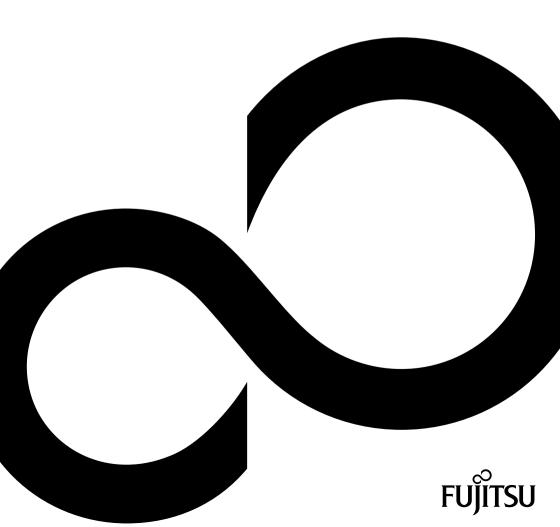
## FUJITSU Display P34-9 UE / P34-9 US



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## FUJITSU Display P34-9 UE / P34-9 US

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### Your LCD screen...

has a whole range of useful features and functions, e.g.:

- TFT display (Thin Film Transistor; active matrix)
- · minimal space requirements thanks to slim casing
- optimum ergonomic characteristics (excellent picture definition and colour purity right into the corners)
- · high degree of brightness and good contrast
- High resolution (3440 x 1440)
- presentation of up to 1,07 billion colours (in conjunction with an appropriate graphics card)
- Automatic scanning of horizontal frequencies from 30 to 160 kHz and refresh rates (vertical frequencies) from 28 to 202 Hz (absolutely flicker-free)
- · Digital screen controller with microprocessor for storing 36 different display modes
- freely adjustable colour alignment for matching the screen colours to the colours of various input and output devices
- · convenient operation via integrated OSD (On-Screen-display) menu
- VESA-DDC compatibility
- VESA-FPMPMI compatibility (Flat Panel Monitor Physical Mounting Interface) Mounting device for swivel arm or a similar accessory
- Plug&Play capability
- · Digital video inputs (USB-C, Displayport and HDMI) with HDCP
- · power management for reducing power consumption when the computer is not in use
- · Compliance with the recommendations according to the latest TCO requirements
- the monitor fulfills all GS ("Geprüfte Sicherheit", Certified Security) requirements.

This operating manual contains important information you require to start up and run your LCD monitor.

A digital graphics card with display port and/or USB-C interface or a video signal source with HDMI interface is required to control the LCD monitor. The monitor processes the data supplied to it by the graphics card. The graphics card or the corresponding driver software is responsible for setting the modes (resolution and refresh rate).

When putting the monitor into operation for the first time, the screen display should be optimally adapted to the display adapter used and adjusted in accordance with your needs (see chapter <u>"Changing the monitor settings", Page 22</u>).

#### Target group

You don't need to be an "expert" to perform the operations described here. Nonetheless, it is important to always observe the safety notes given in the operating instructions for the computer and in this manual.

In the event of any problems, please contact your sales office or our Service Desk.

#### **Further information**

Details of how you set the resolution and refresh rate are provided in the documentation for your display adapter and the associated driver software.

For ergonomic reasons, we recommend a screen resolution of 3440 x 1440 pixels.

Because of the technology used (active matrix) an LCD monitor provides a totally flicker-free picture even with a refresh rate of 60 Hz.

#### Notational conventions

<u>í</u>	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	
L→	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	<ul> <li>indicates</li> <li>terms and texts used in a software interface, e.g.: Click on <i>Save</i></li> <li>names of programs or files, e.g. <i>Windows</i> or <i>setup.exe</i>.</li> </ul>	
"This font"	<ul> <li>t" indicates</li> <li>cross-references to another section, e.g. "Safety information"</li> <li>cross-references to an external source, e.g. a web address: For more information, go to <u>"http://www.fujitsu.com/fts/"</u></li> <li>Names of CDs, DVDs and titles or designations of other materials, e.g. "CD/DVD Drivers &amp; Utilities" or "Safety" Manual</li> </ul>	
Кеу	indicates a button on the monitor, e.g. MENU	
This font	indicates terms and texts that are emphasised or highlighted, e.g.: <b>Do</b> 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 instructions

This device complies with the relevant safety regulations for data processing equipment, including electronic office machines for use in an office environment. If you have any questions about whether the device can be used in the intended environment, please contact your sales office or our Service Desk.

- The display surface of the device is sensitive to pressure and scratches. You should therefore be careful with the display surface in order to avoid lasting damage (scratches).
- If the device is brought into the installation site from a cold environment, condensation can form. Before operating the device, wait until it is absolutely dry and has reached approximately the same temperature as the installation site.
- When installing and operating the device, please observe the notes on environmental conditions in Chapter <u>"Technical specification", Page 59</u> as well as the instructions in Chapter <u>"Setting up an ergonomic video workstation", Page 14</u>.
- To ensure sufficient ventilation, the air inlet and outlet openings of the device must be kept clear.
- The device automatically sets itself to the correct voltage within the range from 100 V to 240 V. Make sure that the local mains voltage is neither higher nor lower than this range.
- Ensure that the power socket on the device and the mains outlet are freely accessible.
- The ON/OFF switch does not disconnect the monitor from the mains voltage. To completely
  disconnect from the mains voltage, you must remove the mains plug from the mains socket.
- The device is equipped with a power cable that complies with safety standards.
- · Use the supplied power cable only.
- Lay the cables in such a way that they do not create a hazard (danger of tripping) and cannot be damaged. When connecting the device, observe the relevant notes in chapter <u>"Connecting the device"</u>, Page <u>18</u>.
- No data transfer cables should be connected or disconnected during a thunderstorm.
- Make sure that no objects (e.g. jewellery chains, paper clips, etc.) or liquids get inside the device (danger of electric shock, short circuit).
- The device is not waterproof! Never immerse the device in water and protect it from spray water (rain, sea water).
- In an emergency (e.g. damaged casing, operation controls or cables, penetration
  of liquids or foreign matter), switch off the device, disconnect the power plug
  and contact your sales outlet or our Service Desk.
- Repairs to the device must only be performed by qualified technicians. Unauthorised opening and incorrect repair may greatly endanger the user (electric shock, fire risk).
- Only use the screen resolution settings and refresh rates specified in Chapter <u>"Technical specification", Page 59</u>. Otherwise you may damage the device. If you are in any doubt, contact your sales outlet or our Service Desk.
- Use a screen saver with moving images and activate the power management for your monitor to prevent still images from "burning in".
- If you operate the device with the swivel arm or a similar accessory, it must not be turned by 180°.

- Store this manual close to the device. If you pass the device on to third parties, you should pass this manual on with it.
- We recommend that you place your device on a durable, non-slip surface. In view of the many different finishes and varnishes used on furniture, it is possible that the feet of the device may mark the surface they stand on.
- · The device must be connected to protective earth.
- To prevent possible hearing damage, do not listen at high volume levels for long periods.
- Warning for excessive sound pressure from earphones and headphones: Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphones and headphones output voltage and therefore the sound pressure level.

#### **Power cable**

Use the supplied power cable only.

Use the following guidelines if it is necessary to replace the original cable set.

- The female/male receptacles of the cord set must meet IEC60320/CEE-22 requirements.
- The cable has to be HAR-certified or VDE-certified. The mark HAR or VDE will appear on the outer sheath.
- For devices which are mounted on a desk or table, type SVT or SJT cable sets may be used. For devices which sit on the floor, only SJT type cable sets may be used.
- The cable set must be selected according to the rated current for your device.
- If necessary, replace the original power cable with a regular grounded 3-core mains lead.

#### Transporting the device



Transport all parts separately in their original packaging or in a packaging which protects them from knocks and jolts, to the new site.

Do not unpack them until all transportation manoeuvres are completed.

If the device is brought from a cold environment into the room where it will be used, condensation may occur. Before operating the device, wait until it is absolutely dry and has reached approximately the same temperature as the installation site.

#### Cleaning the device



Switch off the device and unplug the power plug.

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.

Ensure that no liquid enters the device.

The display surface of the device is sensitive to pressure and scratches. Clean it only using a soft, slightly moistened cloth.

The surface of the casing 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.

