### **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 find the information you require. Along with the **Table of Contents**, an **Index** has been provided to help you locate information.

In addition, many application programs include extensive help functions. As a general rule, you can access help functions by pressing F1 on the keyboard. These help functions are available to you when you use the Microsoft Windows® operating system or the various application programs.

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



#### Information about your PC

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

Windows<sup>xp</sup> invites you to a **tour** (notes on the task bar) to familiarize yourself with the operating system. We listed further useful sources of information starting on page 50.

#### **AUDIENCE**

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

#### **DOCUMENT YOUR NOTEBOOK**

It is important to document the details of your Notebook purchase in the event you need warranty service. The serial number can be found on the back of the Notebook:

Serial Number	
Date of Purchase	
Place of Purchase	

#### **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 Medion.

#### **SERVICE**

Medion is pleased to provide individualized customer service throughout the life of your Notebook. Please feel free to contact a customer service representative with any questions relating to this Notebook.

Copyright  $^{\circ}$  2005 Medion  $^{\circ}$ . All rights reserved. Microsoft  $^{\circ}$ , MS-DOS  $^{\circ}$ , and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries. Pentium  $^{\circ}$  is a registered trademark of Intel Corporation. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorised by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Information in this document is subject to change without notice.

# **Table of Contents**:

Safety Instructions       3         Data Security       3         Operational Safety       4         General Safety Information       4         Important Additional Safety instructions       5         CD-ROM/CD-RW/DVD/DVD-RW Drive safety       6         FTT Display Safety       6         Set-Up Location       7         Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance       of wireless LAN         of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       25         On/Off button       25 </th <th>SAFETY AND MAINTENANCE</th> <th></th>	SAFETY AND MAINTENANCE	
Operational Safety         4           General Safety Information         4           Important Additional Safety instructions         5           CD-ROM/CD-RW/DVD/DVD-RW Drive safety         6           TFT Display Safety         6           Set-Up Location         7           Environmental conditions         7           Power Adapter         8           Cabling         9           Modem         9           Information about the regulatory compliance         of wireless LAN           of wireless LAN         9           Touch pad         9           Battery operation         10           VIEWS & FIRST SETUP         11           Views of the Notebook         13           Scope of Delivery         13           Open Notebook         14           Front View         14           Left Side         15           Right Side         15           Rear Side         15           Indicators         16           Getting Started         17           The Windows® XP Desktop         20           MAIN COMPONENTS         25           On/Off button         25           On/Off button	Safety Instructions	3
General Safety Information       4         Important Additional Safety instructions       5         CD-ROM/CD-RW/DVD/DVD-RW Drive safety       6         TFT Display Safety       6         Set-Up Location       7         Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Data Security	3
Important Additional Safety instructions       5         CD-ROM/CD-RW/DVD/DVD-RW Drive safety       6         TFT Display Safety       6         Set-Up Location       7         Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Operational Safety	4
CD-ROM/CD-RW/DVD/DVD-RW Drive safety       6         TFT Display Safety       6         Set-Up Location       7         Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance       of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	General Safety Information	4
TFT Display Safety       6         Set-Up Location       7         Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance       of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Set-Up Location       7         Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance       of wireless LAN         of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	CD-ROM/CD-RW/DVD/DVD-RW Drive safety	6
Environmental conditions       7         Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Power Adapter       8         Cabling       9         Modem       9         Information about the regulatory compliance       9         of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Cabling       9         Modem       9         Information about the regulatory compliance       9         of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Modem       9         Information about the regulatory compliance       9         of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Information about the regulatory compliance of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
of wireless LAN       9         Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		9
Touch pad       9         Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Battery operation       10         VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
VIEWS & FIRST SETUP       11         Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	·	
Views of the Notebook       13         Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Scope of Delivery       13         Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	VIEWS & FIRST SETUP	11
Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Views of the Notebook	13
Open Notebook       14         Front View       14         Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Scope of Delivery	13
Left Side       15         Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Open Notebook	14
Right Side       15         Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27		
Rear Side       15         Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Left Side	15
Indicators       16         Getting Started       17         The Windows® XP Desktop       20         MAIN COMPONENTS       23         Power Supply       25         On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Right Side	15
Getting Started17The Windows® XP Desktop20MAIN COMPONENTS23Power Supply25On/Off button25Power Adapter26Battery Operation27Inserting the Battery27		
The Windows® XP Desktop		
MAIN COMPONENTS         23           Power Supply         25           On/Off button         25           Power Adapter         26           Battery Operation         27           Inserting the Battery         27	Getting Started	17
Power Supply	The Windows® XP Desktop	20
On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	MAIN COMPONENTS	23
On/Off button       25         Power Adapter       26         Battery Operation       27         Inserting the Battery       27	Power Supply	25
Power Adapter		
Battery Operation		
Inserting the Battery27		
Removing the battery 27		
Charging the Battery28		
Discharging the Battery	- · · · · · · · · · · · · · · · · · · ·	
Battery Power	,	

Power Management	30
Standby Mode	
Suspend (hibernate) mode	30
Display	31
Opening and Closing the Display	31
Screen Resolution	31
Connecting an External Monitor	32
Data entry	
The Keyboard	34
Notebook-specific key combinations	34
Touch pad	35
The Hard drive	
Important Directories	
The Optical Drive	
Connection	38
Handling Discs	38
Loading a Disc	39
Playing Music CDs	
Playing DVD Movies	40
Writing CDs	41
The Sound Card	
External Audio Ports	
Modem	
Modem port	
The Network	
What is a network?	
Fast Ethernet-Network	45
Wireless LAN	48
Universal Serial Bus (USB) Port	49
Software	50
Getting to Know Windows XP	50
Windows <sup>®</sup> XP Manual	50
Windows® XP Tour	50
Microsoft® Interactive Training	
Windows® XP Help and Support	
Software Help	
Device Drivers	
Information about Your PC	
Digital Signatures	
Windows Activation	

The BIOS Set-up-Program	54
Running the BIOS Set-up	54
Navigating the BIOS Utility	54
FIRST AID	55
FAQ - Frequently Asked Questions	57
Data and System Security	
Data Security	
Maintenance Programs	
Password Reset Disk	
Windows <sup>®</sup> Update	60
Windows Update Information for Data Security	61
System Recovery	62
Restoring Microsoft Windows XP	62
System Restore powered by Symantec	63
Limits of Restore Factory Settings (Restore option 3)	64
Performing the Restore	64
Performing the Restore without disc	65
Troubleshooting	66
Localize the Cause	
Check Cables and Connections	66
The Power On Self Test (POST)	66
Errors And Possible Causes	67
Additional Support	68
Driver Support	
Maintenance	
Maintenance Instructions	
Cleaning and Care	
Care of the TFT Display	
Transporting the Notebook	
Securing your Notebook	
Using a safety lock	
Batteries and Proper Treatment	
Upgrades and Repairs	
Notes for Service Engineers	73

APPENDIX	75
Standards	77
Electromagnetic Compatibility	77
Electrical Safety	78
Ergonomics	78
Supplementary Information	78
ISO 13406-2 Class II	78
FCC Compliance Statement	80
Warranty	81
Limits of Liability	82
Local Law	83
Making Copies of This Manual	83
Index	84

# Chapter 1

# Safety and Maintenance

Subject	Page
Data Security	3
Set-up Location	7
Environmental Conditions	7
Modem	9
Information about the regulatory compliance of wireless LAN Touch Pad	9
Touchpad	9
Battery Operation	10

# SAFETY INSTRUCTIONS

Please follow the instructions in this section for the safe operation of your Notebook:



 DO NOT open the case of the Notebook, the battery or the power adaptor. When the case is open there is a danger of severe electric shock.



- DO NOT insert objects through the slots and openings of the Notebook. This may lead to electric shock, electrical short-circuit or fire that will damage your Notebook.
- **DO NOT** allow small children to play unattended with electrical equipment.



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

### **DATA SECURITY**



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.

#### **OPERATIONAL SAFETY**

It is important to follow all of the safety instructions in this manual to ensure the safety of you and your Notebook.

### **GENERAL SAFETY INFORMATION**

#### If you find that:

- the power cord/power adapter is worn or damaged.
- liquid is spilled on the unit.
- the Notebook fails to work properly.
- the Notebook is dropped or the housing is damaged.

#### You should:

- shut-down your Notebook immediately.
- remove the power cord from the socket.
- contact Customer Service.
- do not restart unless you have contacted Customer Service.

How important is the information you will be storing on your Notebook? You need to guard against the loss of your data by making backup copies. You can backup your data onto CD, floppy disk, or other media such as Zip drives. It depends upon how much data you have. In this way, if something happens to the hard drive in your Notebook, you have another copy of your data.

