitor with the blue socket on the graphic card. If necessary remove the white guard-ring on the monitor plug and ensure that the plug and socket mate together precisely.
Because of its asymmetric form the plug only fits into the socket in one position.
Hand-tighten the screws on the monitor cable.

CONNECTING A PS/2 KEYBOARD

Drawing reference: **J**

Connect the keyboard to the left, blue PS/2 port. If you want to connect a USB Keyboard please follow the next step or skip it, if it is not the case.

CONNECTING A USB KEYBOARD

Drawing reference: **K**

Connect the USB keyboard to the USB port.

CONNECTING A PS/2 MOUSE

Drawing reference: **I**

Connect the mouse cable to the right green PS/2 port. If you want to connect a USB mouse please follow the next step or skip it, if it is not the case.

CONNECTING A USB MOUSE

Drawing reference: **K**

Connect the USB mouse to the USB port.

MODEM/ISDN CONNECTION

Drawing reference: **Q**

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

MODEM

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

ISDN

The ISDN cable has two **RJ45**-plugs, so it does not matter which end is plugged into which socket.

LAN CONNECTION

Drawing reference: **R**

LAN (network) connecting cables depend on the **network topology**, i.e. for optical fiber or Ethernet.

CONNECTING PARALLEL DEVICES

Drawing reference: **H**

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 **H** on the rear of your PC.
Because of its asymmetric form the plug only fits into the socket in one position. Then hand-tighten the screws.
If you wish to use a **scanner**, which connects to the parallel interface, you must connect the corresponding scanner cable. The printer is then, if necessary, connected to the scanner.

CONNECTING SERIAL DEVICES

Drawing reference: **L**

In order to connect an external modem, card reader or other serial device, connect the serial cable with the turquoise-colored connection socket on the rear of your PC. Because of its asymmetric form the plug only fits into the socket in one position. Then hand-tighten the screws.

CONNECTING DEVICES TO THE GAMES PORT

Drawing reference: **G**

The multi-pin, orange game port **G** can be used to connect game controllers (**joystick**, **game pad**, **steering wheel** etc.) as well as Game-to-MIDI-adapters. Because of its asymmetric form the plug only fits into the socket in one position. Hand-tighten the screws.

CONNECTING SPEAKERS / AUDIO OUTPUT

Drawing reference: **M**

Connect your **headphones** or **active speakers** by plugging the cable with the **3.5 mm stereo** jack plug into the green socket (reference **M**).
If you have a surround system connect the front speaker to this socket. Connect your rear speaker to the **Rear** connector (**M2**). Your center speaker or subwoofer can be connected to the socket **Center/Subwoofer** (**M3**).
Connect a digital audio device on the digital audio output (**M4**).

CONNECTING A SOUND SOURCE / AUDIO INPUT

Drawing reference: **N**

This port is used to accommodate a connecting cable for in-feeding of external audio sources (i.e. stereo system, keyboard / synthesizer). Connect the connecting cable with the **3.5 mm stereo** jack plug to the light-blue colored socket (reference **N**). If you want to record a digital audio source use the audio input **N2**. A SPDIF-Cinch cable will also be necessary.

CONNECTING A MICROPHONE

Drawing reference: **O**

You can use the pink socket **O** to connect a **microphone** with a **3.5 mm mono** jack plug. Position the microphone in such a way that it does not point directly at the speakers in order to prevent acoustic feedback characterized by loud whistling noises.

CONNECTING PC AND TELEVISION

Drawing reference: **T**

If your computer's VGA card is equipped with a TV-Out socket you can set up this connection according to instructions given on page 63.

CONNECTING IEEE 1394 (FIRE WIRE) DEVICES

Drawing reference: **S**

CONNECTING USB DEVICES

Drawing reference: **K**

If you wish to use a **printer**, **scanner** or other device with a USB port, connect the USB cable to the respective socket on your PC. You have a choice of several connection sockets. It does not matter which you use. Usually this type of device can be connected while the PC is in use. Please read the manuals of the respective devices.

CONNECTING THE POWER SUPPLY

Drawing reference: **V**

Finally, connect the PC and the monitor using the **power leads** supplied with the devices to their respective power supplies. The power supply unit has an On/Off switch (**W**) which can be used to power down the PC. When the switch is at Off no power is being consumed. Pay special attention to the instructions in the "**Safety Instructions**" section under "**Power supply**", (see page 8 onwards).

Do not start your PC yet!

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

GETTING STARTED

So, you can hardly wait to finally get going on your PC. This is quite understandable, but we must ask you first to take a few moments to read the essential section on "**Safety Instructions**".
The PC comes **fully pre-installed**. You do not have to load any of the CD's supplied.
With many programs (e.g. telephone-CD's or encyclopedias), however, it is necessary to insert the corresponding CD 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 power up the monitor, the other peripherals and finally the PC itself.

Step 1

Power up the monitor, your peripheries and finally your PC by briefly pressing the "Main power switch" (drawing reference **C**).

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

> ➲ Note: Ensure that there is nether a disk in the floppy drive nor a bootable CD (e.g. the Recovery-CD) in the CD-ROM drive, since otherwise the operating system will ***not*** be loaded from the hard disk.

Then the ***operating system*** is loaded from the hard disk.
During the initial set-up the loading process takes a little longer. Only once all the necessary data has been registered the operating system is set up completely. Your operating system is loaded completely when a welcome screen is shown on your display.

