

AMILO L Series



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(see the included Help Desk list or go to: www.fujitsu-siemens.com/helpdesk)
- your sales partner
- your sales outlet

Additional information is contained in the Help Desk list and the "Warranty" manual. The "Warranty" manual can be found on the "Drivers & Utilities" CD/DVD provided with your computer.

The latest information on our products, tips, updates, etc., can be found on the internet at:
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AMILO L Series

Operating Manual

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Innovative technology ...

and ergonomic design make your AMILO the ideal easy to use and reliable notebook.

Your notebook is available in several different versions. Most of the sections in this manual apply to all models - any differences are pointed out separately. Some of the illustrations and features in this manual may differ from your model and are for guidance only.

Your operating system Microsoft Windows XP is already pre-installed and optimally configured. That means you're ready to start when you switch on your AMILO for the first time.

Your notebook features the very latest technology so that you get the best performance from your computing experience. Depending on which model you own, you have access to:

- Up to 1 Gbyte Mbyte of main memory (RAM)
- A DVD±RW dual drive, or a CDRW / DVD combo drive, or a multi-format DVD burner with double layer support to watch DVD movies or writing CDs/DVDs
- Three USB ports which provide easy expansion with webcams, game pads, printers and more
- An internal modem for connecting to the internet
- A PC card slot for using a type II PC card
- An onboard sound card and two stereo loudspeakers for your audio enjoyment.
You can even connect headphones, a microphone and external speakers for even better performance.

With the user-friendly *BIOS Setup Utility* you can control the hardware of your notebook and protect your system better against unauthorised access by using the powerful password properties.

This operating manual tells you how to put your AMILO into operation, and how to operate it in daily use.

You can also find information on your AMILO in the following locations:

- in the manuals "Safety" and "Warranty"
- in the wireless LAN software documentation (PDF file on the "Driver & Utilities" CD/DVD)
- in your operating system documentation
- in the information files (e.g. *.TXT, *.DOC, *.CHM, *.HLP, *.PDF, *.HTML)

Notational conventions

The following symbols are used in this manual:



Indicates information which is important for your health or for preventing physical damage. Failure to follow the instructions may lead to loss of data, invalidate your warranty, destroy the notebook, or endanger your life.



Indicates important information which is required to use the system properly.



Text which follows this symbol describes activities that must be performed in the order shown.

This font

indicates screen outputs.

This font

indicates programme names, commands, or menu items.

"Quotation marks"

indicate names of chapters, hard disks, CDs, DVDs, and terms that are being emphasised.

Important notes

Here you will find essential safety information regarding your notebook. The other notes provide useful information on your notebook.

Safety notes



Pay attention to the information provided in the "Safety" manual and in the following safety notes.

Observe the sections in the manual marked with the symbol on the left.

- When connecting and disconnecting cables, observe the relevant notes in this operating manual.
- Only use batteries designed for this notebook.
Do not store batteries for longer periods in the notebook.
Take care not to drop the batteries or otherwise damage their casing (fire risk).
If the rechargeable batteries develop a fault please stop using them immediately.
Do not touch the contacts of the batteries.
Never interconnect the positive and negative terminals of a battery.
Batteries are harmful to the environment. You should dispose of them following guidance from your local District Council.
- If a lithium battery (button cell) is installed in your notebook. Please note:
The battery should only be replaced by an authorised technician. Incorrect handling may lead to a risk of explosion.
Only use batteries approved by Fujitsu Siemens Computers.
Batteries are harmful to the environment. You should dispose of the lithium battery following guidance from your local District Council.
- Read the information on the ambient conditions in the chapter "Technical data" and the chapter "Preparing the notebook for use" before putting your notebook into operation and switching it on for the first time.
- When cleaning the device, please observe the relevant notes in the "Cleaning the notebook" paragraph.
- Keep this operating manual together with your notebook.
If you pass on the notebook to a third party, you should also pass on the operating manual.
- If you have a notebook with wireless LAN, you must also observe the additional safety precautions for devices with wireless LAN in the "Safety" manual.

This notebook complies with the relevant safety regulations for data processing equipment. If you have questions about using your notebook in a particular area, please contact your sales outlet or our Hotline/Help Desk.

Energy saving

If you will not be using your notebook, switch it off.

Make use of the device's energy saving functions (see "Using your notebook"). If you use the possible energy saving functions, the notebook uses less energy. You will then be able to work for longer before having to recharge the battery.

Energy saving under Windows

If a monitor with energy saving features is connected to your notebook, you can use the *Screen Saver* tab to activate the energy saving features of the monitor. Select a screen saver via *Start - Control Panel - Appearance and Themes - Display - Screen Saver*.

You may set further energy saving functions in the menu *Start - Control Panel - Performance and Maintenance - Power Options*.

Travelling with your notebook

Please follow these guidelines when travelling with your notebook.

Before you travel

- Back up important data stored on your hard disk.
- Switch off the radio component (Wireless LAN/ Bluetooth) for security reasons when you cannot exclude that the transmitted radio waves can negatively affect electrical and electronic devices in your surrounding area.
- Switch off the radio component (Wireless LAN/Bluetooth) for data security reasons. With data traffic via a wireless connection, it is also possible for unauthorised third parties to receive data.



Information on activating data encryption is provided in the documentation for your radio component.

- If you wish to use your notebook during a flight, first check with the flight attendants if it is OK to do so.
- If you are travelling abroad, check that the mains adapter can be operated with the local mains voltage. If this is not the case, obtain the appropriate mains adapter for your notebook. Do not use any other voltage converter!
- Make sure that the rated current of the mains adapter is not higher than that of the power system to which you connect the mains adapter (see technical data of the mains adapter).

When travelling in other countries

- Check whether the local power supply and the specifications of the power cable are compatible. If this is not the case, buy a power cable that matches the local conditions. Do not use a connection adapter for electrical devices to connect the notebook.
- Enquire with the corresponding government office of the country you will be travelling in as to whether you may operate the radio component integrated in your notebook there (also see "Manufacturer's notes").
- If you use the modem, incompatibilities with the local telecommunications system may result. This may result in poor performance, or the modem will not work at all. You may require a country-specific telephone adapter (available as an accessory).

Transporting the notebook

- Remove all disks (e.g. CD, DVD) from the drives.
- Switch the notebook off.
- Unplug the mains adapter and all external devices from the power socket.
- Disconnect the mains adapter cable and the data cables for all external devices.
- Close the LCD screen so that it locks into place.
- To protect against damaging jolts and bumps, use a notebook carrying case to transport your notebook.
- Protect the notebook from severe shocks and extreme temperatures (e.g. direct sunlight in a car).

Cleaning the notebook

- ▶ Switch the notebook off.
- ▶ Unplug the mains adapter from the mains socket.
- ▶ Remove the battery.



Do not clean any interior parts yourself; leave this job to a service technician.

Only use cleaning products designed for computers. Normal household cleaners and polishes can damage the markings on the keyboard and the device, the paintwork or the notebook itself.

Ensure that no liquid enters the notebook.

The Crystal View display is very sensitive to scratching! Only clean the display surface with a very soft, slightly damp cloth.

Wipe the casing with a dry cloth.

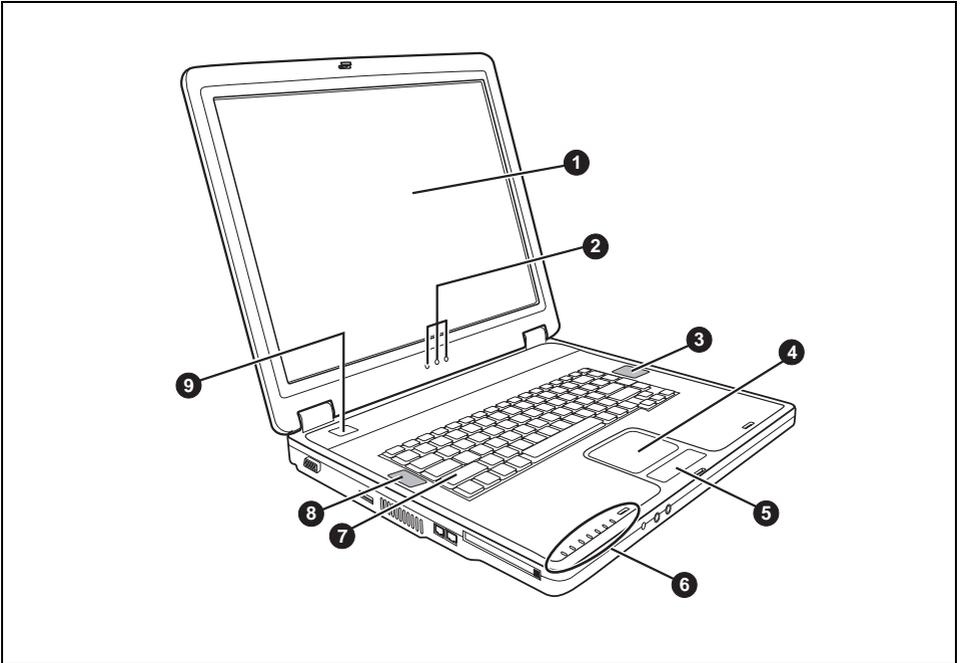
If particularly dirty, use a cloth which has been moistened in mild domestic detergent and then carefully wrung out.

To clean the keyboard and the touchpad, you can use disinfectant wipes.

Notebook views

This chapter presents the individual hardware components of your notebook. You can obtain an overview of the displays and connections of the notebook. Please familiarise yourself with these components before you start to work with your notebook.

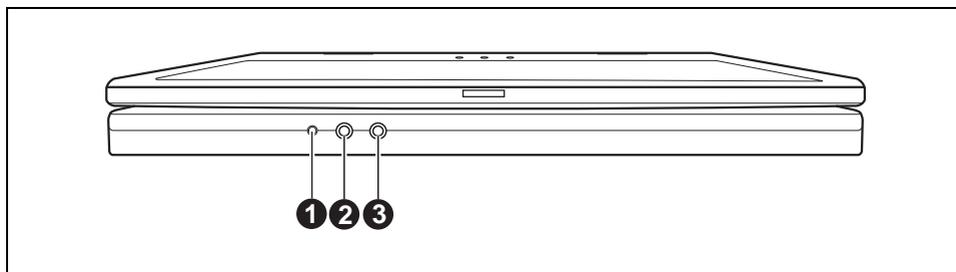
Opened Notebook



- 1 = LCD screen
- 2 = Status indicators
- 3 = Loudspeakers
- 4 = Touchpad
- 5 = Touchpad button

- 6 = Status indicators
- 7 = Keyboard
- 8 = Loudspeakers
- 9 = ON/OFF switch

Front

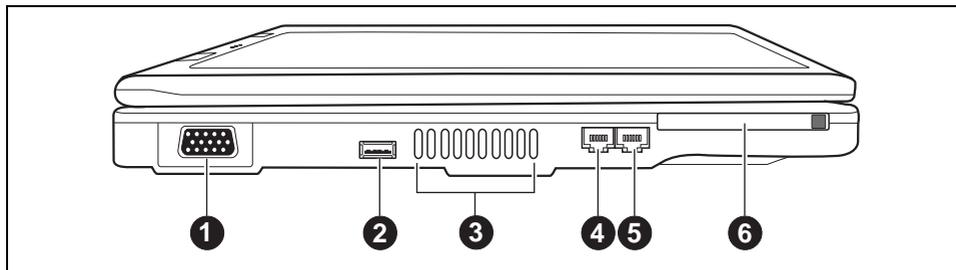


1 = SPDIF port / Headphones socket

2 = Line-In

3 = Microphone jack

Left side panel



1 = Monitor port

2 = USB port

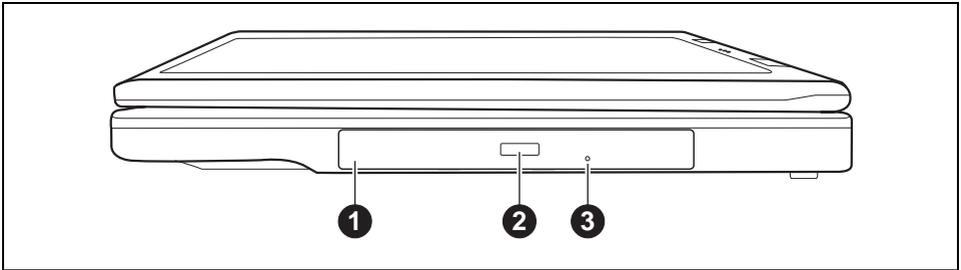
3 = Ventilation slots

4 = Modem port

5 = LAN port

6 = PC card slot

Right side panel

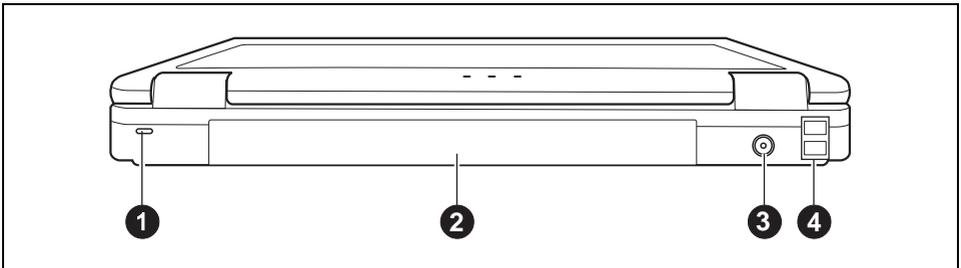


1 = Optical drive

2 = Insert/eject button of optical drive

3 = Opening for manual ejection

Back panel



1 = Kensington Lock

2 = Battery

3 = DC jack (DC IN)

4 = USB ports

Preparing the notebook for use



Please read the "Important notes" chapter.

