FUJITSU Desktop ESPRIMO Q55x / Q958 ESPRIMO Q956 / Q957 ESPRIMO Q7010



Thank you for buying an innovative product from Fujitsu.

Latest information about our products, useful tips, updates etc. is available on our website: "http://www.fujitsu.com/fts/"

You can find driver updates at: "http://support.ts.fujitsu.com/download"

Should you have any technical questions, please contact:

- our Hotline/Service Desk ("http://support.ts.fujitsu.com/contact/servicedesk")
- · Your sales partner
- Your sales office

We hope you enjoy using your new Fujitsu system!



Issued by / EU importer Fujitsu Technology Solutions GmbH Mies-van-der-Rohe-Straße 8 80807 Munich, Germany "http://www.fujitsu.com/fts/"

Copyright © Fujitsu Technology Solutions GmbH 2020. All rights reserved.

Publication Date 09/2020 Order No.: A26361-K1012-Z320-1-19, edition 9

FUJITSU Desktop ESPRIMO Q55x / Q958 ESPRIMO Q956 / Q957 ESPRIMO Q7010

Operating Manual

Your ESPRIMO	5
Ports and Operating Elements	7
Important notes	15
Getting started	17
Operation	39
Troubleshooting and tips	54
System expansions and repairs	58
Technical data	59
Index	60

Remarks

Notes on the product description are consistent with Fujitsu's design specifications and are made available for comparison purposes. The actual results may differ due to several factors. Technical data is subject to change without notification. Fujitsu does not accept any responsibility for technical or editorial errors nor for omissions.

Trademarks

Fujitsu, the Fujitsu logo and ESPRIMO are registered trademarks of Fujitsu Limited or its subsidiaries in the USA and other countries.

PS/2 is a registered trademark of International Business Machines, Inc.

Kensington is a registered trademark of the ACCO brand.

USB Type-CTM and USB-CTM are trademarks of the USB Implementers Forum in the USA and other countries.

HDMI

The terms HDMI and HDMI High-Definition Multimedia Interface and the HDMI logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the USA and/or other countries respectively.

All other trademarks mentioned here are the property of their particular owner.

Copyright

No part of this publication may be copied, reproduced or translated without prior written permission from Fujitsu.

No part of this publication may be stored or transmitted in any electronic manner without written permission from Fujitsu.

Contents

Your ESPRIMO	5
Validity of the Reference Manual	5
Notational conventions	6
Ports and Operating Elements	7
Front	7
Rear	11
Important notes	15
Safety notes	15
Transporting the device	15
Cleaning the device	16
Energy-saving disposal and recycling	16
Important notes for ESPRIMO Q957/Q958/Q7010	16
Getting started	17
Unpacking and checking the delivery	17
Steps for initial setup	17
Fitting the underside cover (device-dependent)	18
Setting up the device	20
Operating position	20
Attach adhesive feet (optional)	23
Fitting the base (optional)	24
Fitting the device to the VESA interface on a monitor (optional)	25
Connecting the power cable	32
Connecting external devices	34
Ports on the device	34
Connecting the monitor	35
Connecting a USB mouse	35
Connecting a USB keyboard	35
Connecting external devices to the serial interface	35
Connecting external devices to the USB ports	36
Connecting a PS/2 device	36
Initial switch-on: Software will be installed	37
Switch on the monitor and the machine	37
Installing the software	38
Operation	39
Switch the device on	39
Switching the device off	39
Indicators on the device	40
Keyboard	41
Important keys and key combinations	41
Optical drive (device-dependent)	43
Handling storage media	43
Inserting or removing storage media	44
Manual removal of storage media (emergency removal)	45
Wireless LAN / Bluetooth wireless components (device-dependent)	45
Switching the wireless components on and off	45
Settings in BIOS Setup Utility	46
Starting the BIOS Setup Utility	46
Operating the BIOS Setup Utility	47

Shutting down the BIOS Setup Utility Property and data protection BIOS Setup security functions Delete data Using the SmartCard reader (device-dependent) Using a palm sensor (device-dependent) Using the security lock Using a locking slide Lead-sealing the casing	47 48 48 48 50 51 52 53
Troubleshooting and tips	54
Help if problems occur	54
I roublesnooting	54
The device cappet he switched off with the Op/Off switch	54 55
Monitor remains blank	55
No mouse pointer displayed on the monitor	56
Date and time are not correct	56
SmartCard reader is not recognised	56
SmartCard PIN forgotten	56
SmartCard lost	56
User and/or supervisor SmartCard lost	57
Error messages on the screen	57
	57
Tips	57
System expansions and repairs	58
Technical data	59
Index	60

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 configuration level chosen some of the hardware components described may not be available on your device. Please observe the notes on your Operating System.