#### **CE** marking

The shipped version of this device complies with the requirements of EU directives 2014/30/EC "Electromagnetic compatibility", 2014/35/EC "Low voltage directive", 2009/125/EC "Ecodesign directive" and 2011/65/EC "RoHS directive".

### **Disposal and recycling**

This device has been manufactured as far as possible from materials which can be recycled or disposed of in such a way that the environment is not damaged. The device may be taken back after use to be reused or recycled, provided that it is returned in a condition that befits its intended use. Any components not reclaimed will be disposed of in an environmentally acceptable manner.

The device must be disposed of in accordance with the local regulations for disposal of special waste.

If you have any questions on disposal, please contact your local sales office or our Service Desk, or contact one of the following directly:

Germany	Belgium	Switzerland
AfB gemeinnützige GmbH	RECUPEL	SWICO
Otto-Stadler-Strasse 6	Boulevard Reyers, 80	Schweizerischer
D-33100 Paderborn	B-1030 Brussels	Wirtschaftsverband der Informations-,
Tel.: +49 (0) 5251 / 414 90 10	Tel.: +32 2 / 706 86 16	Kommunikations- und
Fax: +49 (0) 5251 / 414 90 29	Fax: +32 2 / 706 86 13	Organisationstechnik
"https://www.fujitsu.com/de/	E-mail: "info@recupel.be"	A list of the SWICO acceptance locations
about/local/social-responsibility/ environment-care/recycling/"	"http://www.recupel.be"	can be found at:
christinent-care/recycling/		"http://www.swico.ch"
Asia	USA	
Taiwan:	Fujitsu America, Inc.	
Environmental Protection	1250E. Arques Avenue	
Administration Executive Yuan R.O.C.	Sunnyvale, CA 94085 U.S.A.	
"http://recycle.epa.gov.tw"	Phone No.: (408) 746-6000	

You can also find information about this on the Internet at "https://www.fujitsu.com/emeia/about/local/csr/recycling/".

### **Getting started**

#### Unpacking and checking the delivery



The display surface of the device is sensitive to pressure and scratches. Always hold the device by the casing!

The complete device package includes:

- one monitor
- one data cable (HDMI)
- a data cable (Displayport)
- a USB-C cable
- one USB 3.0 cable (USB-A to USB-B)
- · one power cable
- · a flyer "Quick Start Guide"
- a flyer "safety instructions"
- ► 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.



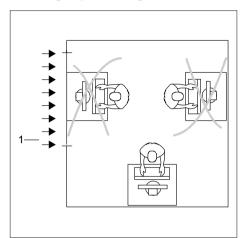
Do not discard the original packing material of the devices. You may need the packaging in the future if you need to transport your device.

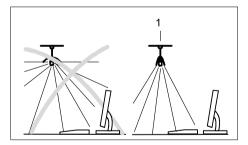
#### Setting up the device



To ensure sufficient ventilation, the air inlet and outlet openings of the device must be kept clear.

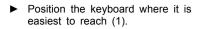
#### Setting up an ergonomic video workstation





 Do not position the video workstation opposite a window (1).

 Position the monitor outside the reach of a light source (1).



Position the monitor so that the eye distance to the screen (1) is around 50 cm.

Position the monitor for optimum viewing (1). The monitor should under no circumstances fall outside the permissible viewing space (2).



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2

Depending on the situation, it may be advisable to use a swivel arm or similar accessory (VESA FPMPMI), which are available from specialist dealers. For this purpose the monitor base must be removed beforehand as described in Chapter "Removing monitor base", Page 17.

50 cm

1

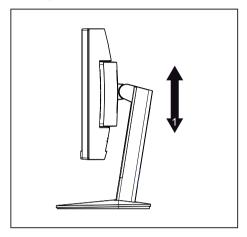
30°

30°

2

#### Adjusting height

The height of the monitor can be adjusted by approximately 150 mm.



Hold the monitor with both hands on the right and left edge of the casing and move it up or down (1).

#### Adjusting the inclination

The inclination of the monitor can be adjusted by -  $5^{\circ}$  (forward) and +25° (back) from its vertical position.

Hold the monitor with both hands on the left and right sides of the casing and move it to the desired angle (see <u>"Adjusting height", Page 16</u>).

#### Adjusting the rotation

The monitor can be rotated by ±172°.

► Grasp the monitor with both hands on the right and left edge of the casing and turn it to the desired position.

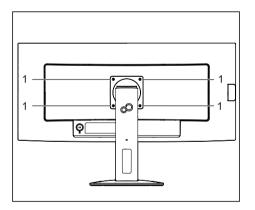
#### Removing monitor base

Before you can use a swivel arm or a similar accessory, you must remove the monitor base.



The display surface is susceptible to scratching!

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



- Switch off the monitor and pull the power plug out of the power socket.
- Lay the monitor on its face on a soft surface.
- Disconnect all cables.
- To release the stand, remove the four screws (1) that hold the stand in the VESA mount. Then lift the stand away upwards.
- You can now mount a swivel arm or a similar accessory in accordance with VESA FPMPMI using a hole spacing of 100 mm.

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For instructions on how to mount the swivel arm or a similar accessory, please see the documentation for the swivel arm or similar accessory.



The assured ergonomics and safety of the monitor may be limited if the foot provided for the monitor is not used.

#### Connecting the device



Please observe the safety information in <u>"Important notes", Page 9</u>.

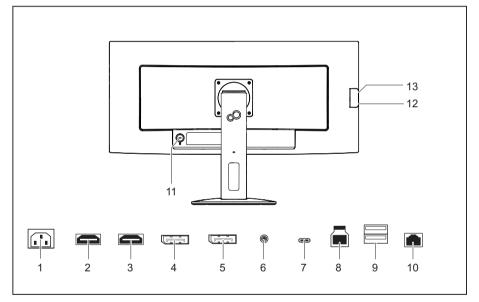
CE conformance and optimum picture quality are guaranteed only if you use the data cables supplied.

- Switch off the monitor and the computer.
- ▶ Disconnect the power plug from the computer.

#### Connecting cables to the monitor

The data cables supplied have two 20-pin DP plugs or two 20-pin USB plugs for connection to the monitor and to the computer.

Refer to the operating manual for the computer for information on the computer's ports and interfaces.



- 1 = Power connection
- 2 = HDMI-1 port
- 3 = HDMI-2 port
- 4 = Display port IN socket
- 5 = Display port OUT socket (Daisy Chain)
- 6 = Audio OUT socket
- 7 = USB-C port (USB 3.2 Gen1, Upstream)

- 8 = USB-B port (USB 3.2 Gen1, Upstream)
- 9 = USB-A port (USB 3.2 Gen1, Downstream)
- 10 = Network port (RJ45, Gigabit Ethernet)
- 11 = Security slot for Security Lock
- 12 = USB-A port (USB 3.2 Gen1, Downstream)
- 13 = USB-C port (USB 3.2 Gen1, Downstream)
- Select the appropriate data cable for your computer.

Plug a data cable connector to the USB-C, HDMI or Display port socket on the monitor.



The monitor automatically detects the input when only one signal source is connected.

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A High Speed HDMI cable is needed for connection via HDMI.

- Plug the network cable supplied into the socket on the monitor.
- If you are using an HDMI or a Display port, plug the USB 3.0 cable supplied (USB-A to USB-B) into the USB-B port socket (USB 3.2 Gen1, Upstream) and the other end of the cable into a USB-A socket on the computer.



A lock (Security Lock) can be mounted in the security slot to protect the monitor against theft. A Security Lock is not included with the monitor at delivery.

#### Connecting cables to the computer

Information on the computer connections and interfaces is contained in the operating manual for your computer.

- ▶ Plug the data cable into the (active) monitor port on the computer.
- ▶ Plug the power connector of the monitor into a properly grounded mains outlet.
- ▶ Plug the power connector of the computer into a properly grounded mains outlet.



If your computer has two monitor ports ("onboard" screen controller and separate graphics card), the monitor port for the separate graphics card is active as standard.

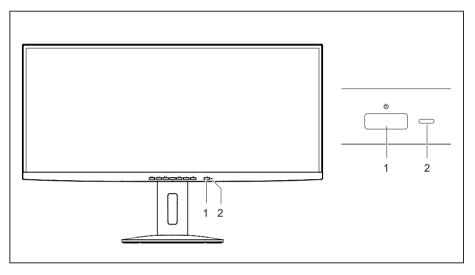


All of the USB ports designated as "Downstream" and the network port are only active while at least one of the two USB ports designated as "Upstream" is connected to a computer.

