
The modem can be operated in the following countries:

Multifrequency (MFC) dialling

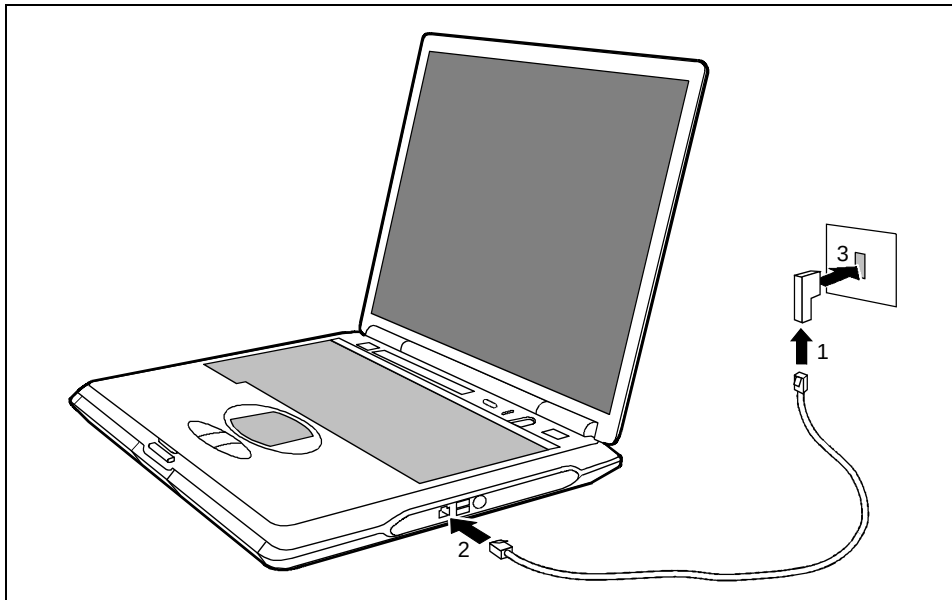
Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Holland, Ireland, Iceland, Italy, Luxembourg, Norway, Austria, Portugal, Sweden, Switzerland and Spain.

Pulse dialling:

Belgium, France, Holland and Italy.

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

Connecting notebook modem to telephone connection



- Ê Connect the modem cable supplied to the country-specific telephone adapter (1).
- Ê Connect the modem cable to the modem port of the notebook (2).
- Ê Connect the modem cable to your telephone wall socket (3).

PC cards

Two PC card slots enable the notebook to operate two type II PC cards or one type III PC card (CardBus or PCMCIA) .

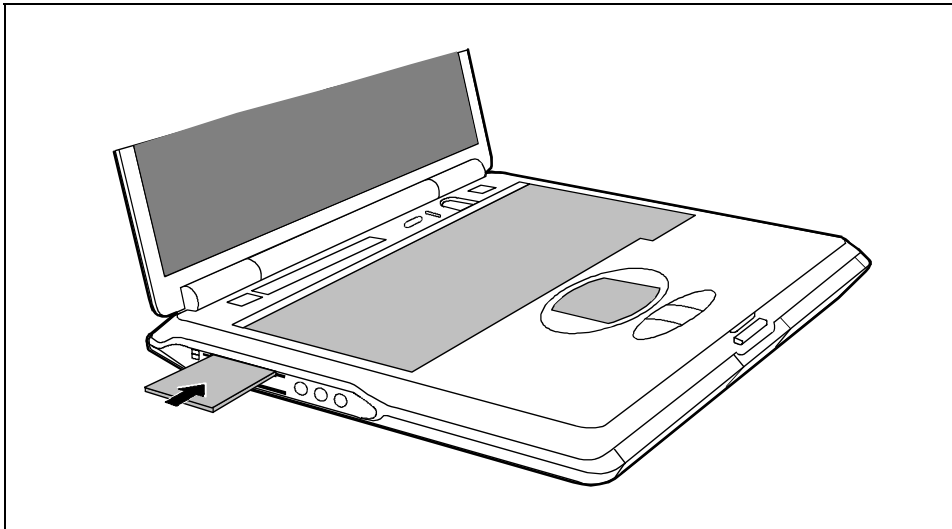


Consult the documentation supplied by the PC card's manufacturer and follow the instructions provided.

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



Ê Insert the PC card, contacts first, into the lower slot guide. The labelled side of the PC card must be facing upward.

Ê 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.

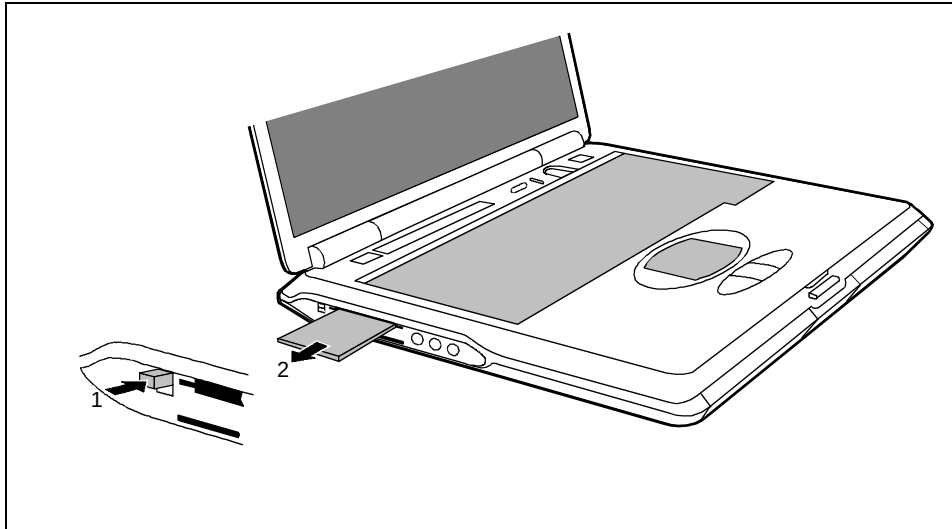
For further information refer to the information files (e.g. *.TXT, *.DOC, *.WRI or *.HLP) provided on the PC card driver diskette or the information in the operating system manual.

You can push the PC card slot eject buttons into the notebook casing. Press the eject buttons until they snap in.

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Removing a PC card



- Ê Press the eject button (1). It will project further out of the notebook's case. If the eject buttons are pushed in flush with the notebook casing, they must first be snapped out. Press the eject buttons until they snap out.
- Ê Slide the PC card out of the notebook (2).

SmartCards

The SmartCard slot enables the notebook to operate one SmartCard.

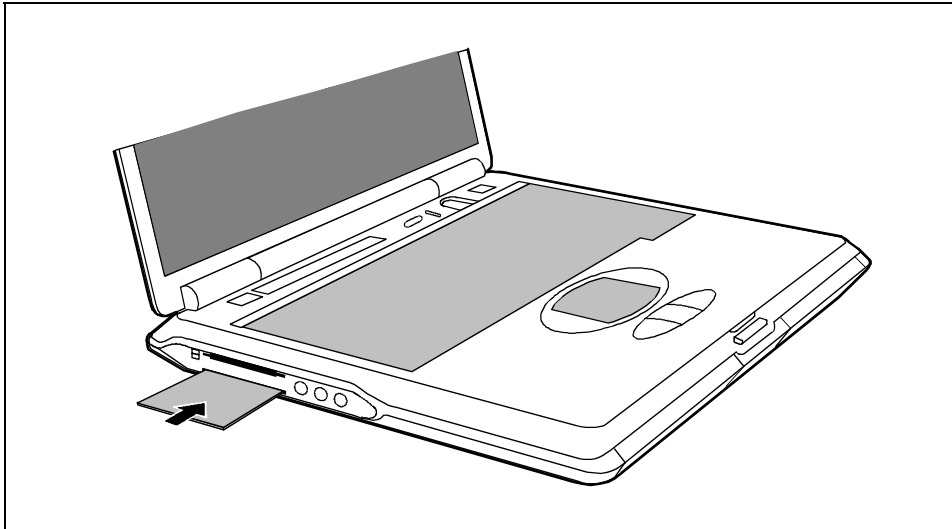


Consult the documentation supplied by the SmartCard's manufacturer and follow the instructions provided.

Never use force when installing or removing a SmartCard.

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

Inserting a SmartCard



- Ê Insert the SmartCard, contacts first, into the lower slot guide. The labelled side of the SmartCard must be facing upward.
- Ê Gently push the SmartCard into the slot until you feel it click into place.



