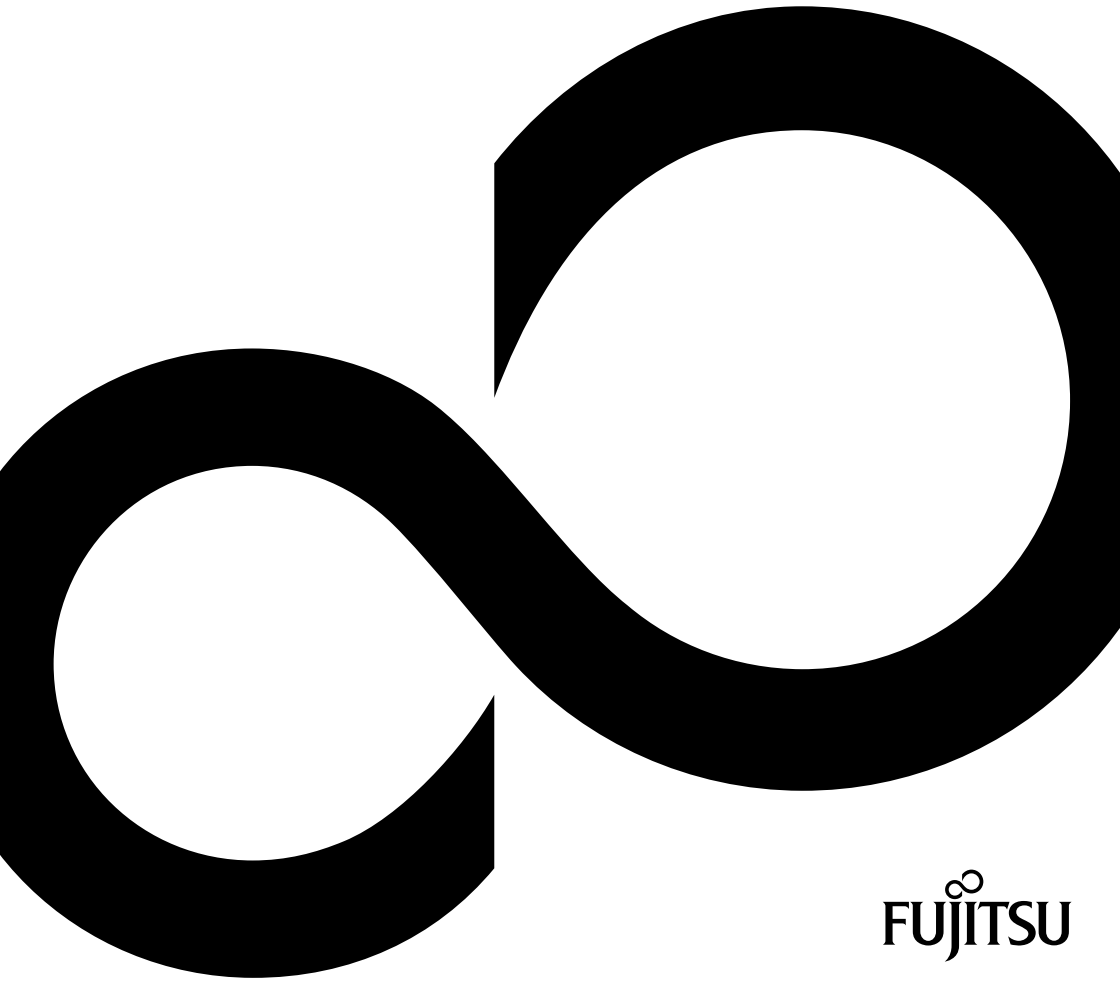


FUJITSU Desktop ESPRIMO D53x / D73x



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- Your sales partner
- Your sales office

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FUJITSU Desktop ESPRIMO D53x / D73x

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Your ESPRIMO

... is available with various configuration levels which differ in terms of hardware and software equipment. You can install additional drives (for example a DVD drive) and other boards.

This manual tells you how to start using your device and how to operate it in daily use. This manual applies for all configuration levels. Depending on the chosen configuration level, some of the hardware components described may not be available on your PC. Please also read the notes about your operating system.

Depending on the configuration selected, the operating system is preinstalled on your hard disk (e.g. Windows).