As soon as a computer gets connected via the USB-C monitor port, the active input signal is switched automatically to USB-C.

## Operation

#### Switching the device on and off



1 = On/off switch

2 = Status LED

The colour of the status LED alters in the following way:

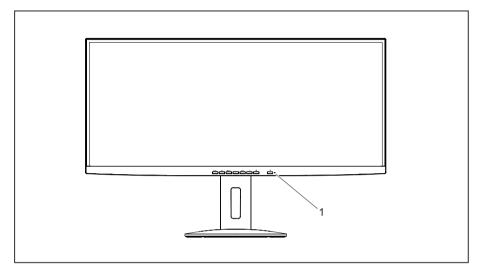
Status LED	Status	
blue	Monitor and computer are switched on (normal mode).	
green	Monitor and computer are switched on (ECO mode).	
orange	Monitor is not receiving a video signal or is in power saving mode.	
	The monitor is in All-In-One mode and the connection to the computer is interrupted.	
Glows white	The monitor is in All-In-One mode and the connection to the computer is switched on.	
Flashes white	The monitor is in All-In-One mode and the computer is in power-saving mode.	
does not light up	Monitor is switched off.	
	The monitor is in All-In-One mode and the computer is powered down.	

Switch the device on again with the ON/OFF switch (1).



You will find more information about the behaviour of the On/Off switch in All-in-One mode in chapter: <u>"Notes on All-in-One operation", Page 49</u>

# Notes on the ambient light sensor and presence sensor



1 = Ambient light and presence sensor

Sensor	Description
Ambient light sensor	If the <i>Auto Brightness</i> function is activated, the ambient light sensor is used for optimum adjustment of the background lighting to the light conditions of the working environment.
Presence sensor If the <i>Presence Sensor</i> function is activated, the presence sensured to reduce the background lighting to a minimum if no ob detected within the specified distance for 10 seconds.	
	After a further 30 seconds absence, the background lighting is switched off.



In order to achieve the best possible results with the presence sensor, observe the following:

- Make certain that no objects are located in the immediate proximity of the presence sensor.
- Recommendation: Adjust your distance to the monitor in the OSD menu. You will find more information on this in chapter <u>"Advanced setting functions", Page 28.</u>
- Depending on the colour and nature of your clothes, the distance detected may deviate from the setting.
- When the presence sensor is activated, the power consumption during operation is increased minimally.

### Changing the monitor settings



The buttons on the control panel have multiple functions. When the OSD menu is active, the current meaning of the buttons is shown directly over the buttons on the edge of the screen.

The display (softkey icon) over the buttons varies depending on the sub-menu chosen.

Key	Function		
MENU	Make image and OSD settings / Advanced configuration / Call up monitor information		
ECO	Activate/deactivate ECO operating mode		
INPUT	Selecting the input signal		
MODE	Select display mode/colour temperature / Adjust RGB channels		
日	Adjust volume		
Ю́.	Adjust brightness/contrast		
С С	Monitor: switching on/off		
	In all-in-one mode: switch the computer on/off		

Softkey icon	Function		
$\uparrow$	Selecting the next menu item (sub-menu)		
$\checkmark$	Selecting the previous menu item (sub-menu)		
$\rightarrow$	Opening the selected sub-menu		
	Going to the next setting		
	Running a function		
$\leftarrow$	Going to the previous setting		
—	Decreasing the set value		
+	Increasing the set value		
$\checkmark$	Accepting the applied settings and returning to the previous menu		
5	Return to the parent menu		
×	Exiting OSD menu		

#### Functions of the control panel and the OSD menu

With the buttons on the control panel, you can call up and use the integrated OSD (On-Screen Display) menu.



The English menu names are used in the following description (default setting).

The OSD menu of your device may differ in several ways from the functional scope described.

The softkey icons may deviate from those shown here.

#### Select OSD language

When an OSD menu button is activated for the first time, the language selection window will appear:

- Press the  $\uparrow$  button or the  $\downarrow$  button to choose the desired language.
- ▶ Press the ✓ button to confirm.



After selecting the OSD language for the first time, you can change it at any time in the OSD.

#### Setting screen display

X	MENU			
[))]	Image $\rightarrow$	Sharpness		50
	Picture in Picture	Saturation		50
	OSD	Hue		50
ŝ	Advanced	Expansion	Full Screen	
Í	Information			
	$\uparrow$	$\checkmark$	$\rightarrow$ ×	

- ▶ Press the **MENU** button to call up the main menu.
- Press the  $\rightarrow$  button to switch to the *Image* submenu.
- Press the  $\uparrow/\downarrow$  button to mark a function in the submenu.
- ▶ Press the / + or  $\leftarrow$  /  $\rightarrow$  button to make the desired setting.
- ▶ Press the <sup>(</sup>) button to save the settings and return to the main menu.

Function	Description	
Sharpness	Setting the picture sharpness	
	Use this function to configure the integrated soft focus or sharpness filter of the monitor.	
	Values below 50 produce a softer picture.	
	Values above 50 produce a sharper picture.	
Saturation	Setting colour saturation	
	You can use this function to reduce or increase the intensity of the colours.	
	This setting only applies for devices with YUV output (e.g. BluRay players).	

Function	Description			
Hue	Setting the colour tone			
	This function can be used to shift the colour spectrum in order to compensate for a colour fault that may be present.			
	This setting only applies for devices with YUV output (e.g. BluRay players).			
Expansion	Adjusting size			
	This function is used to change the type of scaling of low resolutions.			
	Full screen = maximum picture size with distortion (no black bands)			
	<i>Keep aspect</i> = Maximum picture size without distortion (black bands could appear in one direction)			
	<i>1:1</i> = Centered image without scaling (black bands could appear in both directions)			
	The 1:1 option is not available on all models.			

#### **Adjusting Picture in Picture**

Picture in Picture       Mode       Small         ●       OSD       Position       Bottom-Right         ♦OF       Advanced       USB Upstream       Primary         ●       Information       Swap Inputs       Swap Inputs	[}] Image	Input	Off
Advanced USB Upstream Primary		_	
	OSD	Position	Bottom-Right
Information     Swap Inputs	کی Advanced	USB Upstream	Primary
	i Information	Swap Inputs	
$\uparrow  \lor  \times$	1	$\checkmark$ $\checkmark$	$\rightarrow$ ×

- Press the  $\downarrow$  button and then  $\rightarrow$  to switch to the *Picture in Picture* submenu.
- Press the  $\uparrow$  /  $\downarrow$  button to mark a function in the submenu.
- Press the -/+ or  $\leftarrow/\rightarrow$  button to make the desired setting.
- Press the  $\bigcirc$  button to save the settings and return to the main menu.

Function	Description				
Input	Select the input source for Picture in Picture				
Mode	Adjust the picture size				
	With this function, you can select a small or large picture size for Picture in Picture.				
	To optimize the display quality, in the settings <i>Large</i> and <i>Small</i> a resolution with a 16:9 aspect ratio is recommended.				
	The settings <i>Horizontal</i> and <i>Vertical</i> allow you to split the image in half (Picture-by-Picture).				
Position	Adjust the picture position				
	With this function, you can move the Picture in Picture to the bottom right, bottom left, top right or top left.				
USB Upstream	Changing the USB assignment				
	With this function you can switch the assignment of the USB devices connected to the monitor between the systems shown.				
	Primary = The USB devices are assigned to the primary screen.				
	Secondary = The USB devices are assigned to the secondary screen.				
Swap Inputs	Change input source				
	With this function, you can replace the main input source with the Picture in Picture input source and vice versa.				

### Configuring the OSD menu

×	MENU		
[})	Image	OSD	
	Picture in Picture		
	osd $\rightarrow$	Language	
ŝ	Advanced	Timeout	50
(i)	Information	Rotation	Off

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L	
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- ▶ Press the **MENU** button to call up the main menu.
- Press the  $\downarrow$  button twice and then  $\rightarrow$  to switch to the *OSD* submenu.
- $\blacktriangleright\,$  Press the  $\uparrow\,/\,\downarrow\,$  button to mark a function in the submenu.
- ▶ Press the / + or  $\leftarrow$  /  $\rightarrow$  button to make the desired setting.
- $\blacktriangleright\,$  Press the  $\backsim$  button to save the settings and return to the main menu.