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

Detailed information on this device is also 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 manual for "System expansions and repairs"
- · in the operating manual for the monitor
- · in the manual for the motherboard
- · in your Operating System documentation
- · in the document "Data deletion"

Validity of the Reference Manual

This Reference Manual is valid for the following systems:

- FUJITSU Desktop ESPRIMO Q556 (if applicable, followed by suffixes)
- FUJITSU Desktop ESPRIMO Q558
- FUJITSU Desktop ESPRIMO Q956
- FUJITSU Desktop ESPRIMO Q957
- FUJITSU Desktop ESPRIMO Q958
- FUJITSU Desktop ESPRIMO Q7010

Notational conventions

Â	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.	
i	Indicates important information for the proper use of the device.	
•	Indicates an activity that must be performed	
\mapsto	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.	
This font	indicates	
	• terms and texts used in a software interface, e.g.: Click on Save	
	 names of programs or files, e.g. Windows or setup.exe. 	
"This font"	indicates	
	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 <u>"http://www.fujitsu.com/fts"</u> 	
	 Names of CDs, DVDs and titles or designations for other materials, e.g.: "CD/DVD Drivers & Utilities" or "Safety/Regulations" manual 	
Кеу	indicates a key on the keyboard, e.g: F10	
This font	indicates terms and texts that are emphasised or highlighted, e.g.: Do not switch off the device	

Ports and Operating Elements

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

Front

The device is available in several device variants:

- · Device variant with optical drive
- · Device variant with SmartCard reader and / or palm sensor
- · Device variant with second hard disk



If you have not installed either an optical drive or a SmartCard reader / palm sensor or a second hard disk, mount the blanking plate.

You can find information on modifying the device and on installing and removing components in "the System expansions and repairs" manual.



Except for the FUJITSU Desktop ESPRIMO Q7010, each device variant features a microphone connection and an audio output (item no. (1) and (2) in the illustrations below) on the front side.

Here, the FUJITSU Desktop ESPRIMO Q7010 has instead a combined audio input and output.

Device variant with the maximum of components



- 1 = Microphone jack (device-dependent)
- 2 = Audio output (device-dependent)
- 3 = USB port (USB 3.1, type A)
- 4 = USB port (USB 3.1, type A)
- 5 = Insert/eject button, optical drive (optional)
- 6 = USB port (USB 3.1, type C) (optional)
- 7 = Hard disk indicator
- 8 = On/Off switch with power-on indicator
- 9 = Emergency removal



Device variant with SmartCard reader and / or palm sensor

- 1 = Microphone jack (device-dependent)
- 2 = Audio output (device-dependent)
- 3 = USB port (USB 3.1, type A)
- 4 = USB port (USB 3.1, type A)
- 5 = SmartCard reader (optional)

- 6 = USB port (USB 3.1, type C) (optional)
- 7 = SmartCard reader indicator (optional)
- 8 = Hard disk indicator
- 9 = On/Off switch with power-on indicator
- 10 = Palm sensor (optional)

Device variant with second hard disk



- 1 = Microphone jack (device-dependent)
- 2 = Audio output (device-dependent)
- 3 = USB port (USB 3.1, type A)
- 4 = USB port (USB 3.1, type A)
- 5 = Removing second hard disk (optional)
- 6 = USB port (USB 3.1, type C) (optional)
- 7 = Hard disk indicator
- 8 = On/Off switch with power-on indicator
- 9 = Hard disk indicator of second hard disk (optional)

Rear

FUJITSU Desktop ESPRIMO Q556



- 1 = Latching clip (optional)
- 2 = Top casing cover unlocking mechanism
- 3 = Security lock device
- 4 = Padlock clamp
- 5 = LAN port
- 6 = PS/2 port
- 7 = Audio output

- 8 = 2 USB ports (USB 3.1)
- 9 = 2 USB ports (USB 2.0)
- 10 = Display port
- 11 = Bottom casing cover unlocking mechanism
- 12 = DVI-D monitor port
- 13 = Serial port
- 14 = Mains connection (AC IN)

FUJITSU Desktop ESPRIMO Q558



- 1 = Latching clip (optional)
- 2 = Top casing cover unlocking mechanism
- 3 = Security lock device
- 4 = Padlock clamp
- 5 = LAN port
- 6 = 4 USB ports (USB 2.0)
- 7 = PS/2 port (optional)

- 8 = Audio output
- 9 = 2 USB ports (USB 3.1)
- 10 = Display ports
- 11 = Bottom casing cover unlocking mechanism
- 12 = DVI-D monitor port
- 13 = Serial interface (optional)
- 14 = Mains connection (AC IN)

FUJITSU Desktop ESPRIMO Q957/Q958



- 1 = Latching clip (optional)
- 2 = Top casing cover unlocking mechanism
- 3 = Security lock device
- 4 = Padlock clamp
- 5 = LAN port
- 6 = 2 USB ports (USB 2.0)
- 7 = PS/2 port (optional)

- 8 = Audio output
- 9 = 4 USB ports (USB 3.1)
- 10 = Display ports
- 11 = Bottom casing cover unlocking mechanism
- 12 = DVI-D monitor port
- 13 = Serial interface (optional)
- 14 = Mains connection (AC IN)

FUJITSU Desktop ESPRIMO Q7010



The FUJITSU Desktop ESPRIMO Q7010 can be optionally equipped with a Flexiboard (item no. (12) in the illustration below): with one of the following connector types:

- VGA
- DVI-D
- HDMI
- LAN
- USB 2.0 (USB Type-C)



- 1 = Locking bracket (optional)
- 2 = Top casing cover unlocking mechanism
- 3 = Security Lock Device
- 4 = Padlock clamp
- 5 = LAN port
- 6 = 2 USB ports (USB 2.0)
- 7 = USB port (USB 2.0, optional)
- 8 = Audio output

- 9 = 4 USB ports (USB 3.1)
- 10 = 2 Display ports
- 11 = Bottom casing cover unlocking mechanism
- 12 = Flexiboard type DVI-D (by way of example, optional)
- 13 = Serial Interface (optional)
- 14 = Mains connection (AC IN)

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 notes



Please follow the safety notes provided in the "Safety/Regulations" manual as well as the safety notes given below.