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

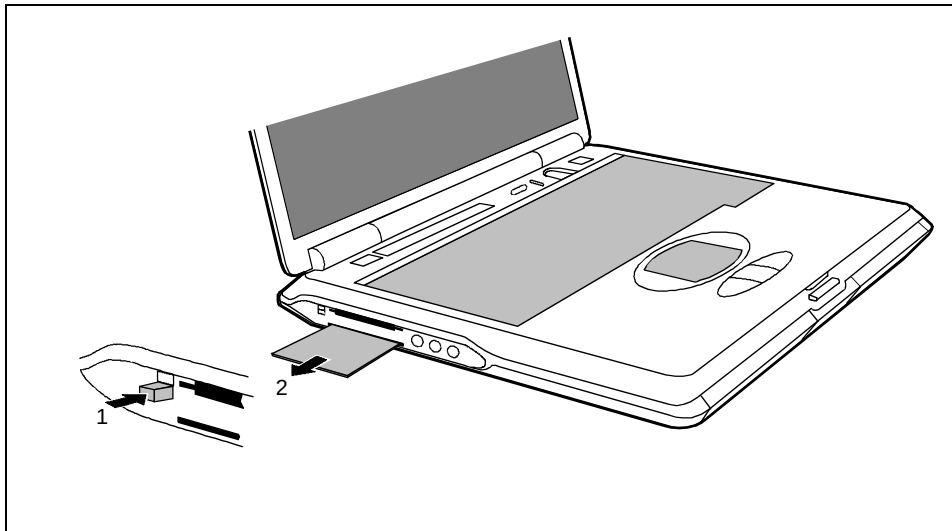
For further information refer to the information files (e.g. **.TXT*, **.DOC*, **.WRI* or **.HLP*) provided on the SmartCard driver diskette or the information in the operating system manual.

You can push the SmartCard slot eject buttons into the notebook casing. Press the eject buttons until they snap in.

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Pulling out a SmartCard

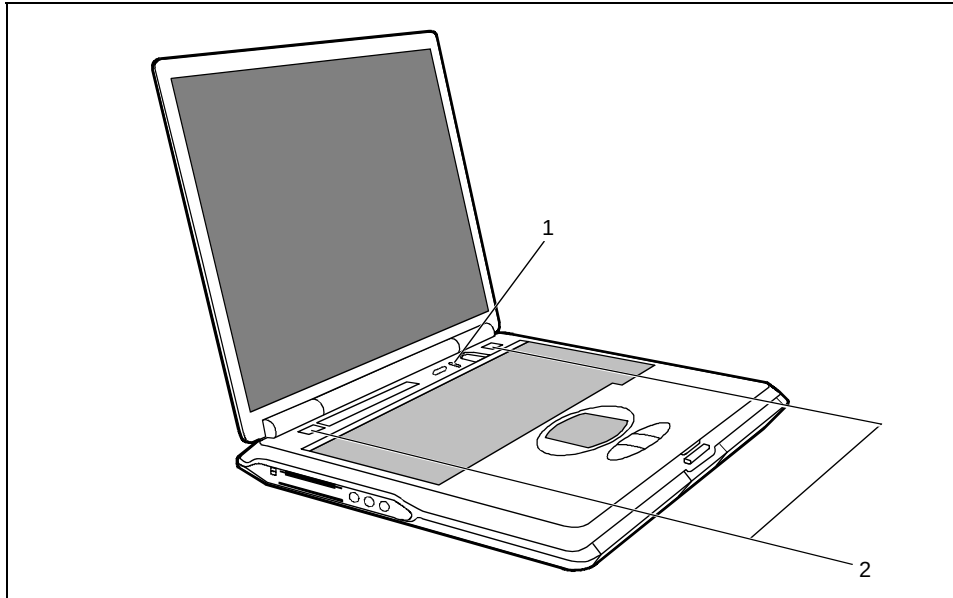


- Ê Press the eject button (1). It will project further out of the notebook's case. If the eject buttons are pushed in flush with the notebook casing, they must first be snapped out. Press the eject buttons until they snap out.
- Ê Slide the SmartCard out of its location (2).

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Microphone and loudspeakers



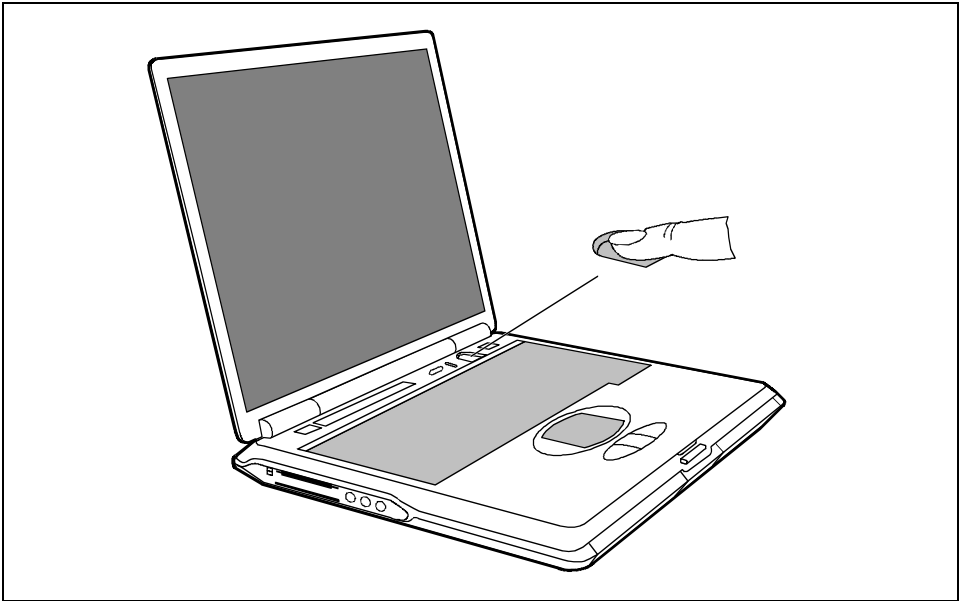
a = built-in microphone

b = built-in loudspeakers

Your notebook contains a built-in microphone (a) and two loudspeakers (b).

If you attach an external microphone, the built-in microphone is disabled. The internal loudspeakers switch off when you attach headphones or external loudspeakers to the audio jack.

Fingerprint ???



The notebook is equipped with a fingerprint reader. Instead of entering a user password, you can also log on to the system with a fingerprint. Before you can use the fingerprint reader, you must install the driver provided on the CD.

Bluetooth Keyboard Product Specification

Product	Bluetooth Keyboard
Radio Specification	[1] Frequency range: 2.402 – 2.480 GHZ [2] RF output Power: Class 3 [3] Receiver Sensitivity: -70dBm at 0.1% BER [4] Cover distance: 3 meter (max)
Electrical Characteristics	[1] Power supply: Transmitter board at keyboard site will be powered by Li-ion 1100 mAh battery; receiver board at PC site is powered by 5Volt DC through USB connector [2] Power consumption: 80 mA max. (Transmitter board) [3] Visual indicator: LED indicators: Caps Lock, Num Lock, Scroll Lock, Battery status, Bluetooth connection status [4] Auto reconnecting:

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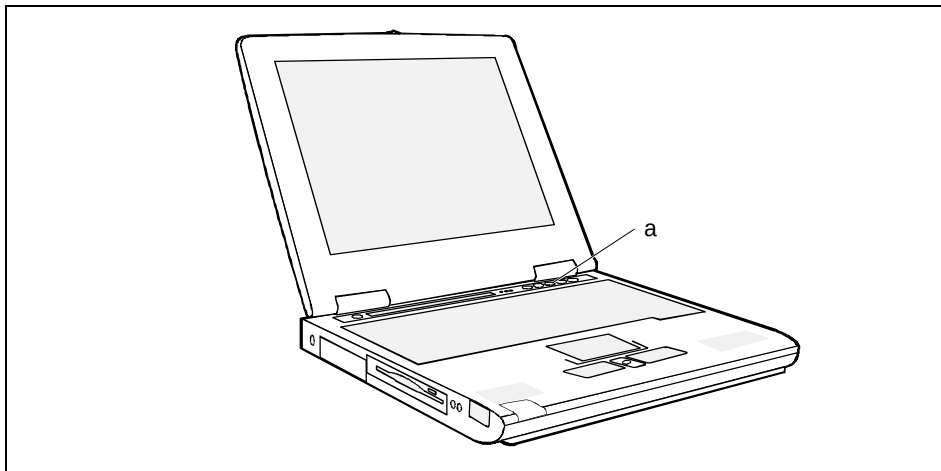
錯誤! 尚未定義樣式。

	Automatically re-connect keyboard with notebook PC [5] Batter life: 24 hour (20,000 times key press)
Intended use/purpose of the equipment	Notebook with detachable K/B which can wireless communicate Notebook
Type of modulation	GFSK
Channel spacing	1Mhz
Designation of emission	ETSI 300 328 ETSI 300 826
Transmit RF power or power range	-6 dBm ~ 0dBm
Duty cycle	625us
Channel access protocol	TDMA
Duplex direction	Duplex
Antenna Type	Micro Strip ANT Peak Gain > 3dBi, <-5dBi Vswr<= 2 Return loss <= -10 dBm
Reference standard or other specification	Bluetooth spec. V1.1

Property and data protection

Your notebook enables you to protect your system and personal data in a number of ways against unauthorised access. By combining these options, you can achieve maximum protection for your system.