Before you can use your notebook for the first time you need to charge the battery and install the supplied software. The operating system Windows®XP and drivers required are preinstalled.

Upon delivery, the battery can be found in the battery compartment. The battery must be charged if you want to operate your notebook with the battery.

When not plugged into a mains outlet, the notebook runs on its built-in battery. You can increase the battery's life by enabling the system's energy saving functions.

When you use your notebook in your home or office, we recommend you use the mains adapter instead of the battery.

Please see the "Connecting external devices" chapter for instructions on how to connect devices such as a mouse and a printer to the notebook.

Unpacking and checking your notebook

- ▶ Unpack all the individual parts.
- ▶ Check your notebook for damage incurred during transportation.



Should you discover damages incurred during transportation, notify your local sales outlet immediately!



We recommend that you keep the original packaging material. You may need the packaging in the future if you need to transport your device.

Selecting a location



Select a suitable location for the notebook before setting it up. Consider the following points when looking for a location:

- Never place the notebook on a soft surface (e.g. carpeting, upholstered furniture, bed). This can block the air vents and cause overheating and damage.
- Do not place the notebook on your legs for a longer period of time. The underside of the notebook heats up during normal operation. Longer contact with the skin can become unpleasant or even result in burns.
- Place the notebook on a stable, flat, nonslippery surface. Please note that the rubber feet may mark certain types of surfaces.
- Keep other objects 100 mm away from the notebook and its mains adapter to ensure adequate ventilation.
- Never cover the fan intake or exhaust openings of the notebook or the mains adapter.
- Do not expose the notebook to extreme environmental conditions. Protect the notebook from dust, humidity, and heat.

Connecting the mains adapter



Please take note of the information in the section "Safety notes".

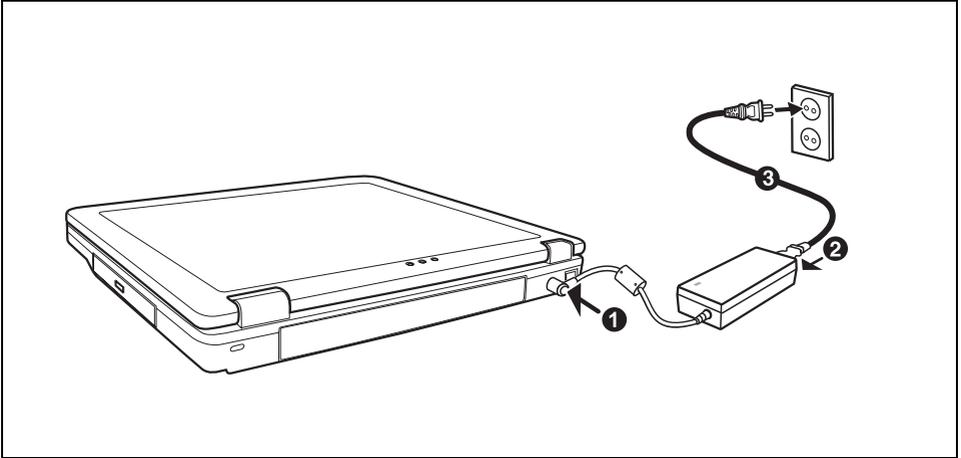
The power cable supplied conforms to the requirements of the country in which you purchased your notebook. Make sure that the power cable is approved for use in the country in which you intend to use it.

The mains adapter's AC cable should only be connected to a mains socket if the notebook is connected to the mains adapter.

Do not use the mains adapter for other notebooks or devices.

Do not use a mains adapter that is not specially intended for this notebook.

Make sure that the rated current of the mains adapter is not higher than that of the power system to which you connect the mains adapter (see technical data of the mains adapter).



- ▶ Connect the mains adapter cable (1) to the DC jack (DC IN) of the notebook.
- ▶ Connect the power cable (2) into the mains adapter.
- ▶ Plug the power cable (3) into a mains outlet.

Switching on the notebook for the first time



When you switch on your notebook for the first time, the supplied software is installed and configured. Due to the fact that this installation must not be interrupted, you should set aside enough time for it to be fully completed and connect the notebook to the mains outlet using the mains adapter.

During installation, the notebook may only be rebooted when you are requested to do so!

Your operating system is pre-installed on the hard disk to facilitate the procedure when you use your notebook for the first time.

- ▶ Switch the notebook on (see "Using your notebook" chapter, "Switching on the notebook" section).
- ▶ During installation, follow the instructions on screen.

Consult the operating system manual if there is anything unclear about the requested input data.



If there is a Windows operating system installed on your notebook the "Drivers" & "Utilities" CD/DVD is included in the delivery scope. You will find further information on the system, drivers, utilities, updates, manuals etc. on this "Drivers & Utilities" CD/DVD.

Using your notebook

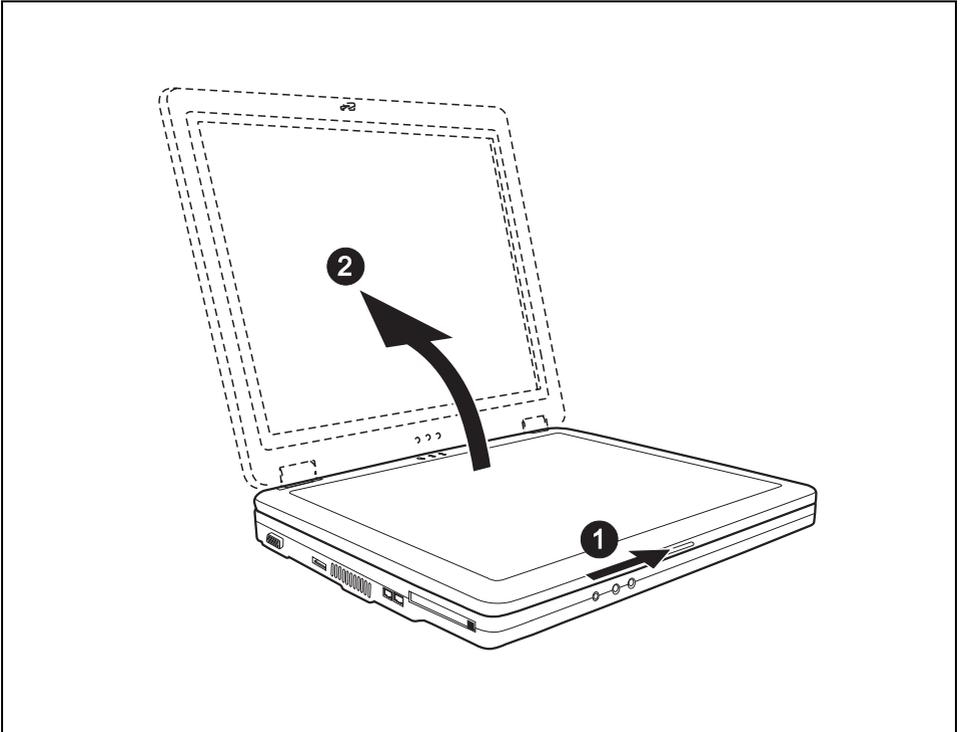
This chapter describes the basics for operating your notebook.

Please see the "Connecting external devices" chapter for instructions on how to connect devices such as a mouse and a printer to the notebook.

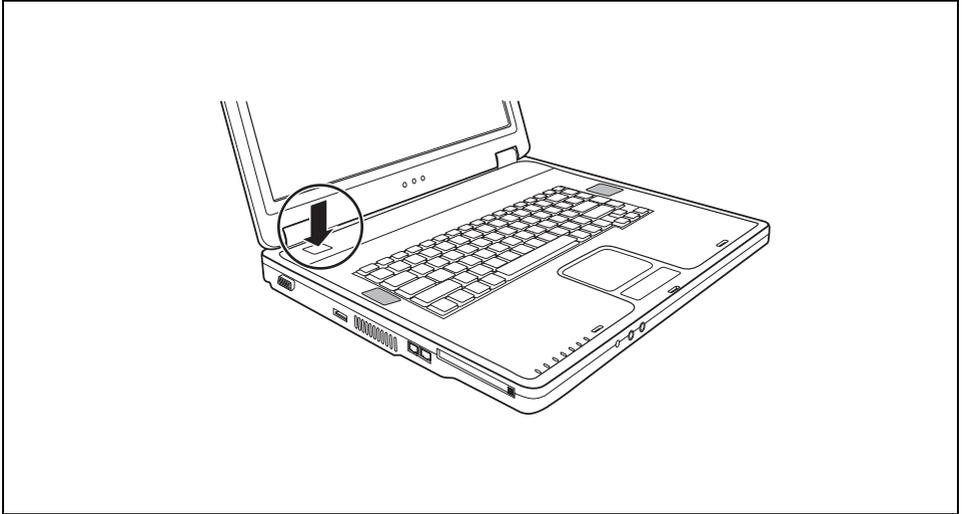


Please take note of the information in the "Important notes" chapter.

Switching on the notebook



- ▶ Slide the release button in the direction of the arrow (1) and unfold the LCD screen upward (2).



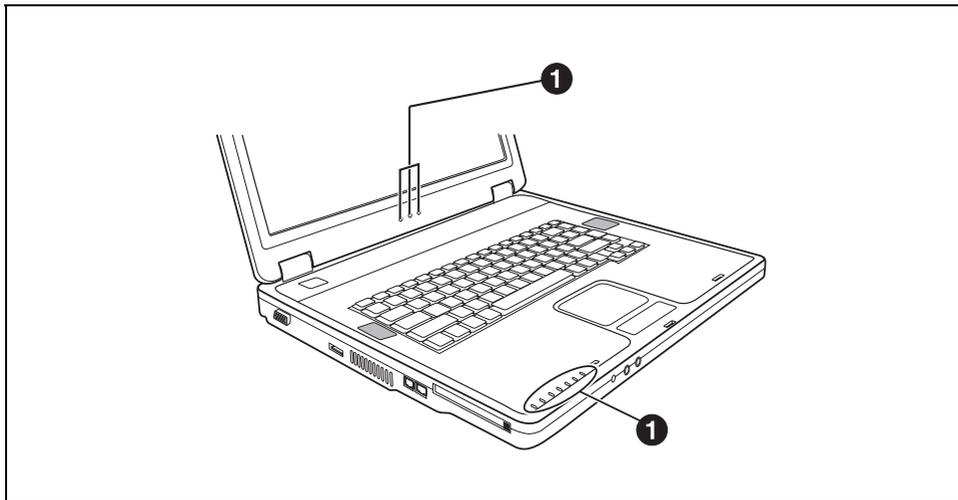
- ▶ Press the ON/OFF switch  to switch the notebook on.

Switching off the notebook

- ▶ Shut down the operating system properly in the *Start* menu via the *Quit* function.
- ▶ If the notebook is not switched off automatically, press the ON/OFF switch for approx. five seconds.
- ▶ Close the LCD screen so that it locks into place.

Status indicators

The status indicators provide information about the status of the power supply, the drives and the keyboard functions.



The status indicators (1) provide information about the status of the power supply, the drives and the keyboard functions.

The meanings of the status indicators are as follows:



Power indicator

- The indicator lights up green: The mains adapter is supplying power to the notebook.
- The indicator flashes: The mains adapter is supplying power to the notebook and the notebook is in the Standby mode.



Battery indicator

- The indicator lights up green: The battery is supplying power to the notebook.
- The indicator flashes: The battery is supplying power to the notebook and the notebook is in the Standby mode.



Battery charging indicator

- The indicator lights up green: The battery is supplying power to the notebook. The battery is fully charged.
- The indicator glows yellow: The battery is charging.
- The indicator flashes red: The battery is nearly empty.



Hard disk indicator

The indicator lights up: The hard disk is being accessed.



CD/DVD indicator

The indicator is lit: The CD/DVD in the optical drive is being accessed.



Num Lock indicator

The indicator lights up: the **Num Lock** key has been pressed. The virtual numeric keypad is activated. In the case of overlay keys, the character printed on the upper right of the key appears when that key is pressed.



Caps Lock indicator

The indicator lights up: the Caps Lock key has been pressed. All the characters you type appear in uppercase. In the case of overlay keys, the character printed on the upper left of the key appears when that key is pressed.



Scroll indicator (Scroll Lock)

The key combination **Fn** + **Scr** has been pressed. The effect this key has varies from programme to programme.