Further information on this device is provided:







- in the "Quick Start Guide" poster
- in the "Safety/regulations" manual
- in the "Warranty" manual
- in the BIOS manual for your device
- in the "System expansions and repairs" manual
- in the operating manual for the monitor
- in the manual for the mainboard
- in your operating system documentation
- in the document "Data deletion"

Validity of the Reference Manual

This reference manual applies to the following systems:

- FUJITSU Desktop ESPRIMO D538
- FUJITSU Desktop ESPRIMO D738

Notational conventions

	Pay particular attention to text marked with this symbol. Failure to observe these warnings could pose a risk to health, damage the device or lead to loss of data. The warranty will be invalidated if the device becomes defective through failure to observe these warnings.
	Indicates important information for the proper use of the device.
	Indicates an activity that must be performed
	Indicates a result
This font	indicates data entered using the keyboard in a program dialogue or at the command line, e.g. your password (Name123) or a command used to start a program (start.exe)
This font	indicates information that is displayed on the screen by a program, e.g.: Installation is complete.
<i>This font</i>	indicates <ul style="list-style-type: none"> terms and texts used in a software interface, e.g.: Click on <i>Save</i> names of programs or files, e.g. <i>Windows</i> or <i>setup.exe</i>.
"This font"	indicates <ul style="list-style-type: none"> cross-references to another section, e.g. "Safety information" cross-references to an external source, e.g. a web address: For more information, go to "http://www.fujitsu.com/fts" Names of CDs, DVDs and titles or designations for other materials, e.g.: "CD/DVD Drivers & Utilities" or "Safety/Regulations" manual
	indicates a key on the keyboard, e.g: 
This font	indicates terms and texts that are emphasised or highlighted, e.g.: Do not switch off the device

Important notes

In this chapter you will find information regarding safety which it is essential to take note of when working with your device.

Safety information



Please note the information provided in the "Safety/regulations" manual and in the following safety notes.

When installing and operating the device, please observe the notes on environmental conditions in Chapter "[Technical specification](#)", [Page 33](#) as well as the instructions in Chapter "[Getting started](#)", [Page 12](#).

Replace the lithium battery on the mainboard only in accordance with the instructions in the "System expansions and repairs" manual.

During system expansions and repairs on the device, take into account the information in the "System expansions and repairs" manual. Some of the operations described there must only be performed by authorised service technicians. Incorrect repairs could greatly endanger the user (electric shock, risk of fire) or cause serious damage to the equipment.

Cleaning the device



Turn off all power and equipment switches and disconnect the power plug from the mains outlet.

Do not use any cleaning agents that contain abrasives or may corrode plastic (alcohol, thinner or acetone).

Never clean the device with water! Water entering into the device could present a serious risk to users (e.g. electric shock).

Ensure that no liquid enters the system.

The surface can be cleaned with a dry cloth. If particularly dirty, use a cloth that has been moistened in mild domestic detergent and then carefully wrung out.

Use disinfectant wipes to clean the keyboard and the mouse.

Clean the optional dust filter of the system at regular intervals (see chapter "[Clean/replace dust filter](#)", [Page 31](#)).

Energy saving, disposal and recycling

You can find information on these subjects in the "Environment and Energy Information" manual or on our website ("<http://www.fujitsu.com/fts/about/fts/environment-care/>").

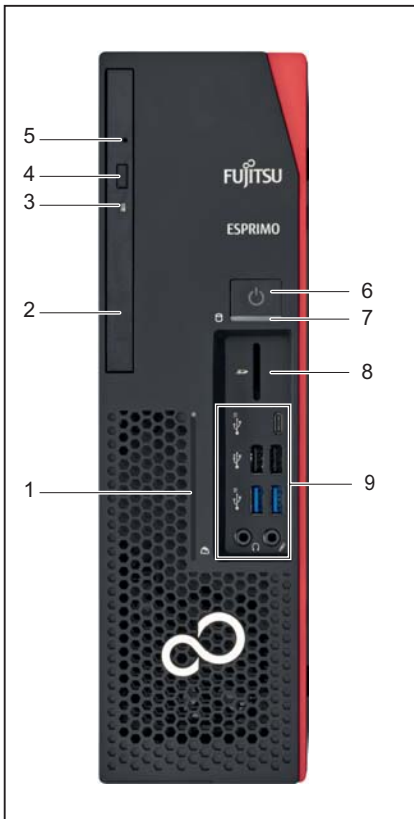
Device overview

This chapter presents the individual hardware components of your device. This will provide you with an overview of the operating controls of the device. Please familiarise yourself with these components before you start to work with the device.

Front

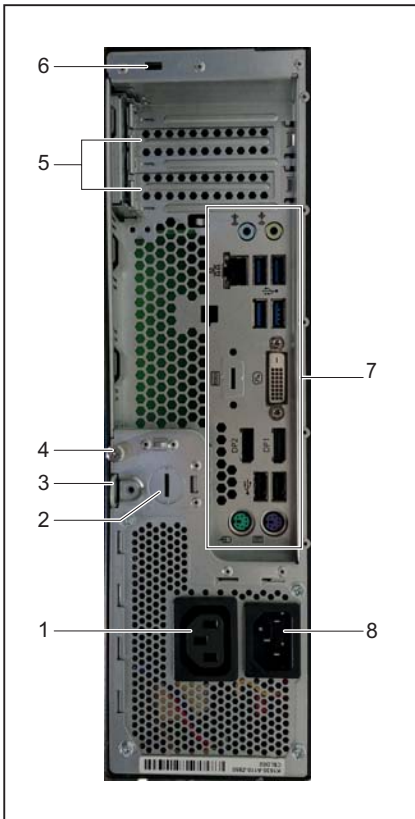


The following chapters always show the maximum configuration level in the illustrations. Any deviations between the individual device variants are separately indicated in the particular chapters.