Security panel



a = Security panel

The security panel enables you to protect your notebook from unauthorised use with a hardware password. When a Security Panel password is activated, the notebook will not start without the correct insertion of a password. The password is entered before the BIOS is read out and the hardware activated.

The password is requested from all suspend and resume modes. As a result, a security level is also provided with the energy-saving mode activated.

The Security Lock function can be used when the notebook is started from the Resume mode, when switched off and from the Save-to-Disk mode.

Password protection of Save-to-RAM Mode is also supported. This function can be deactivated in the **BIOS Setup**. In the **Security Panel on Resume** menu the default value is set to **Enable** at the factory.

It is possible to assign a supervisor password and a user password.



If you have forgotten your user password, you can use the supervisor password to reset the user password, and you can then enter a new user password.

If the security panel is active and you have forgotten both passwords, please contact your our Hotline/Help Desk.

The supervisor password must be set so that the notebook can be unlocked again, and so that a new user password can be assigned when the existing one has been forgotten.

No passwords are assigned when the notebook is delivered. The passwords can be assigned with the **FJSECS.EXE** (supervisor password) and **FJSECU.EXE** (user password) programmes. The supervisor password and the user password can be assigned with up to 4 key entries. Multiple keys (1+2) can be used together as one key entry.



The supervisor password has to be set before the user password can be assigned.

Assigning a supervisor password

The setup programme can be found under **Start - AddOn Software**.

Ê Enter the programme name **FJSECS.EXE** under **Start - Run**.

Ê Click on **OK**.

Ê Follow the instructions of the programme.

Assigning a user password

The setup programme can be found under **Start - AddOn Software**.

Ê Enter the programme name **FJSECU.EXE** under **Start - Run**.

Ê Click on **OK**.

Ê Follow the instructions of the programme.

Examples of possible password combinations

"1" + Enter

"1" + "2" + Enter

"1" + "2" + "3" + Enter

"1" + "2" + "3" + "4" + Enter

("1"+"2") + ("1" + "2" + "3") + ("1" + "2" + "3" + "4") + "1" + "2" + Enter



("1" + "2") means that the key "1" and "2" must be pressed simultaneously.
"Enter" refers to the Enter key of the Security Panel under the LCD screen.

Password error alarm

If a password is entered incorrectly three times, a one-minute alarm is triggered. If the correct password is entered during the alarm, the notebook starts up normally.

After one minute the notebook stops the alarm. The user must press the Suspend/Resume key to start or enter the Resume mode.

After pressing the Suspend/Resume button, the notebook is locked again; the user must now enter the correct user password again. If the entry is correct, the notebook will start.

Security functions under Windows

Under Windows you can activate a screen saver and protect it with a password. Only those users who know the password can deactivate the screen saver and access any open files.

BIOS Setup security functions

The **Security** menu in **BIOS Setup** offers you various options for protecting your personal data against unauthorised access. By combining these options, you can achieve maximum protection for your system.

Preventing unauthorised **BIOS Setup** entry

You can activate this protection by setting a supervisor or a user password in the **Security** menu (**Set Supervisor Password/Set User Password**).

Preventing unauthorised system access

You can activate this protection by setting a password in the **Security** menu. In addition, you must select the entry **Enabled** in the **Password on boot** field.

Preventing unauthorised access to the hard disk drives

You activate this protection when you set a hard disk passwords in the **Hard Disk Security** submenu of the **Security** menu. To do this, set the entry **HDD password** to **Enabled** and assign your password.

If set, the hard disk passwords are checked at each system startup, regardless of whether **Password On Boot** is set to **Enabled** or **Disabled**.

Preventing unauthorised access to floppy disk drive

To activate this protection, select the value **Supervisor** for the **Diskette access** field in the **Security** menu.

Setting passwords

A user password can only be set if a supervisor password has been assigned. The supervisor or user password prevents unauthorised callup of **BIOS Setup**. Only those who know one of the two passwords can call **BIOS Setup**.

With the supervisor password you have access to all functions of the **BIOS Setup**. With the user password you only have access to part of the functions of the **BIOS Setup**.

The user password also prevents unauthorised access to your notebook. With the user password you can prevent booting of the operating system. Only those who know the user password can access the system.



Passwords can be up to eight characters long. All alphanumerical characters can be used; no differentiation is made between upper-case and lower-case.
Passwords are not displayed as they are entered.
If you have forgotten a password, contact your system administrator or contact our customer service centre.

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To set or change a password, proceed as follows:

Ê Call **BIOS Setup** and select the **Security** menu (see chapter "Settings in BIOS Setup"). You must additionally change into the **Hard Disk Security** submenu for the hard disk passwords.

Ê Mark the **Set Supervisor Password** or **Set User Password** field and press the Enter key.

You are asked to enter a password:

Enter new Password:

Ê Enter the password and press the Enter key.

You are asked to confirm the password:

Re-enter new Password:

Ê Enter the password again and press the Enter key.

The new password is saved.

Notice: Changes have been saved [continue]

Ê To prevent booting of the operating system, mark the **Password on boot** field and select the value **Enabled**.

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

Ê Select the option **Exit Saving Changes** in the **Exit** menu.

The notebook is rebooted and the new password is effective.

Cancelling passwords

Supervisor / User password



If you cancel the supervisor password, you automatically deactivate the user password.

To cancel a password (without setting a new password):

Ê Call **BIOS Setup** and select the **Security** menu (see chapter "Settings in BIOS Setup").

Ê Mark the **Set Supervisor Password** or **Set User Password** field and press the Enter key.

You are asked to enter a password:

Enter new Password:

Ê Press the Enter key twice.

Ê Select the option **Exit Saving Changes** in the **Exit** menu.

The notebook is rebooted and the password is cancelled.

Hard disk password

To cancel a password (without setting a new password):

Ê Call **BIOS Setup** and select the **Security** menu (see chapter "Settings in BIOS Setup").

Ê Change into the submenu **Hard Disk Security**.

Ê Set the entry **HDD password** to **Disabled** in the **Hard Disk Security** submenu.

You are asked to enter a password:

Enter new Password:

Ê Press the Enter key twice.

Ê Select the option **Exit Saving Changes** in the **Exit** menu.
The notebook is rebooted and the password is cancelled.

Access protection with SICRYPT PC Lock

With SICRYPT PC Lock you can protect your system from unauthorised booting. Then a system can only be booted when the user inserts a valid SmartCard in the SmartCard reader and enters his/her personal code number (PIN). To use PC Lock you require the following components:

- External or internal SmartCard reader
- PC Lock installed (see manual "BIOS Setup")
- SICRYPT SmartCard



There are two different SmartCards - the Admin SmartCard and the User SmartCard. These differ in their memory capacity. In addition to the access permissions, you can also save other safety options on the Admin SmartCard (e.g. fingerprints with the **Smarty 2** software).

PC Lock controls access to your PC. When a SmartCard is initialised, permissions are assigned for system access (system, setup, system+setup, admin). You can configure several SmartCards for one system and initialise them with different permissions.

In this way users can be divided into user groups. Users of a user group use SmartCards with the same permissions.

Additional instructions for PC Lock



Do not use PC Lock on systems controlled by tele-maintenance. If a SmartCard is inserted and the User PIN must be entered, an automatic system boot is blocked. For example, this is the case with "Wake On LAN", or when software is to be installed via the network that requires a system reboot.

After you have initialised the first SmartCard, the entry **PC-Lock** can no longer be deactivated (**Disabled**) in the **BIOS Setup**.

If you also want to use other security software in addition to PC Lock (e.g. **SmartGuard Pro**), please read the documentation on your security software beforehand.

PC Lock permissions

You can initialise a SmartCard with one of the following permissions:

System	The system starts following entry of the user PIN. You can change the user PIN.
Setup	You can open and change the BIOS Setup and change the user PIN.
System+Setup	The system starts following entry of the user PIN. You can open and change the BIOS Setup and change the user PIN.
Admin	The system starts following entry of the user PIN. You can change the user PIN an the administrator PIN, unlock locked SmartCards, open and change the BIOS Setup and generate additional SmartCards for this system.

For instructions on how to install and operate SICRYPT PC Lock, and how to initialise SmartCards, see the "BIOS Setup" manual.