Step 2

Follow the instructions on the screen. The single dialogues will explain the steps that have to be done.
The greeting procedure will guide you among other things through following screens and dialogues.

Explanation:
At the time of the initial start-up a request will appear on the screen for you to enter your personal details. Please enter these in the white input fields. You can select the fields by clicking on them with the mouse. Pressing Return, or clicking on the "***Continue***" button displays the next window.

Mouse familiarization program

Explanation:
Use the mouse familiarization program to learn how to operate the mouse. Quit the program by pressing the "ESC" key on the top left of your keyboard.

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 "***I accept the agreement***" option field.

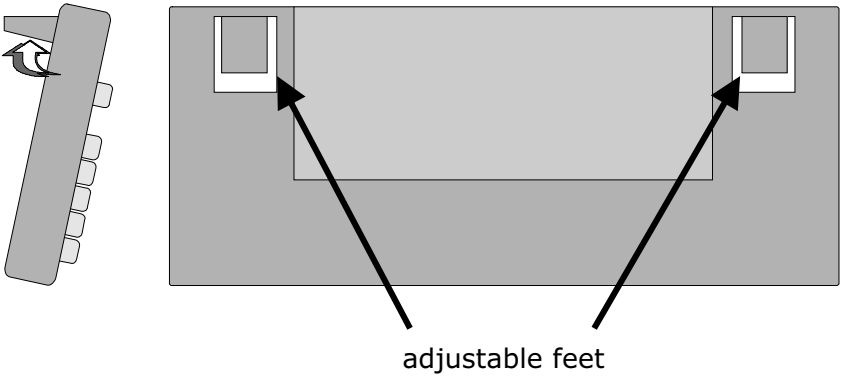
Only by doing so will you be entitled to use the product under the terms and conditions and to open the sealed Windows® manual.

Chapter 4

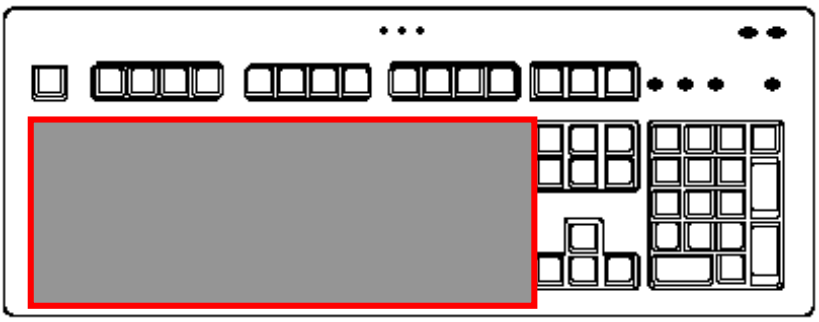
Operation

THE KEYBOARD

This section contains useful information on using the keyboard. All diagrams are schematic. Angle of the keyboard On the base of the keyboard are two folding feet that let you adjust the angle of the keyboard.



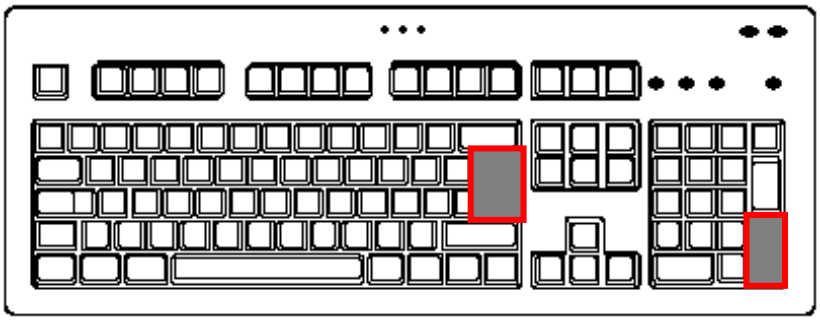
THE QWERTY KEYBOARD



(Diagram the same)

The QWERTY keyboard consists of keys with numeric, alpha-numeric and special characters. The keyboard layout is the same as for a typewriter.

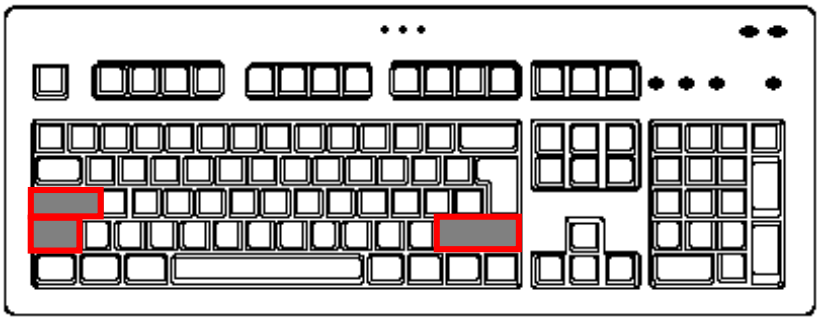
THE RETURN KEY



(Diagram the same)

The RETURN (or ENTER) key is identified by a angle arrow pointing to the left. It is pressed to confirm preset or manually entered commands. In application programs with a word processing function it moves the cursor to the start of the next line. The ENTER key in the number pad has the same function as the Return key.