When installing and operating the device, please observe the notes on ambient conditions in Chapter <u>"Technical data", Page 59</u> and Chapter <u>"Getting started", Page 17</u> or the notes in the data sheets.

The device may only be operated up to a maximum height of 3000 m (9842 ft) (for China only 2000 m (6557 ft)).

When setting up the device, make sure there is clearance all around it so that the casing receives enough ventilation. In order to avoid overheating, do not cover the ventilation areas on the monitor or the device.

You should operate the device only if the rated voltage of the device is the same as the local mains voltage.

For complete disconnection from the mains voltage, you must pull the mains plug out of the socket.

Please note that components in the system as well as the surface of the device may become very hot.

The activities described in these instructions must always be performed with special care.

Only qualified technicians should repair the device. Incorrect repairs could put the user at great risk or cause serious damage to the equipment (electric shock, risk of fire).

Do not lay or place any objects on the upper side of the device.

Do not apply any pressure to the upper side of the device during operation.

Transporting the device



Transport all devices separately in their original packaging or in a packaging that protects them from knocks and jolts.

Unpack them only at the installation site.

If the device is brought from a cold environment into the room where it will be used, condensation may occur. In order to avoid damage to the device, wait before preparing it for use until the device has reached the ambient temperature and it is absolutely dry.

Cleaning the device



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

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

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.

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/").

Important notes for ESPRIMO Q957/Q958/Q7010

In an unlikely extreme situation (CPU completely utilised and many external USB devices with high current consumption connected to the ESPRIMO Q95x/Q7010 simultaneously), the internal CPU frequency can be reduced to prevent a current overload. The mouse, keyboard, headphones and similar devices are low current consumers and are not affected.

As soon as the overload is ended, the CPU frequency returns to the normal value.

In the unlikely case of an extreme overload, the USB 3.1 port, type C, is deactivated and a reset is carried out to limit the output level to 4.5 W (900 mA).

If an extreme system load occurs again, the USB 3.1 port, type C, will be permanently deactivated. To prevent restricted performance or the deactivation of devices, the device causing the overload must be stopped or the number of USB devices with high current consumption and connected to the ESPRIMO must be reduced.

The deactivated or throttled USB 3.1 port, type C, then automatically returns to full power when the device is reconnected or the system is restarted.

Getting started



Please observe the safety information in the "Important notes", Page 15 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.

Fitting the underside cover (device-dependent)



Rating type plate

FUJITSU Desktop ESPRIMO Q956/Q957:

At the time of device delivery, the bottom cover (2) is not yet mounted on the bottom of the device, but packed along with the system so that you can read the type rating plate (3) and the software licence information when preparing it for use.

The type rating plate and the software licence are affixed on the device cover and is usually located below the mounted bottom cover so that it is not visible.

FUJITSU Desktop ESPRIMO Q55x/Q958/Q7010:

With the FUJITSU Desktop ESPRIMO Q55x/Q958/Q7010, the type rating plate is attached to the underside of the device or to the right side of the device (when used vertically).



FUJITSU Desktop ESPRIMO Q956/Q957:

Only fit the underside cover if you are using the device in a horizontal or vertical operating position without attaching it to a VESA interface (see Section <u>"Setting up the device"</u>, Page 20).

If you are fitting the device onto the VESA interface of a monitor, you must not fit the underside cover. If you do, the screw holes for the VESA attachment will no longer be accessible.



Device with device cover (1), with bottom cover mounted (2)



Device with device cover (1) and visible type plate (3, ESPRIMO Q956/Q967 only), no bottom cover.

The device has a device cover (1) at the bottom. The device cover is divided into two: during operation, the bottom cover (2) is inserted in the device cover.

In order to be able to mount the bottom cover prior to preparing it for use, proceed as follows:

► Turn the device over and place it on a stable, flat and clean surface. If necessary, place a slip-resistant cloth on this surface to prevent the device from being scratched.



- ▶ Put the bottom cover as shown on the bottom of the device.
- ► Hook the bottom cover in the openings provided for this purpose at the bottom (1).
- ► Fold the cover in the direction of the arrow (2) until it engages noticeably and audibly.

Information about removing the bottom cover is provided in Section $\underline{\mbox{"Remove}}$ the bottom cover", Page $\underline{25}$.

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 your device location, disturbing vibrations and noises may occur. In order to avoid this, a minimum distance of 10 mm / 0.39 inch to other devices or objects should be maintained on housing sides without ventilation surfaces.

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

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

Do not place multiple devices on one another and do not keep any monitor on the device.