Function	Description				
Language	Selecting the language for the OSD menu				
	With this function you select the language for the OSD menu.				
	• Press the $\rightarrow$ button to arrive at the choice of language.				
	• Press the $\uparrow$ / $\checkmark$ button to select the desired language.				
	► Press the ✓ button to confirm the language selected or				
Timeout	Setting the display duration of the OSD menu				
	With this function you can select a value from 10 to 120 seconds.				
	If the set time expires without a setting being made, the OSD menu is automatically hidden.				
	Where applicable, settings that must be confirmed with the $\checkmark$ button are thereby lost.				
Rotation	Set the orientation of the OSD menu				
	This function allows the orientation of the OSD menu to be rotated. This makes it easier to read the OSD menu while the pivot function is being used.				
	Off = OSD menu will not be rotated				
	On = OSD menu will be turned through 90°.				
	<i>Auto</i> = orientation of the OSD menu will automatically be matched to the orientation of the monitor.				
	The Auto setting only appears on models with a rotation sensor.				

#### Advanced setting functions

		ද්ිරි ADVANCE	D	
		Presence Sensor	Off	
		Proximity		90
31	MENU	Daisy Chain	Off	
~	MENU	FreeSync	Off	
[	Image	Overdrive	Off	
	Picture in Picture	DDC/CI	On	
	OSD	Status LED	On	
्रि	Advanced $\rightarrow$	Power Button	Computer	
í	Information	Factory Recall (EN	ERGY STAR®)	
	$\uparrow$	$\checkmark$	$\rightarrow$ ×	



- ▶ Press the **MENU** button to call up the main menu.
- Press the  $\downarrow$  button three times and then  $\rightarrow$  to switch to the *Advanced* submenu.
- Press the  $\uparrow$  /  $\downarrow$  button to mark a function in the submenu.
- ▶ Press the -/+ or  $\leftarrow/\rightarrow$  button to make the desired setting.
- ▶ Press the <sup><</sup>> button to save the settings and return to the main menu.

Function	Description			
Presence Sensor	Activating/deactivating the presence sensor			
	This function shuts down the monitor gradually while you are absent.			
	After 10 seconds of absence, the brightness is reduced to a minimum.			
	After a further 30 seconds absence, the monitor lighting is switched off.			
	This option only appears if your model has a presence sensor.			
Proximity	Setting the distance to the monitor			
	With this function, you can indicate your actual distance to the monitor and optimise detection by the presence sensor.			
	The vertical indicator dynamically displays the detected distance to the monitor. This setting can be used to set the distance within which you want the sensor to react. If the vertical line is outside the setting bar, this will be judged as "absent" by the presence sensor.			
	This setting can only be applied if the <i>Presence Sensor</i> function is active.			

Function	Description				
Daisy Chain	Daisy chain via display port and/or enable/disable USB-C.				
	<b>Important Notice:</b> When enabling / disabling this function, the power supply via USB-C is interrupted briefly!				
	This function facilitates expansion of the desktop to a monitor connected via "DP OUT". With USB-C this reduces the speed of data transmission from USB 3.1 Gen1 (up to 5 Gbit/s) to USB 2.0 (up to 480 Mbit/s).				
	This option only appears if your model supports daisy chaining and Displayport or USB-C is selected as the input signal.				
FreeSync	Activating/deactivating AMD FreeSync				
	The AMD-FreeSync technology is an AMD project that relies on industry standards such as Displayport Adaptive-Sync in order to provide end users with a dynamic frame frequency. With the AMD-FreeSync technology, the frame frequency of a display is synchronized with the frame rate of FreeSync-compatible graphics cards. This reduces or eliminates visual objects that many users find particularly annoying, i.e.: input latency, image distortion and jerking during gaming and video sessions.				
	The AMD-FreeSync technology may be used via Displayport and HDMI connections.				
Overdrive	Enable/disable enhanced reaction time				
	This function can be used to improve the focus in fast moving images.				
	This setting can only be configured in Video or Custom application mode.				
DDC-CI	Enable/disable Display Data Channel - Command Interface				
	This function allows data to be exchanged via the connection between the PC and the display.				
Status LED	Enable/disable Status LED				
	With this function, you can switch the status LED on the monitor on and off.				
Power Button	Setting the function of the On/Off switch				
	With this setting, you can decide whether to use the On/Off switch on the monitor to switch the <i>display</i> or the connected <i>computer</i> on and off.				
	This option only appears if USB-C was selected as an input signal.				
Factory recall	Activate the factory settings				
	With this function all settings are reset to the factory settings.				
	▶ Press the $\rightarrow$ button to run the function.				
	▶ Press the $\checkmark$ button to confirm or the $\times$ button to cancel.				
	The language selection menu appears.				
	With a VGA data cable, the message Auto Processing is displayed.				

#### **Displaying information**



- ▶ Press the **MENU** button to call up the main menu.
- ▶ Press the  $\uparrow$  button to call up the *Information* window.

Details such as the model designation, serial number, resolution, H/V frequency and ECO mode are displayed.

#### Activate/deactivate ECO operating mode



The power consumption of the device can be decreased by reducing the brightness of the picture.



The ECO mode can only be activated when the Auto Brightness function is deactivated.

- Press the ECO button to switch ECO operating mode on or off.
- $\mapsto$  The message ECO Mode on or ECO Mode off is displayed.

If ECO mode is active, a brightness is used that is the optimum from both the ergonomic and ecological aspects.

If the brightness is further reduced by the user, this new setting is used during the next call of the ECO operating mode.

After the ECO operating mode is switched off, the brightness previously set by the user is restored.

#### Selecting the input signal

	INPUT		
$\checkmark$	HDMI1		
	HDMI2		
	DisplayPort		
	USB-C		
$\uparrow$		×	



- ▶ Press the **INPUT** button to open the *INPUT* setting window.
- Press the  $\uparrow$  /  $\downarrow$  button to select the desired monitor port.
- ▶ Press the ✓ button to confirm the selected monitor port or X to close the window without making any changes.



If the selected input signal does not deliver an image, the monitor shall change this automatically.

In the following cases an automatic change of the input signal is disabled:

- When the "Daisy-Chain" function is activated.
- When the input signal to the "USB-C" monitor port is chosen.

Press the button **INPUT** To call up the *INPUT* settings window if the monitor is not displaying an image and is in power-saving mode.

If on the USB-C upstream port a sheer USB data connection is detected, an enlarged setting window will be displayed.

INPUT / USB L	JPSTREAM
V HDMI1	$\leftarrow$ USB-B $\rightarrow$
HDMI2	USB-B
DisplayPort	USB-B
USB-C	USB-C

- Press the  $\uparrow$  /  $\downarrow$  buttons to select the desired monitor port.
- Press the ← / → buttons to change the assignment of the USB upstream to the relevant video signal.

The built-in KVM will be switched based on the assignments set.



For further information on the KVM function, please refer to chapter "Notes about the KVM function", Page 48.

#### Selecting the application mode

	MODE		
	D-Mode		
	sRGB		
	Low Blue Light		
$\checkmark$	Office		
	Photo		
	Video		
	Custom		
$\downarrow$	]	×	



- ▶ Press the **MODE** button to open the *MODE* setting window.
- $\blacktriangleright\,$  Press the  $\Lambda\,/\,\psi$  button to select the desired application mode.
- ► Press the ✓ button to confirm the selected application mode or X to close the window without making any changes.

Function	Description
D-Mode	Mode for Digital Imaging and Communication in Medicine (DICOM)
	Colour temperature equal to 7500 K, specially calibrated gamma curve.
	This setting only appears on models that support the DICOM picture format.
sRGB	Mode for applications in sRGB colour space
	Colour temperature and brightness according to the sRGB standard.
Low Blue Light	Mode with reduced blue light emission
	Warm tints, reduced brightness.
Office	Mode for everyday office applications
	Colour temperature equals 6500 K, ECO operating mode active.
Photo	Mode for the display of photos
	Increased picture definition and colour saturation.
Video	Mode for the display of videos
	Enhanced reaction time (overdrive), dynamic contrast (ACR).
Custom	Mode for special application purposes
	Free choice of colour temperature, advanced configuration capabilities.

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The brightness set in Mode is stored under Office, Photo, Video and Custom.