Indicator Wireless LAN

The indicator lights green: the key combination **Fn** + **F1** has been pressed. The radio component is enabled.



Indicator with no function

Keyboard

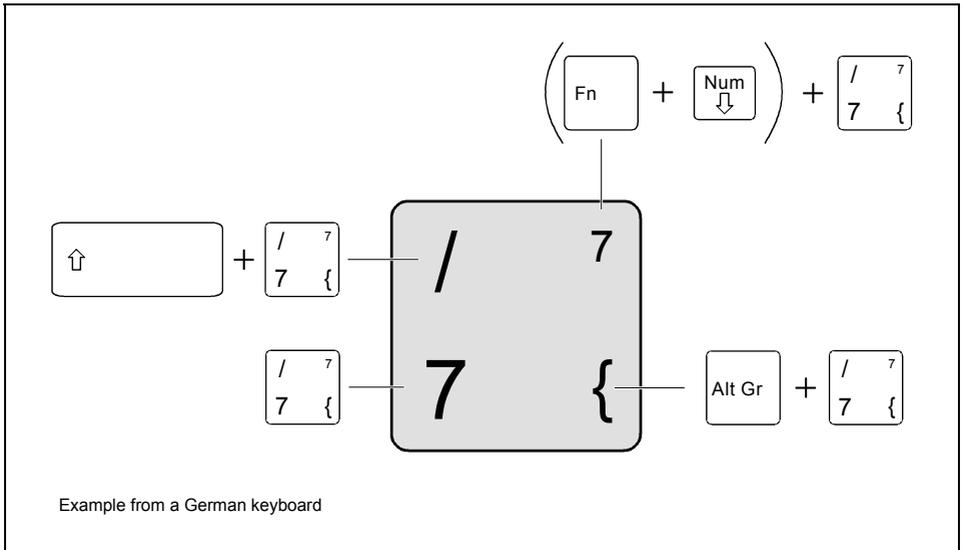
i

The keyboard of your notebook is subject to continuous wear due to normal use. The keyboard markings are subjected to particularly high loads. The keyboard markings can wear off in the course of using the notebook.

The keyboard has been designed to provide all the functions of an enhanced keyboard. Some enhanced keyboard functions are mapped with key combinations.

The following description of keys refers to Windows. Additional functions supported by the keys are described in the relevant manuals supplied with your application programmes.

The figure below shows how to access the different characters on keys with overlaid functions. The example applies when the CapsLK indicator is not lit.



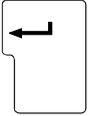
Backspace key

The Backspace key deletes the character to the left of the cursor.



Tab key

The Tab key moves the cursor to the next tab stop.



Enter key (return)

The enter key terminates a command line. The command you have entered is executed when you press this key.



Caps Lock key

The Caps Lock key activates uppercase mode (CapsLK indicator lit). The Caps Lock function causes all the characters you type to appear in uppercase. In the case of overlay keys, the character printed on the upper left of the key appears when that key is pressed.

To cancel the Caps Lock function, simply press the Caps Lock key again.



Shift key

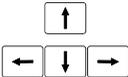
The Shift key causes uppercase characters to appear. In the case of overlay keys, the character printed on the upper left of the key appears when that key is pressed.



Fn key

The **[Fn]** key enables the special functions indicated on overlay keys (see "Key combinations").

If the external keyboard does not feature a **[Fn]** key, you can simultaneously press the **[Ctrl]** + **[Alt]** keys instead.



Cursor keys

The cursor keys move the cursor in the direction of the arrow, i.e. up, down, left, or right.



Pause key

The **[Pause]** key temporarily suspends display output. Output will resume when you press any other key.



Start key

The Start key invokes the Windows Start menu.

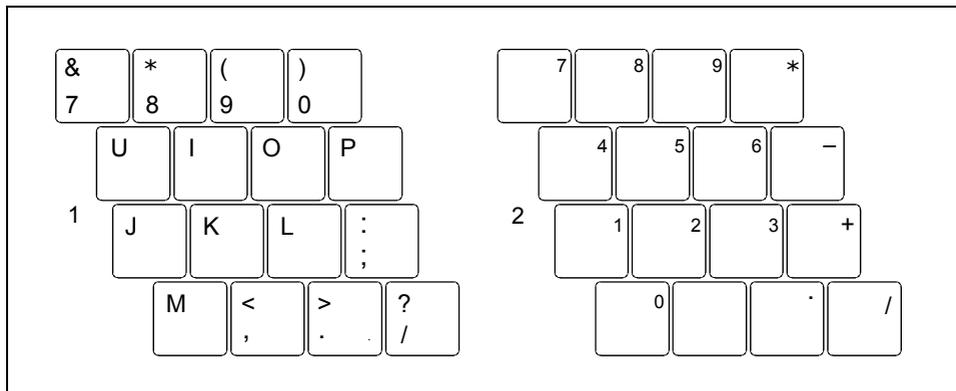


Menu key

The Menu key invokes the menu for the selected item.

Virtual numeric keypad

The keyboard of your notebook does not have a separate number block. To provide the convenience of a numeric keypad, your keyboard is equipped with a virtual numeric keypad. The special keys of the virtual numeric keypad are recognisable by the numbers and symbols printed in the upper right corner of each key. If you have switched on the virtual numeric keypad, you can output the characters shown on the upper right of the keys.



1 = Characters enabled when Num Lock indicator is not lit (see "Status indicators" section).

2 = Characters enabled when Num Lock indicator is lit (see "Status indicators" section).

Key combinations

The following description of key combinations refers to functions when using Microsoft Windows. Some of the following key combinations may not function in other operating systems and with some device drivers.

Other key combinations are described in the relevant manuals supplied with your application programmes.

Key combinations are performed as follows:

- ▶ Press and hold the first key in the combination.
- ▶ While holding the first key down, press the other key or keys in the combination.

i If the external keyboard does not feature a **Fn** key, you can simultaneously press the **Ctrl** + **Alt** keys instead.

Switching wireless LAN on/off
 This key combination switches your notebook's wireless component on and off.

Reducing the volume
 This key combination reduces the volume of the integrated loudspeakers.



Increasing the volume

This key combination raises the volume of the integrated loudspeakers.



Switching between internal and external screen

If an external monitor is connected, the monitor on which the output is to be displayed can be selected with this key combination.

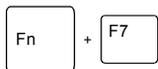
You can opt to use:

- just the notebook's LCD screen
- just the external monitor
- both the LCD screen and the external monitor.



Decreasing screen brightness

This key combination decreases screen brightness.



Increasing screen brightness

This key combination increases screen brightness.



Switching the loudspeakers on and off

This key combination switches your device's integrated loudspeakers off and on.



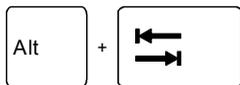
Switching the LCD screen on and off

This key combination switches the LCD screen off. The next input switches the display on again.



Power-Saving Mode

Switches the notebook into the energy-saving mode.



Switching between open applications

With this key combination you can switch between several open applications.



Carrying out a warm boot

This key combination triggers a reset and warm-boots the notebook. First hold down the **[Ctrl]** and **[Alt]** key, and then press the **[Del]** key. First the Task Manager is displayed. Then you must press all three keys again to re-boot.



Backtab (Shift+Tab)

This key combination moves the cursor back to the previous tabular stop.



Key combinations with the Windows keys are contained in the manual for your operating system.

Country and keyboard settings

If you want to change the country and keyboard settings, proceed as follows:

- ▶ Click on *Start - Control Panel*.
- ▶ Double-click on *Regional and Language Options*.

The current settings are displayed in the *Regional Options* tab.

- ▶ Select the country settings you want to use.
- ▶ Click on *Apply*.
- ▶ Click on the *Details* button in the *Languages* tab.
- ▶ Click on *Add...* to add other keyboard layouts to the selection.
- ▶ In the *Default input language* field, choose the keyboard layout you want to use when you start your notebook.
- ▶ Click on *Apply* and confirm with *OK*.

Closed cover switch

The lid switch is a contact switch that causes the notebook to switch into the Standby mode when the LCD screen is folded closed. You can set the lid switch under Windows XP.

Select the *Advanced* tab under *Start - Settings - Control Panel - Energy Options* to set the closed cover switch.

Touchpad and touchpad buttons

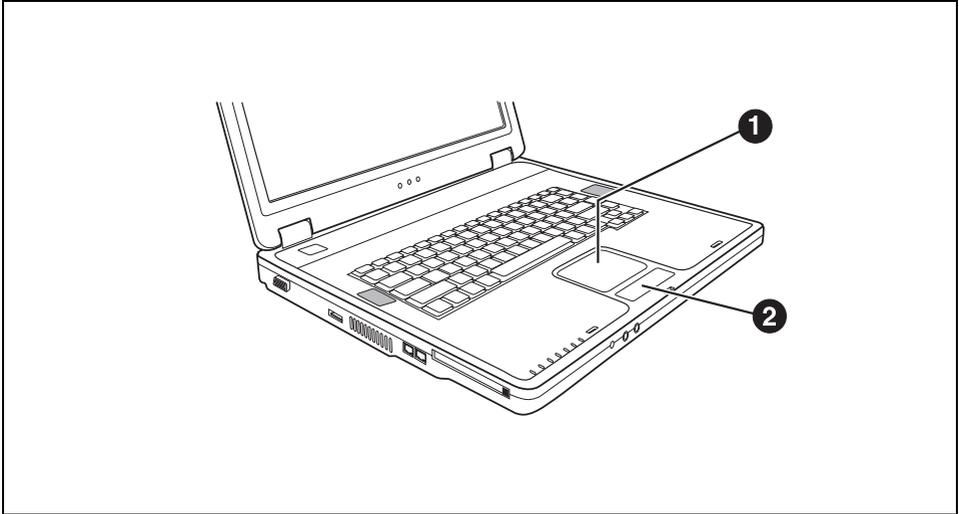


Keep the touchpad clean. Protect it from dirt, liquids, and grease.

Do not use the touchpad if your fingers are dirty.

Do not rest heavy objects (e.g. books) on the touchpad or the touchpad buttons.

The touchpad enables you to move the mouse pointer on the screen. The touchpad buttons allow the selection and execution of commands. They correspond to the buttons on a conventional mouse.



1 = Touchpad

2 = Touchpad buttons

Moving the pointer

- ▶ Move your finger on the touchpad.

The pointer will move accordingly.

Selecting an item

- ▶ Move the pointer to the item you wish to select.
- ▶ Tap the touchpad once or press the left side of the touchpad button once.

The item will be selected.

Executing a command

- ▶ Move the pointer to the field you wish to select.
- ▶ Tap the touchpad twice or press the left side of the touchpad button twice.

The command will be executed.

Dragging an object

- ▶ Select the desired object.
- ▶ Press and hold the left button and drag the object to the desired position with the finger on the touchpad.

The item will be moved.

LCD screen

Information on LCD monitor

High-quality TFT displays are installed in notebooks from Fujitsu Siemens Computers GmbH. For technical reasons, TFT monitors are manufactured for a specific resolution. An optimal, clear picture can only be ensured in the resolution intended for the respective TFT monitor. A monitor resolution which differs from the specification can result in an unclear picture.

The monitor resolution is understood to be the number of horizontal and vertical pixels (i.e. picture elements) which make up the monitor display. For example, "WUXGA" stands for 1920 x 1200 pixels. Each pixel consists of three so-called subpixels of the colours red, green and blue. As a result, a UXGA monitor consists of $1920 \times 1200 \times 3 = 6,912,000$ subpixels.

Frequently used monitor resolutions	Number of pixels
XGA	1024 x 768
WXGA	1280 x 800
SXGA	1280 x 1024
SXGA+	1400 x 1050
UXGA	1600 x 1200
WUXGA	1920 x 1200

The screen resolution of the LCD monitor of your notebook is optimally set at the factory.

Permanently unlit or lit pixels

The standard of production techniques today cannot guarantee an absolutely fault-free screen display. A few isolated constant lit or unlit pixels may be present. The maximum permitted number of pixels faults is stipulated in the stringent international standard ISO 13406-2 (Class II).

Example:

A 15" LCD screen monitor with a resolution of 1024 x 768 has $1024 \times 768 = 786432$ pixels. Each pixel consists of three subpixels (red, green and blue), so there are almost 2,4 million subpixels in total. According to ISO 13406-2 (Class II), a maximum of 4 pixels and 5 subpixels may be defective, i. e. a total of 17 faulted subpixels. That is approx. 0.0007 % of the entire subpixel!

Background lighting

TFT screens are operated with background lighting. The luminosity of the background lighting can decrease during the period of use of the notebook. However, you can set the brightness of your monitor individually.

Monitor settings

Setting the desktop area

The screen resolution of the LCD monitor of your notebook is optimally set at the factory.

Changing the LCD screen brightness

You can adjust the brightness of your LCD display with the keys **[Fn]** and **[F6]** or **[F7]**.

Changing the font size

Under *Start - Control Panel - Appearance and Themes - Display - Advanced* you can choose between a larger and a smaller font in the *Font size* field.