Do not expose the device to extreme ambient conditions (see <u>"Technical data", Page 59</u>, "Ambient conditions"). Protect the device from dust, humidity, and heat.

Operating position

You can use the device in various operating positions.

Horizontal, top casing cover upwards



For the device variant FUJITSU Desktop ESPRIMO Q55x/Q957/Q958/Q7010, you must stick the enclosed adhesive feet in the four corners of the underside of the device in this operating position, see section <u>"Attach adhesive feet (optional)", Page 23.</u>



Vertical only with foot, on/off switch upwards

For mounting, refer to Section "Fitting the base (optional)", Page 24



i

The vertical operating position is only permissible with a foot!



Operation in the vertical operating position is not allowed in Taiwan.

On the VESA interface of a monitor, ON/OFF switch facing upwards

For fitting see Section "Fitting the device to the VESA interface on a monitor (optional)", Page 25



Attach adhesive feet (optional)

For the horizontal operating position, you must attach the adhesive feet to the device.



Attach the adhesive feet to the four corners of the underside of the unit as shown (1).

Fitting the base (optional)

Screw holes for attaching the base can only be found on the left side of the device.

i



- ▶ Place the device on the right side as shown.
- ➡ The screw holes (1) and guide openings (2) for securing the base on the left side of the device are facing upwards.
- ▶ Place the base on the left side of the device such that the locking lugs (3) are inserted into the corresponding guide openings (2) on the device and the screw holes (1) and (4) directly overlap.
- ▶ Place the screws into the overlapping screw holes (1 & 4) and attached the base to the device using the screws.

Fitting the device to the VESA interface on a monitor (optional)



With ESPRIMO Q956/957 type devices, the casing cover is already fitted with the corresponding screw holes by default.

With ESPRIMO Q55x/Q958/Q7010 type devices, you can order the corresponding casing cover with screw holes separately if necessary.



The device must be fitted onto the screen in such a way that the connecting and operating elements can be used from the side.

Remove the bottom cover

 Instructions: The housing is open and the housing cover has been removed, see "System expansions and repairs" manual.



Release the locking lug (1) on the underside cover from the casing cover and remove the underside cover (2).

Information about fixing the underside cover is provided in Section <u>"Fitting the</u> <u>underside cover (device-dependent)", Page 18</u>.

Mounting with screws



• Mount the casing cover (a) into the bolts at the rear of the monitor using the screws (1) supplied.



► Secure the device on the casing cover mounted on the monitor.

Mounting with bolts and screws



Screw in the four hexagon head bolts at the rear of the monitor (1).



▶ Install the casing cover (a) into the bolts at the rear of the monitor using the screws supplied (1).



Secure the device on the casing cover mounted on the monitor.

Mounting on monitors with height-adjustable column



- Detach all cables from the monitor.
- ► Fix the monitor base adapter by laying the Velcro tape around the monitor base (1) and looping it back through the metal eye (2).





 Fix the casing cover onto the monitor base adapter using the screws (1) supplied.

 Secure the device on the casing cover mounted on the monitor.

Connecting the power cable



Observe the safety notes in the enclosed "Safety/Regulations" manual.

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

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 (1) to the power connector (AC IN) of the device.
- Connect the mains cable (2) to a mains socket.

Power connector	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 and 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 ports are located on the front and back of the device. The ports available on your device depend on the configuration level you have selected. The standard ports are marked with the symbols shown below (or similar). Detailed information on the location of the connections is provided in the manual for the motherboard.

Ŀ	DVI-D monitor port, white (device-dependent)	DP	Display port
	Serial port		*HDMI port (device-dependent)
●	USB 2.0 - Universal Serial Bus, type A, black	률	LAN port
●	USB 3.1 Gen1 - Universal Serial Bus, Type A: blue, Type C: black	((+))	Audio input (Line in, device-dependent)
• ← ¹⁰	USB 3.1 Gen2 - Universal Serial Bus, type A: blue, type C: black	((→	Audio output (Line Out, device-dependent), light green
	PS/2 keyboard port, purple	\bigcap	Combined audio input and output (device-dependent)



Some of the connected devices require special software (e.g. drivers) (refer to the documentation for the connected device and Operating System).

Connecting the monitor



Connect the monitor to your device only if it is switched off.

- Follow the instructions contained in the monitor operating manual to prepare the monitor (e.g. connecting cables).
- Plug the data cable into the desired monitor port of the device.
- ▶ Plug the monitor power cable into the grounded mains outlet.

Connecting a USB mouse

► Connect the USB mouse to one of the USB ports on the device.

Connecting a USB keyboard

Use the keyboard cable provided with the keyboard (not included in the delivery scope of the device).

- Plug the rectangular connector of the keyboard cable into the rectangular socket on the underside or on the rear of the keyboard.
- ▶ Plug the flat rectangular USB connector of the keyboard cable into a USB port of the device.

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, modem or keyboard).



USB devices and hot plug-enabled. 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.

Connecting a PS/2 device

Only use the supplied lead.



A PS/2 device is only recognised by the PC if you connect the PS/2 device when the PC is switched off and then switched on again.

- ► Connect the PS/2 device to the PS/2 port on the PC.
- Switch the PC back on.