MODE	
D-Mode sRGB	COLOR
Low Blue Light	5000 K
Office	🗸 6500 К
Photo	7500 K
Video	Native
$\checkmark$ Custom $\rightarrow$	RGB Adjust
$\uparrow  \downarrow$	×

### Setting colour temperature and colours



- ▶ Press the **MODE** button to open the *MODE* setting window.
- Press the  $\uparrow$  /  $\downarrow$  button to select *Custom* mode.
- Press the  $\rightarrow$  button to arrive at the choice of colour temperature.
- Press the  $\uparrow$  /  $\downarrow$  button to select the desired colour temperature.
- ► Press the ✓ button to confirm the selected colour temperature or 5 to close the window without making any changes.

Function	Description
5000 K	Select the colour temperature
6500 K 7500 K	The "warmth" of the screen colours is set using the colour temperature. The colour temperature is measured in K (= Kelvin).
Native	In the <i>Native</i> and <i>Custom Color</i> settings, the full colour space of the LCD panel can be used.
RGB Adjust	You can change the colour ratios of the primary colours (red, green, blue) as required using this function.
	<ul> <li>Press the → button to arrive at the selection of colour channels.</li> <li>Press the ↑ / ↓ button to select the desired colour channel.</li> <li>Press the − / + button to make the desired setting.</li> </ul>
	► Press the ↔ button to save the settings and return to the previous menu.

### Adjusting the volume

	OIDU	
Volume		40
Mute	Off	
$\uparrow \qquad \downarrow$	- + ×	<



- Press the  $\vec{u}$  button to open the *AUDIO* setting window.
- ▶ Press the -/+ or  $\leftarrow/\rightarrow$  button to make the desired setting.
- ▶ Press the X button to save the settings and close the menu.

Function	Description
Volume	Set the volume for playback with the integrated loudspeakers
Mute	Switch the loudspeakers off or on

Adjusting	the	brightness	and	contrast
-----------	-----	------------	-----	----------

-	- BRIGHTNESS	CONTRAST	
	Brightness		75
	Contrast		50
	Black Level		50
	ACR	Off	
	Auto Brightness	Off	
	Lighting Guide	Off	
	Auto Level		
$\uparrow \qquad \downarrow$	- +	×	



- ► Press the  $\dot{\dot{Q}}$  button to open the *BRIGHTNESS/CONTRAST* setting window.
- ▶ Press the -/+ or  $\leftarrow/\rightarrow$  button to make the desired setting.
- ▶ Press the X button to save the settings and close the menu.

Function	Description
Brightness	Set the brightness of the display
	With this function you change the brightness of the background lighting.
Contrast	Set the contrast of the display
	With this function you modify the contrast of bright colour tones.
	If the contrast is set too high, bright surfaces can no longer be distinguished from very bright surfaces. If the contrast is set too low, the maximum brightness will not be achieved.
	Please note that, if you change this setting, correct colour representation can then no longer be assured.
Black level	Setting the black level of the display
	With this function you modify the contrast of dark colour tones.
	Please note that, if you change this setting, correct colour representation can then no longer be assured.

Function	Description
ACR	Enable/disable dynamic contrast
	This function improves the contrast by automatically controlling the background lighting in relation to the image being displayed.
	This setting can only be configured in <i>Office</i> , <i>Video</i> and <i>Custom</i> application mode.
	As soon as ACR is enabled, Auto brightness is automatically disabled.
Auto Brightness	Enable/disable automatic control of the brightness
	This function is used to automatically control the brightness of the background lighting using the ambient light sensor.
	This setting only appears on models with an ambient light sensor and can only be enabled in <i>Office</i> , <i>Photo</i> or <i>Custom</i> application mode.
	As soon as Auto brightness is enabled, ACR is automatically disabled
Lighting Guide	Enable/disable advice on workplace lighting
	With this function, advice is displayed if the ambient light at the workplace does not meet the ergonomic recommendations for working at the computer screen.
	This setting only appears on models with a light sensor.
Auto level	Adjust the signal level
	With this function you can automatically set the contrast.
	Press the $\rightarrow$ button to run the function.
	This setting only appears with an analogue video signal (e.g. VGA).

### Locking the OSD menu

The OSD menu can be locked to prevent accidental or unauthorised changes to the monitor settings.

- Press the MENU button and the ON/OFF button at the same time and keep them pressed for approximately 10 seconds.
- $\mapsto$  The message *OSD locked / unlocked* is displayed.



Please proceed in the same manner to release the locked OSD menu again.

### Lock the ON/OFF button

The ON/OFF button can be locked to prevent accidental or unauthorised changes to the monitor settings.

- ▶ Press the buttons ECO and INPUT at the same time and keep them pressed for a few seconds.
- → The message *Power button locked / unlocked* is displayed.



To remove the locking of the ON/OFF button again, proceed in the same way.

## Using the Daisy Chain function

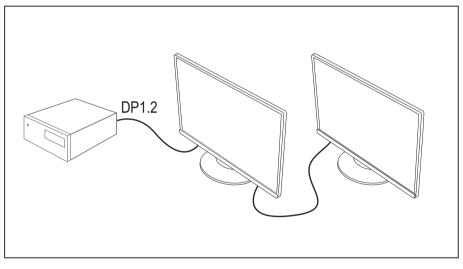
With the daisy chain function, you can connect up to four monitors in sequence to a display port output on your graphics card. The maximum possible number of monitors depends on the resolution:

Screen resolution	Maximum
1920x1080 (FHD)	4 monitors
1920x1200 (WUXGA)	
2560x1440 (QHD)	2 monitors
3440x1440 (UWQHD)	



Ensure that your graphics card supports DP 1.2 or the USB-C port supports "Displayport Alternate Mode" before activating the daisy chain function. Failing this, it is possible that your graphics card may no longer recognise the monitor.

The maximum possible number of monitors can be limited by the graphics card used or by the graphics card drivers used, as well as by their settings (e.g. display refresh rate, colour depth).



- Connect up the graphics card to the "DP IN" port or to the USB-C port (underside) on the first monitor.
- ▶ In each case, connect the next monitor to the "DP OUT" port.



To be able to use the Daisy Chain function, this must be enabled in the OSD.

	کَنَیْ ADVANCED		
	Presence Sensor	Off	
MENU	Proximity		50
[ 💦 Image	Daisy Chain 🛛 🔶	On	$\rightarrow$
OSD	Overdrive	Off	
ද්ිරිදි Advanced	DDC/CI	On	
(i) Information	Factory Recall		

- ▶ Press the **MENU** button to call up the main menu.
- ▶ Press the  $\downarrow$  button three times and then  $\rightarrow$  to switch to the *Advanced* submenu.
- Press the  $\downarrow$  button to highlight the *Daisy Chain* function.
- Press the  $\rightarrow$  button to apply the *On* setting.
- ▶ Press the ⇔ button to save the settings and return to the main menu.



When enabling or disabling the daisy-chain function in the OSD, the power supply via USB-C is interrupted briefly!



As soon as the daisy-chain function is active, automatic detection of other signal sources (e.g. HDMI) is disabled.

The speed of data transmission is reduced on USB-C from USB 3.1 Gen1 (up to 5 Gbit/s) to USB 2.0 (up to 480 Mbit/s).

- Press the button INPUT To change the input signal manually.
- → If switched to an input signal that does not support a daisy chain, the daisy chain function is disabled automatically.

# **Driver** installation

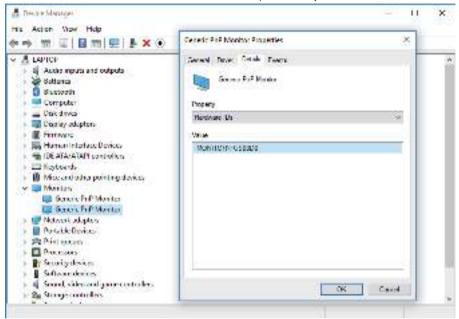


The monitor and network drivers are installed automatically whenever the Microsoft Windows operating system is updated.

- For manual installation, download the monitor and network drivers from <u>"http://www.fujitsu.com/fts/download"</u>. Select the relevant model of monitor and operating system for this on the website.
- ► Unpack the zip file.

## **Monitor drivers**

- ▶ Open the *Device Manager* and select the *Monitors* header.
- ▶ Double click on a listed Generic PnP Monitor to open the Properties window.



▶ If more than one *Generic PnP Monitor* device is displayed, check whether the correct device is selected.