### **IMPORTANT ADDITIONAL SAFETY INSTRUCTIONS**

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

- Do not use this product near water (e.g., near a bathtub, lavatory or kitchens sink, in a wet basement or near a swimming pool).
- Avoid using a telephone/modem (other than a cordless type) during an electrical storm. There is a remote risk of electric shock from lightning.
- Do not use the telephone/modem to report a gas leak in the vicinity of the leak.



Lithium batteries cannot 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 Medion **Service Center** for additional information on battery disposal.

# CD-ROM/CD-RW/DVD/DVD-RW DRIVE SAFETY



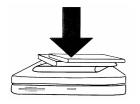
- CD-ROM-/CDRW-/DVD-drives are Laser
   Class 1 devices. These lasers must remain in their sealed casing.
- Danger Invisible laser radiation when open. Avoid direct exposure to beam. This product is certified by the manufacturer to comply with DHHS rules 21CFR, Chapter 1, Subchapter J, applicable at date of manufacturer. Refer to optical drive labels for additional details.
- DO NOT remove the drive covers, as exposure to the lasers may be harmful.
- **DO NOT** look directly into the laser, even when wearing eye protection.

#### TFT DISPLAY SAFETY



- To avoid damage to the TFT Display, never open it a full 120°. Do not forcibly open it.
- In order to avoid damage to the display, do not touch it with your fingers or sharp objects.
- Never lift the Notebook by the TFT Display; doing so could break the hinges.
- There is a risk of injury if the TFT display breaks. Use protective gloves to pack up the broken pieces and contact customer service to arrange for proper disposal.

It is important to thoroughly wash your hands after handling a broken TFT display. There is a chance that **chemicals** may have been released.



 Never place objects on top of the Notebook that would exert any pressure on the display. There is a danger that even slight pressure may break the TFT display.

### **SET-UP LOCATION**

- Keep your Notebook and all connected peripherals away from moisture, dust, heat and direct sunlight. Failure to do so can lead to Notebook malfunction or damage.
- It is highly recommended you do not use the Notebook outdoors.
- Operate the Notebook and all peripherals on a stable, balanced and vibration-free surface.
- Do not leave the base of your Notebook on your lap or any part of your body for a long period of time while the Notebook is turned
   ON or is charging. The Notebook can become very warm while it is turned on or charging and can cause discomfort or injury from heat exposure.

#### **ENVIRONMENTAL CONDITIONS**

- The Notebook is most reliably operated at an ambient temperature between +41° and +104° F and at a relative humidity between 30% and 70% (without condensation).
- When powered off, the Notebook can be stored at temperatures between **32°** and **140° F**.
- Wait until the notebook has reached ambient (room) temperature before turning it on or connecting it to the power adapter.
   Drastic variations in temperature and humidity can create condensation within the PC and may cause it to short-circuit.
- For transporting the notebook keep the **original packing**.

#### **POWER ADAPTER**

- Do not open the power adapter housing. When the housing is open there is a **danger** of severe electric shock. It contains no user-serviceable parts.
- The electric outlet must be in the vicinity of the Notebook and within reach of the power adapter cables. **DO NOT** stretch the power cables tightly to reach an electric outlet.
- To disconnect your Notebook from the power source, or set the Notebook to battery operation, remove the power cord from the Notebook's power socket.
- Only use the Notebook with a power adaptor (FSP090-1ADC21) operating at AC 115V~/60 Hz. In European countries use the Notebook at AC 220-240V~/50 Hz.
  For details on power consumption, please refer to the rating plate on the rear of your Notebook. If you are unsure of the type of power supply available at the point of use, ask your local power company.
- Use only the supplied power cord and power adapter.
- If using an extension cord, make certain that it meets your local safety requirements. If in doubt, consult an electrician.
- To provide additional protection against electric shock, power surges, lightning strikes, or other electrical damage to your Notebook, we recommend the use of a surge protector.

#### **CABLING**

- Arrange cables so no one can walk on or trip over them.
- **DO NOT** place objects on any of the cables.



<u>Caution</u> – To reduce the risk of fire, use only No. 26 AWG or larger telecommunication cords (applies to American Standards).

#### **MODEM**

 If your system has a modem, please make sure you connect it to an analogue telephone line only. Connecting to a digital PBX, a digital line designed for broadband services or ISDN, a shared service line or a payphone will damage the modem or the devices to which it is connected.

# INFORMATION ABOUT THE REGULATORY COMPLIANCE OF WIRELESS LAN

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

-Wireless LAN

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

#### **TOUCH PAD**

Light pressure with the tip of your finger is all that is required to operate the touch pad. Because the touch pad is electrostatic sensitive, objects cannot be used in place of your fingers. Using a pen or other object can damage the touch pad or cause the Notebook to malfunction.

#### **BATTERY OPERATION**

To extend the life and power of your battery and guarantee secure operation, the instructions below should be followed:



- Never expose the battery to direct sunlight or heat for long periods.
- Do not dispose of the battery by fire as they may explode. Check with local codes for possible special disposal instructions.
- **Do not** open the battery housing; it contains no user-serviceable parts.
- Disregarding these instructions will lead to damage and under some circumstances may even cause the battery to explode.
- Keep the battery away from electrically conductive materials, chemical substances and cleaning agents.
- Only use the originally supplied power adapter to charge the battery.
- Fully discharge the battery before recharging it.
- Replace the battery **only** with the same type or an equivalent type recommended by the manufacturer.
- Charge the battery only until the battery charging light goes out. Also, refer to the instructions under "Charging the Battery" on page 28 for instructions on checking the battery level.
- Only change the battery when the unit is switched off.
- **Batteries are classified as special waste** and should always be disposed of properly. Contact Customer Service for more details.
- Keep batteries away from children at all times.
- Use only the batteries and power adapter/cord indicated in this manual.

# Chapter 2

# Views & first setup

Subject	Page
Scope of delivery	13
Open Notebook	14
Front View	14
Left Side	15
Right Side	15
Rear Side	15
Power and Status Indicators	16
Getting started	17

# VIEWS OF THE NOTEBOOK

# **SCOPE OF DELIVERY**

Notebook

**Battery** 

Power pack with mains lead (FSP065-AAC)

Modem cable

External optical drive with separate Y USB cable

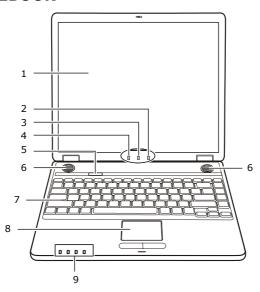
Application-/Support-Disc

Microsoft Windows® XP Recovery Disc + manual

Instruction manual

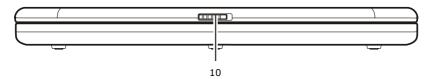
Warranty card

#### **OPEN NOTEBOOK**



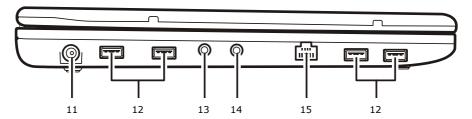
- **1** TFT display (⇒ p. 31)
- 2 Battery charge indicator (⇒ p. 16)
- **3** Power supply indicator □ (\$\Rightarrow\$ p. 16)
- 4 Wireless LAN indicator 
  ¬ (⇒ p. 16)
- **5** Power ON/OFF (⇒ p. 25)
- 6 Stereo speaker
- **7** Keyboard (⇒ p. 34)
- **8** Touch pad (⇒ p. 35)
- **9** Device indicators (⇒ p. 16)

#### **FRONT VIEW**



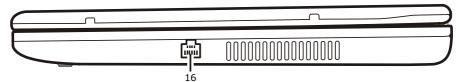
**12 -** Display catch (⇒ p. 31)

# LEFT SIDE



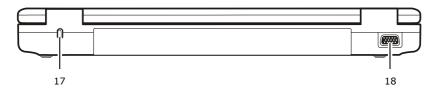
- **11 -** Power socket  $\frac{DC IN}{---}$  ( $\Rightarrow$  p. 26)
- **13 -** Audio Out (→) (⇒ p. 43)
- **14 -** Microphone ( ⇒ p. 43)
- **15 -** LAN port (RJ-45)  $\stackrel{\square}{\text{L}}$  (\$\Rightarrow\$ p. 45)

# RIGHT SIDE



**16 -** Modem port (RJ-11) (⇒ p. 44)

# **REAR SIDE**



- **17 -** Kensington<sup>®</sup> lock ( ⇒ p. 71)
- **18 -** External monitor  $\square$  ( $\Rightarrow$  p. 32)

#### **INDICATORS**

LED's indicate the power and operating system states of the Notebook. The meaning of each LED is:

### BATTERY CHARGE INDICATOR

Below you will see the different meanings of this LED in various situations:

On	Battery is charging.
Blinking	Battery is low.
Off	Battery is not charging.