Initial switch-on: Software will be installed



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

During the installation process, DO NOT restart the device unless you are requested to do so!

Otherwise the installation will not be carried out correctly and the contents of the hard disk will have to 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.

You may need the licence number for Windows during the installation. The licence number is located on a sticker on your device (see <u>"Remove the bottom cover", Page 25</u>).

Switch on the monitor and the machine



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

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

- Press the on/off button on the front of the machine.
- → The operational display will light up and the machine will start.

Installing the software

- ▶ During installation, follow the instructions on the screen.
- ► Consult the Operating System manual if there is anything unclear about the requested input data.



You will find detailed information on the system, as well as drivers, utilities and updates on the "Drivers & Utilities" DVD and on the Internet at <u>"http://www.fujitsu.com/fts/support"</u>.

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.
- \mapsto The power indicator glows and the device is started.

Switching the device off

- Shut down the Operating System properly.
- If the Operating System does not automatically switch the device into energy-saving mode or switch it off, press the ON/OFF switch until the device switches off. Warning, this could lead to a loss of data!
- → If the device is switched off, it consumes a minimum of energy.



The on/off switch does not disconnect the device from the mains voltage. To completely disconnect the mains voltage, pull the power plug out of the power socket.

▶ If necessary, switch the monitor off (refer to the operating manual for the monitor).

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.

Example: Device variant with SmartCard reader and/or palm sensor



No.	indicator	Description	
1	SmartCard reader indicator (device dependent)	The indicator lights up when the device's SmartCard reader is accessed (device dependent).	
2	Hard disk indicator	The indicator lights up when the hard disk drive in the device is being accessed.	
3	Power indicator	Attention: In the energy saving mode, the device must not be disconnected from the mains, as this can result in data loss.	
		Indicator is illuminated:	
		The device is switched on.	
		Indicator flashes:	
		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 illuminated:	
		The device is switched off (disconnected from the mains) or is ready. If the device is ready it can be switched on with the On/Off switch.	



In the energy saving mode, the device must not be disconnected from the mains, as this can result in data loss.

Keyboard

i

The illustrated keyboard is an example and may differ from the model you use.



1 = Function keys

2 = Power button (optional)

- 4 = Cursor keys
- 5 = Numeric keypad (calculator keypad)

3 = Alphanumeric keypad

Important keys and key combinations

The description of the following keys and key combinations applies to Microsoft operating systems. Details of other keys and key combinations can be found in the documentation of the relevant application programme.

Key / key combination	Description
\bigcirc	Power button (optional)
\bigcirc	Depending on the setting in the <i>BIOS Setup</i> the device can be switched on or off with this switch. Some operating systems allow you to configure additional functions of the ON/OFF switch in the Control Panel.
	With some keyboards the ON/OFF switch can only be used with an ACPI (Advanced Configuration and Power Management Interface). Otherwise the key is inoperative. The motherboard must support this function.
	Enter key
	Confirm the highlighted selection. The enter key is also referred to as the "Return" key.

Key / key combination	Description	
	Windows key	
	The Windows key switches between the start screen and the last used application.	
	Menu key	
	The Menu key opens the menu for the active application.	
	Shift key	
Û	enables upper-case letters and the upper key symbols to be displayed. The Shift key is also called "Shift".	
	Alt Gr key (country-dependent)	
Alt Gr	produces a character shown on the bottom right of a key (e.g. the @ sign on the $\[Q \]$ key).	
Num	Num Lock key	
Û	By pressing the Num Lock key you switch between the upper- and lower-case levels of the calculator keypad.	
	When the Num Lock indicator is lit the digit and comma keys are active.	
	When the Num Lock indicator is not lit the cursor control functions are active in the Numeric keypad.	
\square	Ctrl key	
Ctrl	performs a special operation when pressed in conjunction with another key. The $\boxed{\text{Ctrl}}$ key is also called the "Control" or "Control key".	
	Windows Security/Task Manager	
Ctrl + Alt + Del	This key combination opens the Windows Security/Task Manager window.	

Optical drive (device-dependent)



Depending on the device variant, your device is fitted with an optical drive.

An optical drive on one side and a SmartCard reader/palm sensor on the other cannot be combined with one another.



This product contains a light-emitting diode (LED), classified in accordance with IEC 60825-1:2007: LASER CLASS 1, and hence, it should not be opened.

Handling storage media

Observe the following guidelines when handling storage media:

- · Avoid touching the surface of any storage media. Handle storage media only by their edges.
- Always keep the storage media in its case. This will protect the storage media against being covered in dust, scratched or damaged in any other way.
- · Protect your storage media against dust, mechanical vibrations and direct sunlight.
- · Avoid keeping storage media in areas subject to high temperatures or humidity.

You can use 12 cm diameter storage media in the drive. Do not use any visiting card CDs or other small storage media.

When using a CD of poor quality vibrations and reading errors may occur.

Inserting or removing storage media



- Press the Insert/Eject button to open the tray.
- └→ The drive tray will open.

- Place the storage media in the tray with the printed side facing upwards.
 - Remove any storage media already in there.

i

If you press the Remove button while the storage media is being accessed in the optical drive, the storage media is not output automatically. Wait until the process has completed and try once again.