Operating the SmartCard reader

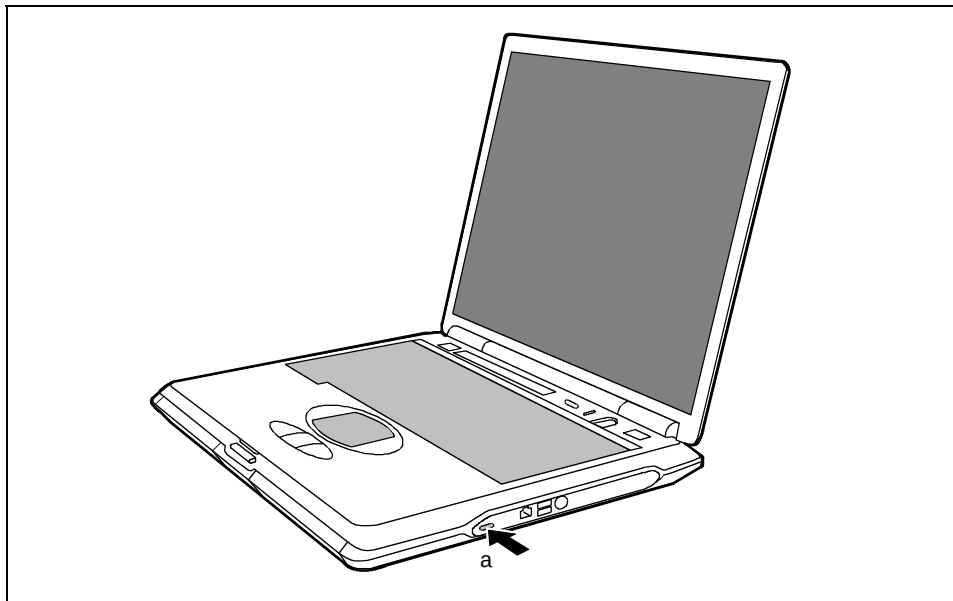
- Operating the internal SmartCard reader

You can switch on the PC by inserting your SmartCard. If the SmartCard reader has been released, the SmartCard reader indicator on the front of the PC flashes green.

- Operating the external SmartCard reader

After the PC is switched on, you will be prompted to insert your SICRYPT SmartCard.

Kensington Lock



a = Kensington Lock

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You can protect your notebook from theft with the Kensington Lock device (a) and a Kensington MicroSaver.



Connecting external devices



Under all circumstances, please observe the safety notes provided in the "錯誤! 找不到參照來源。" chapter.

Read the documentation on the external device before connecting it.

Do not connect or disconnect cables during a thunderstorm.

Do not pull on the cable when disconnecting a cable. Always take hold of the actual plug.

Adhere to the order described in the following when you connect external devices to the notebook or separate them from the notebook:

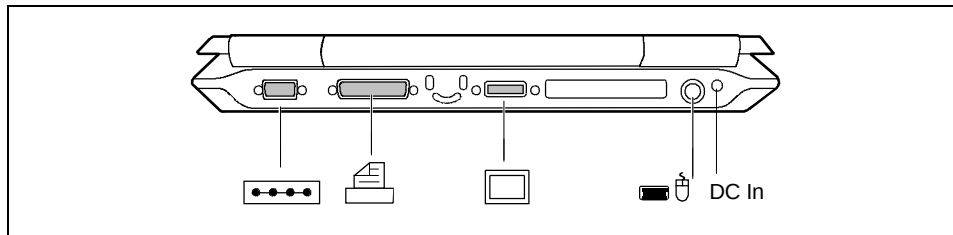
Connecting devices to notebook

- 1) Turn off all power and equipment switches.
- 2) Pull all power plugs out of grounded mains outlets.
- 3) Connect all the cables to the notebook and the external devices.
- 4) Plug all data communication cables into the utility sockets.
- 5) Plug all power cables into the mains supply.

Disconnecting devices from notebook

- 1) Turn off all power and equipment switches.
- 2) Pull all power plugs out of grounded mains outlets.
- 3) Unplug all data communication cables from the utility sockets.
- 4) Disconnect all the cables from the notebook and the external devices.

Ports



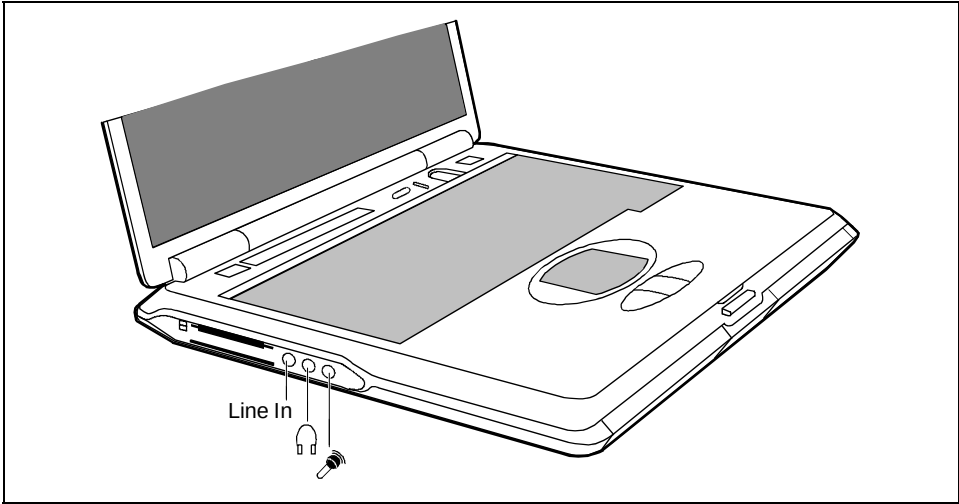
Connections on the rear



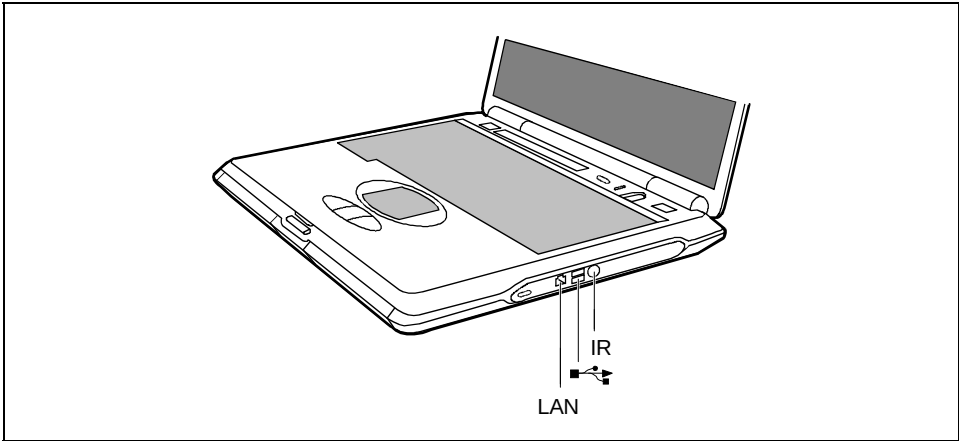
The connection without a symbol (second connection from the right) is the docking connection. It makes the connection between the devices when you dock the notebook to a docking device.

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Connections on the left side



Connections on the right side

The ports are marked with the following symbols (or with similar symbols):

LAN	LAN-port (Local Area Network, for Network connection)	DC In	Port for power adapter
	PS/2 port (for keyboard or mouse)		Headphones port
	Parallel port		Microphone connector
	Monitor port	IR	Infrared port
TV	TV out socket (video output)		USB port
	Serial port		Modem connector



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. The screen controller in your notebook supports extended SXGA resolutions of up to 1280x1024/60 Hz and 16 bit colour depth.

- Using the **[Fn] + [F10]** key combination you can switch back and forth between the external monitor and the LCD screen.
- If your notebook is equipped with a TFT monitor, you can display the same picture on the external monitor and the LCD screen simultaneously.

- Ê Switch off the notebook and the external monitor.
- Ê Connect the external monitor to the monitor port on your notebook.
- Ê First switch on the monitor and then the notebook.

Setting the refresh rate for your external monitor

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

- Ê To change the refresh rate or resolution select the monitor type in the menu **Start - Settings - Control Panel - Display - Settings - Advanced - Monitor**.
- Ê Now select the **Adapter** tab.
- Ê Adjust the refresh rate and then 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 an external keyboard

You do not need to switch off your notebook.

- Ê Simply connect the external keyboard to the PS/2 port on your notebook.

Connecting an external PS/2 mouse

You do not need to switch off your notebook.

- Ê Simply connect the mouse to the PS/2 port on your notebook.

Connecting a serial mouse

- Ê Switch off the notebook.
- Ê Connect the mouse to the parallel port on your notebook.
- Ê Switch the notebook on.
- Ê Run the mouse service programme under *Start - Settings - Control Panel* and select the *General* tab.
- Ê Select the correct mouse type.
- Ê Restart the notebook.

Using the parallel port

- Ê Switch off the notebook.
- Ê Connect the data cable of the printer to the parallel port on the notebook.
- Ê Plug the power cable of the printer into the mains outlet.
- Ê First switch on the printer, then the notebook.