THE SHIFT AND CAPS-LOCK KEYS



(Diagram the same)

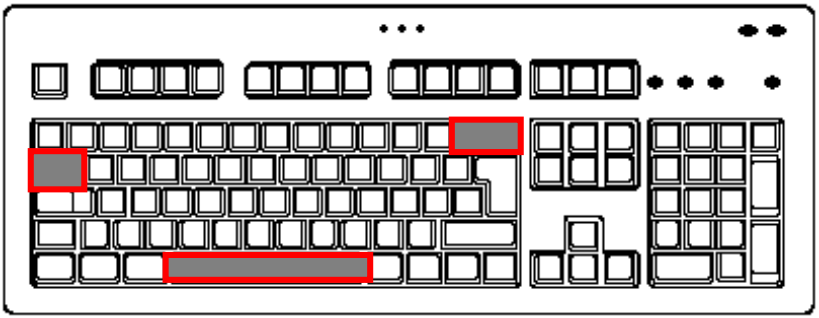
There are two **SHIFT** keys which are identified by a wide, upwards arrow. When the **SHIFT** key is pressed, letters entered are shown as capitals.

For other keys, the characters shown in the top section of the key (where these exist) will be displayed. The **CAPS-LOCK** key is identified by a wide, downwards arrow.

When this key is pressed it has the same effect as the **SHIFT** key being continuously held down.

When the **CAPS-LOCK** is operational the middle status LED lights. The **CAPS-LOCK** function is deactivated by pressing the **SHIFT** key.

SPACE / TAB / BACKSPACE KEYS

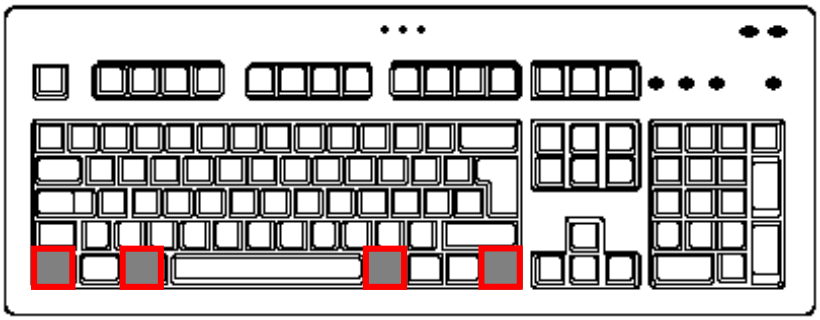


(Diagram the same)

The **BACKSPACE** key is identified by a thin leftwards arrow. When it is pressed the character to the left of the cursor is deleted.

If there are any characters to the right of the cursor, then these are moved one space to the left with the cursor.
The **SPACEBAR** is the long, unmarked key on the bottom row of the keyboard. Press it to create a space.
The **Tab** key is identified by two opposing arrows, one on top of the other.
In word processing it normally has the function of moving the cursor a certain distance to the right or, when the shift key is pressed at the same time, to the left.
Its function may, however, vary according to the program used.

THE ALT AND CTRL KEYS



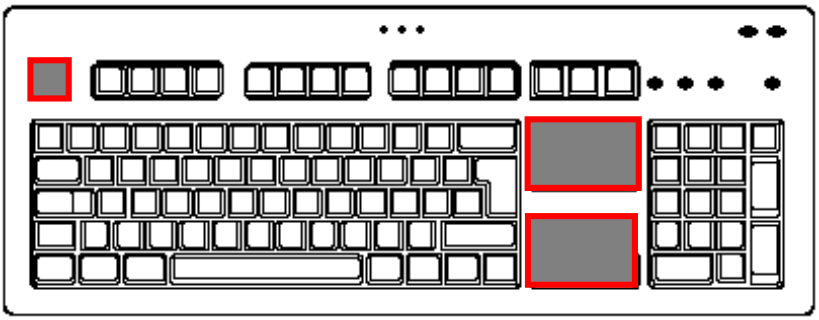
(Diagram the same)

The left **Alt**-key, in conjunction with other keys, performs certain functions. These functions are determined by the respective program. In order to enter a combination of keys containing the Alt-key keep the Alt-key pressed while pressing the other key. The right **Alt**-key operates in a similar way to the Alt-key, 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.
Alt + 5	Generates the Euro symbol.
Shift + 2	Generates the @ character required for e-mails (pronounced: at).
Ctrl + Alt + Del	A warm start is brought about.

CURSOR CONTROL KEYS



(Diagram the same)

The four **direction keys**, also known as arrow keys, are responsible for controlling the cursor on the screen. The cursor moves in the direction shown on the key.

The **Home** key moves the cursor to the start and the **End** key to the end of the line.

The **Page↓** and **Page↑** keys scroll one page on in the corresponding direction.

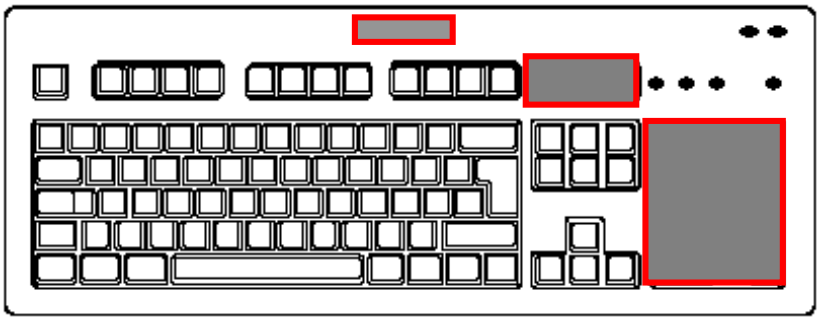
The functions described are dependent upon the application program and may differ. In combination with the control key the cursor control keys offer additional functions.