#### Power supply indicator

Below you will see the different meanings of the LED in various situations:

Off	The system is powered off or is in <b>Hipernate mode</b> .
On	The notebook is in full operation.

### WIRELESS LAN

This LED wuld be lit when the wireless LAN function is activated. (optional feature)

#### ACCESS INDICATOR

This LED lights or flashes when the Notebook is accessing the hard disk.

# Num Lock

This LED lights when NUM-Lock has been activated [Fn+NumLk]. It sets the keyboard so that numbers are assigned to certain characters, simplifying numerical data input.

#### CAPITAL LOCK

This LED lights when CAPS-Lock has been activated. This sets the keyboard to capital letters.

# SCROLL LOCK

This LED indicates that the Scroll Lock key on the keyboard is activated [Fn+ScrLk]. The Scroll Lock key has different functions depending on the software you are using.

# **GETTING STARTED**

Before you get started using your notebook, first take a few moments to read the important section on **Safety**.

This Notebook comes with software **fully pre-installed**. You do not have to install any of the CDs supplied. However, with many programs (e.g., telephone CDs or encyclopaedias) it is necessary to insert the corresponding CD to access the data that is stored on it. The software will prompt you to do this when necessary.

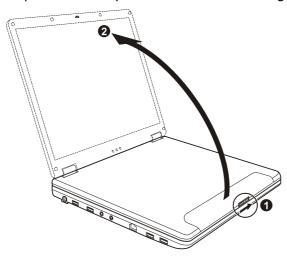
#### Step 1

• Before starting the Notebook please insert the battery.

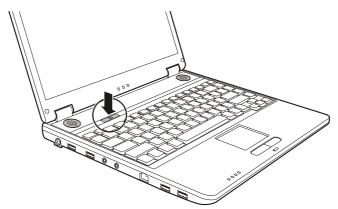


If the battery level is insufficient, connect the power adapter.

• Open the display by pushing the latch-trip (10) to the right with your thumb and then open the display up to the required position with your thumbs and forefingers.



Switch the Notebook on by operating the On/Off switch (5). The Notebook will start and then run through various phases.





**Note:** Make sure there is no bootable CD (e.g., the Recovery CD) in the CD-ROM drive. Such disks will prevent the operating system from loading off the hard drive.

Your operating system is finished loading when a welcome screen is shown on your display.

#### Step 2

The greeting procedure will guide you through a series of dialogue boxes. The information in each dialogue box will explain the steps that need to be taken.

Should you have any questions just click on



#### **Enter Personal Details**

In one of the initial start-up dialog boxes a request will appear on the screen for you to enter your personal details. Please enter the requested information in the white input fields. You can select the fields by clicking on them with the mouse. When you press Enter, or click on the Continue button you progress to the next window.

#### **License Agreement**

The greeting procedure also displays the license agreement. Please read this 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 on the right side of the screen 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 and be entitled to open the sealed Windows® manual.

#### Step 3

After the login procedure the Windows<sup>®</sup> desktop appears on your screen. This can be adjusted so that the screen of your computer looks different.

# THE WINDOWS® XP DESKTOP

After the login procedure the Windows® XP desktop appears on your screen. (Your desktop might not look exactly like the one shown here.)



#### 1. Start Button

Clicking the Start button brings up a menu where you can access help, software programs, files, and settings. For more information, click **Windows® XP Tour** on the **Start** menu.

#### 2. Program Bar

The most commonly used software programs are listed here.

# 3. All Programs

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

#### 4. Information about your PC

Click this button to receive important information about your Notebook as well as valuable hints and additional assistance.

#### 5. Turn Off Computer

Click this button to shut down Windows® XP and the Notebook.

#### 6. Task Bar

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

#### 7. Desktop Icons

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

#### 8. Logged in User

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

#### 9. Control Panel

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

# 10.Windows® XP Help

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

# Chapter 3

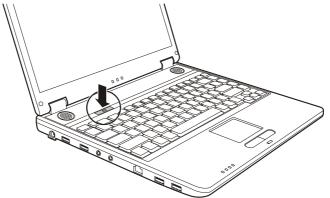
# Main Components

Subject	Page
Power Supply	26
Display	31
Data Entry	34
The Hard Drive	36
The Optical Drive	38
The Sound Card	43
Modem	44
The Network	45
The Universal Serial Bus (USB) Port	49
Software	50

# **POWER SUPPLY**

# On/OFF BUTTON

The On/Off button  $\bigcirc$  (**5**) is used to power up/down the Notebook.





**WARNING!** Do not switch off your Notebook while the **hard disk** or the optical drive is running and the corresponding **media activity LEDs** are lit. Otherwise data may be lost. To protect the hard disk you should always wait for 20 seconds after powering down the Notebook before powering it up again.

#### **POWER ADAPTER**

Your Notebook is supplied with a universal AC power adapter, which automatically adjusts to the available power source. The following levels are supported: **AC 100-240V~/ 50-60 Hz.** Please follow the power supply **safety instructions** found on page 8.

The power adapter is connected via a power cord to an AC outlet. The DC power lead from the power adapter is connected to the **left** side of the Notebook (11).

The adapter provides the Notebook with power and also charges the battery. The power supply indicators of the Notebook (see page 16) provide details on the operating state. The battery is also being charged when you are working on your Notebook with the power adapter.

The power adapter is still live if the Notebook is not connected with it. You should therefore unplug the power adapter from the outlet if it is not connected to the Notebook.



**WARNING!** Use only the power adapter and power cord supplied with your Notebook.

# **BATTERY OPERATION**

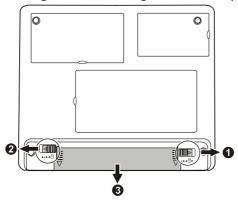
In order to extend the life and power of your battery, and to guarantee reliable operation, it is essential that the safety instructions on page 10 are followed.

#### **INSERTING THE BATTERY**

Push the battery pack into the intake. The contacts must point to the direction of the Notebook during this. Push the rechargeable battery until it obviously locks audibly.

#### **REMOVING THE BATTERY**

Push the security latch-trip • on the underside of your Notebook to the right. Push the ejection bar • to the left and pull the battery pack out of the battery compartment at the same time. Please pay attention to the safety notes from page 10 during the storage and handling of the rechargeable battery.





**WARNING!** Do not remove the battery while the Notebook is running on battery power. You increase the possibility of losing data.

**WARNING!** Take care that the contacts at the accumulator and the notebook computer are not damaged or dirty when storing the accumulator or using the notebook. This could lead to malfunctioning.

#### **CHARGING THE BATTERY**

The battery is charged via the power adapter. If the power adapter is connected, it charges the battery automatically, whether the Notebook is turned on or not.

When the Notebook is switched off, full charging takes a few hours. If the Notebook is switched on, the charging process takes a significantly shorter time. You will find the meaning of the load checking display on page 16. However, it is recommended that from time to time you discharge the battery completely and recharge it afterwards with the Notebook switched off. You can discharge the battery without losing data, if you turn your notebook on without using any application and no power adapter. As soon as the battery is empty your notebook will enter the hibernate mode. We recommend doing this procedure every time you think the battery power is losing efficiency. You will find the meaning of the battery supply indicator (++) on page 16.

#### **DISCHARGING THE BATTERY**

Operate the Notebook by means of the rechargeable battery until it switches off automatically because of the low battery charge. Do not switch the Notebook off, even if a warning appears on the display. Deactivate all the **Energy Options** in the **System** Control, above all **Alarms** and **Energy Models**. Don't forget to safeguard your open files at the correct time, in order to avoid a potential loss of data.

#### **BATTERY POWER**

A fully charged Li-Ion battery will provide power for some hours of operation. However, the battery life will vary according to how the power saving functions are set, the way you work, the size of the main memory and the display type.

When working in Windows an audible warning alert will sound as soon as the battery level drops below a set minimum value. When this happens, the processing power is reduced in order to save power.



**NOTE:** Battery warning signals and "Low-Battery" mode will be heard immediately when the power pack is first connected.

**NOTE:** For full battery performance please charge and discharge the new battery two to three times consecutively!

#### CHECKING THE BATTERY LEVEL

In order to check the current level of the battery, move the cursor over the power symbol in the taskbar.

When in battery mode, a battery symbol is displayed:



Further information on power settings can be obtained by double clicking on the symbol.



**NOTE:** If you ignore the warning signal when the battery level is low, your Notebook goes into suspend mode. (Depending on the BIOS/OS setting this will be Save-to-Disk or Save-to-RAM).