Synchronising the display on the LCD screen and an external monitor

Your notebook supports the simultaneous display on the LCD screen and an external monitor. Pressing the key combination **[Fn]** + **[F5]** switches between LCD only, external monitor and LCD and external monitor only. The last setting is useful if you would like high resolution and refresh rate on an external monitor.

Battery

The battery supplies your notebook with the necessary power during mobile use. You can increase battery life by enabling the system's power management features.

The life of the battery is dependent on its proper storage, the number of charging/discharging cycles and the operating temperature of the notebook.

Charging, caring for and maintaining the battery



Only use batteries approved by Fujitsu Siemens Computers for your notebook.

Take care not to drop the batteries or otherwise damage their casing (fire risk).

If the rechargeable batteries develop a fault please stop using them immediately.

Do not touch the contacts of the batteries.

Never interconnect the positive and negative terminals of a battery.

Batteries are harmful to the environment. You should dispose of them following guidance from your local District Council.

Information on the battery charging time is contained in the "Technical data" chapter.

You can charge the battery by connecting the notebook to the mains adapter.

The time taken to load the battery depends on its usage.

Make sure that the ambient temperature of the notebook lies within the permissible range.

You can maintain long life from your battery by allowing it to discharge fully before you recharge it again. To do this, leave your notebook turned on when it is operated with the battery. Once the battery is running low you will hear a warning alarm. If you do not connect the mains adapter within five minutes of the warning alarm described above, your notebook will automatically switch off.



You can set the power-management features for your notebook under *Start - (Settings) - Control Panel - Power Options*.

Storing the battery

Keep the battery pack between 0°C and +30°C (32 and 122 degrees Fahrenheit). The lower the temperature at which the batteries are stored, the lower is the rate of self-discharge.

If you store rechargeable batteries for a longer period (longer than two months), the battery charge level should be approx. 30%. To prevent exhaustive discharge, check the charging level of the battery at regular intervals.

To be able to make use of the optimal charging capacity of the batteries, the battery should be completely discharged and then fully recharged.



If you do not use the batteries for long periods, remove them from the notebook. Never store the batteries in the unit.

Monitoring the battery charging level

Windows also has a "Battery status meter" in the taskbar for monitoring the battery capacity. When you place the mouse pointer on the battery symbol, the system displays the battery status.

Removing and installing the battery



Only use batteries released for your notebook.

Never use force when inserting or removing a battery.

Take care not to drop the batteries or otherwise damage their casing (fire risk).

Do not touch the contacts of the batteries.

Never interconnect the positive and negative terminals of a battery.

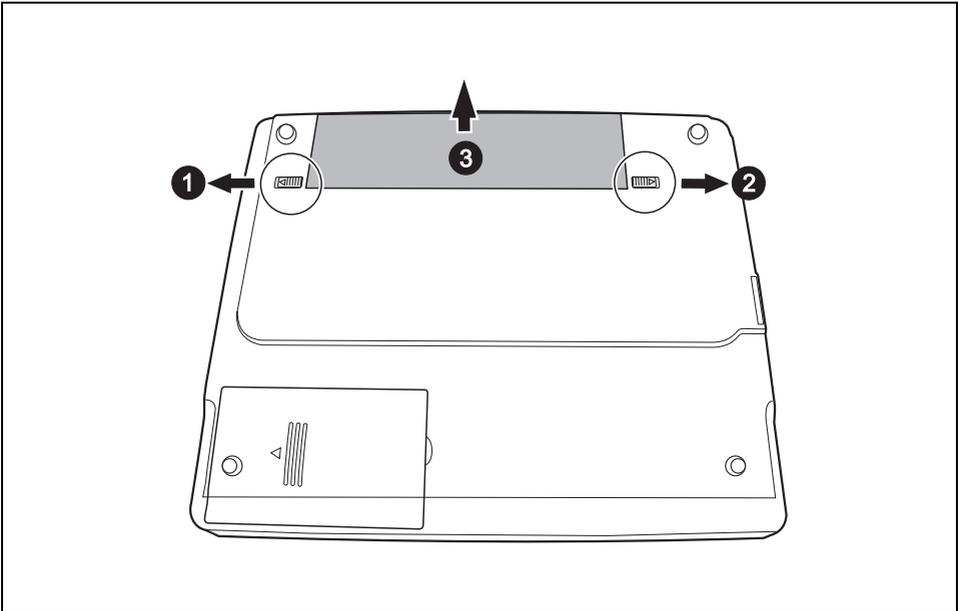
If the rechargeable batteries develop a fault please stop using them immediately.

Batteries are harmful to the environment. You should dispose of them following guidance from your local District Council.

Make sure no foreign objects get into the battery compartment.

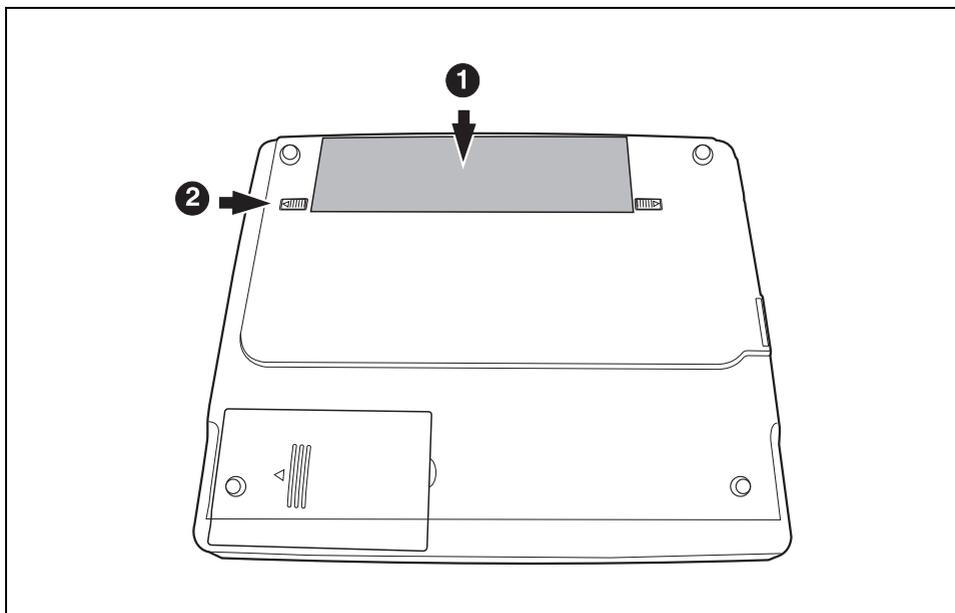
Removing battery

- ▶ Switch the notebook off.
- ▶ Close the LCD screen so that it locks into place.
- ▶ Unplug the mains adapter from the mains socket.
- ▶ Disconnect all cables connected to the notebook.
- ▶ Turn your notebook over and place it on a stable, sturdy, flat surface. If necessary, lay an anti-slip cloth on this surface to prevent the notebook from being scratched.



- ▶ Unlock the battery lock by pushing the lever (1) in the direction of the arrow as far as it will go.
- ▶ Slide the battery lock in the direction of the arrow (2) and hold it in place.
- ▶ Remove the battery from the battery compartment (3).

Inserting battery



- ▶ Place the battery in the battery slot so that the contacts enter first.
- ▶ Push the battery into the battery compartment until it engages (1).
- ▶ Push the lever (2) in the direction of the arrow up to the stop (2).

Using the power-management features

If you use the possible energy saving functions, the notebook uses less energy. You will then be able to work longer when using the battery before having to recharge it.

You can also use energy saving modes such as *Standby* or *Hibernate* for times when you are not using your notebook but want to keep coming back to it.



If you are connecting to a network, or the Internet, we advise you to turn off the energy saving modes as they interrupt your connection.

When you are finished working with your notebook we advise you to come out of an energy saving mode and then turn off as normal.

Never turn off your notebook while it is in an energy saving mode.

If the notebook is in an energy-saving mode mode:

- Do not connect any external devices.
- Do not disconnect any external devices.
- Do not attempt to switch the notebook on if the built-in battery is flat.
- Do not add or remove RAM.
- Do not add or remove a PC card.

When you close the lid, the notebook automatically enters an energy-saving mode.

The energy saving functions can be activated under *Start - Control Panel - Performance and Maintenance - Power Options*. Under Windows, *Hibernate* is activated by default.

PC cards

A PC card slot (CardBus or PCMCIA) enables the notebook to operate a type II PC card.



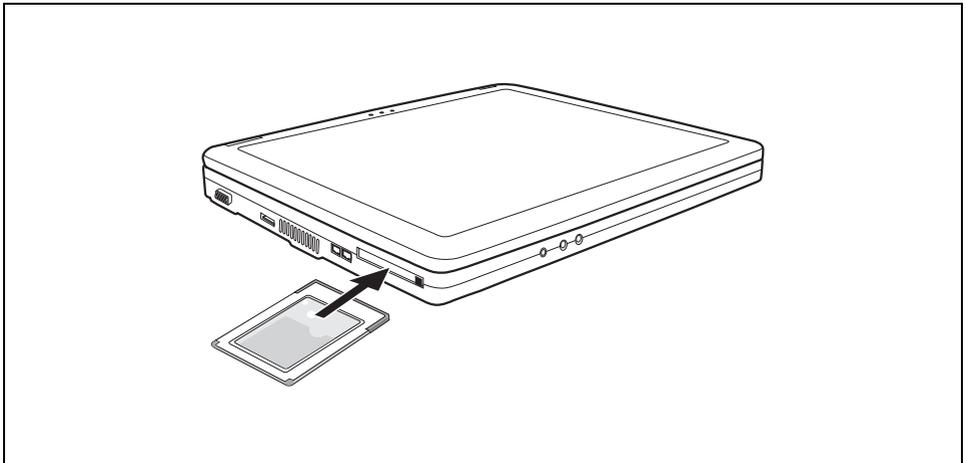
Consult the documentation supplied by the PC card's manufacturer and follow the instructions provided.

Never use force when inserting or removing a PC card.

Make sure that foreign objects do not fall into the PC card slot.

Installing a PC card

- ▶ Insert the PC card, contacts first, into the slot guide. The labelled side of the PC card should be facing upward.



- ▶ Gently push the PC card into the slot until you feel it click into place.



Consult the documentation supplied with the PC card for information on how to install the necessary device drivers.

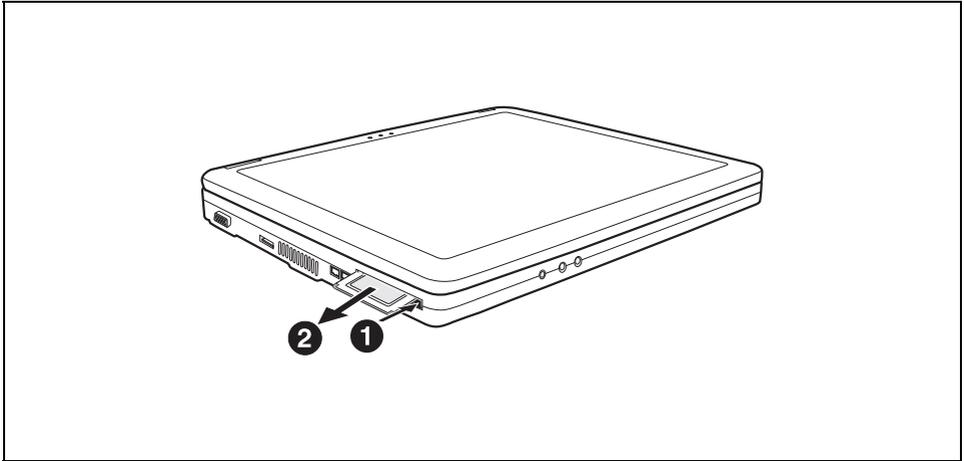
Also observe the corresponding information files (e.g. *.TXT, *.DOC, *.WRI, *.HLP or *.PDF) on the driver CD and in the user manual of the operating system.

You can push the PC card slot eject button into the notebook casing. Press the eject button until it snaps in. This prevents the PC card from being ejected accidentally.

Removing a PC card

Use the small PC card icon located in your task bar to stop the card:

- ▶ Left-click on the icon.
- ▶ Select the PC card you want to stop and remove.
- ▶ Press the Enter key.



- ▶ Press the eject button (1). The PC card will project further out of the notebook's case. If the eject button is lowered, you must first cause the eject button to release from the notebook casing. To do this, press the eject button until it releases.
- ▶ Slide the PC card out of the notebook (2).

CD/DVD drive

Your notebook is delivered with an CD/DVD drive. Depending on the variant, your notebook is equipped with a CDRW / DVD combo drive, or a DVD+RW drive, or a DVD±RW dual drive, or a Multi-format DVD burner with double layer support.

CD/DVD drives can either only read or both read and write different CDs or DVDs. The meaning of the respective CD and DVD types is described in the following:

CD-ROM

Abbreviation for **C**ompact **D**isc - **R**ead **O**nly **M**emory. A CD-ROM is an optical data storage device that can contain a maximum of 700 Mbytes. These data cannot be changed.