The **Insert** key changes the keyboard to the insert mode. In insert mode the data are entered at the cursor position and all subsequent characters are shifted to the right. The insert mode remains active until the **Insert** key is pressed again.

The **Delete** key deletes the character to the right of the cursor. All other characters to the right of the cursor are moved one space to the left.

The **Escape** key is identified by **ESC** and is needed by various software, in order to leave a program or menu. Its precise function is dependent upon the software used.

THE NUMBER AND CURSOR PAD



(Diagram the same)

The number pad is used for fast input of figures and numerical operations. The number pad is not designed for numerical touch typing. The number pad is activated by pressing the **<NUM>** key, so that the **NUM-LOCK indicator** lights.

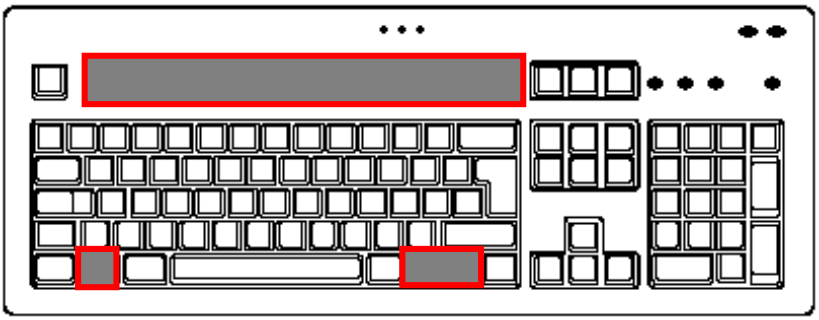
If the **NUM-LOCK** indicator does not light, then the cursor pad is active and the key functions are the same as for the control pad. The **Print Screen** key allows a printout (hard-copy) of the screen content on a printer (where connected). This does not apply, however, to all characters, no graphics are output to the printer. In addition this only works under MS-DOS with the corresponding setting. Under Windows the screen is copied as a graphic to the clipboard.

The **Break** key allows data output on-screen to be halted and restarted by operation of any other key.

This is used in the MS-DOS operating system if you wish to output text on the screen which is longer than one screen page. If the <**Break**> key is operated when the **Ctrl** key is pressed, then commands or programs currently being executed, such as screen output, will be interrupted. The **Scroll** lock key has no function in the MS-DOS operating system.

A lot of Windows software uses this key to freeze the cursor at a certain position. If the key is pressed once, then the Scroll lock function is activated. The corresponding **Display** lights. The function is switched off again by pressing the key again.

THE FUNCTION AND WINDOWS KEYS



(Diagram the same)

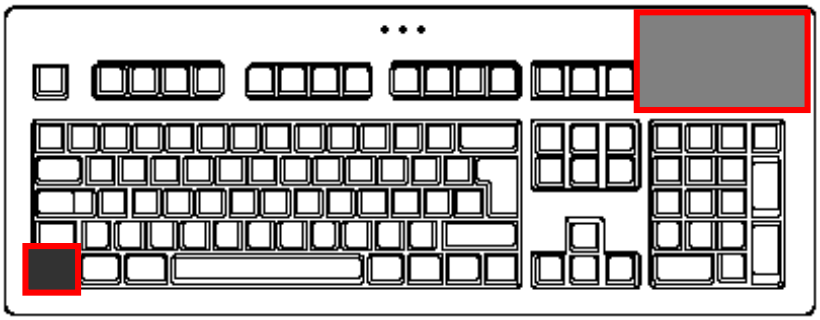
The F1 to F12 keys in the top row of the keyboard are known as ***Function keys***.
The function keys have no generally applicable function and are assigned differently by each piece of software.
Instructions on the assignment of these keys will be found in the user manual for the respective software program. Help is usually called up via the F1 key.

The left and right Windows keys (with the Windows banner) are used to call up the Windows opening menu.

Tips: Press this key simultaneously with the **E** key to start Windows Explorer; pressing simultaneously with the **Pause** key calls up the device manager.

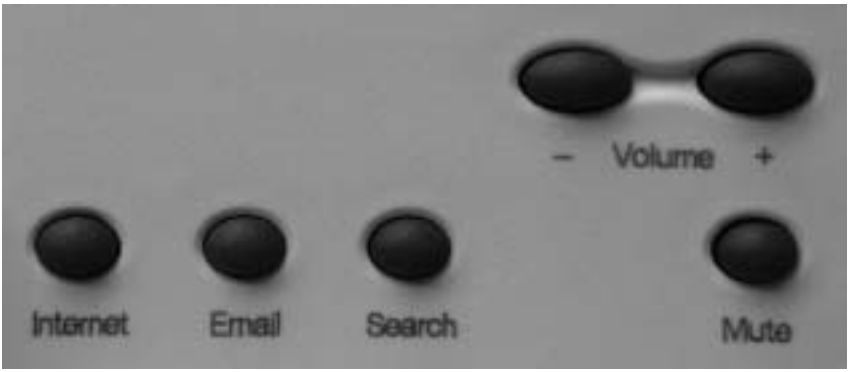
The Applications key corresponds to clicking the right mouse button and under Windows®, for example, opens the context menu for the work area.