Manual removal of storage media (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 your device off.
- Push a pen or a piece of wire (such as a paper clip) firmly into the opening (1).
- → The drive tray is ejected. You can now pull the drive tray (2) out of the drive.

Wireless LAN / Bluetooth wireless components (device-dependent)



The installation of wireless components not approved by Fujitsu will invalidate the certifications issued for this device.



The operation of these wireless components is not permissible in Taiwan.

Switching the wireless components on and off



With the programme *Device Manager* you can switch off the wireless components on or off separately.

Pay attention to the additional safety notes for devices with wireless components provided in the "Safety/Regulations" manual.

Details on using Wireless LAN can be found in the online help system included with the Wireless LAN software.

You can find more information on how to use Bluetooth on the CD you received with your Bluetooth software.

Settings in BIOS Setup Utility

With the help of the *BIOS Setup Utility* you can adjust the system functions and the hardware configuration for your device.

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

Menu	Description
Main	System settings such as time and date
Advanced	Advanced system settings
Boot	Configuration of the start-up sequence
Power	Power management functions
Security	Password settings and security functions
Exit	Exits the BIOS Setup Utility

The BIOS Setup Utility program contains the following menus:

The following function keys can also be used:

Key	Description
Esc	to shut down the BIOS Setup Utility
	The current settings are not saved.
F7	To discard changes and to load the previous configuration of the <i>BIOS Setup Utility.</i>
F9	To load the default configuration of the BIOS Setup Utility.
F10	to shut down the BIOS Setup Utility
	The current settings are saved.

Starting the BIOS Setup Utility

- Start the device (switch off/on or reboot the Operating System).
- → Depending on the setting for *Fast Boot* in the *BIOS Setup Utility* the following display, if applicable, appears on the screen on start-up:

<F2> BIOS Setup <F12> Boot Menu

- 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.

The BIOS Setup Utility starts.

Operating the BIOS Setup Utility

i

Press the F1 key to display help on the operation of the *BIOS Setup Utility*. The description of the individual settings is shown in the right-hand window of the *BIOS Setup Utility*.

With the F9 key you can load the default settings of the *BIOS Setup Utility*.

- ▶ Use the cursor keys \leftarrow or \rightarrow to select the menu in which you would like to configure settings.
- \mapsto The menu is displayed on the screen.
- ► Select the option that you want to change with the cursor keys ↑ or ↓.
- 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 (e.g. in this manual).

Shutting down the BIOS Setup Utility

You need to select the desired option in the Exit menu and activate it by pressing the Enter key:

Exit Saving Changes - save changes and exit BIOS Setup Utility

- ► To save the current menu settings and to shut down the *BIOS Setup Utility*, select *Exit Saving Changes* and *Yes*.
- \mapsto The device is rebooted and the new settings come into effect.

Exit Discarding Changes - Reject changes and exit BIOS Setup Utility

- ► To discard the changes, select *Exit Discarding Changes* and *Yes*.
- → The settings which were in force when *BIOS Setup Utility* was called continue to remain effective. The *BIOS Setup Utility* is shut down and the device is rebooted.

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.

BIOS Setup security functions

In the *BIOS Setup* the menu on *Security* offers you various options for protecting your personal data from unauthorised access, e.g.:

- · preventing unauthorised system access
- preventing opening the BIOS Setup without authorisation



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

Make a note of the passwords and keep them in a safe place. If you forget your supervisor password, you will not be able to access your device. Deleting the password is not covered by warranty and assistance for rectifying this will be charged separately.



Your password can be up to 32 characters long and can contain letters and numbers. No distinction is made between upper-case and lower-case.

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 disks or SSDs can be irretrievably deleted before the hard disks or the whole system are 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".

Using the SmartCard reader (device-dependent)



Whether your device has a SmartCard reader depends on the device variant you have ordered.

The SmartCard reader allows access to be limited to only those users that have an appropriate SmartCard.

SmartCards are not supplied as standard equipment. You can use all SmartCards that comply with the ISO standard 7816-1, -2 or -3. These SmartCards are available from various manufacturers.

With the appropriate software you can use your SmartCard as an alternative to password protection, but also as a digital signature, for encrypting your e-mails or for home banking.

We recommend that you always use two SmartCards. Always keep one of the SmartCards in a safe place if you are carrying the other SmartCard with you.

In order to be able to take advantage of all the security features of your system, you will need a CardOS SmartCard from Fujitsu Technology Solutions.



The SmartCard can only be used with a PIN so maximum protection is maintained even when the SmartCard is lost. In order to maximise your security, the CardOS SmartCard gets disabled if three incorrect attempts are made to enter the PIN.

When using your CardOS SmartCard for the first time, you have to enter the preset PIN "12345678" or the PIN that has been informed to you by your system administrator.

Mounting the SmartCard reader



Fit the SmartCard sensor as described in the "System expansions and repairs" manual.

Inserting the SmartCard



Do not use force when inserting and removing the SmartCard.

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



▶ Push the SmartCard into the SmartCard reader with the chip facing upwards.

i

Using a palm sensor (device-dependent)

Whether your device has a palm sensor depends on the device variant you have ordered.