CD-R

Abbreviation for **C**ompact **D**isc **R**ecordable. A CD-R is an optical data storage device that can only be written with a maximum of 700 Mbytes of data. Then these data cannot be changed, but can be read as often as desired.

CD-RW

Abbreviation for **Compact Disc ReWriteable**. A CD-RW is an optical data storage device that can be written with a maximum of 700 Mbyte of data a virtually unlimited number of times. This means the data can be deleted and changed.

DVD (DVD-ROM and DVD video)

Abbreviation for **Digital Versatile Disc** or **Digital Video Disc**. A DVD is an optical data storage medium that can contain a maximum of 17 Gbytes of data. These data cannot be changed.

DVD+R/DVD-R

Abbreviation for **Digital Versatile Disc Recordable** or **Digital Video Disc Recordable**. A DVD+R or a DVD-R is an optical data storage device that can only be written once with a maximum of 4.7 Gbytes of data. Then these data cannot be changed, but can be read as often as desired.



DVD+R and DVD-R are different standards. DVD+Rs and DVD-Rs can only be written by drives which support the respective standard.

DVD+RW/DVD-RW

Abbreviation for **Digital Versatile Disc** or **Digital Video Disc ReWriteable**. A DVD+RW or a DVD-RW is an optical data storage device that can be written with a maximum of 4.7 Gbytes of data virtually an unlimited number of times. This means the data can be deleted and changed.



DVD+RW and DVD-RW are different standards. DVD+RWs and DVD-RWs can only be written by drives which support the respective standard.

DVD+R DL (Double Layer)

Abbreviation for **Digital Versatile Disc Recordable Double Layer** or **Digital Video Disc Recordable Double Layer**. A DVD+R DL is an optical data storage device that can only be written with a maximum of 8.5 Gbytes of data. Then these data cannot be changed, but can be read as often as desired.

CDRW / DVD combo drive



The CDRW / DVD combo drive is a Class 1 laser according to IEC 60825-1. It contains a light emitting diode (LED) which may produce a stronger laser beam than a Class 1 laser.

It is dangerous to look directly at this beam.
Therefore, do not remove any drive housing parts.

You can read all CD/DVD types specified above with the CDRW / DVD combo drive. You can also write CD-Rs and CD-RWs.

Please ask your local computer store for assistance if you are not sure which CD or DVD type suits best for your needs, e. g. backing up data, recording films, storing pictures etc..

DVD±RW dual drive



The DVD±RW drive is a Class 1 laser according to IEC 60825-1. It contains a light emitting diode (LED) which may produce a stronger laser beam than a Class 1 laser. It is dangerous to look directly at this beam. Therefore, do not remove any drive housing parts.

With the DVD±RW dual drive you can read all CD/DVD types named above. You can also write CD-Rs, CD-RWs, DVD+Rs, DVD+RWs, DVD-Rs and DVD-RWs.

Please ask your local computer store for assistance if you are not sure which CD or DVD type suits best for your needs, e. g. backing up data, recording films, storing pictures etc..

Multi-format DVD burner with double layer support



The Multi-format DVD burner with double layer support is a Class 1 laser according to IEC 60825-1. It contains a light emitting diode (LED) which may produce a stronger laser beam than a Class 1 laser. It is dangerous to look directly at this beam. Therefore, do not remove any drive housing parts.

With the Multi-format DVD burner with double layer support you can read all optical data storage media named above. You can also write CD-Rs, CD-RWs, DVD+Rs, DVD+RWs, DVD-Rs, DVD-RWs and DVD+R DLs.

Please ask your local computer store for assistance if you are not sure which CD or DVD type suits best for your needs, e. g. backing up data, recording films, storing pictures etc..

Handling CD/DVDs



Observe the following guidelines when handling CD/DVDs:

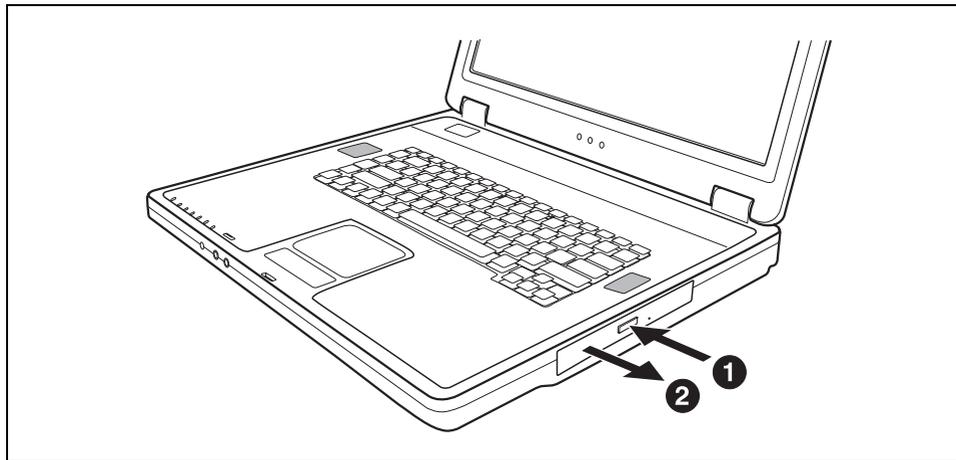
- Avoid touching the surface of a CD/DVD. Hold CDs/DVDs by their edges!
- Always store CDs/DVDs in their cases. This will protect CD/DVD from dust, scratches and other damage.
- Protect your CDs/DVDs from dust, mechanical vibration and direct sunlight!
- Avoid storing a CD/DVD in areas subject to high temperatures or humidity.



In order to make use of the full recording speed of your drive, please use disks marked "Multispeed" or "High Speed"

Inserting or removing a CD/DVD

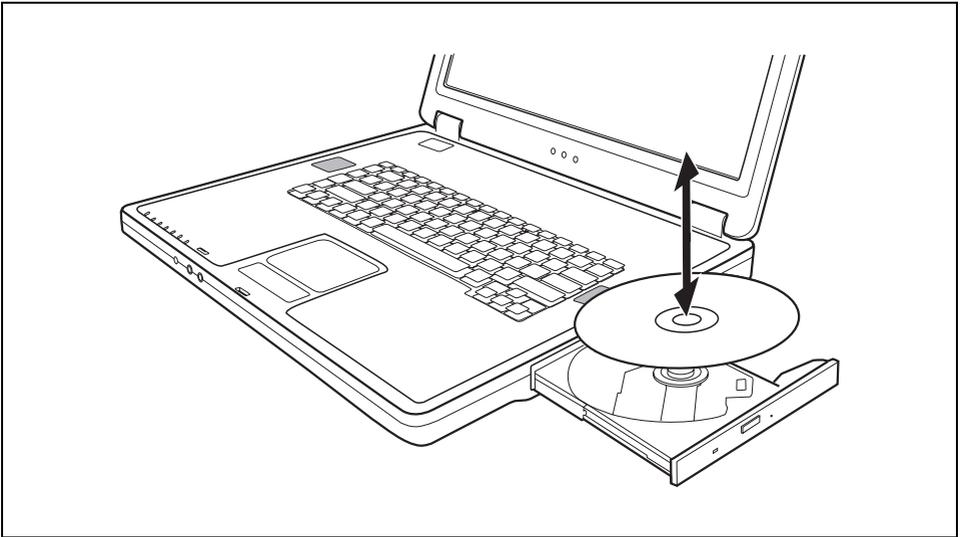
The notebook must be switched on.



- ▶ Push the insert/eject button.

The drive tray will open.

- ▶ Pull the drive tray completely out.



- ▶ Place the CD/DVD in the drive tray with the label facing upwards.
- or
- ▶ Take out an inserted CD/DVD.
 - ▶ Push in the drive tray until you feel it lock into place.

Manual removal (emergency removal)

In the event of a power failure or damage to the drive it may be necessary to manually remove the CD/DVD.

- ▶ Switch the notebook off.
- ▶ Push a pen or a piece of wire (such as a paper clip) into the opening for manual ejection (see "Front" section).

The drive tray is unlocked. You can now pull the drive tray out of the drive.

Regional codes for DVD films and DVD players

DVD films and DVD players (e.g. the DVD drive of your notebook) are always provided with a regional code. The regional codes of DVD films and DVD players must match so that the DVD film can be played back.

There are six different regional codes:

- Regional code 1: USA and Canada
- Regional code 2: Egypt, Europe, Japan, South Africa and the Middle East
- Regional code 3: Southeast Asia (including Hong Kong, Indonesia, Philippines, South Korea, Taiwan)
- Regional code 4: Australia, New Zealand, South Eastern Pacific, Central and South America and the Caribbean
- Regional code 5: Africa (except South Africa), India and the former states of the USSR
- Regional code 6: China

The DVD drive of your notebook supports the function RPC-II (Phase II System of Regional Playback Control). This function permits the final user to change the regional code of the drive up to five times to play back corresponding DVD films. Then the last regional code selected is retained and cannot be changed again.



If a DVD film is to be watched in all regions, it has the regional code 0.

Before buying a DVD film you should check that the regional code of the DVD film matches the regional code set for the DVD drive of your notebook.

Adjusting AutoPlay function of your CD/DVD drive

Windows XP uses AutoPlay technology. This allows you to tell Windows XP how to use different types of CD or DVD disks.

You can set the AutoPlay function of the CD/DVD drive according to your needs. For example, if you insert a music CD you can tell Windows XP to open Media Player and start to play it.

Proceed as follows:

- ▶ Click *Start* and then *My Computer*.

The *My Computer* window will appear.

- ▶ Select the CD / DVD icon you want to change and click it with the right-hand mouse or touchpad button.

A context menu appears.

- ▶ Click on *Properties*.
- ▶ Click on the *AutoPlay* tab.
- ▶ Adjust the AutoPlay function to meet your needs.



Please note that you must select the desired action and confirm it with *Apply* for each individual CD/DVD content type.

Adjusting the volume

- ▶ Set the desired volume with the key combination **Fn** + **F3** or **Fn** + **F4**.

or

- ▶ To adjust the volume use the Windows volume control from the *Start* menu - *Programs* - *Accessories* - *Multimedia* - *Volume Control*.

Integrated 56k modem

The integrated 56k modem supports all data communication applications, such as:

- Modem operation: High-speed downloads at up to 56,000 bit/s (V.9x). Downward-compatible to V.34 modems.
- Fax mode: Transmitting and receiving at up to 14,400 bit/s
- Simple country adaptation with programme

The modem complies with the EU Directive 91/263/EEC (Telecommunications terminal equipment directive) and has been checked in agreement with the guideline TBR-21.

The modem can be operated in the following countries:

Multifrequency (MFC) dialling

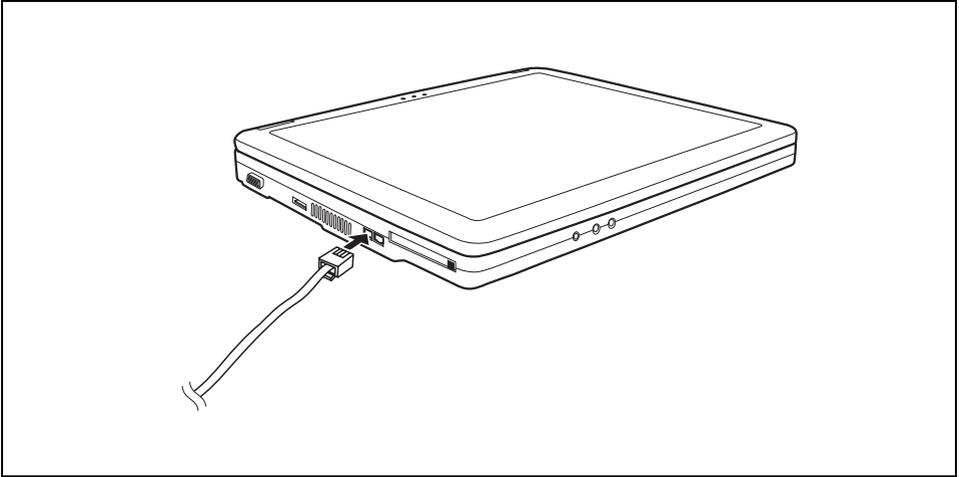
Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Holland, Ireland, Iceland, Italy, Luxembourg, Norway, Austria, Portugal, Sweden, Switzerland and Spain.

Pulse dialling:

Belgium, France, Holland and Italy.

Also in: Poland, Slovenia, South Africa and Hungary.