MULTIMEDIA FUNCTIONS



(Diagram the same)

Depending on the setting, your keyboard is provided with multimedia keys. They have the following functions:



The **Internet** key will launch your internet browser application.

The **Email** key will launch your Email application.

The **Search** key will launch your predefined search engine.

The **Mute** key will turn off PC sound.

With the **Volume + /-** you can adjust the volume.

THE NETWORK

If your PC is provided with a Fast Ethernet-Network connector, you can connect it to a network.

The following explanation refer to PCs with a network connector.

You will find further information about networking in the Windows®-Help in the Start-Menu.

WHAT IS A NETWORK?

Talking about network means connecting several PCs.

The users can transfer information and data between each other and share their sources such as printer, modem and 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.
- In private household PCs use only one modem- or one ISDN-card to use the internet.
- 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:

1. The PC must have the same network cards that support the same network technology. Unless otherwise quoted your PC will support the current standard **Fast Ethernet** (10/100 Mbit).
2. The network cards must be connected. All you need is a so-called 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 each other. For this purpose they use protocols.
5. The setting of protocols must be correct.
6. The protocols must be enabled to make possible shared access.

IEEE 1394 (FIRE WIRE)

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

THE HARD DRIVE

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

The hard drive contains the operating system of the computer, other application programs and backup files, so that some of the space is already used up.

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 hard drive is addressed as drive C, D and E.
Whenever the computer is accessing the hard disk, the corresponding LED lights (drawing reference: **E**).

> ➲ Never try to 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 changes.

Partition	Drive	Type	Capacity (approx.)
Boot	C:	NTFS	60%
Backup	D:	NTFS	30%
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.

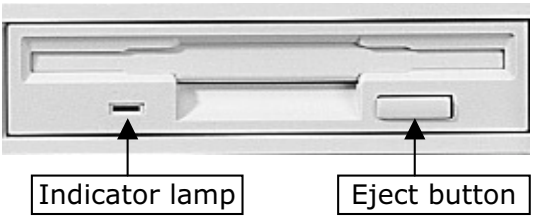
THE FLOPPY DISK DRIVE

The floppy disk drive can read and write 3.5" floppy disks with a storage capacity of 720 KB or 1.44 MB.

It is an excellent medium for storing and transporting small quantities of data.

In order to be able to access a disk, first place the formatted disk in the floppy drive. The floppy disk drive is addressed by the operating system as drive A.

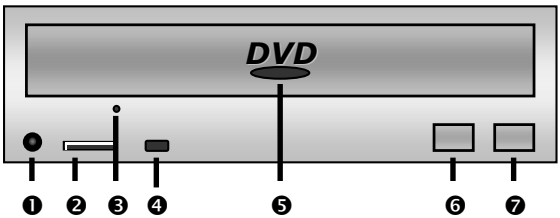
If you wish to remove the floppy disk, press the eject button. Whenever the computer is accessing the floppy disk, the indicator on the floppy disk drive is lit.



➲ **Warning!** Do not try to remove the floppy disk from the drive while it is being accessed, as this may lead to loss of data.

THE OPTICAL DRIVE

Depending on the model, your PC will be fitted with a **CD-ROM-,** a **CD-RW,** a **DVD-drive** or **a combination** of those drives. The diagram is schematic and the features can vary slightly.



(Diagram the same)

❶	**Port** for stereo headphones with a 3.5 mm jack plug.
❷	**Volume control**. This control allows you to adjust the volume of the headphone output.
❸	**Emergency removal aperture*** of the CD/DVD-drive. (See page 53)
❹	**Busy**. This LED lights when data is being read from the CD and flashes during positioning.
❺	**Tray** of CD/DVD-drive.
❻	**Playback button***. If a music CD is inserted, playback starts when this button is pressed. If an audio CD is already playing, skips to the next track.
❼	The **eject button** opens and closes the tray of the drive. If an audio CD is playing this button ends playback.

* Optional function

- NOTE: This section describes the CD-ROM drive. Operation of a DVD- or CD-RW-drive is basically the same.

- If your PC has two optical drives, only one drive will be connected to the internal analog audio output. The other drive uses instead the digital audio output, muting the headphone port.

With the CD-ROM drive, data can be read or audio CD's played. Compact disks can store large quantities of data and offer relatively fast access

LOADING A DISK:

1. Press the eject button on the front of the CD-ROM-drive, in order to open the tray.
2. Place the disk with the label upwards on the tray so that it lays flat on the tray.
3. Press the eject button again.

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

In order to access the CD, change to the corresponding drive.

When accessing audio or video disks (or audio or video files on conventional CD's) you should use the media playback preinstalled on the computer. CD-ROM and DVD-ROM-drives can play audio CD's, but only on the DVD-ROM can you listen to DVD audio. Depending on the DVD audio CD and the software installed you may also have to open a DVD player program.

If you wish to remove the CD press the eject button once.

➲ While the computer is accessing the CD-ROM drive, the corresponding LED display (❹) is lit. In this case do not try to remove the CD from the drive.

EMERGENCY REMOVAL OF A JAMMED DISK

If the tray fails to open automatically, it can be manually opened provided that your unit has an emergency removal aperture (see page 51, ❸).
Restart the computer and if the tray is still jammed proceed as follows:

1. Shut down Windows and switch the computer off.
2. Introduce a long pointed object (such as a straightened paper clip) into the emergency removal aperture (❸) until you notice a resistance. Slight pressure will then cause the tray to open.
3. Remove the CD and restart the computer.