The palm sensor (1) can record the image of the pattern of the veins in the hand. This image is evaluated by additional software and can be used instead of a password.



Mounting the palm sensor



Fit the palm vein sensor as described in the "System expansions and repairs" manual.

Using the palm sensor

- ► To be able to use the palm sensor, you must install and launch the software.
- ► Follow the instructions on the screen.



The surface of the hand must be positioned such that the palm of the hand lies centrally over the palm sensor. In doing so, the palm of the hand and slightly spread fingers should form an even surface.

The supplied software shows the precise position of the hand above the palm sensor.

Using the security lock

i

The following illustration shows the FUJITSU Desktop ESPRIMO Q956/Q957 device variant. You will find the security lock device in the same position in the FUJITSU Desktop ESPRIMO Q55x/Q958/Q7010 device variant.

Your device has provision for a security lock (1). Using the security lock device and the Kensington Lock cable (steel cable, accessory) you can protect your device against theft. Please consult the manual for your Kensington Lock.



Attach the Kensington Lock cable to the Security Lock mechanism (1) on your device.

Using a locking slide

- The upper housing cover is removed, see "System expansions and repairs" manual.
- The lower housing cover is removed, see "System expansions and repairs" manual.



You can also purchase a locking bracket for your device. Contact the service desk or sales partner responsible for your country.

The following illustration shows the FUJITSU Desktop ESPRIMO Q956/Q957 device variant. You will find the components concerned in the same position in the FUJITSU Desktop ESPRIMO Q55x/Q958/Q7010 device variant.

You can use the padlock clamp located on the device and the locking bracket to protect your device from unauthorised opening.



▶ Pull the locking slide apart slightly (1).



▶ Insert the latching clip into the eyes (2) in the direction of the arrow (3).

- Secure the lower housing cover again, see "System expansions and repairs" manual.
- Secure the upper housing cover again, see "System expansions and repairs" manual.



Fold the locking latching clip fully to the right until it is lying against the rear of the device and secure a padlock to the padlock clamp.



Alternatively you can use a Kensington Lock cable (see <u>"Using the security lock", Page 51</u>). This will prevent unauthorised opening of the latching clip and, with it, the casing cover.

Lead-sealing the casing

To prevent unauthorised persons from opening the casing, the casing can be lead-sealed.

- Use the wire of the lead-seal to connect the locking bracket with the padlock clip on the back of the device (see chapter <u>"Rear", Page 11</u>).
- ▶ Use the seal to secure the lead-sealing chain or wire.

Troubleshooting and tips



Refer to the safety notes in the "Safety/regulations" manual and in the <u>"Getting</u> started", Page <u>17</u> chapter when connecting or disconnecting cables.

If a fault occurs, try to correct it as described in the following documentation:

- in this chapter
- · in the documentation for the connected devices
- · in the help systems of the software used
- · in the documentation for your operating system

Help if problems occur

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

- Note the Ident-No. of your device. The Ident-No can be found on the type rating plate on the underside of the device (see <u>"Fitting the underside cover (device-dependent)", Page 18</u>). If necessary, remove the type rating plate in order to access the Ident-No..
- Contact the Service Desk responsible for your country for clarification of the problem: <u>"http://support.ts.fujitsu.com/contact/servicedesk"</u>. When you do this, please have ready the Ident-No. 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.	 Check whether the power cable is plugged properly into the device and a grounded mains outlet.
Internal power supply overloaded.	 Unplug the mains plug of the device from the mains socket.
	 Wait for about 3 minutes.
	 Insert the power plug into a properly grounded mains outlet again.
	 Switch the device on.

Cause	Troubleshooting
System crash	Press the On/Off switch for at least 4 seconds, until the device switches off. Attention: Warning, this could lead to a loss of data!
	The Operating System is not shut-down properly in the process. Error messages are therefore possible the next time the system is booted.

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

Monitor remains blank

Cause	Troubleshooting
Monitor is switched off.	 Switch the monitor on.
Power saving has been activated (screen is blank)	 Press any key on the keyboard. or 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	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	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	 Restart the system. Press the F8 key while the system is booting.
	 Start the system in Safe mode.
	Set the correct values for the connected monitor as described in the operating manual of your monitor.

Cause	Troubleshooting
The mouse is not properly connected.	 Shut down the Operating System correctly.
	 Switch the device off.
	Check that the mouse cable is properly connected. If you are using an adapter or extension lead for the mouse cable, check the plug-in connection.
	 Make sure that only one mouse is connected.
	 Switch the device on.

No mouse pointer displayed on the monitor

Date and time are not correct

Cause	Troubleshooting
Date and time are set incorrectly.	 Set the correct time and date under the Operating System you are using.
	or ► In the <i>BIOS Setup</i> , set the date or time.

SmartCard reader is not recognised

Cause	Troubleshooting
Chip card inserted incorrectly.	 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 you are using 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.

SmartCard lost

Cause	Troubleshooting
SmartCard lost	If you are working in a network, contact your system administrator, who can boot your system with a Supervisor SmartCard.