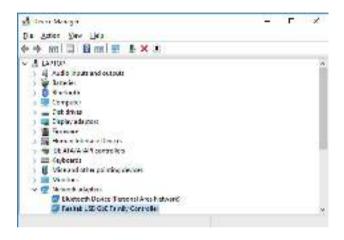
To do this, go to tab Details, Property and set "Hardware Ids".

"Monitor\FUSxxxx" is displayed under *Value*. Otherwise, select the other *Generic PnP Monitor* device.

- ▶ Click on Update Driver in tab Driver.
- ▶ Click on Browse my computer for driver software.
- ▶ Click on *Browse*, navigate to the unpacked zip file and confirm with *OK*.
- ▶ Click on *Next* and wait until the driver is installed.

## **Network drivers**

- Open the directory with the unpacked contents of the network driver.
- ▶ Run the *setup.exe* file and follow the instructions.
- ► After successful installation, the device is displayed in the *Device Manager* under the *Network Adapters* header as a *Realtek USB GbE Family Controller*.



# Notes on the program "DisplayView"

*DisplayView* is a program for Microsoft Windows operating systems, which provides the user with a simple user interface for adapting functions that are normally assigned to the OSD.

Changes to brightness, contrast, image position and other default monitor settings can be made easily and intuitively.

The program also supports extended functions such as Auto-Rotation and Desktop Partitioning.

Your device may differ from the described scope of function in some areas.

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Display	view <sup>m</sup> Fujitsu
<ul> <li>Brightness/Contrast</li> <li>Mode</li> <li>Rotation</li> <li>Desktop Partitioning</li> <li>Presence Sensor</li> <li>Profiles</li> <li>Information</li> </ul>	Connected displays         Image: Display1         Display1         Display2         Image: Display1         Brightness         Image: Display2         Image: Display2
1	Apply settings to all connected monitors ? Undo

DisplayView Can be downloaded here: "www.fujitsu.com/fts/displayview"

Function overview:

- OSD management for screens equipped with DDC/CI
- OSD direct access for quick changes
- Settings for power saving mode and security settings for the presence sensor (only for models with presence sensor)
- · Automatic rotation and partitioning of screen contents
- · Supports analogue and digital monitor ports
- · Supports up to 4 monitors
- Supports the Microsoft Windows 10 operating system

### **Presence sensor**

In the presence sensor submenu, you can activate and configure the power saving (PC Standby) and security (Lock PC) settings based on the user's presence status.

## **Rotation function**

The rotation menu allows you to rotate the screen content pursuant to the screen orientation.

## **Desktop partitioning**

The desktop area of the Microsoft Windows operating system can be divided into several areas into which program windows can be fitted automatically by adjusting their size.

Display	/iew <sup>im</sup>	FUjîtsu
<ul> <li>Brightness/Contrast</li> <li>Mode</li> <li>Rotation</li> <li>Desktop Partitioning</li> <li>Presence Sensor</li> <li>Profiles</li> <li>Information</li> </ul>	Connected displays Display1 Display2 Desktop Partitioning	
1		Press left Ctrl key for Desktop Partitioning

## Notes on power management

If your computer is equipped with power management (power-saving mode), the monitor can fully support this function. Here the monitor does not distinguish between the individual energy-saving modes of the computer (standby mode, suspend mode and OFF mode), as it is capable of immediately switching into the mode with the highest energy-saving effect.

Mode	Mode State		Power consumption				
		Typical	Maximum	Status LED			
Power On – maximum operation	Maximum brightness / with USB and audio	187 W	< 200 W				
Power On – normal mode	Maximum brightness / without USB and audio	57 W	< 75 W				
Energy Star	Factory settings, without USB and audio	33 W	-				
EU Energy Label	Without USB and audio	35 W	-	-			
ECO	Without USB and audio	42.3 W	55 W				
Readiness (standby)	Without USB devices connected	0.3 W	< 0.5 W				
Off	Without USB devices connected	0.29 W	< 0.5 W	-			

If the computer detects inactivity (no input) it sends an appropriate signal to the monitor to reduce the power consumption (power saving mode). The status LED of the monitor changes colour to show the change in status. ECO operation is the pre-set factory default.

Once an input is made at the computer the screen contents are restored.



For detailed information on how energy-saving mode operates, please refer to the operating manual or technical manual of the computer.



For maximum energy efficiency, the ACR (Advanced Contrast Ratio) OSD setting is activated by default. Deactivate the ACR function to achieve an optimised screen appearance.

# Notes on USB Power Delivery (USB-PD)

USB-PD is a function defined by the USB Implementers Forum, Inc., in accordance with the current specification of USB-PD Version 2.0. It provides a way to deliver current via the USB-C cable, and charge power of up to 65 W, a convenient way for you to recharge your Notebook or Tablet.

For this, the monitor must be in operating mode, readiness mode or All-in-One mode. No USB-PD is possible when disconnected.



To ensure security and compatibility, only the supplied USB-C cable or an equivalent certified USB-C cable must be used.

The USB-PD function is protected by an electrical overcurrent device. If current exceeds 4 A, USB-PD is switched off as a precautionary measure. In this case, disconnect the device, check it for defects and reconnect it to be able to use USB-PD again.



This monitor was tested using systems developed by FUJITSU, requiring power delivery of max. 65 W via USB-PD. For other systems that only accept their own brand of USB-PD charging device due to specific power delivery directives, the USB-PD support for this monitor may be limited. Please note that any restriction of this kind on the system will be due to the brand involved.

On the manufacturer's website of your Notebook or Tablet, check that the latest firmware is installed for your USB-PD controller. By installing more recent USB-PD controller firmware, you can avoid compatibility problems with charging operations.

Only one USB port on this monitor supports USB Power Delivery with up to 65 W. The other USB ports deliver conventional USB charge current. You can identify proper connection by this symbol:

Symbol	Port	Power supply
	USB-C	up to 65 W (USB-PD)
⋺∙<╌	USB-C	up to 15 W
● <del></del>	USB-A	up to 4.5 W

# Notes about the KVM function

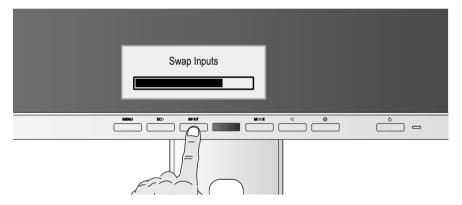
Your monitor has a KVM function. This involves the two USB ports designated as "Upstream" being switched over in response to the selected input signal.

Input signal	USB-Upstream
HDMI1/HDMI2	USB-B
Display port	USB-B
USB-C	USB-C

This enables you to switch or 'swap' between any peripherals connected to the monitor and the integrated network port between two computers.

► For more convenient switching between two computers, press and hold down the key **INPUT** until the progress bar for the *Swap Inputs* function (switch between inputs) has reached 100%.

The monitor switches between USB-C and the other input signal, i.e. the one used most recently.



If data carriers are connected to the monitor, it is advisable before changing the input signal to disable the *Remove hardware safely* function to prevent the loss of data.



The *Swap Inputs* function is only enabled if a computer is connected to both of the USB ports designated as "Upstream".

## Notes on All-in-One operation



The functions described here can only be assured in combination with selected FUJITSU Notebooks, Tablets and PCs that have a native USB-C connection with integrated display port support (e.g. ESPRIMO G, LIFEBOOK, STYLISTIC).

The following three functions govern All-in-One operation.

- · Continuous power supply for the system via the monitor
- · Switching the PC on and off using the On/Off switch on the monitor
- · System status displayed by the status LED on the monitor



Ensure that your system has the very latest BIOS version.

For further information about opening the "BIOS" settings, please consult the handbook for your system.

## ESPRIMO G

To use All-in-One operation to its full extent, perform the following settings:

Main Advanced Security Power	Event Logs Boot Save & Exit
Power Settings	
Power Failure Recovery USB Power	[Always On] [Always On]
Wake-Up Resources	
External Power Button Control	[Enabled] [Disabled]
Wake On LAN boot	[Best Sequence]
USB Keyboard Wake Up Timer	[Enabled] [Disabled]

In the BIOS settings on your PC, open the *Power* header where you then set USB power to Always On and USB Keyboard to Enabled.