- 1 = SmartCard reader (optional)
- 2 = bay for slim line drive
- 3 = slim line drive status indicator (see ["Indicators on the device", Page 10](#))
- 4 = slim line drive insert/eject button
- 5 = slim line drive emergency removal
- 6 = ON/OFF switch with power indicator (see ["Indicators on the device", Page 10](#))
- 7 = hard disk indicator (see ["Indicators on the device", Page 10](#))
- 8 = memory card reader (optional)
- 9 = ports, depending on the configuration level (see ["Ports on the device", Page 17](#))

Rear



1 = monitor socket (optional)

2 = casing lock (optional)

3 = eye for padlock (diameter 6 mm)

4 = knurled screw (for opening the cover)

5 = two slots for low-profile boards or port expansions (VGA, eSATA, etc.)

6 = provision for security lock

7 = ports, depending on the configuration level (see "[Ports on the device](#)", [Page 17](#))

8 = AC voltage socket (AC IN)

Indicators on the device

The indicators are on the front of the casing. Which indicators are available on your device depends on the configuration level you have selected.



No.	Indicator	Description
1	Indicator for SmartCard reader (optional)	The indicator lights up when the SmartCard reader is accessed.
2	Drive indicator	The indicator lights up when the CD-ROM or DVD drive in the device is accessed. Never under any circumstances remove the CD/DVD while the indicator is lit.
3	Power-on indicator	<p>Caution: In energy-saving mode, the device must not be disconnected from the mains supply, as this could lead to loss of data.</p> <ul style="list-style-type: none">• The indicator is illuminated: The device is switched on.• The indicator is flashing: The device is in energy-saving mode. After being switched on with the ON/OFF switch, the device powers up or returns to the state it was in before it entered energy-saving mode.• The indicator is not lit: The device is switched off.
4	Hard disk indicator	The indicator lights up when the hard disk drive in the device is being accessed.

Getting started



Please observe the safety information in the ["Important notes", Page 7](#) chapter.

Unpacking and checking the delivery

It is recommended not to throw away the original packaging material! It may be required for reshipment at some later date.

- ▶ Unpack all the individual parts.
- ▶ Check the contents of the package for any visible damage caused during transport.
- ▶ Check whether the delivery conforms to the details in the delivery note.
- ▶ Should you discover that the delivery does not correspond to the delivery note, notify your local sales outlet immediately.

Steps for initial setup

Only a few steps are necessary to put your new device into operation for the first time:

- Select a location for device and set up device
- Connect external devices such as mouse, keyboard and monitor
- Check the voltage at the mains outlet and connect the device to an electrical outlet
- Switch the device on

You will learn more about the individual steps in the following sections.

External devices



If you have received other external devices in addition to your own device (e.g. a printer), do not connect these until after the initial installation. The following sections describe how to connect these external devices.

Drives and boards



If you have received drives or boards as well as your device, please do not install them until after first-time setup. Installation of drives and boards is described in the "System expansions and repairs" manual.

Setting up the device



When setting up your device, please read the recommendations and safety notes in the "Safety/regulations" manual.

We recommend that you place your device on a surface with good anti-slip qualities. In view of the multitude of different finishes and varnishes used on furniture, it is possible that the rubber feet will mark the surface they stand on.

Depending on the location of your device, bothersome vibrations and noises may occur. To prevent this, a distance of at least 10 mm / 0.39 in should be maintained from other devices on casing sides without ventilation surfaces.

In order to avoid overheating, do not cover the ventilation areas on the monitor or the device.

For ventilation areas, a minimum distance of 200 mm / 7.87 in from the device must be maintained.

Do not stack several devices on top of each other.

Do not expose the device to extreme ambient conditions (see ["Technical specification", Page 33](#), "Ambient conditions"). Protect the device against dust, humidity and heat.

Operating position

You can use the device in a vertical or horizontal operating position.

With the aid of suitable feet, it is possible to use the device in a vertical operating position (see ["Vertical operating position with feet \(optional\)", Page 13](#)).

Vertical operating position with feet (optional)



Use the optional feet when you wish to use the device in the vertical operating position.