Cause	Troubleshooting
User and/or supervisor SmartCard lost.	If you have lost your User SmartCard, you can continue working with the Supervisor SmartCard and initialise a new User SmartCard or deactivate the SystemLock function.
	If you have lost the Supervisor SmartCard, you can also continue working, but you no longer have all rights and cannot initialise another Supervisor-SmartCard.
	If you have lost both SmartCards, you cannot boot your system. Please contact our Service Desk. You must provide proof of ownership for the device. Then the Service Desk will refer you to our service partner, who will unlock your device (for a charge).

User and/or supervisor SmartCard lost

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

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.

Tips

Торіс	Тір
Out of system resources	 Close unnecessary applications.
	or ► Run the applications in a different order.

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".

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 data

Electrical data	
Protection class:	11
Rated voltage range	100 – 240 V
Rated frequency	50 – 60 Hz (AC)
Max. rated current	1.5 – 0.8 A
Dimensions	
Width/depth/height:	ESPRIMO Q956/Q957: 186 mm x 191 mm x 59 mm / 7.32" x 7.49" x 2.30"
	ESPRIMO Q55x/Q958/Q7010: 185 mm x 190 mm x 54 mm / 7.28" x 7.48" x 2.13"
Weight	
in basic configuration:	approx. 1.8 kg / 4.0 lbs
Ambient conditions	
Environment class: 3K2	DIN EN 60721-3-3
Environment class: 2K2	DIN EN 60721-3-2
Temperature	
Operation (3K2)	15 °C 35 °C / 59 °F 95 °F
Transport (2K2)	–25 °C 60 °C / –13 °F 140 °F
The formation of condensation is not permitted while the device is in operation!	
Supply areas and clearances required to ensure adequate ventilation:	
without air vents	min. 10 mm / 0.39 inch
with air vents	min. 200 mm / 7.87 inches (exception: underside in vertical operating position, refer to <u>"Setting up</u> the device", Page 20)
Maximum permissible operating height	3000 m (9842 ft), for China only 2000 m (6557 ft)



The data sheets of these devices provide detailed technical data. The data sheets are available on the Internet at http://www.fujitsu.com/fts/".

Index

A

Alphanumeric keypad 41 Anti-theft protection 51 Audio output 34

В

BIOS Setup Utility calling 46 operating 47 Settings 46 Shutting down 47 Buttons Cursor keys 41

С

CD/DVD Emergency removal 45 Components installing/removing 58 Configuration, BIOS Setup Utility 46 Configuring the hardware 46 Configuring the system 46 connecting Connecting a PS/2 device 36 USB keyboard 35 Connecting a PS/2 device 36 Connecting a USB mouse 35 Connecting a USB mouse 35 Contents of delivery 17 Ctrl+Alt+Del 42 Cursor keys 41

D

data delete 48 Data protection 48 Delete SATA hard disk 48 Device Ports 34 set up 20 switching off 39 Switching on 39 transporting 15 Device drivers, serial interface 35 Device, transporting 16 upgrades 58 Devices connecting 36 Devices, connecting 35 Disposal 16

Е

Emergency removal, CD/DVD 45 Erase Disk 48 Ergonomic Video workstation 20 External devices connecting 36 Ports 34 External devices, connecting 35

F

Function keys 41

G

Getting started 17

I

Important notes 15 Installation Software 37–38 Switching on for the first time 37

κ

Kensington Lock cable 51 Key On/Off switch 41 Key combinations 41–42 Keyboard 41 Alphanumeric keypad 41 Cursor keys 41 Function keys 41 Numeric keypad 41 Keyboard port 34 Keys 41 Alt Gr 42 Control 42 Control key 42 Ctrl 42 Ctrl key 42 Ctrl+Alt+Del 42 Enter 41 Enter key 41 Menu key 42 Num 42 Return 41 Shift 42 Shift key 42

L

LAN port 34 Latching clip 52 Lead-seal chain 53 Lead-seal wire 53 Lead-sealing 53 Line out 34

М

Mechanical backup Latching clip 52 Mechanical lock Kensington Lock cable 51 Lead-sealing 53 Padlock clamp 52 Security Lock 51 Monitor connecting 35 switching off 39 Switching on 39 Monitor port DVI-D 34

Ν

Note Safety 15 Notes important 15 Numeric keypad 41

ο

On/Off switch 41 Optical drive 43

Ρ

Packaging 17

Packaging, unpacking 17 Padlock clamp 52 Password protection 48 Ports 7, 34 Power cable connecting 32 Preparing for first use, overview 17 Preparing for operation 32 Preparing for use, overview 17 Property protection 48

R

Re-transportation 15 Recycling 16 Removing by hand, CD/DVD 45 Retransportation 16

S

Safety notes 15 Saving energy 16 Security functions SmartCard 48 SystemLock 48 Security measures 48 Serial interface 35 Serial interface. connecting devices 35 settings 35 Serial port 34 Servicing 58 Setup Refer to the BIOS Setup Utility 46 Software Installation 37-38 Storage media Handling 43 Summary Device 5 System expansion 58 System settings, BIOS Setup Utility 46 System unit, see Device 16

т

Transportation 15-16

U

Universal Serial Bus 34 Upgrades, device 58 USB devices connecting 36 USB port 35 Connecting devices 36 Connecting the keyboard 35 Using the Security Lock 51 V Video workstation 20