**WARNING!** If the battery is empty, your data will not be retained for long in Standby/Save-to-RAM mode.

**WARNING!** Never remove the battery while the Notebook is switched on or if the Notebook has not yet gone into suspend mode, as this may lead to loss of data.

#### **POWER MANAGEMENT**

Your Notebook offers automatic and modifiable power saving functions that you can use to maximize battery life and reduce overall operating costs. The power saving modes are known as standby mode and suspend (hibernate) mode.

#### STANDBY MODE

When in standby mode, the contents of the RAM of your Notebook are preserved while practically all other components of your Notebook are shut down, reducing your power consumption to a minimum. By pressing any key on the keypad, you can bring your Notebook back to the fully operational state. You will restart at precisely the line in which you were working prior to the interruption. The computer takes less time to go into and come out of standby mode, but uses more power than suspend (hibernate) mode.

## SUSPEND (HIBERNATE) MODE

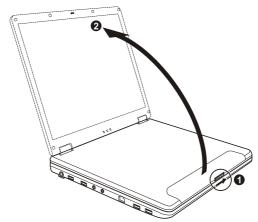
The hibernate mode is an alternative to a complete shutdown of the Notebook. In this mode all data from RAM (system and graphic data) are copied to the hard disk as a file. As soon as the data has been safely saved, the Notebook powers down. When the Notebook is switched on again, this file is written back to RAM by the BIOS. In a few moments the Notebook is in the exact state as when it was last used. If while working on a document the Notebook is closed (assuming the correct ACPI setting), the Notebook saves the data in RAM for you automatically. You will restart at precisely the line in which you were working prior to the interruption. The computer uses no power while it is in suspend (hibernate) mode, but it takes a little longer for the computer to go into and come out of hibernation compared to standby.

# **DISPLAY**

Unlike a normal monitor, the TFT display does not produce either radiation or flicker.

## **OPENING AND CLOSING THE DISPLAY**

A display catch (10) keeps the display closed when the Notebook is not in use.



To open, use your thumbs to press the bar, then lift the display with your thumbs and index finger and position it as desired.



**WARNING!** The display should **not** be opened fully to 120°. Do not try to forcibly open it.

The opening and closing of the display can be assigned various functions via the Power management feature. For example, the Notebook can be programmed to power down when the display is closed.

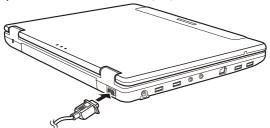
## **SCREEN RESOLUTION**

The integral screen has a native resolution of **1024 x 768** pixels. Using a higher resolution can lead to distortion of the display, especially with text. Using a lower resolution may cause the display to use only a portion of the screen area.

## **CONNECTING AN EXTERNAL MONITOR**

The Notebook has a VGA port (18) for connecting an external monitor. To connect and configure an external monitor:

- 1. Shut down your notebook.
- 2. Connect the video signal cable of the external monitor to the VGA port of the Notebook (18).



3. Connect the external monitor to the electrical socket, power it up and start your notebook.

There are two options for setting up an external monitor:

#### 1. Clone your Desktop

Press **<Fn> + <F5>** to activate the external monitor. The notebook display will be switched off. Adjust the display settings following the external monitor specification.

Press **<Fn> + <F5>** once more and both displays are switched on.

Press **<Fn> + <F5>** again to deactivate the external monitor. The notebook display will be switched on.

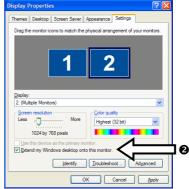
## 2. Extend your Desktop

This option does not support the key combination **<Fn>** + **<F5>**.

Right click anywhere on your desktop and select "**Properties**" to start the "**Display Properties**" program.

- Select the "**Settings**" tab and left click on the second display **0**.
- Check the option "extend my Windows desktop onto this monitor" @ and press "ok".
- To deactivate the extension uncheck the option "extend my Windows desktop onto this monitor".





You can change the resolution and colour depth for either display in this screen. However, you may have to decrease the depth of colour if you increase the resolution since the video memory has a limited capacity.

## THE KEYBOARD

By dual assignment of certain keys you have the same range of functions available to you as with a normal Windows keyboard. Some functions are input using the **Fn** key, which is normal on notebook computers.

#### **NOTEBOOK-SPECIFIC KEY COMBINATIONS**

Combination	Description
Fn F1 V	Switches the wireless LAN on and off.
Fn F3	Decreases the volume.
Fn F4	Increases the volume.
Fn F5	Toggles the display screen between internal monitor, external monitor and simultaneous display.
Fn F6 ▼☆	Reduces screen brightness.
Fn F7	Enhances screen brightness.
Fn F10 K	Switches the loudspeakers on / off.
Fn F11	Switches the backlight off to save power. Pressing any key switches the backlight on again.
Fn F12	Power saving functions. This key combination is set to <b>power down</b> by default. To adjust this key to your own needs go to display <b>properties</b> in <b>power saving.</b>

#### **TOUCH PAD**

The touch pad's primary function is to move the cursor around or select items displayed on the screen with the use of your fingertip instead of a mouse. It is positioned in front of the keyboard (8). The pointer follows the direction which is specified by moving your finger or thumb over the touch pad.

**DO NOT** use a ball-point pen or other object on the touch pad, as this could damage or cause a malfunction of your touch pad.

Below the touch pad are the left and right mouse buttons which

can be used as on a normal mouse.

You can scroll over the screen with the control field (optional).But you can also make a click or a double click directly with the Touchpad, by giving its surface a light tap once or twice briefly.

You will find a wide number of useful settings that will make your daily work easier under the 'Mouse' Point in the Windows<sup>®</sup> system control.

## THE HARD DRIVE

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

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

Whenever the computer is accessing the hard disk, the corresponding LED  $\widehat{\Box}$  illuminates (see page 16.)



**WARNING!** Never switch off the computer while the busy indicator is lit since this may result in loss of data.

If you are looking for a file on the hard drive and you know the name, go to Search on the Start menu to find the file. Following is some general information on where you might find some common files.

Usually your hard drive is divided into several partitions, as shown below. The partitions of your hard drive may vary from what is shown here.

Local Disk	C:	Windows XP
		Software programs
		Your documents
BOOT	D:	Drivers for internal PC components
		Installation files for software that came with your PC
Recover	E:	Restore software

## **IMPORTANT DIRECTORIES**

The most important directories preinstalled on your Notebook are shown below. These directories may vary from what is shown here.

**Caution:** Don't delete files unless you know what they are. Windows XP might require these files for your computer to operate correctly. Also, do not alter or resize the partitions – this will make it difficult to restore your Notebook to the factory settings.

- C:\ This is the main hard disk drive partition for your Notebook. It is where your program files, settings, and documents are stored, as well as files necessary for running Windows XP.
- **C:\Program Files** Includes files belonging to software programs.
- C:\Windows The main directory for Windows XP.
- C:\Documents and Settings Includes the settings and documents for all users.
- **D:**\ Includes files for restoring hardware components and software programs.
- **D:\Driver** Drivers for internal Notebook components.
- **D:\Tools** Includes installation files for software that came with your Notebook.
- **E:\** Includes files for restoring the entire Notebook to working order.
- **E:\Recover** Includes the files needed to perform a system restore.

# THE OPTICAL DRIVE

Your Notebook will be supplied an external optical drive as optional equipment. This can be a CD/, DVD/, CD-RW, a combination drive (DVD/ and CD-RW support) or a DVD rewriter. Please take the precise information about the device from the packaging.

#### CONNECTION

- 1. Connect the plain end of the USB cable to the back USB interface of the optical drive.
- 2. Now connect **both** USB connectors of the cable to the Notebook, in order to provide the drive with electricity.
- 3. Your optical drive will be recognized by the operating system and ready for operation.

#### **HANDLING DISCS**

To maintain the life of CD and DVD discs, observe these guidelines.

- Avoid radiation by direct sunlight (UVA/UVB).
- Avoid scratches and damage to the disc surface.
- Avoid extreme temperatures.
- Do not attach labels or paper to DVD discs.
- Do not use record-cleaning or anti-static agents to clean your discs.

We also recommend that you avoid specially shaped discs such as hearts or polygons, or discs that are not standard size. Do not use warped or cracked discs as they may cause damage to your drive.

## LOADING A DISC

- **Tip**: 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.

This computer features a slot-loading optical drive.

- To insert a disc into the optical drive, gently push the disc into the slot and the drive will lock the disc in place and pull it inside.
- 2. Gently push the tray in to close it.

Many discs automatically start when they are loaded and launch a playback software program. In some cases you might need to start a program (for example, a DVD player program).

## **PLAYING MUSIC CDS**

Windows Media Player and MusicMatch Jukebox can be used to play music CDs. Please refer to the documentation for these programs to decide which program you would like to use.