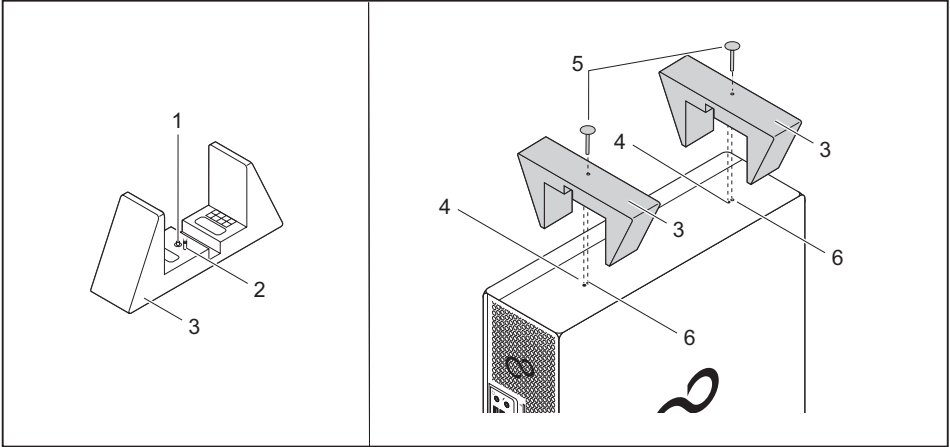
The set-up direction is compulsory: The captions "FUJITSU" and "ESPRIMO" must be facing upwards so that sufficient ventilation is ensured.



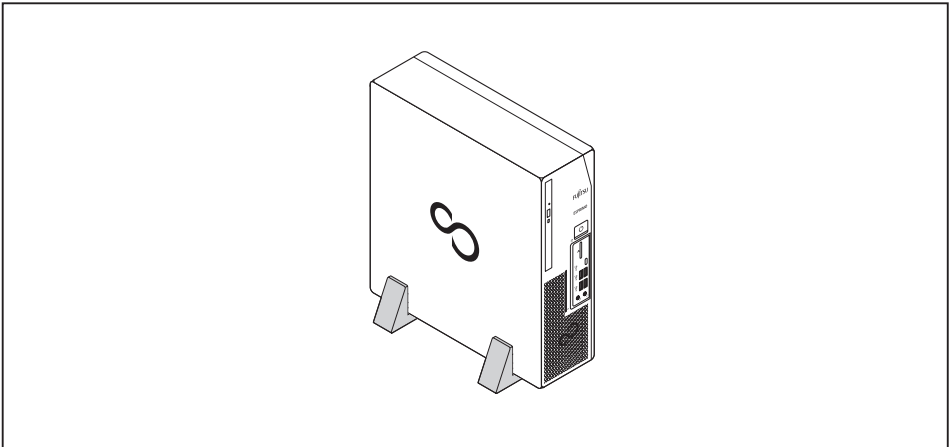
You must remove the feet again to be able to open the device.

Proceed as follows to operate the device in the vertical operating position with the feet:

- ▶ If necessary, disconnect the cables connected to the device.



- ▶ Place the device on the right side as shown.
- ↳ The screw holes (6) and guide openings (4) for securing the feet on the left side of the device point upwards.
- ▶ Place the feet (3) on the left side of the device so that the pins (2) enter into the corresponding guide openings (4) on the device and the screws rest against the screw holes (6).
- ▶ Tighten the screws to secure the feet.

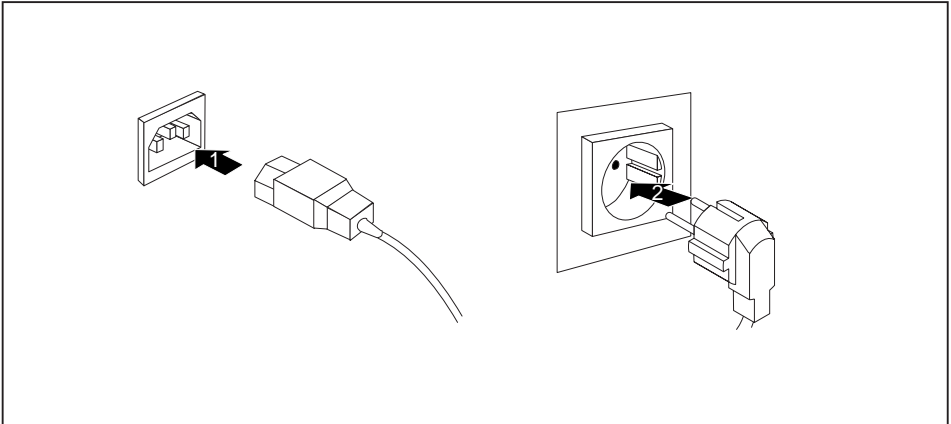


- ▶ Stand the device on the feet as shown.






Connecting the device to the mains supply



Use the following table to check which mains plug applies for your country. The following illustration may be different from your country variant.



- ▶ Connect the power cable to the device (1).
- ▶ Plug the power plug into a grounded mains outlet (2).