Using the serial port

- Ê Switch off the notebook.
- Ê Connect the data cable of the printer to the parallel port on the notebook.
- Ê Plug the power cable of the printer into the mains outlet.
- Ê First switch on the printer, then the notebook.

Establishing an infrared connection

Using the infrared software for Windows, you can communicate with another PC or printer equipped with an infrared interface.



Before you can establish an infrared connection, you must have activated the infrared software. Additional information on the infrared interface is contained in the Windows help in the Start menu under the topic "Infrared".

Configuring the infrared connection

By default, the mode for the infrared port is set to **FIR** in the **BIOS Setup** ("Fast IrDA Mode"). If you want to communicate with a system on which Windows ME is not running, you can change the setting to **IrDA**. Please note that **IrDA** is the slower mode and is generally used on older computers.

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 allows cables from USB devices to be connected and disconnected with the system switched on.

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

Ê Connect the data cable to the external device.

Ê Connect the data cable to a USB port .



Device drivers

The devices you connect to the USB ports usually require no driver of their own, as the required software is already included in the operating system. However, if the USB device requires its own software, please install it from the data carrier provided with the USB device.

Operating notebook with docking device

Docking devices turn notebooks into convenient standard workstations in a flash. Only the Port Replicator II-L can be used as a docking device for this notebook.

For additional information on the Port Replicator II-L, also see the documentation on the docking devices.



You should install your notebook's software (operating system, device drivers) before docking your notebook the first time.

Connections for external devices on the Port Replicator II-L

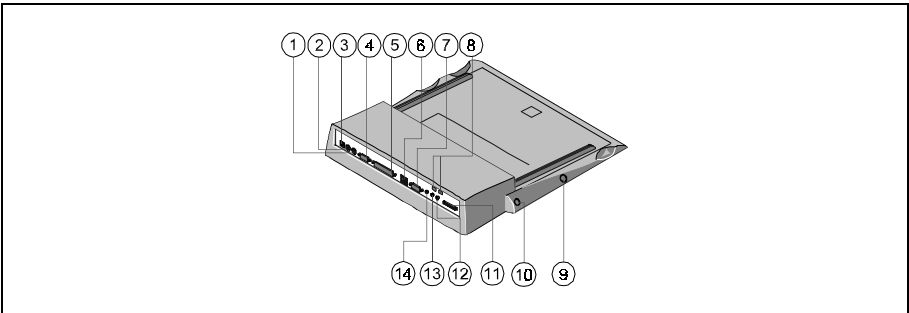
The ports for external devices are on the rear of the port replicator II-L. The standard ports are indicated by symbols.

- i**

The LAN connection on the Port Replicator II-L only functions when your notebook is equipped with an internal LAN or modem/LAN module. Otherwise this connection is inoperative.
- i**

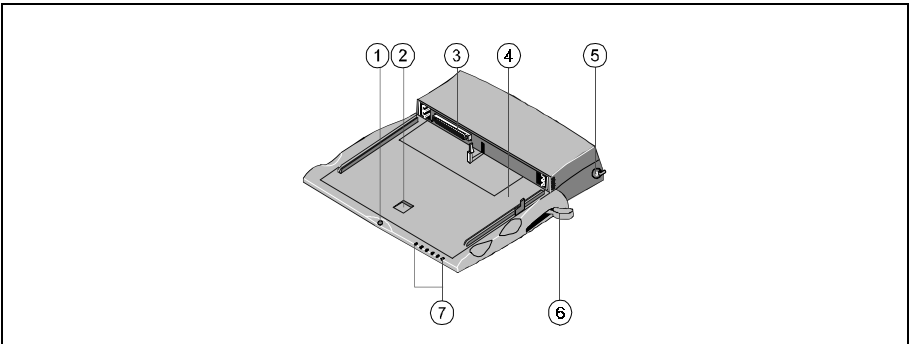
The serial, parallel and audio ports can be configured in the **BIOS Setup** of the notebook. Some of the devices that you connect require special drivers (e.g. a printer driver for the printer). For information on which driver you need to install and where, please refer to the documentation for the device concerned.

The following illustration shows the positions of the connections on the II-L port replicator.



- | | |
|---------------------|---|
| 1 = Keyboard port | 8 = LAN connector |
| 2 = PS/2 mouse port | 9 = ON/OFF switch (Standby button) |
| 3 = DC jack (DC IN) | 10 = Reset button |
| 4 = Serial port | 11 = Connection for floppy disk drive*) |
| 5 = Parallel port | 12 = Audio input (Line in) |
| 6 = Two USB ports | 13 = Microphone connector |
| 7 = Monitor port | 14 = Headphones port |

*) has no function on this LIFEBOOK C-Serie



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- | | |
|---------------------------------------|------------------------|
| 1 = Eject button*) | 5 = Kensington Lock |
| 2 = Platform release lever | 6 = Manual eject lever |
| 3 = Docking port | 7 = Indicators*) |
| 4 = Device-specific platform (Tray F) | |

*) has no function on this LIFEBOOK C-Serie

Indicators on the II-L port replicator

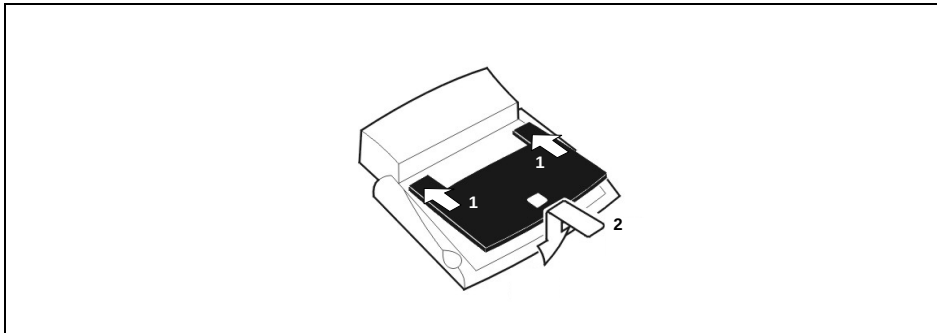


The indicators and the eject button on the front of the Port Replicator II-L are covered by the device platform of this LIFEBOOK C-Serie, and are therefore inoperative.

Mounting the Tray

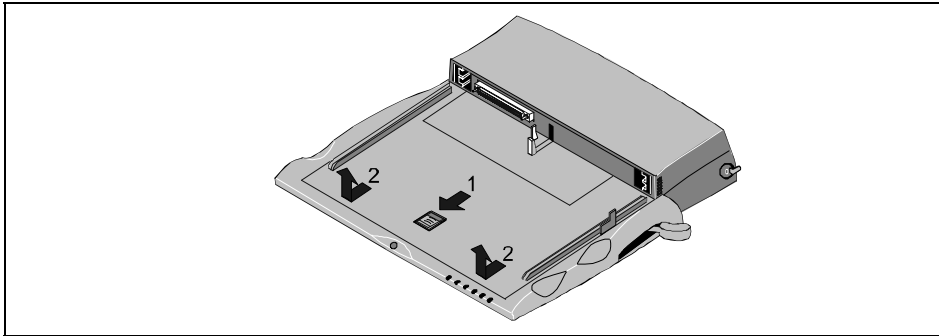
A Tray assumes the mechanical adaptation of the notebook to the docking device. You must mount the Tray on the docking device before you can dock the notebook.

For this LIFEBOOK C-Serie you require the device platform F.



- Ê Hold the Tray at an angle over the docking device and push the Tray straight into the notches in the docking device (1).
- Ê Press down the front corners of the Tray (2) until they engage.

Removing the Tray



- Ê Push the release (1) in the direction of the arrow until the Tray is released on both sides.
- Ê Remove the Tray (2).

Docking the notebook

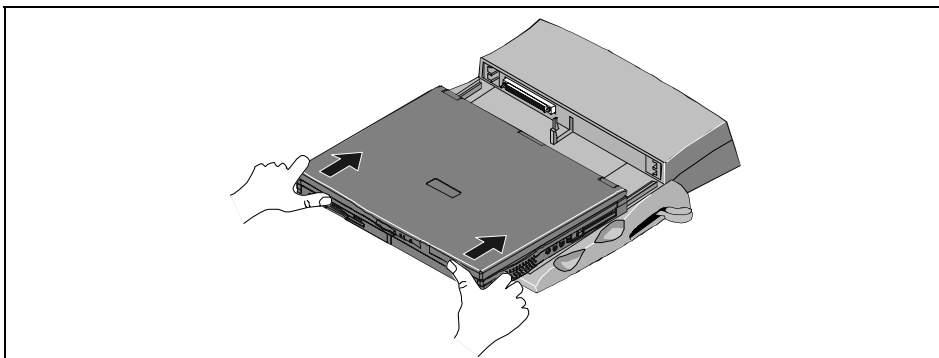
Docking notebook while running

If an operating system is installed on your notebook that supports "Plug & Play" and "hot docking" (e.g. Windows 98), you need not switch off the notebook for docking. The notebook may also be in an energy-saving mode.