## LIFEBOOK / STYLISTIC

Advanced		
Miscellaneous Con	figurations	
[]		
Anytime USB Charge Charge on power-off: Charge on running:	[Disabled] [Fast charge]	
USB Type-C Power Delivery (Power Delivery on System-Off:	[Enabled])	
[]		

► In the BIOS settings of your system, open the *Advanced* - *Miscellaneous Configurations* header and set *Power Delivery on System-Off* there to *Enabled*.

## Monitor

		နိုင္ခ်ိုး ADVANC	ED	
		Presence Senso	r Off	
		Proximity		90
<b>&gt;</b> /		Daisy Chain	Off	
ME	NU	Overdrive	Off	
[ ] Imag	ge	DDC/CI	On	
	D	Status LED	On	
နိုင်္ပိုင် Adv	anced $ ightarrow$	Power Button	← Computer	$\rightarrow$
(i) Info	rmation	Factory Recall (E	ENERGY STAR®)	
				<b>∽</b>

► In the OSD settings of your monitor, open the *Advanced* header and set the *Power Button* to *Computer*.

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By activating All-In-One mode, power consumption of the monitor increases in power-saving ('Sleep') mode.

## **Operating system**

📽 System Settings			5	11	×
🗧 🚊 👻 🕆 📳 🗠 Bardware and Source	⊁ Nowe Options ⇒	System Sett	iap v	to Search	p
Define power buttons and turn o	on password oro	tection			^
Choose the power settings that you want to page apply to all of your power plans.			rn aka ta The se	tíngs on thi	
😌 Change settings that are currently unava	ilable				
Rower and sleep buttons and lid settings. —					-
	📳 Ör hill	lery	🛷 Nag	edin	
🕑 When I press the power button:	Shat down	9	Shut slown	v	
When I press the sleep button:	Sleep	~	unit.		
🍝 When I dose the I d:	Sloop		Donothing	~	
					4
		L	Save changes	Cano	9

► In the settings of the Microsoft Windows operating system, open the *Power options - System* settings header and set the desired response characteristics of the On/Off switch.



- ► For the *Power button* function, press and hold down the On/Off switch on the monitor for more than 2 seconds.
- ► For the *Sleep button* function) press the On/Off switch on the monitor and hold it down for less than 2 seconds.

If the system connected via the USB-C is in power-saving mode, the status LED can show you whether the system is fully compatible with All-In-One mode:

Status LED	Meaning
Flashing at 1-second intervals	Your system is completely compatible with the All-In-One mode. In any status, you can turn the system on and off using the On/Off switch on the monitor.
Flashing at 3-second intervals	Your system is only compatible with the All-In-One mode to a limited extent. It is not possible from every status to switch on the computer using the On/Off switch.

# Notes on the HDR mode

The monitor has an HDR mode. This is activated automatically as soon as the current Displayport or HDMI connection detects an HDR signal. The dynamic range of brightness is increased and the colour space is extended to DCI-P3. A prolonged use of the HDR mode increases the stress on the LCD panel and can therefore affect the lifetime of your monitor.



The HDR mode is available only if the operating system, the graphics card, its drivers and the viewer software support the HDR output.

To optimize the display quality in HDR mode, make sure that the operating system and the graphics card drivers are updated.

In HDR mode, the ECO mode, the OSD menu *mode* and *Brightness/Contrast* as well as the *FreeSync* function are not available.

The HDR mode cannot be activated during video display with USB-C, nor in picture-in-picture mode.

A prolonged use of the HDR mode increases the stress on the LCD panel and can therefore affect the lifetime of your monitor.

- ▶ Open the monitor settings of your operating system or the settings of your graphics card and activate *HD / HDR*.
- $\mapsto$  The monitor will switch to HDR mode.

## Notes on low blue light mode

This monitor has a "low blue light" function, which can be selected in the OSD menu. This "low blue light" function reduces the blue light emission of the monitor to a minimum. In this way, the device complies with the "low blue light" certification of the Technical Inspection Association.

LED backlights no longer emit blue light as a conventional source of white light.

Further information can be found in Chapter "Selecting the application mode", Page 32.

The viewing distance to the monitor should be approximately 50 cm. Further information can be found in Chapter <u>"Setting up an ergonomic video workstation", Page 14</u>.

When working continuously at a display screen, it is recommended that you take a five minute break every hour. During these breaks, do eye exercises to relax your eyes.

To prevent eye strain and dryness, focus regularly on objects in the distance.

# Notes on ergonomic colour adjustment



If you select colours for the monitor in your application programmes, take note of the information below.

The primary colours blue and red on a dark background do not produce the minimum required contrast of 3:1 and are therefore not suitable for continuous text and data entry.

When using several colours for characters and background and giving the primary colours full modulation, you can obtain very suitable colour combinations (see the following table):

Background				Chara	acters			
	black	white	purple	blue	cyan	green	yellow	red
black		+	+	-	+	+	+	-
white	+		+	+	-	-	-	+
purple	+	+		-	-	-	-	-
blue	-	+	-		+	-	+	-
cyan	+	-	-	+		-	-	-
green	+	-	-	+	-		-	-
yellow	+	-	+	+	-	-		+
red	-	+	-	-	-	-	+	

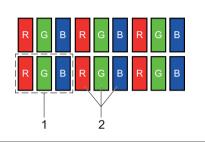
+ Colour combination very suitable

- Colour combination not suitable because colour hues are too close together, thin characters are not identifiable or rigorous focusing is demanded of the human eye.

# Explanatory information about standard ISO 9241-307

### Permanently unlit or lit pixels

Today's production techniques cannot guarantee an absolutely fault-free screen display. Depending on the total number of pixels (resolution), there may be a few constantly lit or unlit pixels or subpixels.



#### 1 = Pixel

2 = Subpixel

Pixel	A pixel consists of 3 subpixels, normally red, green and blue. A pixel is the smallest element that can be generated by complete functionality of the display.
Subpixel	A subpixel is a separately addressable internal structure within a pixel that enhances the pixel function.
Pixel fault	All 3 subpixels are lit/unlit. The result is a brighter or darker pixel.
Subpixel fault	Only one subpixel is lit/unlit. The result is a pixel with missing colours.

The maximum permitted number of faulty pixels is stipulated in the international standard ISO 9241-307. The LCD displays from Fujitsu comply to at least Class I. Fujitsu guarantees displays that are free of pixel faults, so that only subpixel faults may occur.

### Examples:

A flat-screen monitor with a resolution of 1280 x 1024 has 1280 x 1024 = 1,310,720 pixels. Each pixel consists of three subpixels (red, green and blue), making a total of about 3.9 million subpixels. According to ISO 9241- 3 (Class II), a maximum of 3 lit and 3 unlit pixels plus 7 lit or 13 unlit subpixels, or a corresponding combination, may be faulty (1 lit subpixel counts as two unlit subpixels).

A flat-screen display with a resolution of 1920 x 1200 has  $1920 \times 1200 = 2304000$  pixels. Each pixel consists of three subpixels (red, green and blue), making a total of about 6,9 million subpixels. According to ISO 9241-3 (Class I), a maximum of 2 lit and 2 unlit pixels plus 5 lit or 11 unlit subpixels, or a corresponding combination, may be faulty (1 lit subpixel counts as two unlit subpixels). Because Fujitsu supplies displays that are free of pixel faults, only subpixel faults enter into the evaluation.

# Troubleshooting

Should an error occur, first check the following points. If the distortion is still not eliminated, the monitor should, if possible, be checked on another computer.