## **PLAYING DVD MOVIES**

To play DVD movies on your Notebook, you need a DVD playback software program, such as CyberLink's award-winning PowerDVD. To play DVD movies using this software, insert a movie DVD into the DVD-ROM or DVD-RW drive, then click **Start**, then **All Programs** and select PowerDVD.

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 high demands on the Notebook's processor, so when playing a DVD please close all other applications. To increase Notebook performance, you may also wish to purchase a plug-in MPEG2 decoder card, which has its own decompression processor and will thus free the Notebook's processor.



**NOTE:** The decoding software included with your Notebook 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.

## **WRITING CDS**

You can use your CD-RW/DVD-ROM combo drive to write ("burn") data and music CDs.

A data CD is a compact disc (CD) used to store PC data (for example, files and folders you have on your hard disk).

A music, or audio, CD is a compact disc (CD) used to record music that you can play on your home or car stereo CD player. Using a CD-R instead of a CD-RW for music CDs will help ensure a greater level of compatibility with conventional CD-players.

There are several different options for burning CDs. The first step for using any of these options is to insert a blank recordable CD into your combo drive.

Nero Burning ROM can create different types of audio, video, and data CDs quickly and easily. Click **Start**, then **All Programs**, then **Nero**, then **Nero OEM** to access Nero Burning ROM. Follow the step-by-step instructions given by the software wizard to create a CD.

Windows XP includes functionality for quickly and easily creating data CDs:

- Select the files or folders you would like to write to your CD.
   To select more than one file, hold down the CTRL key while
   you click the files you want.
- 2. In the File and Folder Tasks menu on the left (Picture Tasks if the files are located in My Pictures), click Copy this file, Copy this folder, or Copy the selected items. If you do not see the File and Folder Tasks menu, select Tools on the main menu, then Folder Options. Under Tasks on the General tab, select Show common tasks in folders.
- 3. In the Copy Items dialog box, click the CD-RW, and then click **Copy**.
- 4. Double-click My Computer, then the CD-RW. Windows displays a temporary area where the files are held before they are copied to the CD. Verify that the files and folders that you intend to copy to the CD appear under Files Ready to be Written to the CD.

5. Under CD Writing Tasks, click **Write these files** to CD. Windows displays the CD Writing Wizard. Follow the instructions in the wizard.

Music jukebox and media player programs (such as Windows Media Player) often offer alternatives for burning audio CDs. Refer to the help within the program for more information.

You can also purchase third-party CD burning software for writing files to a CD-R or CD-RW disc.

More information about copying CDs reliably can be found in the "Technical Reference" section of this manual under "CD Facts."



**WARNING!** Unless you own the copyright or the permission of the owner of the copyright, unapproved copying of copyrighted CDs or DVDs violates national and/or international laws and can result in serious punishment.

## THE SOUND CARD

Your Notebook 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.

If you wish to alter the base volume, click on the loudspeaker symbol in the task bar. A double click opens the sound mixer.

By means of the key combinations ( $\Rightarrow$  page 34) you still have the possibility to regulate the volume.

By using the keys you increase the volume and by using you decrease it.

#### **EXTERNAL AUDIO PORTS**

Your Notebook has a loudspeaker, so you can always playback sounds without additional equipment. The connection of a Hi-Fi system increases the sound quality significantly. The use of the external connections gives you a good opportunity to connect your notebook to external devices.

Audio Out (13)	<ul> <li>For sound reproduction via exter- nal stereo equipment such as loudspeakers (active) or head- phones.</li> </ul>
Microphone In (14)	<ul> <li>For recording via an external mi- crophone.</li> </ul>

# **MODEM**

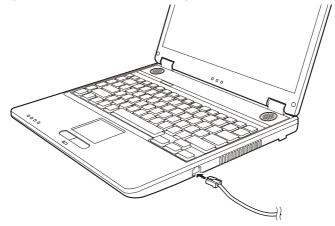
The modem is fitted with an RJ-11 interface, into which a standard telephone lead can be plugged.



**WARNING!** Use only with an analogue telephone line. The modem cannot withstand the voltage levels of digital telephone systems such PBX or lines such as ISDN or Broadband services.

#### **MODEM PORT**

Insert one end of the RJ11-connection (telephone plug connector) into the modem/network interface (16) and the other into an analogue telephone socket that is easily accessible.





**NOTE:** Do not place the Notebook in Suspend (or Sleep) mode if you are connected to your Internet provider, since this will cause the modem connection to be lost.

# THE NETWORK

## WHAT IS A NETWORK?

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

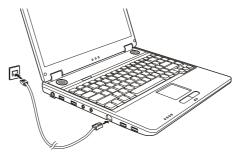
Here are some practical examples:

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

#### **FAST ETHERNET-NETWORK**

Your PC has a Fast Ethernet Network connection. You can use this to connect to a network.

Connect one end to the RJ45 connection (Western plug) at the network interface of your Notebook (15) and the other to another PC or a hub/switch.



The Windows XP Help and Support Centre offers extensive information about networking your PC. You can access this information by clicking on **Start**, then **Help**.

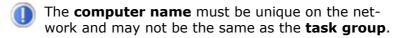
#### WHAT DO YOU NEED FOR NETWORKING?

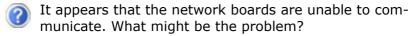
Some requirements have to be fulfilled to successfully network computers:

- 1. The Notebook must have a network card that supports the same network technology as the other computers on the network. Unless otherwise quoted, your Notebook will support the current **Fast Ethernet** (10/100 Mbit) standard.
- 2. The network cards must be connected. You need a Shielded Twisted Pair-cable (CAT5) that has an **RJ-45**-connector.
  - If you want to directly 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 network **operating system**. Windows<sup>®</sup> can act as a network operating system.
- 4. All networked PCs must speak the same "language" to understand one another. They use protocols for this purpose. The setting of protocols, therefore, must be the same for all networked PCs.

#### TROUBLESHOOTING WITHIN THE NETWORK







Maybe one of the used network boards works with a **different speed** (e. g. 10 instead 100 Mbit) and your network computer is unable to recognize this. If necessary, set the network driver to the compatible speed.

If two PCs should be linked you require a **cross-link cable**, otherwise use a **patch** cable.

In addition, check the **protocols** and the **configuration**.

- The data transmission is incorrect or very slow. What might be the problem?
  - Maybe you have the wrong cable (UTP / CAT3 or lower) or the problem is the proximity of a power cord or another source of interference.

For further hints on troubleshooting search for "network errors" in Windows Help and Support.

#### WIRELESS LAN

Wireless LAN is an optional feature. This function allows you to create a wireless network link with an access point or directly with another wireless-enabled PC.

Using the keys  $(\Rightarrow p. 34)$  you can enable or disable the wireless LAN function and the corresponding LED for WLAN  $(\Rightarrow p. 16)$  will light.

ATTENTION: Make sure the Wireless LAN option is switched OFF in any environment where it might interfere with critical and sensitive devices, e.g., on aircraft, in hospitals and other medical centres, etc.

#### **CONDITIONS**

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 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 or Internet Service Provider 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.

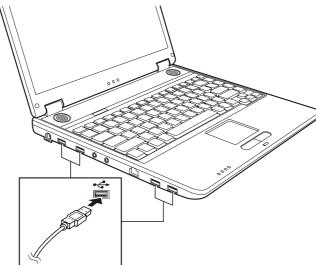
The wireless network link works according to standard **IEEE 802.11g** which is also compatible with the IEEE 802.11b standard. The standard 802.11a is not supported.

If encrypted transmission us 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. 11 Mbps) can vary according to the **distance** and **loading** of the partner.

# UNIVERSAL SERIAL BUS (USB) PORT

USB ports provide an easy way to connect many peripheral devices to your PC. You can use any USB device with any USB port. **4 USB** ports (12) are located on the left side of the Notebook for your convenience.



Some USB devices require that you reinstall software drivers when you connect the device to a different USB port than the one originally used. This can be avoided by always using the device with the same USB port. 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 powered hub. The data transfer speed is 1.5 Mbit or 12 Mbit, depending on the device connected.

# SOFTWARE

There are many kinds of help and information for using your PC. This section tells you where to get help with the Microsoft<sup>®</sup> Windows<sup>®</sup> XP operating system, software programs, and the Medion PC.

## **GETTING TO KNOW WINDOWS XP**

# WINDOWS® XP MANUAL

This printed manual provides general information about the operating system. We recommend that all beginning users or users of previous versions of Windows<sup>®</sup> read this information. It can be found with the CDs in the accessory box that came with your PC.

# WINDOWS® XP TOUR

Windows® XP includes a tour that you can take to familiarize yourself with the operating system. This tour can usually be found by clicking on the **Start** menu. You can also find the tour by selecting **All Programs**, then **Accessories**.