The power adapter cable may not be connected to the DC socket (DC IN) of the notebook when you dock the notebook. The notebook must be in the battery mode.

- Ê Put your docking device into operation (see documentation for the docking devices).
- Ê Mount the suitable Tray on the docking device.
- Ê Disconnect all cables connected to notebook.
- Ê Make sure that the PC card eject buttons of the notebook are pressed in.



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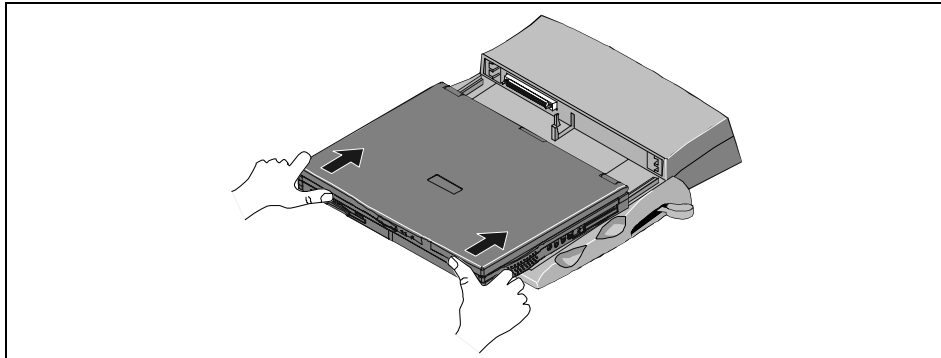
- Ê Place your notebook on the docking device and push it evenly in the direction of the arrows until you feel it engage.

Docking a notebook while switched off



The power adapter cable may not be connected to the DC socket (DC IN) of the notebook when you dock the notebook. The notebook must be in the battery mode.

- Ê Put your docking device into operation (see documentation for the docking devices).
- Ê Mount the suitable Tray on the docking device.
- Ê Switch off the notebook.
- Ê Disconnect all cables connected to notebook.
- Ê Make sure that the PC card eject buttons of the notebook are pressed in.



- Ê Place your notebook on the docking device and push it evenly in the direction of the arrows until you feel it engage.

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Switching on docked notebook

Ê Press the Suspend/Resume button of the notebook.

or

Ê Press the Suspend/Resume button on the left-hand side of the docking device.

Undocking the notebook

Undocking notebook while running

If an operating system is installed on your notebook that supports "Plug & Play" and "hot docking" (e.g. Windows 98), you need not switch off the notebook for undocking. The notebook may also be in an energy-saving mode.

Windows 98/2000

You must prepare the notebook for undocking.

Ê To do this, select *Eject PC* in the Start menu.

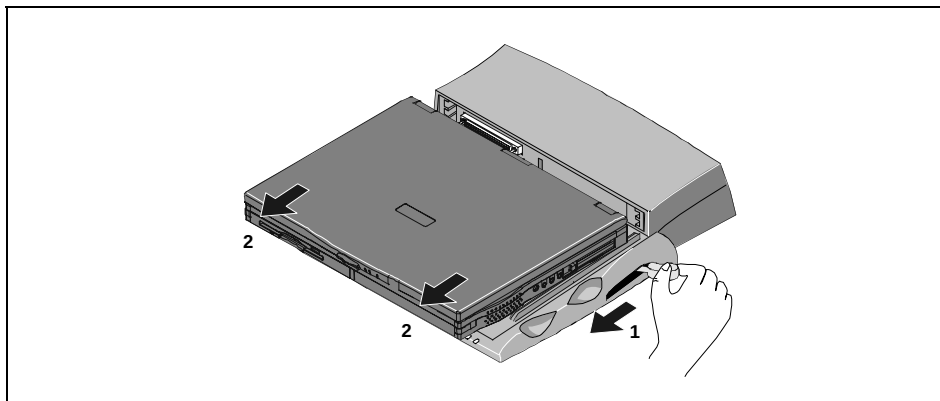
Windows NT



To remove your notebook under Windows NT while running the software *Portable Suit for NT4.0* (*Notedock*, *Cardexecutive*, *PowerProfiler*) must be installed.

Ê Click on *Undock* in the *Notedock* window (additional software *Portable Suit for NT4.0*).

Undocking notebook when switched off



Ê Move the lever in the direction of the arrow (1).

Ê Remove the notebook toward the front (2).

Settings in BIOS Setup

In **BIOS Setup** you can set the system functions and the hardware configuration of the notebook. The settings can only be changed via the keyboard.

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

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

Main:	for system settings as time, date, hard disk and monitor selection
Advanced:	for system settings such as ports and keyboard
Security:	for password settings and safety functions
Power:	for setting the energy saving functions
Boot:	for configuring the boot sequence
Info:	for displaying the system configuration (e.g. processor and memory configuration)
Exit:	to exit the BIOS Setup

Start BIOS Setup

⇒ Restart the notebook (switching ON/OFF or warm boot).

The following display briefly appears on the screen during start-up:

<ESC> Diagnostic screen <F12> Boot Menu <F2> BIOS Setup

⇒ When this message appears, press the 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 Hotline/Help Desk.

Operating BIOS Setup



Press the **[F1]** key to display help on the operation of **BIOS Setup**.

The description of the individual settings is shown in the right-hand window of the **BIOS Setup**.

Using the **[F9]** function key, you can load the default settings for the **BIOS Setup** menu you are currently in.

⇒ Use the cursor key **↑** or **↓** to select the menu you wish to access to make changes.

⇒ 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 space bar to confirm your selection.

⇒ Press the **[ESC]** key to exit the selected menu.

⇒ Make a note of the changes you have made (here in this manual, for example).

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Exiting BIOS Setup

To exit *BIOS Setup*, 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.

Exit Saving Changes

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

Exit Discard Changes

Select *Exit Discard Changes* and *Yes* to discard the changes you have made. The settings which were in force when *BIOS Setup* was called remain effective. *BIOS Setup* is terminated and the device is rebooted.

Load Setup Default

To revert all the menus of *BIOS Setup* to the default entries, select *Load Setup Default* and *Yes*.

Discard Changes

To load the values of all the menus of *BIOS Setup* that were in effect when *BIOS Setup* was called, select *Discard Changes* and *Yes*. If you want to exit *BIOS Setup* with these settings, select *Exit Saving Changes* and *Yes*.

Save Changes

To save settings without exiting *BIOS Setup*, select *Save Changes* and *Yes*.

Troubleshooting and tips



Take note of the hints in the chapter "Connecting external devices", when you connect or disconnect cables.

If a fault occurs in your notebook, try to eliminate it with the measures described in this chapter. If you fail to correct the problem, proceed as follows:

- Ê Make a note of the steps and the circumstances that led to the fault. Also make a note of any error messages displayed.
- Ê Switch off the notebook.
- Ê Contact your sales outlet or our Hotline/Help Desk.

Installing new software

When installing programmes or drivers, important files may be overwritten and modified. To be able to access the original data in the case of any problems following installation, you should backup your hard disk prior to installation.

Saving and restoring system files

With "Microsoft Backup" you can create backup copies of your system files and restore the files. We recommend that you create a backup copy of all important files after switching on your notebook for the first time.

- Ê Click on **Start** and select **Accessories** and **System Programs**.
- Ê Click on **Backup**.
- Ê Depending on whether you want to create a backup copy or restore the files, select either the **Backup** or the **Restore** tab.
- Ê Follow the instructions on the screen.

Restoring the hard disk contents under Windows

Using the Windows Recovery CD and the Drivers & Utilities CD, you can restore the operating system of your notebook.

During restoring the operating manual the contents of your hard disk will be overwritten. After this, operating system, drivers and software utilities will be reinstalled. For this reason you should try to save important data to a backup medium before you restore the hard disk contents.

- Ê Insert the "Start-Disk for Windows" into the floppy disk drive and switch the notebook on.
- Ê Follow the instructions on the screen.



Detailed PC knowledge is required for manual partitioning.

- Ê Insert the Windows Recovery CD into the optical drive.

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⇒ Start the **Setup** programme on the CD.

You must then reinstall all the drivers. Use the "Drivers & Utilities" CD.

The notebook's date or time is incorrect

⇒ Double-click on the clock in the task bar and adjust the time.

or

⇒ Set the time and/or date in the **BIOS Setup** menu **Main**.



If the date and time are repeatedly incorrect when you switch on the notebook, the buffer battery that supplies the internal clock is dead.

Connect the notebook via its power adapter to a grounded mains outlet or install a fresh battery. The buffer battery will take approximately two days to complete its recharge. Should the problem persist, please contact our Hotline/Help Desk.