CD-ROM-/DVD-DRIVE AS BOOTDRIVE

The optical drives can be used for booting the operating system.

If the PC doesn't boot from the disk even if bootable try the other drive (if provided) and boot the PC again.

If you are still failing it could be possible that it isn't specified in the BIOS. Please make sure if it is the case.

THE DVD TECHNOLOGY?

The Compact Disk (CD) was introduced in 1982.

Who could imagine doing without the CD as a storage medium for data, multimedia, computer games and also, in part, for video? A CD can hold up to 700 MB of data, which is too little for good quality storage of an entire feature film.

The DVD (**D**igital **V**ersatile **Disk**) has the same dimensions as a CD but can hold more data as the data can be recorded with greater density and in some cases on both sides (double sided).

Furthermore, each side can contain two layers of information (dual layer).

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

A DVD drive can read both DVD-ROM's and CD-ROM's, thus also providing you with access to your legacy data media.

THE 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 subtitles
- Better picture quality than VHS or SVHS
- Navigation in seconds, picture stills, etc.
- Choice of different camera angles
- **Parental Control** - The parental control option means that certain scenes or the entire film can be made accessible only to certain age groups. DVD players can, for example, be set so that scenes which have been passed for viewing only by over-18's are not shown.

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.

This extreme compression combined with exceptional picture quality is provided by the MPEG2 image coding method on the DVD.

This places very high demands on the processor, so that when the computer is playing a DVD video no other applications should be run.

If you do wish to do this, or if your computer is too slow, we recommended that you buy a so-called MPEG2 plug-in board, which has its own decompression processor.

➲ **Attention:** The region setting may be changed up to five times using the software, then it can only play DVD movies for the last region setting. 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 at the expense of the user.

SUBJECTS CONCERNING CD-REWRITER

First of all some words about so-called CD-blanks.

CD-BLANKS (CD-R / CD-RW)

Normal CDs are pressed from a glass master and then sealed. In the case of blank CDs, the "zeroes" and "ones" are burnt into the CD with the laser of the CD-Rewriter. Therefore they are more sensitive than normal CDs. So please avoid the following – especially with blanks before first use:

- radiation by direct sunlight (UVA/UVB)
- scratches and damage
- extreme temperatures

COLORS OF THE CD BLANKS

The blanks have a reflective layer (silver or gold) and a colored synthetic layer which is initially transparent. This synthetic layer is available in green or blue. The laser ray reflected back from the reflective layer hits the synthetic layer and "burns" it which makes it impassable for the laser ray. This is how the information is put onto the blank.

There is no general answer to the question about which color combination is best as the medium (blank), the writing device (CD-Rewriter) and the reading devices (CD-ROM, hi-fi CD-player, Discman etc.) must harmonize together.

If you have problems reading a particular type of blank, we recommend that you try a blank with a different color combination.

WHAT TYPES OF CDS CAN BE COPIED?

As CD-ROM, CD-R and CD-RW-drives do have their technical limits, it is not possible to copy all CDs perfectly.

Problems can be caused by the source CD-ROM drive and by the source CD. Therefore we recommend that before you copy a CD you select the option "Simulation".

However, it is possible to make a damaged copy of a CD without an error message being displayed.

This can happen if there is data or other information to protect the CD being copied between the tracks of the source CD.

Using the software included in delivery, you can make backup copies of virtually any CD type.

The following table contains a list of CD types which can be copied and some remarks on how to make backup copies:

CD-Type	Comments
Audio	If your drive is not a CD-R or a CD-RW drive, a source CD-ROM drive is required which can read digital audio data. Not all drives support the extraction of digital audio data. You can copy audio CDs in "Disk-at-Once" mode if the source CD-ROM drive is fast enough.
Boot-CD	Using the software included in delivery, you can make boot CDs.
Data-CD 1/2 ISO 9660 Joliet	If no special formatting or methods to prevent copying have been used, it should be possible to copy this format without any problems.
Extended play CDs	CDs with a capacity of up to 80 Min./700 MB can be generated. Not every drive works perfectly with these CDs.

CD-Type	Comments
Mixed Mode	Some CDs can be copied without problems, others cannot This might be because the formatting does not permit copies of CDs to be made or because there are many deviations from the standard and some CDs do not comply with the standards.
PSX-CD	Playstation™-games are supported.
UDF (Packet Writing)	Some CD-ROM drives cannot read UDF-CDs. If the CD-ROM drive is able to read Multi-Session-CDs, there shouldn't be any problems. This format requires the nero – InCD program.

WHAT DOES ... MEAN ...

Boot-CD	See ➲El Torito
Buffer Underrun	Due to an empty intermediate buffer, the continuous flow of data to the CD-RW has been interrupted and as a result data has been lost.
CD-Extra	CD-Format which contains audio and data-➲tracks. As the audio data is at the beginning, audio CD players can also play these CDs.
CD-R	Recordable CD
CD-RW	Re-writeable CDs
Disk at once (DAO)	Writing the data in one process. This is important for copying music CDs so they are true to the original.
El Torito	Requires for Boot CDs. If a CD has been formatted with this format, a PC can be booted from this CD if it has the appropriate BIOS support. It does not support long filenames.