# MICROSOFT® INTERACTIVE TRAINING

Training is the most powerful way to acquire skills that help you perform a specific task efficiently. On the **Start** menu, choose **All Programs**, choose **Accessories**, and then choose **Microsoft**<sup>®</sup> **Interactive Training**.

# WINDOWS® XP HELP AND SUPPORT



An answer to almost every question can be found in this program. You'll find it in the **Start** menu.

## **SOFTWARE HELP**

Many software programs incorporate extensive help functions. As a general rule, you can access help functions by pressing F1 on the keyboard. Many software programs include Help as an option on the menu at the top of the screen or window. They may also provide an icon (or icons) with a question mark on them that you can click to access more information.

The software included with the Notebook was pre-installed at the factory.

During software installations, important files can be changed or even deleted. Medion recommends that you set a Windows<sup>®</sup> XP recovery point before installing software (p. 64).

For specific installation information, refer to the documentation that came with the software program. Here is a typical installation procedure.

- 1. Load the software program installation disc in the combo drive.
- Most installer programs start automatically after a few moments.
   If the installer program does not start automatically, you can manually start it by double-clicking My Computer, and then double-clicking the drive letter where you loaded the software program installation disc.
- 3. Follow the instructions given by the program.

## **DEVICE DRIVERS**

If you install external devices, such as printers or digital cameras, you may also need to install device drivers. The drivers will be included with your peripheral devices. These are occasionally updated by the manufacturer. Check with the manufacturer of your peripheral device to find out if you have the most recent version of your device drivers.

#### **INFORMATION ABOUT YOUR PC**

Clicking on **Start** and then on **Information about your PC** will bring up more extensive information about your PC, as well as useful links to software tools and other resources. It also contains any last minute information about your PC that may not be included in this manual.

#### **DIGITAL SIGNATURES**

When installing software or drivers, you may receive the message "The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP." Although the software lacks the digital signature, it may work properly. Click on "Tell me why this testing is important" to get detailed information. Click on "Continue Anyway" to continue to install your software.

To set file signature verification options for Windows XP:

- 1. Click Start, then Control Panel. Double-click System.
- 2. On the Hardware tab, select Driver Signing.
- 3. Under **File Signature Verification**, select one of the following:

**Ignore** allows all device drivers and software to be installed on this PC regardless of whether they have a digital signature.

**Warn** displays a warning message when you attempt to install a software program or device driver without a digital signature.

**Block** prevents installation programs from installing device drivers without a digital signature.

If you are logged on to your PC as an administrator, you can click **Apply setting as system default** to apply the selected setting as the default for all users of your PC.



**WARNING!** During software installation important files can be changed or deleted. To avoid problems in using older files after installation, make sure to safeguard your hard disk.

#### WINDOWS ACTIVATION

Microsoft is committed to the protection of intellectual property rights and the reduction of software piracy. Windows XP contains software-based product activation technology. Your copy of Windows XP has already been activated for your Notebook. However, product activation is needed if some components of your Notebook have been replaced or you use non-authorized BIOS. If necessary, you can activate Windows XP as often as needed.

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

## THE BIOS SET-UP-PROGRAM

In BIOS setup (Basic Configuration) there are a number of configurable parameter settings available for your Notebook. For example, you can change the operating mode of the interfaces, security features or power management.



**WARNING!** The Notebook is factory pre-set to guarantee optimum operation. Only modify the parameters if necessary and if you are familiar with the configuration options.

#### RUNNING THE BIOS SET-UP

You can only run the BIOS configuration program at system startup. If the Notebook has already started, power it down and then up again. Press the **F2** function key in order to start the BIOS-SET-UP.

#### **NAVIGATING THE BIOS UTILITY**

There are six menu options: System Information, Basic System Settings, Start up Configuration, Onboard Devices Configuration, System Security and Load Default Settings.

To enter a menu, highlight the item using the cursor up/down keys; then press **Enter**.

While in a menu, follow these instructions:

- Press the cursor up/down keys to move between parameters.
- Press the cursor left/right keys to change the value of a parameter.
- Press Esc while you are in any of the menus to return to the main menu.



**Note:** If you are unsure if your parameter settings are correct, you should load the "**Set-up-Defaults**".

# Chapter 4

# First Aid

Subject	Page
FAQ	57
Data and System Security	59
System Recovery	62
Troubleshooting	66
Maintenance	69

# 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.
- ... your installed a new motherboard.
- ... a different BIOS version has been installed.
- ... you install the software to another computer.



What is the Windows activation?



Your operating instructions include a chapter about this subject.



How do I perform a data backup?



Use the program Backup for this.

It is important that you follow the operating instructions of these programs.

Make a backup and another backup of selected data to an external medium (CD-R, CD-RW, DVD-R, DVD-RW, SD card, etc.), to familiarize yourself with the technique.

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

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

# DATA AND SYSTEM SECURITY

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

#### **DATA SECURITY**

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

Both programs are 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 disk maintenance programs such as **Disk Defragmenter** and **Disk Cleanup**. The 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**.

## **PASSWORD RESET DISK**

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. Windows Help describes how to create a password-reset disk.

# 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. Open **Windows Update** in the Help and Support Center.
- 2. Click on Search for update.
- 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.
- 4. Click on **Check and install updates**, when you have selected all the desired updates, and then click on **Install now**.

60

#### 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 notebook when downloading the updates.

## System Recovery

Before performing a recovery, you should review the "Troubleshooting" section in this manual to see if you can resolve the problem. If not, it is possible that a software file required by Windows XP to operate the computer was damaged or deleted. If this is the case, there are basically two strategies for recovery.

- Restoring your system using Windows XP System Restore
  - This type of recovery is usually very quick and will solve most typical problems that occur after an unsuccessful installation of an application, device, or driver has caused instability in the system.
- Restoring your system using the Application & Support
  Disc provided by Medion and powered by Symantec
  There are several options for recovery available using the
  Application & Support Disc, including the ability to restore you
  entire system to its original factory settings.

#### RESTORING MICROSOFT WINDOWS XP

Windows XP System Restore allows you to set "recovery points." This feature enables you to take a snapshot of the current system configuration, which you can return to should an application, device, or driver cause instability in the system.

While Windows XP automatically creates recovery points, you can also set them manually. In addition, you can configure the maximum amount of memory used for this.

To use System Restore to set recovery points or restore your system, click the **Start** menu, then choose **All Programs**, then choose **Accessories**, then choose **System Tools**, then choose **System Restore**. Select the task that you would like to perform and follow the on screen instructions. For detailed information refer to Windows XP Help and Support.

System Restore includes various functions to help ensure that your Notebook and 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

62

proper functioning of Windows XP, and your software and devices. The restore function you use depends on the type of problem or error. In general, it is a good idea to set a recovery point before installing a new software program or driver. If the system becomes unstable during or after the installation, you can usually return to a workable configuration without deleting newly created documents. If Windows XP System Restore does not solve your problem refer to the next section, *System Restore powered by Symantec.* 

## SYSTEM RESTORE POWERED BY SYMANTEC



If your system is not functioning properly and Windows XP System Restore did not solve the problem, then you should use the Application Support Disc provided by Medion to restore your system. This recovery mode provides several options.

There are three options for restoring your system:

## 1. Recovery of start-up files

Use this option to restore the start-up files. This option is most useful when a virus has corrupted certain files necessary for your computer to boot. It is executed very quickly.

## 2. Recovery of system and driver files

This option will copy the original system and driver files to your hard disk. This feature shouldn't affect your personal files and settings. However, we recommend that you first back up your personal data just to be safe.

## 3. Restoring the factory settings

This recovery will reset your system to its condition at delivery. ALL DATA ON YOUR LOCAL DISC (C:) DRIVE WILL BE ERASED. If possible, back up your personal data to external media before performing this restore.

## LIMITS OF RESTORE FACTORY SETTINGS (RESTORE OPTION 3)

Any changes made to the original factory configuration (for example, settings for your display, printers, network, or Internet connection) will be overwritten by this restoration.

Any software that you installed after purchasing the computer will be erased and will need to be reinstalled.

**Everything** on the C:\Local Disk partition will be erased. This includes all of your documents and settings.

Tampering with the Recover (E:) hard disk drive or its contents will make it more difficult to restore your Notebook. Do not alter, resize, or delete the Recover (E:) hard disk drive. Also, do not alter or delete the files on the Recover (E:) hard disk drive. We strongly recommend that you do not store any files, folders, or programs on the Recover (E:) hard disk drive.

#### PERFORMING THE RESTORE

Each step of the restore replaces an increasing number of files on your hard drive, and therefore takes longer to finish. We recommend that you attempt each of the restore options in order, starting with "Recovery of start-up files." After finishing each restore option, you should test your system to see if it has solved your problem. If the problem persists, then try the next restore option.