Battery indicator does not illuminate

Battery is not installed or is defective

If the battery status indicator does not light up, either no battery is installed or there is no contact between the notebook and the battery.

⇒ Check whether the battery is installed correctly in its compartment.

It may be necessary to replace the battery with a new one. When you dispose of used batteries, please observe the safety instructions in the chapter "錯誤! 找不到參照來源。".

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

⇒ Set the setting **Display Settings** to **LCD BIOS-Setup** in the menu **Advanced - Video Features**.

The notebook's 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

Ê Switch the external monitor on.

Power saving has been activated (screen is blank)

Ê Press any key to continue.

Brightness is set too dark

Ê Adjust the brightness of the monitor.

Screen output is set to the notebook's LCD screen

Ê Press the key combination **[Fn] + [F10]** (selecting internal/external display).

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

Ê Switch off the external monitor and the notebook.

Ê Check whether the power cable is plugged properly into the power adapter and into the mains outlet.

Ê Check whether the data cable is properly connected to the notebook and the external monitor (if it is plugged in with a connector).

Ê Switch on the external monitor and the notebook.

The external monitor is blank or the image is unstable

Two causes are possible: An incorrect type has been selected for the external monitor or the wrong screen resolution has been set for the application program.

Ê Terminate the application programme with **[Alt] + [F4]**.

If the fault continues to occur after ending the programme, switch over to the notebook's internal LCD screen with **[Fn] + [F10]**. Change the following setting:

Ê Select *Start - Settings- Control Panel - Display - Settings* and then the screen resolution you require in the *Resolution* field.

or

Ê Select the correct monitor under *Start - Settings- Control Panel - Display - Settings - Advanced Properties - Monitor - Modify*.



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The notebook cannot be started

If the notebook does not start after switch on, this may be due to one of the following:

The battery is not installed correctly

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

The battery is dead

- Ê Charge the battery.
- Or
- Ê Install a charged battery.
- Or
- Ê Connect the power adapter to the notebook.

The power adapter is not connected correctly

- Ê Switch off the notebook.
- Ê Check whether the power adapter is connected correctly to the notebook.
- Ê Check whether the power cable is plugged properly into the power adapter and into the mains outlet.
- Ê Switch the notebook on.

The notebook stops working

If the notebook stops working, this may have the following reasons:

The notebook is in Standby or Suspend mode

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

An application programme has caused the malfunction

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

The battery is dead

- Ê Charge the battery.
- Or
- Ê Install a charged battery.
- Or
- Ê Connect the power adapter to the notebook.

The mouse does not work

If the connected mouse does not work, the following can cause it:

Incorrect setting in BIOS Setup

- Ê Check the setting *Hotplug* in the *BIOS Setup* in the menu *Advanced - Keyboard/Mouse Features*. The setting must be set to *Enabled*.

Touchpad driver is not installed properly

- Ê Deinstall the touchpad driver.
- Ê Install the actual driver from the "Drivers & Utilities" CD.

Mouse driver is not loaded

- Ê Check whether the correct mouse driver is properly installed and is present before the application programme is started.
Detailed information can be found in the User Guides for the mouse or application programme.

Mouse is not connected

- Ê Switch off the notebook.
- Ê Check whether the mouse cable is correctly connected to the notebook.
If you use an adapter or extension lead with the mouse cable, check the connections.
- Ê Switch the notebook on.

The floppy disk cannot be written

- Ê Check whether the disk is OK and is not write-protected.

The printer does not print

- Ê Make sure that the printer is switched on and is on-line (see the manuals supplied with the printer).
- Ê Check that the cable connecting the notebook and the printer is connected properly.
- Ê Check that the correct printer driver is installed.
- Ê Check in the *BIOS Setup* whether the *Advanced - I/O Device Configuration* field is set to *Enabled* for the port you are using.
The respective entry in the fields of *Serial Port* or *Parallel Port* must match the setting in the application programme under Windows.



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Acoustic warnings

A beep sounds every few seconds

The battery is almost flat.

Ê Charge the battery.

Error messages on the screen

This section describes the error messages generated by the **BIOS-Setup**. Error messages displayed by the operating system or programmes are described in the relevant manuals.

CMOS Battery Bad

If the error message occurs repeatedly, then the buffer battery in the notebook is flat.

Ê Connect the notebook via its power adapter to the mains outlet. The buffer battery will take approximately two days to complete its recharge.

If the error message appears repeatedly, please contact the place of purchase or our Hotline/Help Desk.

System CMOS checksum bad – Default configuration used

The system configuration information is incorrect.

Ê Restart the notebook.

Ê Enter the **BIOS Setup** programme by pressing **[F2]**.

Ê Select the **Exit** menu in the **BIOS Setup**.

Ê Select the **Default Setup** entry and click on **OK**.

If the error message appears repeatedly, please contact the place of purchase or our Hotline/Help Desk.

Insert system diskette and press Enter key to reboot

The operating system cannot be loaded or the hard disk contains no operating system or is not formatted.

Ê Insert a system disk.

Ê Press any key to continue.

Invalid system disk - Replace the disk, and then press any key

The inserted disk is not a system disk or the inserted system disk is defective.

Ê Insert another system disk.

Ê Press any key to continue.

If you wish to boot from floppy disk:

Ê Insert a system disk.

Ê Press any key to continue.

Diskette drive A error

Ê Start the **BIOS Setup** and make sure that the parametre for floppy disk drive A has been set to the format 1.44 Mbyte, 3 1/2 inch.

Extended memory failed at offset: xxxx Failing Bits: zzzz zzzz

When testing the extended memory an error has resulted at the address xxxx.

Ê Check whether the additional memory module has been inserted correctly.

Should you receive this error message again, please contact your dealer.

Failure Fixed Disk n

The settings of the hard disk drive are incorrect.

Ê Start the **BIOS Setup (IDE Adapter 0 Master submenu)** and select the correct settings.

Fixed Disk address conflict Diskette Drive address conflict

There is an I/O address conflict.

Ê Start the **BIOS Setup** and check the corresponding settings.

Incorrect Drive A type - run SETUP

Ê Start the **BIOS Setup** and make sure that the parametre for floppy disk drive A has been set to the format 1.44 Mbyte, 3 1/2 inch.

Keyboard controller error

Ê Switch off the notebook with the Suspend/Resume button.

Ê Wait 3 - 5 seconds and switch on the notebook again.

If this error message appears again, please contact your point of sale or our Hotline/Help Desk.

Keyboard error

If you use an external keyboard:

Ê Check the connection and reboot the notebook.

If this error message appears again, please contact your point of sale or our Hotline/Help Desk.

nn Stuck key

Ê Make sure that no key is pressed.

If this error message appears again, please contact your point of sale or our Hotline/Help Desk.

Operating system not found

Ê Check in the **BIOS Setup** whether your hard disk has been set correctly.

Ê Make sure that the operating system is installed on the corresponding drive.

Not enough Save-to-Disk partition or file exists on Fixed Disk - Save-to-Disk feature is disabled.

The Save-to-Disk mode is not available to you, as no memory space has been assigned to this mode.

Ê Use the **PHDISK** service programme to assign the memory space required for this mode.

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Press <F1> to resume, <F2> to SETUP.

This error message appears if an error occurs during the self-test before starting the operating system.

Ê Press the [**F1**] function key to start the operating system.

Ê Enter the *BIOS Setup* programme by pressing [**F2**].

Previous boot incomplete - Default configuration used

Due to an error during the previous system boot, default values were used for certain settings. Check the *BIOS Setup* and the settings.

Ê Press the [**F1**] function key when prompted to do so.

Real Time clock error

Ê Contact your sales outlet or our Hotline/Help Desk.

nnnnK Shadow RAM failed at offset: xxxx Failing Bits: zzzz

Ê Contact your sales outlet or our Hotline/Help Desk.

System battery is dead - Replace and run SETUP

Ê Contact your sales outlet or our Hotline/Help Desk.

System cache error - Cache disabled

Ê Contact your sales outlet or our Hotline/Help Desk.

nnnnK System RAM failed at offset: xxxx Failing Bits: zzzz

Ê If you have installed a DIMM, you should remove the module and reboot the notebook.

If the error message is no longer displayed, the error concerned is DIMM-related. Should you receive this error message again, please contact your dealer.

System timer error

Ê Contact your sales outlet or our Hotline/Help Desk.

Memory extension



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

So that the current data can be saved in the **Save to Disk** suspend mode, sufficient memory space must be available on the hard disk (at least the size of the main memory +16 Mbytes).

Install only memory expansions that satisfy the requirements and rules governing safety, RFI and electromagnetic compatibility and relating to telecommunications terminal equipment (see the chapter "錯誤! 找不到參照來源。").

Use only memory expansions which have been released for your notebook (64, 128, and 256 Mbyte modules, SD RAM, JEDEC 144 pin SO DIMM, 3.3 V).