Extraction	(Audio-) Taking digital audio data from a CD-ROM drive.
Finalizing	If an audio CD has not been finalized, the CD can only be played back in the CD-Rewriter. Hi-Fi players cannot play back CDs which have not been finalized.
Fixing	In contrast to finalizing which finalizes the entire CD, fixing is restricted to one ➲session.
Hybrid-CD	Format with two data systems: ➲HFS (Apple Mac) and ➲ISO 9660 (other OS')
HFS	Hierarchical File System for Apple MacOS.
Image	Image of a CD or a partition structure.
ISO 9660	CD-ROM file system specified in 1984: Level 1 = 8.3 name convention (ABCD1234.EXT) Level 2 = 8.3 name convention + special signs Level 3 = up to 128 digits
Joliet	➲ISO 9660-Format extended by Microsoft. File names up to 64 digits whereby this extension is only visible under Windows®9X/NT. Other systems only see the ➲ISO 9660-Format.
Lead-In / -Out	Marks the physical start and end of a ➲session. The ➲TOC is saved in the Lead-In area.
Mixed Mode	A CD containing both data and music tracks, whereby the data is contained in the first ➲track and the music is contained in the second track.

MP3	MP3 (MPEG3) is a compression procedure which reduces e.g. a CD music track to approx. one tenth of its original size. Files which have been compressed using this procedure can usually be recognized due to their file extension *.mp3. To play back these files you need a software decoder. A conventional CD player is not capable of playing back these music tracks.
Multi-Read	CD-drives which have this capability are able to read CD-RWs. This is achieved by amplifying the laser unit.
Multi-Session	see ➲session; To access other sessions of a CD click the right hand mouse key on the appropriate CD-ROM drive in the Explorer and select "properties". You can select a session from the file card "data carrier".
On the fly	This write procedure does not create an ➲Image-file. A small project file with file references is used to write the CD. To be able to do this, you need a fast computer.
Packet Writing	The CD is treated like a hard disk. You can save (write) the data from an application directly onto the CD. This only works from Windows®95 onwards. Another pre-condition is that the first ➲track of the CD contains a ➲UDF-driver. This driver is loaded automatically when the CD is inserted into the drive.
PSX-CD	CD for the Sony™ Playstation™. To operate the PSX-CD-backup copies, the Playstation™ must be equipped accordingly.
Sector	Smallest addressable unit of a CD.

Session	A session includes all data which have been burnt onto the CD in one writing process. Only one data ➲track can be written per session, however a number of audio➲tracks can be written. Every CD can have a number of sessions, but these CDs can only be read by devices capable of reading multi-sessions.
TOC	(Table of contents) Directory of ➲tracks.
Track	On a music CD, one track is the equivalent to one song. In the case of data it is a summary of ➲sectors of the same type to record data.
Track at once (TAO)	On multi-session CDs, all tracks are written onto the CD in one working process. The ➲TOC and the connections are written between the data blocks and cause a pause of approx. 2 seconds between the songs.
UDF (Universal Disk Format)	Platform-wide CD file system which is used in the ➲Packet Writing process. The required UDF driver is always loaded from the CD and makes it possible for CD writers and CD-Rewriters to access the CD as it would a hard disk.
Extended play CDs	By reducing the size of the distance between tracks, the capacity of a CD can be extended. You require special CD blanks (80 Min./ 700MB) and a recorder, as well as matching software which supports this. The products included in delivery are capable of these tasks.
Unicode	16-Bit-digit set. The standard ASCII-set of signs is saved in 8 Bit mode and therefore has a limited scope, for example no Arabic letters.

THE GRAPHIC CARD

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

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 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 graphic setting using the "Display Properties" help program.

We recommend for optimum image reproduction 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 a LCD monitor is being used.

CONNECTING THE PC TO A TELEVISION

If your graphic card has a TV output, you can transfer the image from your PC to the television set.

(Diagram the same)

❶	Composite video output (Cinch)
❷	S-video output

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

CONNECTING YOUR PC TO A TELEVISION:

1. Shut down Windows and power down the PC.
2. If your TV set has a composite video port, connect the composite video input on your set with the composite video output on the PC. If your TV set has an S-video port, connect the S-video input on your set with the S-video output on the PC.

In order now to be able to see the PC image on your TV set, switch on the television.

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

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

SYSTEM REQUIREMENTS

If you wish to use the graphic card in another PC, the following requirements must be met and drivers which can be downloaded from www.nvidia.com

Processor	From Pentium® II/III Processor or equivalent.
Slot	AGP – slot
Monitor	VGA, from 640 x 480 resolution upwards
CD-ROM	Min. 2-speed (for driver installation)
Operating system	From Microsoft Windows®9X/NT 4.0 SP5

THE SOUND CARD

Your PC has an integrated stereo sound card (on-board) with 16-bit and 3D spatial sound effects (3D).
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.

THE MIDI- / GAME PORT

At the rear of your Computer you will find the MIDI-/Game port-Interface.

Here you can connect control equipment like Joystick, Game pad, Steering Wheels, etc. In general these are used in games or simulations to get a realistic and easy control of the program. Steering Wheels can add a realistic feeling to "racing" programs. MIDI is a standard that enables exchange of data between keyboards and similar equipment of the musicians environment. Via DIN-cable data will be sent to the respective equipment. This may be data like length of notes or data changing the attributes (sysex).

The common environment of a MIDI-implication is:

- Keyboard plays passages, or single notes in a sequencer program.
- The sequence is edited in the PC and stored as a MIDI-File.
- The PC controls the MIDI-equipment (sound creation of keyboard, Sampler, etc.).