Power connection	Country
	USA, Canada, Mexico, parts of South America, Japan, Korea, the Philippines, Taiwan
	
	Russia and the Commonwealth of Independent States (CIS), large parts of Europe, parts of South America, the Middle East, parts of Africa, Hong Kong, India, large parts of South Asia.
	UK, Ireland, Malaysia, Singapore, parts of Africa
	China, Australia, New Zealand

Connecting external devices



Read the documentation on the external device before connecting it.

With the exception of USB devices, always remove all power plugs before connecting external devices!

Do not connect or disconnect cables during a thunderstorm.

Always hold the plug of a cable when removing it. Never unplug a cable by pulling the cable itself.

To ensure that your device works properly, use only the connection cable supplied or use a high-quality connection cable.














Ports on the device



The maximum possible configuration level of your device is described below. Some of the connected devices require special software (e.g. drivers) to be installed and set up (refer to the documentation for the connected device and operating system).

The ports are located on the front as well as on the rear of the device. The standard ports are marked with the symbols shown below (or similar). Detailed information on the location of the ports is provided in the manual for the mainboard.

Front and rear ports

Symbol	Description
	Microphone port (Line In)
	Headphones port (Line Out)
	Socket type A black: Universal Serial Bus - USB 2.0
	Socket type A blue: Universal Serial Bus - USB 3.1 (Gen1) = USB 3.0
	Socket type A blue: Universal Serial Bus - USB 3.1 (Gen2)
	Socket type C black: Universal Serial Bus - USB 3.1 (Gen2)
	PS/2 mouse port, green
	PS/2 keyboard port, purple
DP1 / DP2	Displayport
	DVI-D screen connection
	Serial port
	Audio output (Line Out), light green
	Audio input (Line In), light blue
LAN 	LAN port

Connecting a monitor



Only attach the monitor to your device when switched off.

- ▶ Follow the instructions contained in the monitor manual to prepare the monitor for operation (e.g. connecting cables).
- ▶ Connect the data cable of the monitor into the required monitor port of your device.



You may only then connect the mains cable of the monitor to the monitor socket of the device if the rated current of the monitor (e.g. 1,2 A - see documentation for the monitor) is less than the maximum permitted power output of the monitor socket of the device (e.g. 1,5 A - see type plate on the PC).

- ▶ Depending on the configuration level of your device, plug the monitor power cable into a grounded mains outlet or into the monitor socket on the device.

Connecting the mouse

You can connect a USB mouse or a PS/2 mouse to your device.

Connecting a USB mouse

- ▶ Connect the USB mouse to one of the USB ports on the device.

Connecting a PS/2 mouse



The PS/2 mouse is only detected by the device if you connect the mouse when the device is switched off and then switch the device on again.

- ▶ Connect the PS/2 mouse to the PS/2 mouse port of the device.
- ▶ Switch your device on again.

Connecting the keyboard

You can connect a USB keyboard or a PS/2 keyboard to your device.

Connecting a USB keyboard

Use the supplied keyboard cable only.

- ▶ Plug the flat rectangular USB connector of the keyboard cable into a USB port of the device.

Connecting a PS/2 keyboard

Use the supplied keyboard cable only.



The PS/2 keyboard is only detected by the device if you connect the keyboard when the device is switched off and then switch the device on again.

- ▶ Switch your device off.
- ▶ Plug the round plug of the keyboard cable into a keyboard port of the device.
- ▶ Switch your device on again.

Connecting external devices to the serial interface



For an exact description of how to connect external devices to the corresponding port, please see the external device documentation.

External devices (e.g. a printer or scanner) can be connected to the serial port.

- ▶ Connect the data cable to the external device.
- ▶ Connect the data cable to the corresponding serial interface.

Port settings



You can change the settings of the port in the *BIOS Setup*.

Device drivers



The devices connected to the serial interface require drivers. Your operating system already includes many drivers. If the required drive is missing, install it. The latest drivers are usually available on the Internet or will be supplied on a data carrier.

Connecting external devices to the USB ports

You can connect a wide range of external devices to the USB ports (e.g. printer, scanner, mouse or keyboard).



USB devices are hot-pluggable. This means you can connect and disconnect USB cables while your device is switched on.

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 one of the USB ports on your device.

Device drivers



External USB devices which you connect to one of the USB ports don't usually need their own drivers because the software required is already included in the operating system. If the device requires separate software, please follow the instructions in the manufacturer's documentation.

Switching on for the first time: installing the software



Once the installation has been started the device must not be switched off, unless the installation has been completed.

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

The installation will otherwise not be carried out correctly and the contents of the hard disk must be completely restored.



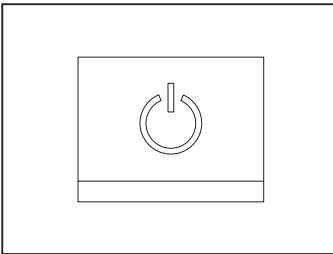
If the device is integrated into a network, the user and server details as well as the network protocol are required during the software installation.