To make selections in the restore program, use the up and down arrow keys to highlight the option you would like to select, and then press enter to make the selection.

- Copy your data files to external media (such as a floppy disk, CD-R, CD-RW, DVD-RW, or flash card) BEFORE you continue!
- Insert the "Application & Support" disc and restart (reboot) the Notebook.

**Caution:** Do not use the "Medion Product Recovery" CD-ROM (a Windows XP CD for restoring Windows XP itself) for restoration purposes. This disc does not restore the original factory setup of the Notebook.

- 3. Select the option "Boot from CD-ROM" from the first screen.
- 4. Use the arrow keys to read through the license agreement, and then press the **Esc** key to proceed.

- 5. Read the information screen that appears, and then press **Enter** to proceed.
- 6. Select option **1**, **2**, or **3** to perform a restore (the types of restore are described earlier in this chapter). Select option **4**. **Reboot** to cancel the restore process.
- 7. The next screen shows information about the type of restore that you have chosen. Select either **Abort** or **Back** to return to the previous screen, or select **Finish** to execute the restore.
- 8. When the restore is completed, it automatically restarts the Notebook. Remove and store the Application & Support disc.

#### PERFORMING THE RESTORE WITHOUT DISC

- 1. Please carefully read the chapter "**System Recovery**" and follow all advices.
- 2. Start your Notebook and hit the F3 immediately in order to launch the recovery menu.
- 3. Use the arrow keys to read through the license agreement, and then press the **Esc** key to proceed.
- 4. Please accept the Licence terms and proceed.
- 5. Select the desired option to perform a restore.
  - **Caution:** Do not alter or resize the recovery partition (Drive E:). This could result into damaging the option of factory restore.

## **TROUBLESHOOTING**

#### LOCALIZE THE CAUSE

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

#### **CHECK CABLES AND CONNECTIONS**

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

- In battery mode, connect the Notebook to the power adapter and ensure that the battery is charged up.
- If you are operating the Notebook with the power adapter, check the electrical socket, power cord and all switches in the circuit of the electrical socket.
- Switch off the Notebook and check all cable connections. Check the connections to peripherals. Do not exchange cables, even though they may look similar. The polarity in the cables may be different. When it is confirmed that the Notebook has power and all connections are correct, turn the Notebook on again.

# THE POWER ON SELF TEST (POST)

The Power On Self Test (POST) is executed during each boot process to test the memory, motherboard, display, keyboard and other components. If the Notebook does not pass the POST but beeps several times, or if the screen remains blank, call your Notebook support technician.

66

#### **ERRORS AND POSSIBLE CAUSES**

#### The display is blank:

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

#### The Notebook switches off during operation.

 The rechargeable battery could be empty. Connect the Notebook by means of the mains adapter and charge the rechargeable battery.

#### The Notebook cannot be switched off.

 Operate the Notebook by means of the rechargeable battery and check that it has been correctly inserted and charged.

#### Wrong Date and Time:

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

#### No data can be accessed from the optical Drive:

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

#### The Fn+F5 key combination does not react

The second monitor is activated under Display Characteristics. Select it by removing the tick from Extend Windows Desktop to this Monitor.

## The WLAN connection does not function

You must press the key combination, in order to activate the WLAN connection, and the corresponding display must be illuminated (⇒ P. 16).

#### **ADDITIONAL SUPPORT**

If the suggestions in the above section have not solved your problem, please contact customer care and we will attempt to help you solve the problem. Before you call, 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 have this available.

## **DRIVER SUPPORT**

This Notebook 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, the software drivers for individual components are updated from time to time. This is a regular process provided by the manufacturer to mend possible compatibility problems that may occur with components (e.g., programs or hardware) that were not tested at the time of your Notebook'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

68 FIRST AID

## **MAINTENANCE INSTRUCTIONS**

This section provides information on the proper maintenance and care of your Notebook. Following these measures can extend its lifetime.

#### **CLEANING AND CARE**



- Warning! There are no user-serviceable or user-cleanable parts inside the Notebook housing. Never open the Notebook housing.
- DO NOT use any solvents, corrosive or gaseous cleaning agents.
- DO NOT use CD-ROM cleaning disks or similar products that clean the lens of the laser to clean your CD-ROM/CD-RW/DVD/DVD-RW drive.
- Before cleaning, always remove the power adapter plug and all connecting cables.
- Only use a damp, lint-free cloth to clean the Notebook.

#### CARE OF THE TET DISPLAY

- Always close the Notebook when not in use. Avoid touching or scratching the surface of the screen as it is easily damaged.
- Make sure that no water drops are allowed to remain on the screen. Water can cause permanent discoloration.
- Clean the screen with a dry, soft, lint-free cloth.
- Do not expose the screen to bright sunlight or ultraviolet radiation.

## TRANSPORTING THE NOTEBOOK

Please use the following guidelines when transporting the Notebook:

- Switch off the Notebook. This will prevent damage to the hard disk. When the Notebook is turned off, the hard disk heads are moved into a safe area.
- Remove any CDs and floppy disks. This will prevent damage to the disks or to the drive heads.
- Close the Notebook and ensure that the cover locks shut.
- Always use the Notebook carrying case. This helps to protect the Notebook from dirt, moisture, jolts and scratches.
- Fully charge your battery and any spare batteries immediately before a long journey.
- Should you need to ship your Notebook, always use the original packaging and make certain the shipper knows the contents contain fragile electronic equipment.
- Wait until the Notebook has reached ambient (room) temperature before turning it on or connecting it to the power adapter.
   Drastic variations in temperature and humidity can create condensation within the Notebook and may cause it to short-circuit.

70

#### **SECURING YOUR NOTEBOOK**

#### SETTING A USER PASSWORD

You can prevent unauthorized access to your Notebook by setting a User Password. When starting the Notebook the password will be requested. The User Password is set in the **BIOS**.

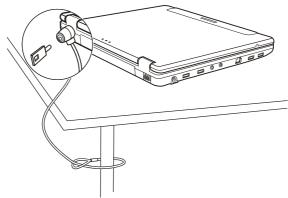
Attention: Keep your password in safety place. If you forget your password you do not have the possibility to cancel it. In this case please call your service centre.

To protect your data from unauthorized access, you can also use the security option of Windows<sup>xp</sup>. See also chapter "Data and System Security" (p. 59).

#### **USING A SAFETY LOCK**

You can prevent theft by using a so called **Kensington lock**, which can be bought at your local retailer.

The cable wraps around an object and the "T" shaped end inserts into the Kensington lock port and a key or combination dial is used to secure the lock in place. Please keep your key at a safety place.



#### **BATTERIES AND PROPER 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:

- ⇒ <u>Attention</u>: There is a lithium battery on the motherboard. Lithium batteries are hazardous waste and need to be disposed of properly. If necessary, we will take back your used CMOS lithium battery.
- 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 OFF 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!

72

## **UPGRADES AND REPAIRS**

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

#### **Notes for Service Engineers**

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

#### Notes on Laser Radiation:

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

 The CD-ROM/CD-RW/DVD/DVD-RW drive contains no userserviceable parts. Only the manufacturer should perform repairs to the CD-ROM/CD-RW/DVD/DVD-RW drives.

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

- **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**

Subject	Page
Standards	77
Warranty	81
Index	84

## **STANDARDS**

This Notebook meets the requirements of the following standards:

#### **ELECTROMAGNETIC COMPATIBILITY**

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

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

- Keep the Notebook 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 meters (9.84 ft) should be used for the LPT, COM, USB, IEEE 1394, audio, video and network interfaces with this Notebook.
- When connecting additional components, please observe the *Guidelines on Electromagnetic Compatibility (EMC)*.

## **ELECTRICAL SAFETY**

#### **EN 60950** Safety of information technology equipment.

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

#### **ERGONOMICS**

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

#### **SUPPLEMENTARY INFORMATION**

This product has been tested for operation in UK and complies with the European Directives on Radio and Telecommunications Terminal Equipment (R&TTE 1999/5/EC).

## **ISO 13406-2 CLASS II**

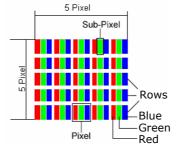
Active matrix LCDs (TFT) with a resolution of  $1024 \times 768$  pixel (XGA), which are in turn composed of three sub-pixels each (red, green, blue), contain about 2.4 million addressable transistors. Because of this very high number of transistors and their extremely complex production process occasionally defective or incorrectly addressed pixels or sub-pixels may occur.

There have been several attempts in the past to define the acceptable number of defective pixels. But this can be difficult and varies widely between different manufacturers.