To be able to work with MIDI you need to have an adapter cable that is connected to the MIDI/Game port.
This adapter can be purchased in special music shops.

MODEM

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 analog telephone sockets. The integral modem cannot withstand the voltage levels of digital telephone systems such PABX or lines such as ISDN or Broadband services

SOFTWARE

This section deals with software. We differentiate between **BIOS**, **Application programs** and **operating system**, which will be our first matter of subject.

TO GET TO KNOW WINDOWS^{XP}

The operating system Windows^{xp} offers different options to understand the operation of it. We will list only few of the options:

WINDOWS^{XP} HOME EDITION – FIRST STEP

This manual will give a general survey about the usage of the operating system.

We recommend the reading to beginners and to those who have experienced older versions of windows.

WINDOWS^{XP} HELP AND SUPPORT

MICROSOFT INTERACTIVE TRAINING – STEP BY STEP

WRITING CDS

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 UP NERO - BURNING ROM

1. In Windows® click on the "***Start"*** button, which is on the left side of the task bar.
2. Select "***Programs"*** and then „nero - BURNING ROM".
3. An assistant appears to help you write CDs. Follow the instructions dependent on the CD type

WRITING A CD WITH THE HELP OF THE ASSISTANT

It is very simple to write a CD by using the assistant in nero - BURNING ROM. The assistant provides step by step instructions in order to write a simple CD with audio or PC data.

If you are not familiar with CD-R technology yet, the help function (call it up using the F1 function key, or under "*Help"* in the program bar), as well as this manual provides you with important information. In order to be able to help you to write a CD, we have provided a step by step guide for the most common formats. All settings can be left as their standard values.

INSTALLATION OF THE SOFTWARE

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

Confirm by clocking on "**Continue**".

The software included in delivery is already preinstalled in the factory.

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.

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 the Windows^{xp}-Help how to activate this function.

An example for the manual installation without the autorun function:

1. Open the "*Start menu*" and select the item „*RUN*".
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.

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 Windows^{xp}-Version 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 version.

If necessary you can activate Windows^{xp} as often as requested.

BIOS SETUP

THE BIOS SETUP PROGRAM

In the BIOS set-up (Hardware Basic Configuration of your system) you have a number of parameter settings available for operation of your PC.

For example, you can change the operating mode of the interfaces, the security features or the 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.

Chapter 5

Customer Service

DATA AND SYSTEM SECURITY

The described programs are part of your Windows operating system. You will find detailed information in your Windows help.

DATA SECURITY

Make regular data security on external media such as CD-R or CD-RW. Windows offers you the program "**Backup**" and the program "**Files and Settings Transfer Wizard"**.

You will find both programs in **Accessories**, **System Tools**. Make a backup disk with all your passwords and the operating system configuration.

MAINTENANCE PROGRAMS

You can avoid sources of errors with the help programs such as "**Disk Defragmenter**" and "**Disk Cleanup**".

The help program **System Information** can be very helpful since it gives you detailed information about your system configuration. You will find these programs in **Accessories**, **System Tools** too.

PASSWORD RESET DISK

To protect user accounts from users forgetting their password every local user should create a password reset disk and keep it in a safe place.

Please read in your Windows help how to create a password reset disk.

RESTORING THE FACTORY SETTINGS

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

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 required, back-up all required data on drive D.

This recovery will set back your system to the condition at delivery. Printer installation or any other additional software has to be installed again. You will need to enter the "Product Key" (License Number) again, if necessary.

CARRYING OUT A RESTORE

1. Firstly, please make sure that you have completely read the entire "Restore" section.
2. Insert the Support®-CD and start the PC.
3. Select the option "Start from CD-ROM".
4. In the restore menu which now appears, please select **1**.
5. Follow the on-screen instructions.
6. The PC restarts and once again has its factory settings.

TROUBLESHOOTING

LOCALIZE 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, 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 power on again.

THE POWER ON SELF TEST (POST)

The Power On Self Test (POST) is executed during each boot process to test memory, Motherboard, display, keyboard and other components.

When the PC does not pass the POST but beeps several times and even leaves the screen blank, call your PC support.

> ➲ The PC can only be switched off when the power switch is pressed for 5 sec.

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 cable is not loose and fully connected.

Wrong Date and Time

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

»Non-system disk or disk error ...«-message appears during boot-up.

- You may have a floppy disk in the disk drive and the system is looking for an operating system on that floppy. Remove the disk and press any key.

No data can be accessed from the CD-ROM Drive.

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

The Printer does not work.

- Check the printer cable.
- Do a Printer Self Test.
- Should several equipment be operated from the same port, check all peripherals and reinstall the drivers.
- If you have access to the internet download and install the latest drivers.

Storing data onto Floppy not possible.

- The diskette is not formatted, write protected or too small for the amount of data to be stored.

DRIVER SUPPORT

This PC has been tested in our test laboratories in detail and extensively with a large number of different devices. It fulfils all required standards and complies with the standard "Designed for Windows", which certifies utmost compatibility. However, it is usual, that drivers are updated from time to time. This is because e.g. possible compatibility problems occur with other components (programs, equipment) which have not yet been tested. Driver updates and the latest information on your product are available in the Internet.

www.medion.com

DO YOU NEED FURTHER SUPPORT ?

If the suggestions in the above section have not solved your problem, please contact the hotline. We will try to help you over the telephone. However, before you contact your Technology Center, please keep 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.

INDEX