Contact your network administrator if you have any questions about these settings.

When you switch on the device for the first time, the supplied software is installed and configured. Plan a reasonable amount of time for this, as this process must not be interrupted.

Switch on the monitor and the machine

► Switch on the monitor (see operating instructions for the monitor).



- Press the ON/OFF switch (1) on the front of the device.
- ↳ The operational display will light up and the machine will start.

Installing the software

- During installation, follow the on-screen instructions.
- If anything is unclear regarding the data you are asked to input, read the online Help in your operating system.



You will find more information on the system, as well as drivers, utilities and updates on the optional "Drivers & Utilities" DVD and on the Internet at ["http://www.fujitsu.com/fts/support"](http://www.fujitsu.com/fts/support).

You can find information and help on the Windows operating system functions on the Internet at ["http://windows.microsoft.com"](http://windows.microsoft.com).

Operation

Switch the device on

- ▶ If necessary, switch the monitor on (see the operating manual for the monitor).
- ▶ Press the ON/OFF switch on the front of the device.
- ↳ The power indicator glows and the device is started.

Switching off the device



Switching the device off does not disconnect it from the mains voltage. To completely disconnect the mains voltage, remove the power plug from the power socket.

- ▶ Shut down the operating system in the proper way.
- ↳ The device switches to power saving mode automatically and switches off.

Procedure in an emergency



If the device cannot be switched off, you can force a shutdown by using the following emergency procedure.

Warning, this could lead to a loss of data!

- ▶ Press the ON/OFF switch for at least 4 seconds.
- ↳ The device will switch off.
When you next restart the device, error messages may be displayed due to the improper shutdown.

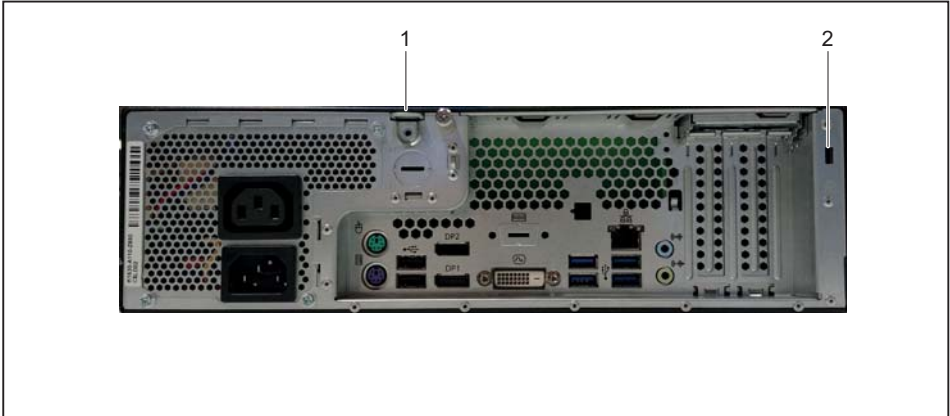
Settings in BIOS Setup

In the *BIOS Setup*, you can set system functions and the hardware configuration of the device. At delivery, the default entries are effective (see BIOS manual or mainboard manual). You can customize these settings in the *BIOS Setup*.

Property and data protection

Software functions and mechanical locking offer a broad range of functions for protecting your device and your personal data against theft and unauthorised access. You can also combine these functions.

Anti-theft protection and lead-sealing



1 = Eye for padlock

2 = Device for Security Lock

Anti-theft protection

You can protect your device from theft

- with the eye (1), a padlock and a chain, which you have connected to a fixed object beforehand.
- with the security lock device (2) and a Kensington MicroSaver. Please consult the manual for your security lock.

Lead-sealing

To prevent unauthorised persons from opening the casing, the casing can be lead-sealed. To do this, feed the sealing chain through the eye (1) and seal the chain with the lead seal.

Mechanical casing lock (optional)

With the casing lock, you can mechanically lock the casing to prevent unauthorised persons from opening it. On delivery, you will find the keys on the rear panel of your device.



In addition to the casing lock, an open  and a closed lock  are also illustrated.

- Key turned towards the closed lock: The device is locked.
- Key turned towards the open lock: The device is unlocked.

BIOS setup security functions

The *Security* menu in *BIOS Setup* offers you various options for protecting your personal data against unauthorized access, e.g.:

- Prevent unauthorized access to *BIOS Setup*
- Prevent unauthorised system access
- Prevent unauthorised access to the settings of boards with their own BIOS
- Activate virus warnings
- Protect BIOS from overwriting
- Protect the device from being switched on by an external device

You can also combine these functions.

A detailed description of the *Security* menu and how to assign passwords can be found in the manual for the mainboard or in the BIOS manual.

Access authorisation via SmartCard

In systems equipped with a SmartCard reader, access can be restricted to those users who have a corresponding SmartCard.