Connecting notebook modem to telephone wall socket



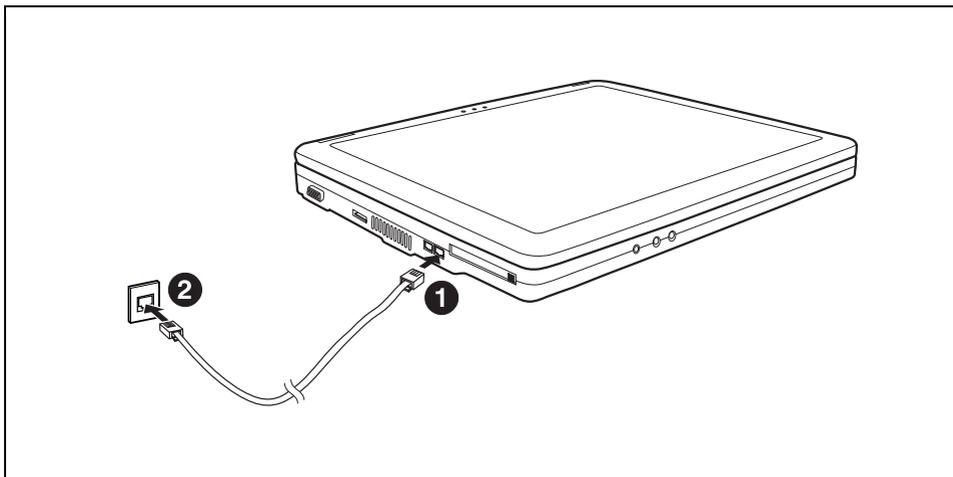
- ▶ Connect the modem cable to the country-specific telephone adapter.
- ▶ Connect the modem cable to the modem port of the notebook.
- ▶ Connect the modem cable to your telephone wall socket.



Please note that the telephone line is busy and that you cannot use your telephone if the modem cable is plugged into the telephone wall socket. Pull the modem cable out of the telephone socket after you have finished your internet session or the fax mode and reconnect the telephone cable.

Ethernet and LAN

The internal LAN module of your notebook supports Ethernet-LAN (10/100 Mbps). With the LAN module you can establish a connection to a local network (LAN = Local Area Network).



- ▶ Connect the LAN cable to the notebook's LAN connector (1).
- ▶ Connect the LAN cable to your network connector (2).



Your network administrator can help you to configure and use the LAN-connections.

Wireless LAN (optional)



The installation of a wireless LAN module not approved by Fujitsu Siemens Computers GmbH voids the permits (CE!) issued for this device.

- ▶ Press the key combination **[Fn] + [F1]** to switch the wireless component on and off.

The wireless LAN indicator  lights up green when the wireless component is switched on.



Details are contained in the online help for your wireless LAN software and in the "Wireless LAN" manual. This manual is provided as PDF file on the "User Documentation" or "Drivers & Utilities" CD/DVD.

Security functions

Your notebook has several security features that you can use to secure your system from unauthorised access.

This chapter will explain how to use each function, and what the benefits are.



Please remember that in some cases, for example, forgetting your password, you can be locked out and unable to access your data. Please note therefore the following hints:

- Make regular backups to external storage devices such as external hard drives, CD or DVD disks.
- Some security functions need you to choose a password. Make a note of the passwords and keep them in a safe place.

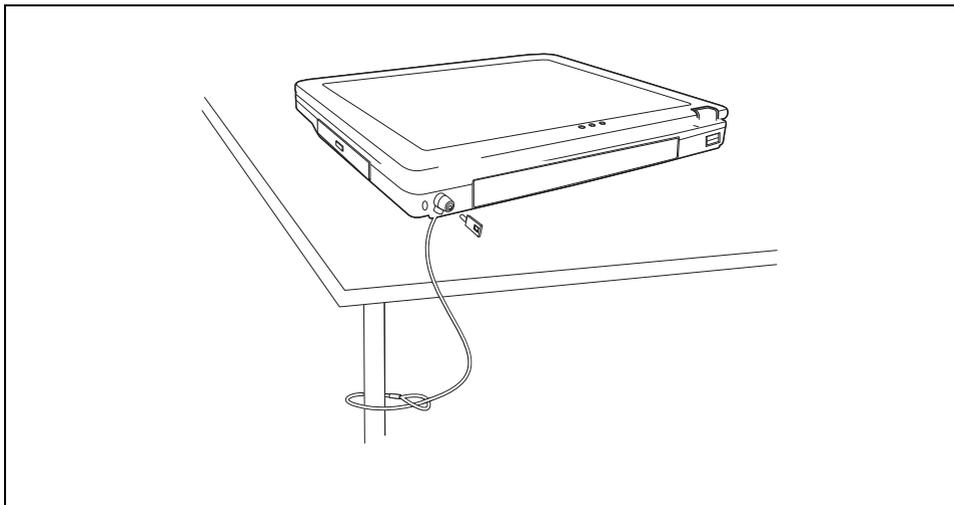
If you forget your passwords you will need to contact the help desk. Passwords are not covered by your warranty and a charge will be made for assistance.

Brief overview of the security functions

Security function	Type of protection	Preparation
Kensington Lock	Mechanical	Mount and lock Kensington MicroSaver (accessory)
BIOS password protection	Password protection for <i>BIOS Setup Utility</i> and operating system. The Admin password consists of a maximum of eight alphanumeric characters.	Specify a Admin password and, if desired, activate the password protection for the operating system in the <i>BIOS Setup Utility</i> .

Using Kensington Lock

With the Kensington MicroSaver, a sturdy steel cable, you can help protect your notebook from theft. For this reason your notebook is equipped with a device for the Kensington MicroSaver. The Kensington MicroSaver is available as an accessory.



- ▶ Fit the Kensington MicroSaver on the device (1) on your notebook.

Configuring password protection in BIOS Setup Utility



Before using the various options of password protection for your data security in the *BIOS Setup Utility*, please note the following hints:

- Be sure to note your admin password, as if you forget your admin password, you cannot access your *BIOS Setup Utility* and/or your system. Passwords are not covered by your warranty and a charge will be made for assistance.
- Back up your data on external data carriers at regular intervals.



If you have opened these operating instructions on the screen, we recommend that you print out the following instructions. Because you cannot call the instructions onto the screen while you are setting up the password.

The admin password prevents unauthorized calling of the *BIOS Setup Utility* and/or access to the operating system.

The password can be at most eight characters long. You can use all alphanumeric characters and need not distinguish between uppercase and lowercase characters.



Please refer to section "Settings in BIOS Setup Utility" for a description of entering and operating the *BIOS Setup Utility*.

Entering the admin password

- ▶ Call the *BIOS Setup Utility*.
- ▶ Select the entry *Boot Password* from the *Startup* menu and press the enter key.
- ▶ Enter the password in the *Enter new Power On Password* field and press the Enter key.

With *Verify new Power On Password* you are asked to confirm the password.

- ▶ Enter the password again and press the Enter key.
- ▶ Press the Space key to activate the *Enable Password to Power On* field if you want to use the admin password to prevent unauthorized startup of the operating system.
- ▶ Select *OK* and press the Enter key.

If you do not want to make any other settings, you can exit *BIOS Setup Utility*.

- ▶ Select the *Save and Exit* option in the *Exit* menu.
- ▶ Select *OK* and press the Enter key.

The notebook is rebooted and the new password is effective.

Changing the admin password

- ▶ Enter the *BIOS Setup Utility* and go to the *Startup - Boot Password* menu.
- ▶ When changing the password, proceed exactly as for password assignment.

You can only change the admin password if you have logged on with the admin password.

Canceling the admin password

To cancel the admin password (without setting a new password) run the following steps:

- ▶ Call the *BIOS Setup Utility*.
- ▶ Select the *Startup - Boot Password* menu and press the Enter key.
- ▶ Enter the password in the *Enter old Power On Password* field and press the Enter key.
- ▶ Confirm the *Enter new Power On Password* and *Verify new Power On Password* fields with the Enter key.
- ▶ Select *OK* and press the Enter key.



The password protection is only switched off if both fields are deactivated.

- ▶ Select the *Save and Exit* option in the *Exit* menu.
- ▶ Select *OK* and press the Enter key.

The notebook is rebooted and the admin password is cancelled.

Connecting external devices



Before you connect or disconnect any devices from your notebook please read the safety notes in the "Important notes" chapter.

Always read the documentation supplied with the device you wish to connect.

Never connect, or disconnect cables during a thunderstorm.

Never pull on a cable when disconnecting it. Always hold the plug.

Follow the steps below in order, when connecting or disconnecting devices to your notebook:

Connecting devices to notebook

1. Turn off your notebook and all external devices.
2. Unplug your notebook and all devices from the mains sockets.
3. Connect the cables for your external devices following the supplied instructions.
4. Plug all power cables into the mains sockets.

Disconnecting devices from notebook

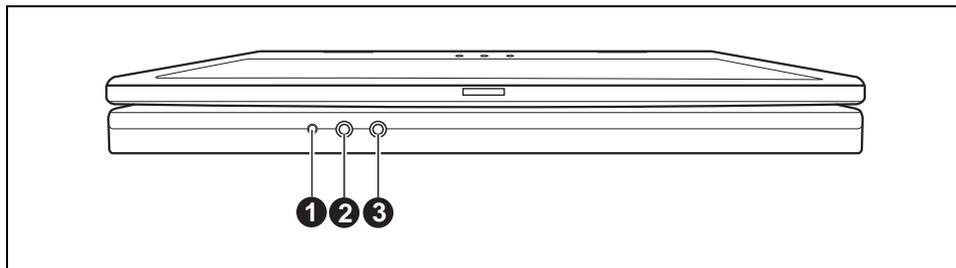
1. Turn off your notebook and all external devices.
2. Unplug your notebook and all devices from the mains sockets.
3. Disconnect the cables for your external devices following the supplied instructions.



Some of the external devices require special drivers (see the operating system and external device documentation).

Ports

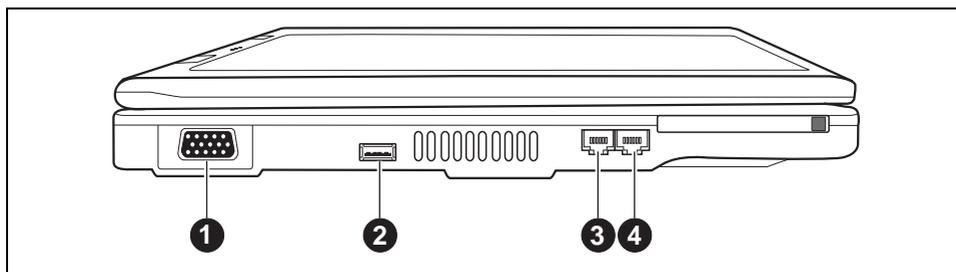
Ports on the front



1 = SPDIF port / Headphones socket
2 = Line-In

3 = Microphone jack

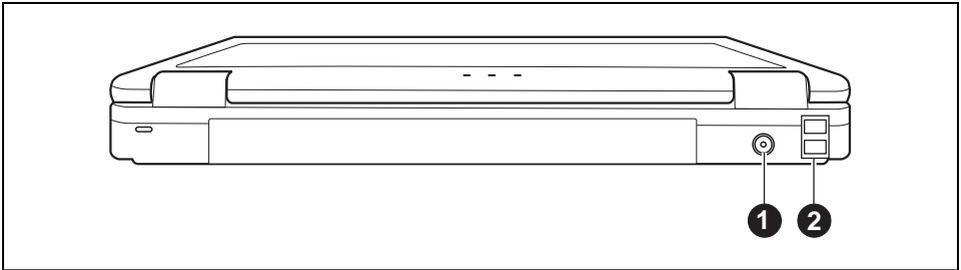
Connections on the left side



1 = Monitor port
2 = USB port

3 = Modem port
4 = LAN port

Connections on the rear



1 = DC jack (DC IN)

2 = USB ports



Some of the external devices require special drivers (see the operating system and external device documentation).

Connecting an external monitor

An external monitor can be connected to the notebook.

- ▶ Switch off the notebook and the external monitor.
- ▶ Connect the data cable of the external monitor to the VGA connector of the notebook.



If you want to connect an analogue monitor, first connect the monitor adapter provided to the VGA connector of your notebook.

- ▶ First switch on the external monitor and then the notebook.

Using the **[Fn] + [F5]** key combination you can switch back and forth between the external monitor and the LCD screen.

You can display the same picture on the external monitor and the LCD screen simultaneously.

Setting the refresh rate for your external monitor

The refresh rate must be correctly set so that the image does not flicker.

- ▶ Select the monitor type in the menu *Start - Control Panel - Appearance and Themes - Display - Settings - Advanced - Monitor*.
- ▶ Now select the *Adapter* tab.
- ▶ Adjust the refresh rate and click *Apply*.



If the refresh rate set is too high, the monitor may be damaged. Please see the documentation included with your monitor for the maximum possible refresh rate.

Connecting USB devices

On the USB ports you can connect external devices that also have a USB port (e.g. a printer, a scanner or a modem).



USB devices are hot-pluggable. This means you can connect and disconnect devices while your operating system is running.

USB 1.x has a maximum data transfer rate of 12 Mbit / s.

USB 2.x has a data transfer rate of up to 480 Mbit/s.

Additional information can be found in the documentation for the USB devices.

- ▶ Connect the data cable to the external device.
- ▶ Connect the data cable to a USB port of the notebook.



Device drivers

Some USB devices will be automatically recognised and installed by your operating system. However, newer devices will need to be installed using the supplied CD / DVD. Always follow the instructions supplied with the device to complete the installation.