We, therefore, adhere to the clear and strict requirements of **ISO 13406-2**, **class II**, for the warranty handling of all TFT display products. These requirements are summarized below.

Within ISO-standard 13406-2 the general requirements regarding pixel defects are defined. Pixel defects are classified into three failure types and four failure classes. Each individual pixel is made up of three subpixels in the primary colours (red, green, blue).

#### **Pixelstructure**



## **Types of Pixel Failures:**

Type 1: A constantly lit pixel (a bright, white spot), even though it is not addressed

A white pixel is caused when all three sub-pixel are lit.

Type 2: A pixel that does not light up (dark, black spot), although it is

addressed

Type 3: Abnormal or defective red, green or blue sub-pixels.

(E.g. constantly lit with half the brightness, one colour is not shining, blinking or flickering, but not belonging to Type 1 or 2 Pixel Failures)

In addition: A cluster of type 3 (= 2 or more defective sub-pixels in an array of 5 x 5 pixel). A cluster is an array of 5 x 5 pixel (15 x 5 sub-pixel).

#### ISO 13406-2, Class II

Resolution	Type 1	Type 2	Type 3	Cluster Type 1, Type 2	Cluster Type 3
1024 x 768	2	2	4	0	2
1280 x 854	3	3	6	0	3
1280 x 1024	3	3	7	0	3
1400 x 1050	3	3	8	0	3

## **Example:**

A 17" - SXGA-display consists of 1280 horizontal and 1024 vertical picture dots (pixel), which amounts to a total of 1,31 million pixels. Based on one million pixels this translates into a factor of about 1.31. Class II type failure consequently allows for three defects each of type 1 and type 2 and 7 defects of type 3 and 3 cluster of type 3.

These cases are normally not covered by warranty.

If the number of failures exceeds the figures of any category mentioned above then this may be covered by the warranty.

#### **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.

80

## **WARRANTY**

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

Limited warranty repair or replacement shall not extend the original limited warranty period of the defective product. This limited warranty does not cover any supplies or accessories, including but not limited to: software, blank media, user-installed drives, etc.

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

TO THE EXTENT ALLOWED UNDER APPLICABLE LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND MEDION SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND NO IMPLIED WARRANTY APPLIES TO THE PRODUCT AFTER THE APPLICABLE PERIOD OF THE EXPRESS LIMITED WARRANTY STATED ABOVE. Some countries, states or provinces do not allow exclusions or limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This limited warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.

MEDION's limited warranty is valid in any country or locality where MEDION has a support presence for this product and where MEDION has marketed this product. The level of warranty service you receive may vary according to local standards. MEDION will not alter form, fit or function of the product to make it operate in a country for which it was never intended to function.

TO THE EXTENT ALLOWED UNDER APPLICABLE LAW, THE REMEDIES IN THIS LIMITED WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL MEDION OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. IN NO EVENT SHALL

RECOVERY OF ANY KIND AGAINST MEDION BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT SOLD BY MEDION WHICH CAUSED THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, YOU ASSUME ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO YOU AND YOUR PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF USE OR MISUSE OF, OR INABILITY TO USE THE PRODUCT NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF MEDION. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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

#### Please note the following:

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

#### Unit Exchange

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

#### Send-In Repairs

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

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

Replacement products may be either new or equivalent in performance to new. MEDION replacement or repaired products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

#### Out-of-Warranty Support

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

#### Networking

Medion warrants the operation of network capabilities as follows: Medion will ensure that the network (LAN) port is working properly. No network connectivity issues are supported.

#### **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 the company 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 of personal data on your Notebook.

#### **LOCAL LAW**

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

#### MAKING COPIES OF THIS MANUAL

This manual contains information protected by law. All rights are reserved. Copyright law prohibits duplicating this information in mechanical, electronic, or any other form, without the written approval by the manufacturer.

## INDEX

A	D
All programs20	Data and system security59
Appendix75	Data entry34
Audienceii	Data security
Audio out43	Deleting files37
	Desktop20
В	Digital Signatures52
Batteries and proper treatment 72	Directories37
Battery operation 10, 27	Disc-Drive38
Battery power28	Discharging the battery28
Charging28	Discs
Checking the battery level29	Handling38
Discharging28	Display31
Inserting27	Driver support68
Load checking display28	Drivers37, 51
Removing27	DVD movies40
Battery power28	DVD 1110Vies40 DVD-Drive38
BIOS Setup-Program54	DVD-DIIVE36
BIOS Utility	E
Navigating54	Electrical safety78
Burning CDs See writing CDs	Electromagnetic compatibility77
burning CD3 See Writing CD3	EMC77
С	Enter personal details19
Cabling9	Environmental conditions
Care of displays69	Ergonomics78
CD-ROM38	Extend desktop33
CDs	External monitor32
Data41	Clone desktop32
Music41	•
Writing41	Extend desktop33
Charging the battery28	F
Checking the battery level29	FAQ57
Cleaning agents69	Fast Ethernet-Network45
Cleaning agents69	FCC compliance sStatement80
Clone desktop32	Files
Connectors	Deleting37
Audio Out15	Finding files36
External monitor32	First Aid55
LAN port (RJ-45)15	Frequently asked questions57
Microphone	Frequently asked questions
	G
Modem	Getting started17
Modem port (RJ-11)15	Insert battery17
Power socket15	
USB49	Switching on the notebook18
USB port15	н
VGA	Hard drive36
Control panel	Partitions36
Convright <sup>®</sup> ii	າ ຜາ ເປເປປາວ

Components

HDSee Hard drive	What do you need for
help50 Help with software51	networking?46 What is a network?45
Help with software	Wireless LAN48
I	Wileless LAIN40
Icons21	0
Indicators	On/Off button25
Access16	Operational safety 4
Battery charge indicator 16	
Capital Lock16	Р
Num Lock16	Partitions36
Power supply indicator16	Password reset disk59
Scroll Lock16	Peripheral devices51
Wireless LAN16	Playing DVD movies40
Information about your PC21	Playing music CDs40
ISO 13406-2 Class II78	POST66
	Power30
K	Turning off your computer21
Kensington-lock71	Power adapter 8
Keyboard34	Power management30
	Power On Self Test66
L	Power supply25
Laser radiation73	Battery operation27
License agreement19	Main operation26
Load checking display28	Suspend mode30
М	PowerDVD40
	Program bar20
Main components	Programs
Hard drive36	Installing63
Modem 44	Location37
Network45	0
Optical drive38	Q
Software50	Qualityii
Sound card43	R
Universal Serial Bus (USB)49	
Main operation26	Recovery62
Maintenance	Windows <sup>xp</sup> 62
Care of the TFT display69	Recovery points62
Cleaning and care	Repairs73
Transporting the notebook 70	Restoring62
Maintenance programs	Limits
Microphone In	Running the Bios Setup54
Connecting44	S
Mouse35	Safety
MPEG240	Data37
MusicMatch Jukebox40	Safety instructions
riasiciiaccii Jakebox	Additional safety instructions 5
N	Battery operation10
Network	Cabling 9
Fast Ethernet-Network45	Data security 3
Troubleshooting47	Environmental conditions 7
	Z

General safety information4	Upgrades and repairs	
Modem9	Using a safety lock	71
Operational safety4	v	
Optical drive safety6	-	
Power adapter8	Views	
Set-Up location7	Audio Out	
TFT Display safety6	Battery charge indicator	
Touch pad9	Device indicators	
Upgrades and repairs73	Display catch	
Wireless LAN9	Kensington lock	
Screen resolution31	Keyboard	
Search36	LAN Port (RJ-45)	
Securing your Notebook71	Microphone	
Serial numberii	Modem port (RJ-11)	
Serviceii	Monitor (external)	
Service engineers73	Power ON/OFF	
Setting a user password71	Power socket	15
Set-Up Location7	Power supply indicator	14
Software50	Stereo Speaker	
For playing CDs40	TFT Display	
Software help51	Touch pad	
Sound card43	USB port	
Standards77	Wireless LAN indicator	14
Electrical safety78	w	
Electromagnetic compatibility 77	<del></del>	
Ergonomics78	Warranty	
FCC compliance statement 80	Limits of liability	
Standby mode30	Local law	
Start button20	Windows activation	
Support68	Windows Logo testing	
Suspend to disk30	Windows Media Player	40
<u> </u>	Windows XP	
Т	Control Panel	
Table of contentsvi	Desktop	
Task bar21	Help	
Touch pad 9, 35	Help and support	
Trademarksii	Interactive training	
Transport70	Manual	50
Troubleshooting66	Recovery	62
Errors and possible causes 67	Recovery point	
Turn off computer21	Tour	
•	Windows® Update	
U	Wireless LAN	48
Universal Serial Bus49	Writing CDs	41