Operating the SmartCard reader (optional)

- ▶ Connect the external SmartCard reader to your system as described in the instructions for the SmartCard reader.
- ↳ After the device is switched on, you will be prompted to insert your SmartCard.

Delete data

Erase Disk function for hard disks and solid state drives

Erase Disk is a solution integrated in the firmware of FUJITSU desktops (*UEFI: Unified Extensible Firmware Interface*) to delete all data from a hard disk or Solid State Disc drives (SSDs).

With this function, all data from internal or external hard disks or SSDs connected via the eSATA port can be irretrievably deleted before the hard disks are disposed of or the entire system is disposed of. The function can also be used if hard disks are to be completely deleted, e.g. before installing a new operating system.



Further information on *Erase Disk* can be found on the Internet at "<http://support.ts.fujitsu.com/download>".

Delete personal data in volatile and non-volatile memories

All FUJITSU desktops store personal data in volatile and non-volatile memories. The main components on which this data is stored are:

- hard disks
- SSDs

In addition, there are other internal components (e.g. mainboard) that can contain personal data even when the system is switched off and disconnected from power.



For more information on deleting this data, see the "Data Deletion" document on the Internet at "<http://support.ts.fujitsu.com/download>".

Software installation and restore

Installing new software

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

Download current drivers/software

- ▶ Switch the device on.
- ▶ In the browser, select the address "<http://www.fujitsu.com/fts/support>".
- ▶ Select the desired product group, e.g. *Client Computing Devices*.
- ▶ In the *Downloads* area, select the entry *More Details*.
- ▶ Select your device via one of the available search options:

Automatic Product Detection

or

- ▶ *Serial number*

or

- ▶ *Product Search*

or

- ▶ *Browse For Product*

↳ A list of the available drivers, software, etc. is displayed.

- ▶ To see the valid versions and available options for your operating system, select the operating system desired under *Selected operating system*.
- ▶ Click on the desired drivers, desired software, etc.
- ▶ To start the download, click on *Direct download* after the desired option.
- ▶ Follow the instructions on the screen.

Problem solutions and tips



Refer to the safety notes in the "Safety/regulations" manual and in the ["Getting started", Page 12](#) chapter when connecting or disconnecting cables.

If a fault occurs, try to rectify it in accordance with the measures described in the following documents:

- in this chapter
- in the documentation relating to the peripheral devices
- in the Help sections for the individual programs
- in the documentation for the operating system in use.

Help if problems occur

Should you encounter a problem with your computer that you cannot resolve yourself:

- ▶ Note the ID number of your device. The ID number is found on the type rating plate on the back, the underside or the top of the casing.
- ▶ Contact the Service Desk responsible for your country for clarification of the problem: ["http://support.ts.fujitsu.com/contact/service desk"](http://support.ts.fujitsu.com/contact/service desk). When you do this, please have ready the ID number and serial number of your system.

Troubleshooting

Power-on indicator remains unlit after you have switched on your device

Cause	Troubleshooting
The mains voltage supply is faulty.	<ul style="list-style-type: none"> ▶ Check whether the power cable is plugged properly into the device and a grounded mains outlet.
Internal power supply overloaded.	<ul style="list-style-type: none"> ▶ Pull the power plug of the device out of the mains outlet. ▶ Wait approx. 3 min. ▶ Plug the power plug into a properly grounded mains outlet again. ▶ Switch the device on.

The device cannot be switched off with the On/Off switch.

Cause	Troubleshooting
System crash	<ul style="list-style-type: none"> ▶ Press the On/Off switch for at least 4 seconds, until the device switches off. <p>Attention: Warning, this could lead to a loss of data!</p> <p>The Operating System is not shut-down properly in the process. Error messages are therefore possible the next time the system is booted.</p>

Monitor remains blank

Cause	Remedy
Monitor is switched off	▶ Switch your monitor on.
Power saving has been activated (screen is blank)	<ul style="list-style-type: none"> ▶ Press any key on the keyboard. <p>or</p> <ul style="list-style-type: none"> ▶ Deactivate the screen saver. If necessary, enter the appropriate password.
Brightness control is set to dark	▶ Adjust the brightness control. For detailed information, please refer to the operating manual supplied with your monitor.
Power cable not connected	<ul style="list-style-type: none"> ▶ Switch off the monitor and the device. ▶ Check that the monitor power cable is properly connected to the monitor and to a grounded mains outlet or to the monitor socket of the device. ▶ Check that the device power cable is properly plugged into the device and a grounded mains outlet. ▶ Switch on the monitor and the device.
Monitor cable not connected	<ul style="list-style-type: none"> ▶ Switch off the monitor and the device. ▶ Check that the monitor cable is properly connected to the device and monitor. ▶ Switch on the monitor and the device.
Incorrect setting for the monitor	<ul style="list-style-type: none"> ▶ Restart the system. ▶ Press [F8] while the system is booting. ▶ Start the system in Safe Mode. ▶ Set up the monitor as described in the documentation for your operating system and monitor.