Connecting external audio devices

Microphone port/Line In

Via the microphone port you can connect an external microphone to your notebook.

Headphone port/external loudspeakers

Via the headphone port you can connect either headphones or external loudspeakers to your notebook.

Adjusting the volume

- ▶ Set the desired volume with the key combination **Fn** + **F3** or **Fn** + **F4**.

or

- ▶ To adjust the volume use the Windows volume control from the *Start* menu - *Programs* - *Accessories* - *Multimedia* - *Volume Control*.

Removing and installing components during servicing



Only qualified technicians should repair your notebook. Unauthorised opening or incorrect repair may greatly endanger the user (electric shock, fire risk) and will invalidate your warranty.

You may remove and install the components described in this chapter yourself after consulting the Hotline/Help Desk.

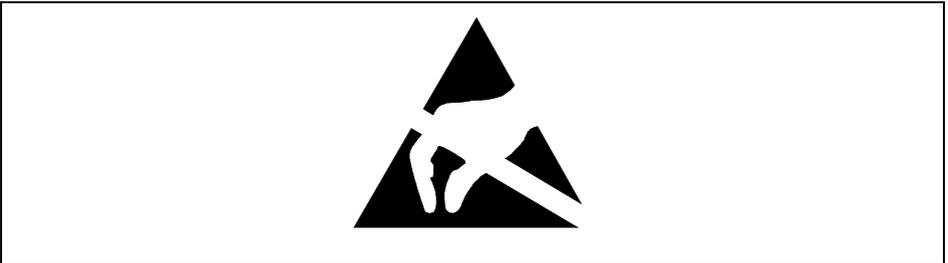


If you remove and install components without consulting the Hotline/Help Desk, then the warranty of your notebook will be voided.

Notes on installing and removing boards and components

- Switch the notebook off and pull the power plug out of the mains socket.
- Remove the battery.
- Take care when you use the locking mechanisms on the battery and any other component.
- Never use sharp objects such as screwdrivers, scissors or knives as leverage to remove covers.

Boards with electrostatic sensitive devices (ESD) are identifiable by the label shown.



When you handle boards fitted with ESDs, you must, under all circumstances, observe the following points:

- You must statically discharge yourself before working with boards (e.g. by touching a grounded object).
- The equipment and tools you use must be free of static charges.
- Remove the power plug from the mains supply before inserting or removing boards containing ESDs.
- Always hold boards with ESDs by their edges.
- Never touch pins or conductors on boards fitted with ESDs.

Removing and installing the battery

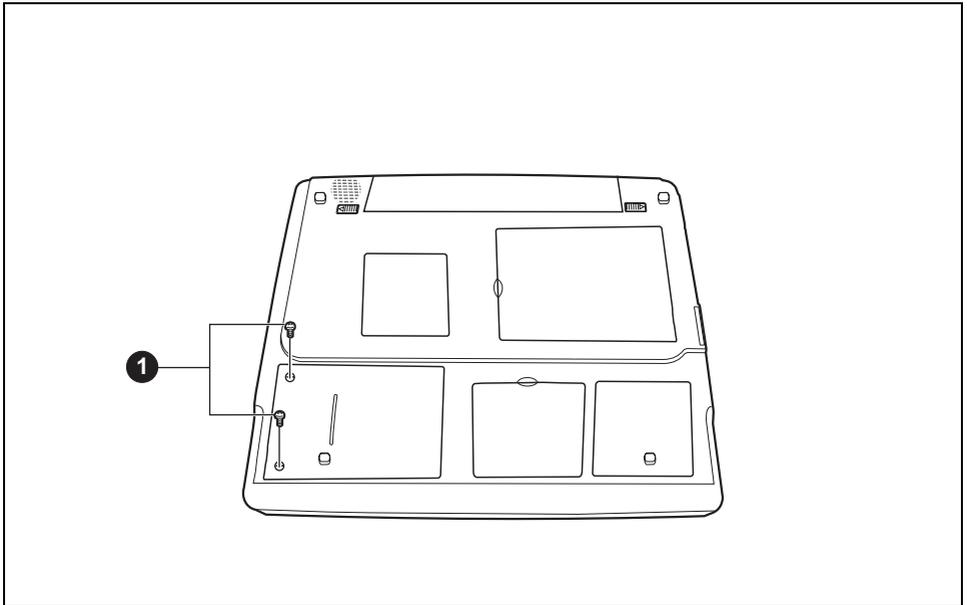


How to remove and reinstall the battery is described in chapter "Using your notebook", in the section "Removing and installing the battery".

Removing and installing the hard disk

Removing the hard disk

- ▶ Switch the notebook off and pull the power plug out of the mains socket.
- ▶ Close the LCD screen so that it locks into place.
- ▶ Disconnect all cables connected to the notebook.
- ▶ Turn your notebook over and place it on a stable, sturdy, flat surface. If necessary, lay an anti-slip cloth on this surface to prevent the notebook from being scratched.
- ▶ Remove the battery (see "Removing and installing the battery").



- ▶ Remove the screws (1).
- ▶ Pull the cover off the notebook.
- ▶ Then undo the screw from the hard disk.
- ▶ Pull the hard disk by the pulling aids to the left side.
- ▶ Remove the hard disk from the hard disk compartment.

Installing the hard disk

- ▶ Place the hard disk into the hard disk compartment.
- ▶ Slide the hard disk by the pulling aids to the right.
- ▶ Fasten the screw on the hard disk.
- ▶ Place the cover on its mounting location.
- ▶ Fasten the cover with the screws (1).
- ▶ Install the battery (see "Removing and installing the battery").
- ▶ Turn the notebook over and place it on a flat surface.
- ▶ Reconnect the cables that you disconnected before.

Memory expansion

Your notebook has 256 Mbyte -1 Gbyte of main memory installed, depending on the upgrade level. The notebook will not start without memory modules, as no fixed main memory is installed.

Installing and removing the memory extension

If you are asked by the Hotline/Help Desk to remove and install the memory extension yourself, proceed as follows:



Please take note of the safety information in the "Important notes" chapter.

The notebook must be switched off when installing/removing the memory modules, it must not be in Suspend mode.

Use only memory expansions released for your notebook.

Never use force when installing or removing memory modules.

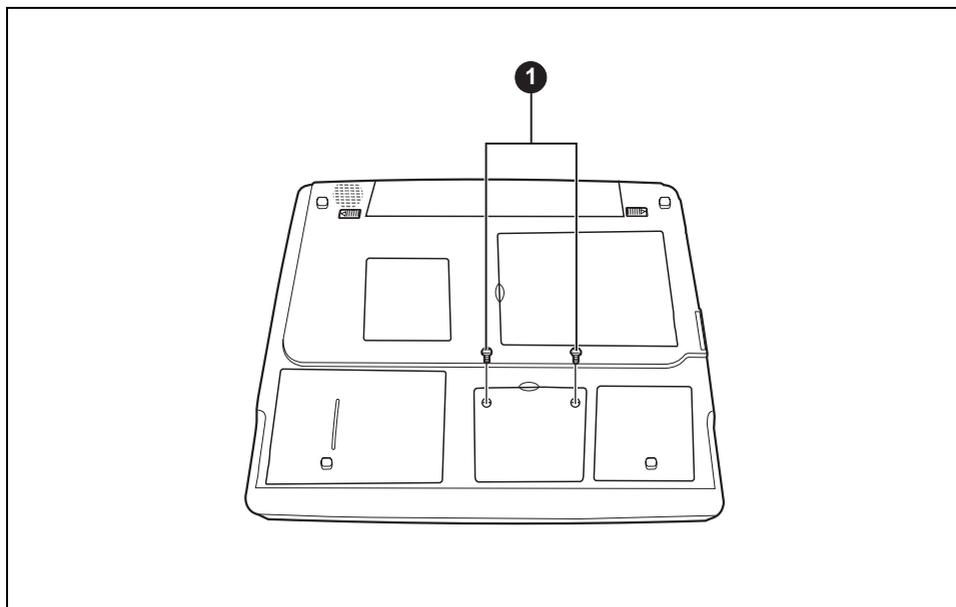
Make sure that foreign objects do not fall into the memory extension compartment.

Individual components (e.g. the processor heat sink) can become very hot during operation. Therefore, we recommend that you wait one hour after switching off the notebook before removing or installing the memory modules. Otherwise, there is a danger of being burned!

As some components with ESDs are exposed, please observe the section "Notes on installing and removing boards and components" in the chapter "Important notes".

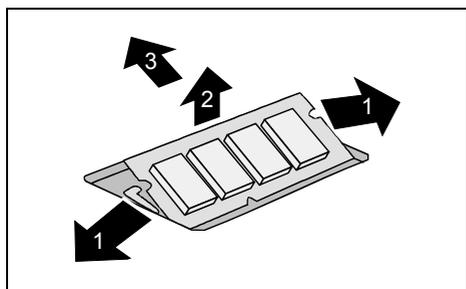
- ▶ Switch the notebook off.
- ▶ Close the LCD screen so that it locks into place.
- ▶ Unplug the mains adapter from the mains socket.
- ▶ Disconnect all cables connected to the notebook.
- ▶ Turn your notebook over and place it on a stable, sturdy, flat surface. If necessary, lay an anti-slip cloth on this surface to prevent the notebook from being scratched.
- ▶ Remove the battery (see "Using your notebook" – "Removing battery").

Removing cover



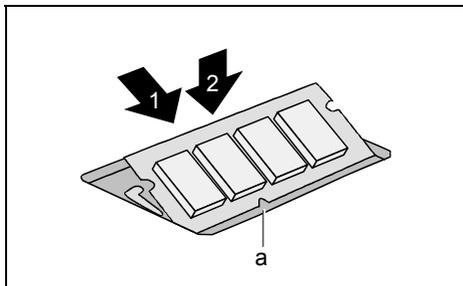
- ▶ Remove the screws (1).
- ▶ Pull the cover off the notebook.

Removing a memory module



- ▶ Carefully push the two mounting clips outwards (1).
The memory module will flap upward (2).
- ▶ Pull the memory module out of its slot in the direction of the arrow (3).

Installing a memory module



- ▶ Insert the memory module with the contacts and the recess (a) facing the slot (1).
- ▶ Carefully push the memory module downwards until it engages noticeably (2).

Mounting the cover

- ▶ Place the cover on its mounting location.
- ▶ Fasten the cover with the screws.
- ▶ Reinstall the battery (see "Using your notebook" chapter, "Inserting battery" section).
- ▶ Turn the notebook over and place it on a flat surface.
- ▶ Reconnect the cables that you disconnected before.

Settings in BIOS Setup Utility

In *BIOS Setup Utility* you can set the system functions and the hardware configuration of the notebook.

When it is delivered, the notebook is set to factory default settings. You can change these settings in *BIOS Setup Utility*. Any changes you make take effect as soon as you save and quit the *BIOS Setup Utility*.

The *BIOS Setup Utility* programme contains the following menus:

<i>Startup:</i>	for system settings such as time, date and passwords
<i>Chipset:</i>	Determining shared memory for VGA
<i>Boot:</i>	for configuring the boot sequence
<i>Exit:</i>	to exit the <i>BIOS Setup Utility</i>

Start BIOS Setup Utility

- ▶ Reboot the notebook (switch off/on or reboot operating system).

The following or a similar display appears on the screen during booting:

<F2> BIOS Setup <F12> Boot Menu

- ▶ When this message appears, press the function key **F2**.



If a password has been assigned:

- ▶ Enter the password and press the Enter key.

If you have forgotten the password, contact your system administrator or contact our customer service centre.

Operating BIOS Setup Utility

- ▶ Use the cursor key **←** or **→** to select the menu you wish to access to make changes and press the Enter key.

The menu is displayed on the screen.

- ▶ Use the cursor key **↑** or **↓** to select the field you wish to change.
- ▶ Press the Enter key.
- ▶ Press the **ESC** key to exit the selected menu.
- ▶ For future reference, make a note of the changes you have made (for example, in this manual).

Exiting BIOS Setup Utility

To exit *BIOS Setup Utility*, select the *Exit* menu from the menu bar. You can then decide which settings you want to save. The *Exit* menu offers the following options.

You must mark the required option and activate it with the Enter key.

Save the settings and exit the BIOS Setup Utility - Save Changes and Exit

Select *Save Changes and Exit* and *OK* to save the current settings and exit the *BIOS Setup Utility*. The device is rebooted and the new settings come into effect.

Default Values

To revert all the menus of *BIOS Setup Utility* to the default entries, select *Get Default Values* and *OK*.

Reject the changes and exit the BIOS Setup Utility – Exit (No save)

Select *Load Previous Value* to discard the changes you have made. The settings which were in force when *BIOS Setup Utility* was called remain effective. *BIOS Setup Utility* is terminated and the device is rebooted.

Troubleshooting and tips



Take note of the safety notes in the "Safety" manual, when you connect or disconnect cables.

If a fault occurs, try to correct it as described. If you fail to correct the problem, proceed as follows:

- ▶ Make a note of the steps and the circumstances that led to the fault. Also make a note of any error messages displayed.
- ▶ Switch the notebook off.
- ▶ Please contact the Hotline/Help Desk.