Never use force when installing or removing memory modules.

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

The main memory of your notebook can be expanded to a maximum of 512 Mbyte with another memory module. The notebook will not start without memory modules, as no fixed main memory is installed.

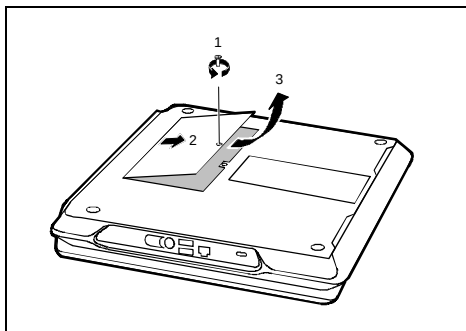
Removing and installing memory extension



Please note the information provided in the "錯誤! 找不到參照來源。" section in the chapter "錯誤! 找不到參照來源。".

- Ê Switch off the notebook and all devices connected.
- Ê Close the LCD screen so that it locks into place.
- Ê Unplug the power adapter from the mains outlet.
- Ê Remove the battery (see "錯誤! 找不到參照來源。").
- Ê Disconnect all cables connected to the notebook.
- Ê Place the notebook upside down on a flat surface.

Removing cover

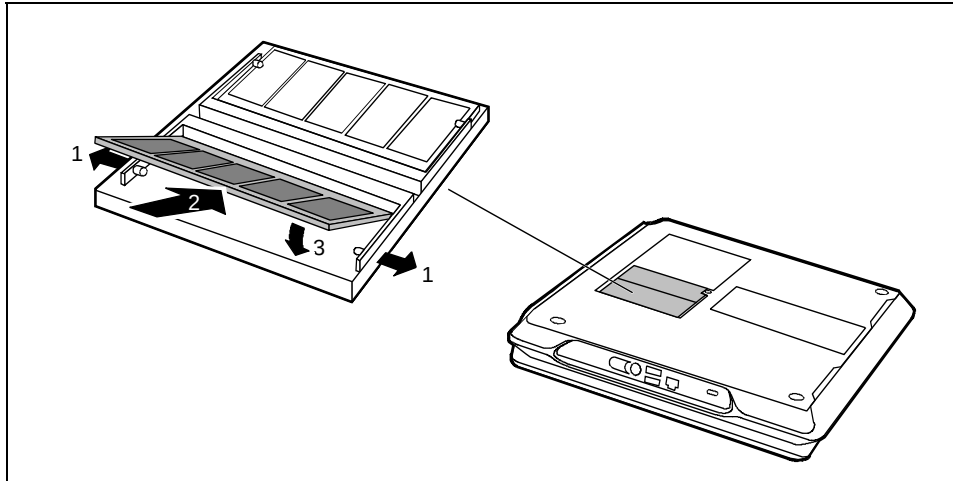


- Ê Remove the screw (1).
- Ê Lift the cover off the notebook in the direction of the arrow (2).
- Ê Pull off the cover from the notebook in the direction of the arrow (3).



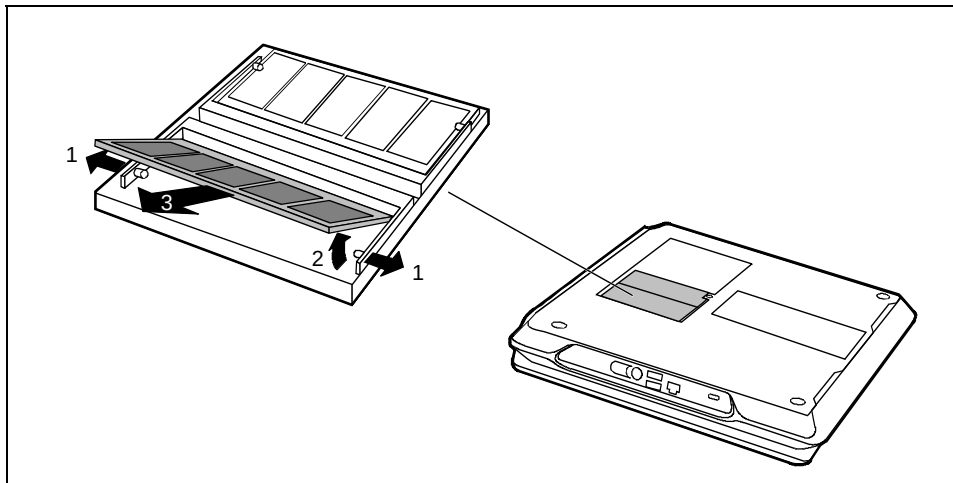
錯誤! 尚未定義樣式。

Installing memory modules



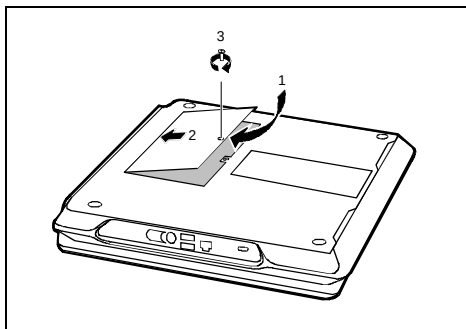
- Ê Carefully push the two mounting clips outwards (1).
- Ê Insert the memory module, contacts first, into the slot (2).
- Ê Carefully push the memory module downwards until you feel it latch into place (3).

Removing memory modules



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

Mounting the cover



- Ê Place the cover on its mounting location (1).
- Ê Close the cover on the bottom of the notebook (2).
- Ê Fasten the cover with the screw (3).

- Ê Refit the battery.
- Ê Place the notebook right side up on a flat, stable, nonslip surface.
- Ê Reconnect the cables.



Technical data

Notebook

Processor

µPGA2 (Socket Mount)

Intel Pentium III 700 MHz to 1 GHz

Intel 815 EM

Chipset:

Main memory:

Maximum 1 Gbyte PC 133 SO DIMM

2 slots for 512 Mbyte modules

JEDEC 144 pin

Possible modules:

- CD-ROM drive, 24X speed
- DVD drive, 8/20X speed (CD-ROM)
- CD-RW drive, 24/4/8X speed
- Floppy disk drive
- Hard disk drive
- Battery

Electrical data

Regulations complied with:

CE, EN60950, FCC Part 15 Class B, GS, Energy Star, SITO

Protection class:

II

Maximum power draw:

60 W

(notebook on with battery charging)

LCD screen

Display diagonal:

15-inch SVGA TFT

15-inch XGA TFT

LVDS-port

Graphics

Chip:

AGP 4x, Advanced 3D, DVD accelerator

Video memory:

64 Mbyte with DDR support

Supported resolutions on external monitor:

????

Colour depth:

1024x768

24 bit

Audio

Sound:

ESS Allegro ES1988



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Modem (Mini PCI modem)

Integrated modem:

56K, V.90, MC97 Codec, RI

LAN connector:

Ethernet 10/100T, PME, AOL 2.0

Combo module:

Modem and LAN
IEEE1394: 1394b

Bluetooth???

BlueTooth?? (Schreibweise??)

Intel/Ericsson or Siemens USB

Input devices

Keyboard:

88 keys

Touchpad:

3 keys

Slots

PC Card slots (CardBus/PCMCIA):

PCMCIA 2 x type II or 1 x type III,
PC card controller O2 Micro O2 711E1

Ports

PS/2 port:

6-pin mini DIN female connector

- Parallel port:

25-pin female connector, bi-directional, ECP capable

- Monitor port:
- Serial port:
- Microphone jack:
- Headphone port:
- Video port:
- Modem port:
- USB port (Universal Serial Bus):
- Infrared interface:
- LAN connector:
- Docking port:
- Kensington Lock

15-pin female connector
9-pin male connector, RS232C connector, mono connector, stereo
7-pin mini DIN female connector
Female connector, RJ-11 once twice
IrDA 1.1 (Max 4M)
Female connector, RJ-45
240-pin Port Replikator II/II-L

Environmental conditions

Environment class 7K1

DIN IEC 721

Environment class 7M2

DIN IEC 721

Temperature:

- Operating (7K1)
- Transport (2K2)

5 °C 35 °C
-15 °C 60 °C

Dimensions

Width/depth/height:

340 mm/278 mm/39,5 mm

Weight:

approx. 3,1 kg

Battery

Rated voltage:

19 V

Rated capacity

1.8 Ah (Li-Ion) / 58.3 W

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錯誤! 尚未定義樣式。

Charging time (when not in operation):	approx. 2 hours
Operating time with a battery:	approx. 3 hours (without power management)

Power adapter

Primary	
• Rated voltage:	90 V to 240 V (automatic)
• Frequency:	50 Hz to 60 Hz (automatic)
• Max. rated current:	1,5 A
Secondary	
• Rated voltage:	19 V
• Max. rated current:	3,16 A

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



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