If you cannot solve the problem,	please contact our Service Desk.
----------------------------------	----------------------------------

Having this problem?	Check the following points:	
No screen display Power indicator does not light up	<ul> <li>Check whether the power cable on the monitor is connected correctly.</li> </ul>	
	• Check whether the computer is switched on.	
No screen display	Check whether the computer is switched on.	
Power indicator is lit	Check whether the data cable for the monitor is correctly attached to the monitor port on the computer.	
	<ul> <li>Press any key on the computer keyboard. The computer may be in power saving mode.</li> </ul>	
	<ul> <li>Alter the brightness and/or contrast until you get a picture.</li> </ul>	
Message: No Signal	Check whether the data cable for the monitor is correctly attached to the monitor port on the computer.	
	• Check whether the computer is switched on.	
Message: Frequency out of range:## kHz / ## HzPlease change the display mode to 1920 x 1080 with 60 Hz	The input signal (horizontal frequency and refresh rate) at the displayed input does not correspond to the technical data for the monitor.	
	<ul> <li>Adjust the video frequency range using the computer software (see documentation for the computer or display adapter).</li> </ul>	
	<ul> <li>Set a different screen resolution using the computer software (see documentation for the computer or display adapter).</li> </ul>	
Daisy Chain does not work	There may not be enough bandwidth to feed the second monitor.	
	<ul> <li>Reduce the display refresh rate and/or the colour depth in the graphics settings of the system.</li> </ul>	

Having this problem?	Check the following points:
No current through USB port	Ensure that you use the USB-C cable supplied, or an equivalent and certified one.
	Your device may trigger the overcurrent protection on the monitor.
	<ul> <li>Disconnect the device, check it for defects then reconnect it.</li> </ul>
	The lateral USB ports only deliver current if a computer is connected to a USB port designated as "Upstream".
	<ul> <li>Connect a computer to a USB port designated as "Upstream" to activate the lateral USB ports.</li> </ul>
	The lateral USB ports do not support USB power delivery.
	If your device needs high charge levels of up to 65 W, connect it to the USB-C port on the underside of the monitor.
It is not possible to wake up the computer using a mouse or keyboard connected to the monitor	If your computer loses its connection to mouse / keyboard while in power-saving mode, the
and/or to wake up the computer using an On/Off switch on the monitor in All-in-One mode	mouse and keyboard are then no longer detected. This can occur if a different input signal gets used on the monitor during the intervening period.
	Use the On/Off switch on the computer to wake up the computer.
	Ensure that the input signal does not get changed while the computer is in power-saving mode.
	<ul> <li>Only connect one computer to the USB port designated as "Upstream".</li> </ul>
	Further information can be found in the chapter <u>"Notes about the KVM function", Page 48</u>

# **Technical specification**



Condensation is not permitted, neither in the rated range of operation nor in the limit range of operation.

Product name		P34-9 US
Name of model		P34-9U
Dimensions and weight		
Visible diagonals		86.72 cm
Dot pitch		0.233 mm
Image size	Width	799.8 mm
	Height	334.8 mm
Maximum resolution		3440 x 1440
Dimensions incl. monitor base	Width	814.8 mm
	Height (min.)	390.3 mm
	Depth	275 mm
Weight (without packaging)		9.5 kg
Storable display modes		32
Pixel error classes according to ISO 9241-307	Class	I
Electrical data		
Video	Digital	Displayport / HDMI / USB-C
Horizontal frequency		30 kHz 160 kHz (Multi-Scan)
Refresh rate		28 Hz 102 Hz
Maximum pixel rate		Display port: 600 MHz
		HDMI: 600 MHz
		USB-C: 360 MHz
Power supply		switches automatically
		100 V – 240 V, 50/60 Hz
Sound output		3 W left; 3 W right
Total power consumption	see Chapter <u>"Notes on power magent</u>	nanagement", Page <u>46</u>
USB power output		USB-C UFP: 65 W
		USB-C DFP: 15 W
		USB-A: 4.5 W

### **Environmental conditions**

15 °C 35 °C
15% 85%
5 °C 35 °C
15% 85%
3000 m

## Preset operating modes



The position and size of the picture are factory-configured to optimum settings for the operating modes listed here. Depending on the display adapter used, changes may occur to the picture position and picture size. In this case, you can change and save the settings (see Chapter <u>"Changing the monitor settings", Page 22</u>).

For ergonomic reasons, a screen resolution of 2560 x 1440 pixels is recommended. For technology reasons (Active Matrix), an LCD monitor also provides an absolutely flicker-free screen image at a refresh rate of 60 Hz.

### Most frequent operating modes

### PC-Timings

1	720 x 400@70 Hz	VGA	2	640 x 480@60 Hz	VGA
3	640 x 480@75 Hz	VESA	4	800 x 600@60 Hz	VESA
5	800 x 600@75 Hz	VESA	6	1024 x 768@60 Hz	VESA
7	1024 x 768@75 Hz	VESA	8	1280 x 1024@60 Hz	VESA
9	1280 x 1024@75 Hz	VESA	10	1440 x 900@60 Hz	CVT
11	1600 x 900@60 Hz	DMT	12	1680 x 1050@60 Hz	CVT
13	1920 x 1080@60 Hz	CEA-861	14	1920 x 1200@60 Hz	CEA-861
15*	2560 x 1080@60 Hz		16	2560 x 1440@60 Hz	
17**	3440 x 1440@30 Hz		18	3440 x 1440@60 Hz	
19	3440 x 1440@100 Hz	RB	20***	3840 x 2160@50 Hz	
21***	3840 x 2160@60 Hz				

\* Only for USB-C

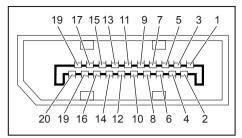
\*\* Only for HDMI

\*\*\* Only for DP and HDMI HDR mode

### Video-Timings

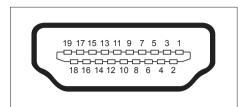
No.	Screen resolution	Refresh rate	
1	640 x 480 p	60 Hz	
2	720 x 480 i	60 Hz	
3	720 x 480 p	60 Hz	
4	720 x 576 i	50 Hz	
5	720 x 576 p	50 Hz	
6	1280 x 720 p	50 Hz	
7	1280 x 720 p	60 Hz	
8	1920 x 1080 i	50 Hz	
9	1920 x 1080 i	50 Hz	
10	1920 x 1080 i	60 Hz	
11	1920 x 1080 p	50 Hz	
12	1920 x 1080 p	60 Hz	

## Displayport socket



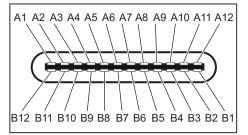
Pin	Meaning
1	Lane 3 (negative)
2	Earth
3	Lane 3 (positive)
4	Lane 2 (negative)
5	Earth
6	Lane 2 (positive)
7	Lane 1 (negative)
8	Earth
9	Lane 1 (positive)
10	Lane 0 (negative)
11	Earth
12	Lane 0 (positive)
13	Connected to earth
14	Connected to earth
15	Auxiliary channel (positive)
16	Earth
17	Auxiliary channel (negative)
18	Hot Plug Detect
19	Return for Power
20	Power for connector (3.3 V 500 mA)

## HDMI port



Pin	Meaning
1	TMDS Data2+
2	TMDS Data2 Shield
3	TMDS Data2–
4	TMDS Data1+
5	TMDS Data1 Shield
6	TMDS Data1–
7	TMDS Data0+
8	TMDS Data0 Shield
9	TMDS Data0–
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	N.C.
15	SCL
16	SDA
17	DDC/CEC Ground
18	+5 V Power
19	Hot plug detect

## USB-C port



Pin	Meaning
A1	Ground return
A2	SuperSpeed differential pair #1, TX, positive
A3	SuperSpeed differential pair #1, TX, negative
A4	Bus power
A5	Configuration channel
A6	Non-SuperSpeed differential pair, position 1, positive
A7	Non-SuperSpeed differential pair, position 1, negative
A8	Sideband use (SBU)
A9	Bus power
A10	SuperSpeed differential pair #4, RX, negative
A11	SuperSpeed differential pair #4, RX, positive
A12	Ground return
B12	Ground return
B11	SuperSpeed differential pair #2, RX, positive
B10	SuperSpeed differential pair #2, RX, negative
B9	Bus power
B8	Sideband use (SBU)
B7	Non-SuperSpeed differential pair, position 2, negative
B6	Non-SuperSpeed differential pair, position 2, positive
B5	Configuration channel
B4	Bus power
B3	SuperSpeed differential pair #3, TX, negative
B2	SuperSpeed differential pair #3, TX, positive
B1	Ground return

# **Appendices:**

### TCO:

"https://support.ts.fujitsu.com/IndexDownload.asp?SoftwareGuid=0b1846d6-c0bc-4535-8ad5-1adb49610945"

### ENERGY STAR®:

"https://support.ts.fujitsu.com/IndexDownload.asp?SoftwareGuid=d64ffa5e-9f01-475a-9269-975391774341"

### BSMI RoHS:

"https://support.ts.fujitsu.com/IndexDownload.asp?SoftwareGuid=2318189a-c6bc-4691-a45d-2c37884197b6"

### China RoHS:

"https://support.ts.fujitsu.com/IndexDownload.asp?SoftwareGuid=e8358fb7-83a3-45ca-b707c36a868bf0ca"