The telephone numbers are contained in the supplied help desk list. Please have the following information ready when you call:

- The model name and serial number of the notebook. The serial number is located on a sticker on the underside of the notebook.
- Notes of any messages that appear on the screen and information on acoustic signals.
- Any changes you have made to the hardware or software after receiving the notebook.
- Any changes you have made to the *BIOS Setup* settings after receiving the notebook.
- Your system configuration and all peripheral devices connected to your system.
- Your sales contract.

Restoring installed software



Please create backup copies of your files on a regular basis. If data is damaged or lost, you can restore your applications using the original data carriers. However, if you do not have backup copies of your own data files, they cannot be restored.

If your Operating System will not start, or if there are errors on the hard disk, the pre-installed software may have to be re-installed.

The following resources are included with your computer:

- "Fujitsu Siemens Product Recovery CD-ROM" CD/DVD
 - "Drivers & Utilities" CD/DVD
 - Special component driver CDs (optional)
 - Manual for the Windows Operating System
 - CoA (Certificate of Authenticity) Label
- You are not asked for this registration code when restoring Windows XP.

Using these resources, you can completely restore the installed software as described below.

Restoring the operating system



We strongly recommend that you back up all your data files before re-installing the Operating System, as far as this is possible, as the restore process deletes all files from your hard disk. You must re-install all the programs you have installed since purchasing your computer and then restore your data files using the backup copies.

If an error message (blue screen) appears after repeated starting (booting), restart your computer. During the boot process, press the **[F8]** key at short intervals until the message *Extended Windows start options* appears. Select *Last known working configuration*.

If this operation is unsuccessful, reinstall the Operating System as described below:

1. Switch the computer on.
2. Insert the "Fujitsu Siemens Product Recovery CD-ROM" CD/DVD that came with your computer into the CD/DVD drive and close it.
3. Switch your computer off, wait a moment and then switch it on again.
4. When you see the prompt on the screen *Press any Key to boot from CD...* press any key on the keyboard. The installation program starts, and the *Windows Setup* menu appears on your screen.
Your computer will load files it needs from the CD/DVD drive to restore Windows XP on your computer. This can take a few minutes.
5. After the relevant files have been loaded, the *Windows XP Home Edition Setup* menu appears. Press Enter to continue.
6. The setup process will pause and you will see the *Windows XP Home Edition License Agreement* on the screen. To continue with the setup you must accept the agreement. Press **[F8]** key.
7. In the next screen that appears, press **[Esc]** for *Don't Repair*.
8. In the following menu select *C: ...*, press **[D]** and confirm by pressing the Enter key.
9. Next press **[L]** and confirm by pressing the Enter key.
10. In the following menu, the option *Format with NTFS file system* is available. Choose this option to erase your hard disk.
Your computer will now examine the hard disk and then automatically copy files from the CD/DVD drive to continue the recovery process. This will take several minutes. During this process your computer will also restart automatically. After the restart, Windows XP will begin the setup process.

11. The setup process will pause and you will see the *Windows XP Home Edition License Agreement* on the screen. To continue with the setup you must accept the agreement. Click on the button marked *I accept this agreement* and then click on the box marked *Next*.
The Windows XP setup process will continue to install the necessary files and devices onto your computer. This will take several minutes. During this process Windows XP will tell you what it is doing.
12. The setup process will pause to ask you to enter your name and organisation. You must enter a name though you do not have to enter an organisation. When you have entered your details click on the box marked *Next*.
13. You will be prompted to enter a name for the computer. Windows XP will suggest a name but you may change this if you wish. Click on the *Next* button to continue.
The Windows XP setup process will continue installing the files it needs. This will take several minutes. During this process Windows XP will tell you what it is doing. Your computer will automatically restart and the setup process will continue.
14. The following prompt will appear on the screen:
To improve the appearance of visual elements, Windows will automatically adjust your screen resolution.
Click on the *OK* button. After the screen has been adjusted, Windows XP will ask you to confirm that you can read some text. Click on the *OK* button.
15. Windows XP presents you with a screen welcoming you to Microsoft Windows. To continue, click on *Next* in the bottom right-hand corner of the screen.
16. You need to enter the name of each person who will use the computer. You may enter up to five names. At least one name must be entered. A separate user account will be set up for each user. When you have finished, click *Next* in the bottom right-hand corner of the screen.
17. Click on *Finish* in the bottom right-hand corner of the screen. Windows XP completes the installation process.
18. Remove the "Recovery CD-ROM" from the CD/DVD drive and store it in a safe place.
19. Now follow the process in the "Restoring drivers, manuals and special software" section to install the software drivers for the components such as the modem on your computer.

Restoring drivers, manuals and special software

Restoring drivers

Drivers can be restored without having to re-install Windows. You can restore all pre-installed utilities, viewers and drivers without affecting the Windows Operating System.

1. Insert the "Drivers & Utilities" CD/DVD into the CD/DVD drive while Windows is running.
2. Click on *Driver Installation* when you see the menu.
3. Click on *Install*. All drivers for the components that were on the computer when purchased are now reinstalled. You cannot stop the installation process once it begins.

Once the installation process is complete your computer will automatically restart.

If your computer has an optional Drivers CD for components, follow the on-screen instructions.

Restoring the online documentation

1. Insert the "Drivers & Utilities" CD/DVD into the CD/DVD drive while Windows is running.
2. Select *Documentation* from the menu. The online manuals for your computer will be installed.

Restoring additional software

1. Insert the "Drivers & Utilities" CD/DVD into the CD/DVD drive while Windows is running.
2. Select *Additional Software* from the menu and follow the on-screen instructions.

The notebook's date or time is incorrect

- ▶ Set the time and/or date in the *Startup* menu of the *BIOS Setup Utility*.



If the date and time are repeatedly incorrect when you switch on the notebook, the buffer battery that supplies the internal clock is dead. Please contact your sales outlet or our hotline/help desk.

The LCD screen of the notebook remains blank

Monitor is switched off

- ▶ Press a key or enter the password

External monitor or television set connected

- ▶ Press the key combination **[Fn] + [F5]** (selecting internal/external display).

The LCD screen is difficult to read

Reflection

- ▶ Turn the notebook or alter the tilt of the LCD screen.

The external monitor stays blank

If your screen remains blank this may be due to the following:

Monitor is switched off

- ▶ Switch the external monitor on.

Power saving has been activated (screen is blank)

- ▶ Press any key to continue.

Brightness is set too dark

- ▶ Adjust the brightness of the monitor.

Screen output is set to the notebook's LCD screen

- ▶ Press the key combination **[Fn] + [F5]** (selecting internal/external display).

The external monitor's power cable or data cable is not connected properly

- ▶ Switch off the external monitor and the notebook.
- ▶ Check whether the power cable is plugged properly into the external monitor and into the power socket.
- ▶ Check whether the data cable is properly connected to the notebook and the external monitor (if it is plugged in with a connector).
- ▶ Switch on the external monitor and the notebook.

The external monitor is blank or the image is unstable

The wrong external monitor has been selected or the wrong screen resolution has been set for the application programme.

- ▶ End the application programme under Windows with **[Alt] + [F4]**. If the fault continues to occur after ending the programme, switch over to the notebook's internal LCD screen with **[Fn] + [F5]**. Change the following setting:
- ▶ Select the correct monitor or set the correct screen resolution.
 - Setting the screen resolution: Select *Start - Control Panel - Appearance and Themes - Advanced - screen resolution* and then the screen resolution you require.
 - Selecting the monitor: Select the correct monitor under *Start - Control Panel - Appearance and Themes - Display - Settings - Advanced - Display*.

The notebook cannot be started

The battery is not installed correctly

- ▶ Switch the notebook off.
- ▶ Check whether the battery is installed correctly in its compartment.
- ▶ Switch the notebook on.

The battery is dead

- ▶ Charge the battery.

Or

- ▶ Install a charged battery.

Or

- ▶ Connect the mains adapter to the notebook.

The mains adapter is not connected correctly

- ▶ Switch the notebook off.
- ▶ Check whether the mains adapter is connected correctly to the notebook.
- ▶ Switch the notebook on.

The notebook stops working

The notebook is in Standby or Suspend mode

- ▶ Reactivate the notebook by pressing a key (Standby mode) or by switching it back on (Suspend mode).

An application programme has caused the malfunction

- ▶ Close the application programme or restart the notebook by switching it on/off or with a warm boot.

The battery is dead

- ▶ Charge the battery.

Or

- ▶ Install a charged battery.

Or

- ▶ Connect the mains adapter to the notebook.

The printer does not print

- ▶ Make sure that the printer is switched on and is on-line (see the manuals supplied with the printer).
- ▶ Check that the cable connecting the notebook and the printer is connected properly.
- ▶ Check whether the correct printer driver is loaded (see printer documentation).

The DVD film does not continue to play

Should the picture freeze when playing some DVD films, deactivate the accelerated hardware decryption (it is activated in the default setting; this can be recognised from the checkmark in the corresponding checkbox).

- ▶ Open the drive tray.
- ▶ Place the DVD in the drive tray with the label facing upwards.
- ▶ Push in the drive tray until you feel it lock into place.
- ▶ Wait until the WinDVD starts.
- ▶ Press the right mouse button or touchpad key.

A context menu appears.

- ▶ Click on *Configuration* and then on *Video*.
- ▶ Click on the checkmark in the checkbox of *Hardware Acceleration*.

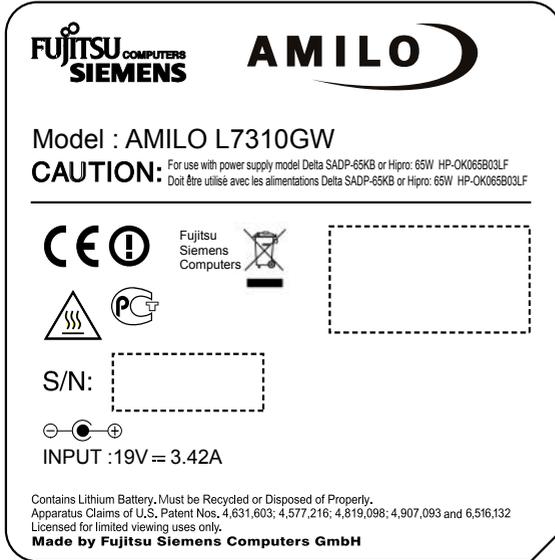
The checkmark disappears.

- ▶ Click on *OK*.

The function is now deactivated.

Technical data

To find the correct technical data for your device, see the device information plate. The device information plate is located on the underside of the device.



Model designation (example AMILO L7310G)

Notebook

Environmental conditions

Environment class (3K2)

Temperature

- Operation (3K2): 5 °C 35 °C
- Transport (2K2): -15 °C 60 °C

Width x Depth x Height (front/back): 353.8 mm x 250 mm x 25/32 mm

Weight (depending on configuration): approx. 3 kg



The data sheet of this notebook contains further technical data. You will find the data sheet on the "Drivers & Utilities" CD/DVD supplied and on the Internet at www.fujitsu-siemens.com.

Battery

4-cell rechargeable battery

Charging time (when not in operation):	approx. 2.5 hours
Operating time	approx. 1.5 hours (depending on application)

6-cell rechargeable battery

Charging time (when not in operation):	approx. 3.0 hours
Operating time	approx. 2.5 hours (depending on application)

Mains adapter 65 W

Main

- Rated voltage: 100 V to 240 V (automatic)
- Frequency: 50 Hz to 60 Hz (automatic)

Sub

- Rated voltage: 19 V
- Max. rated current: 3.42 A

You can readily order an additional mains adapter and an additional power cable.

Manufacturer's notes

Disposal and recycling

Further information can be found on the "Drivers & Utilities" CD/DVD provided with your computer.

Declarations of Conformity

You will find the Declaration of Conformity for the AMILO on the Internet at: www.fujitsu-siemens.com. Hereby, Fujitsu Siemens Computers, declares that the AMILO is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Copyright-protected technology

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 authorised by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

CE marking



CE marking for devices without radio component

The shipped version of this device complies with the requirements of the EEC directives 89/336/EEC "Electromagnetic compatibility" and 73/23/EEC "Low voltage directive".



CE marking for devices with radio component

This equipment complies with the requirements of Directive 1999/5/EC of the European Parliament and Commission from 9 March, 1999 governing Radio and Telecommunications Equipment and mutual recognition of conformity.

This equipment can be used in the following countries:

Belgium	Denmark	Germany	Estonia
Finland	France	Greece	UK
Ireland	Iceland	Italy	Latvia
Liechtenstein	Lithuania	Luxemburg	Malta
Netherlands	Norway	Austria	Poland
Portugal	Sweden	Switzerland	Slovakia
Slovenia	Spain	Czech Republic	Hungary
Cyprus			

Contact the corresponding government office of the respective country for current information on possible operating restrictions. If your country is not included in the list, then please contact the corresponding supervisory authority as to whether the use of this product is permitted in your country.

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