No mouse pointer displayed on the screen

Cause	Remedy
The mouse is not correctly connected.	<ul style="list-style-type: none"> ▶ Shut down your operating system in the proper manner, for instance using [Ctrl] + [Alt] + [Del]. ▶ Switch the device off. ▶ Check that the mouse cable is properly connected to the system unit. If you use an adapter or extension lead with the mouse cable, check the connections. ▶ Make sure that only one mouse is connected. ▶ Switch the device on.
Disabled USB ports	<ul style="list-style-type: none"> ▶ Check in the <i>BIOS Setup</i> whether the used USB ports are <i>enabled</i> (see BIOS manual or manual for the mainboard).

Time and/or date is not correct

Cause	Remedy
Time and date are incorrect.	<ul style="list-style-type: none"> ▶ Set the correct time and date within the operating system you are using. <p>or</p> <ul style="list-style-type: none"> ▶ Set the correct time and/or date in the <i>BIOS Setup</i>.
The lithium battery is empty.	<ul style="list-style-type: none"> ▶ If the time and date are repeatedly wrong when you switch your device off and then on, change the lithium battery (see the "System expansions and repairs" manual).

SmartCard reader is not recognised

Cause	Troubleshooting
Chip card inserted incorrectly.	<ul style="list-style-type: none"> ▶ Check whether you have inserted your SmartCard into the SmartCard reader the right way with the chip facing upwards. ▶ Check whether the SmartCard you are using is supported. Your SmartCard must comply with the ISO standard 7816-1, -2, -3 and -4.

SmartCard PIN forgotten

Cause	Troubleshooting
PIN forgotten	▶ If you are working in a network, contact your system administrator, who can unlock your system with a Supervisor PIN.

Error messages on the screen

Error messages and their explanations are provided:

- in the technical manual for the mainboard
- in the documentation for the programs used

Tips

Topic	Tip
Out of system resources	▶ Close unnecessary applications. or ▶ Run the applications in a different order.

Clean/replace dust filter

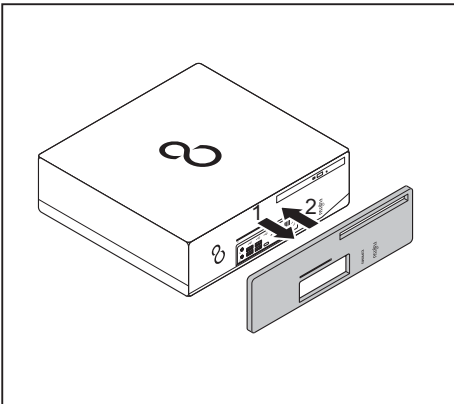
Your system can be protected from dust particles by an optional dust filter.

Recommended cleaning cycle:

- In a normal working environment: 1x per year
- At high ambient temperature and/or dust exposure: monthly to semi-annually



You can use the *Dustfilter Cleaning* software to configure the time interval. You can find the software on the Internet at "<http://support.ts.fujitsu.com/download>".



- ▶ Remove the dust filter from the front panel (1).
- ▶ Carefully clean the dust filter with a brush or vacuum cleaner.
- ▶ Place the dust filter on the front panel (2).

System expansions and repairs



Information on system expansions and repairs can be found on the Internet in the "System Expansions and Repairs" manual at ["http://www.fujitsu.com/fts/support"](http://www.fujitsu.com/fts/support).

Operations that are distinguished in the manual as Only For Service, such as repairs to the device, may only however be performed by authorised service technicians. Incorrect repairs may greatly endanger the user (electric shock, fire risk) and will invalidate your warranty.

Technical specification

Electrical data	
Protection class:	I
Rated voltage range:	100 - 240 V
Rated frequency:	50 - 60 Hz
Max. rated current:	
E85+: Device without monitor socket:	2,5 - 1,2 A
E94+: Device with monitor socket:	5,2 - 2,5 A
of which Value for monitor socket:	2,0 - 1,0 A
Dimensions	
Width/depth/height:	313 mm x 286 mm x 89 mm / 12,32 in. x 11,26 in. x 3,50 in.
Weight	
In basic configuration:	about 5 kg / 11,02 lbs
Environmental conditions	
Environment class (3K2):	DIN IEC 721 part 3-3
Environment class (2K2):	DIN IEC 721 part 3-2
Temperature:	
Operating (3K2):	
Transportation (2K2):	10 °C ... 35 °C / 50 °F ... 95 °F
The formation of condensation is not permitted while the device is in operation !	
Clearance required to ensure adequate ventilation:	
Without air vents	min. 10 mm / 0,39 in.
With air vents	min. 200 mm / 7,87 in.



The data sheet for this device provides further technical data. The data sheet can be found on our website "<http://fujitsu.com/fts/>".

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