SIEMENS

SIMATIC Industrial PCs

Panel Drivers and Tools
PDT V1.5 for IPC/IFP with capacitive multi-touch screen

Operating Manual

06/2019
A5E41104686-AC

Legal information

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This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

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⚠ WARNING
indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that property damage can result if proper precautions are not taken.

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The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Preface

This operating manual applies to the "SIMATIC IPC Panel Drivers and Tools" PDT software in combination with one of the following devices:

- SIMATIC IPC
- SIMATIC IFP

This operating manual describes the installation of the software PDT and the configuration of devices via the SIMATIC IPC Configuration Center.

The information in this documentation takes precedence over statements in the basic operating instructions, the release notes and online help.

Conventions

The following generic terms are used in this document for product names and device type names:

Long form	Generic term
SIMATIC IFP, Industrial Flat Panel	IFP, device
SIMATIC IPC, industrial PC	IPC, PC, device
SIMATIC IPCx77D, SIMATIC IPCx77E	Panel PC
SIMATIC IPCx27D, SIMATIC IPCx27E	Box PC
Device with capacitive multi-touch screen	Multi-touch, MT
Windows Embedded Standard 7E, 7P	WES7E, WES7P
Microsoft Windows 7 Ultimate	Windows 7
Microsoft Windows 10 Enterprise, Version 2019 LTSC (Build 17763) 64-bit Microsoft Windows 10 Enterprise, Version 1607 (Build 14393) 64-bit Microsoft Windows 10 Enterprise, Version 2016 LTSB (Build 14393) 64-bit Microsoft Windows 10 Enterprise, Version 2015 LTSB (Build 10240) 64-bit	Windows 10
SIMATIC IPC Panel Drivers and Tools	PDT, Panel Drivers and Tools
SIMATIC IPC Configuration Center	ICC *, Configuration Center

* ICC is also the name of the Desktop symbol.

Style conventions

Style convention	Scope
"OK"	• User interface terms, for example, dialog names, tabs, buttons, menu commands • Required inputs, for example, limits, tag values. • Path information
"File > Edit"	Operator actions, for example, menu commands, shortcut menu commands.
<F1>, <Alt+P>	Keyboard operation

Figures

This document contains figures of the software described. The figures can deviate slightly from the supplied software.

Trademarks

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● SIMATIC®; SIMATIC HMI®; SIMATIC Industrial Flat Panel®; SIMATIC IPC®

● WinCC®

History

The following earlier release versions of these operating instructions have been published:

Edition	Comment
04/2016	First edition V1.1
01/2017	V1.2: Expansion by Touch/Key devices with resistive single touch screen, "Information" tab, IFP ETH commissioning, amendments
10/2017	Remedy
06/2019	V1.5: Minor adaptations and additions

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Safety instructions 1

Industrial Security

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

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For additional information on industrial security measures that may be implemented, please visit (http://www.siemens.com/industrialsecurity).

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under (http://www.siemens.com/industrialsecurity).

Disclaimer for third-party software updates

This product includes third-party software. Siemens AG only provides a warranty for updates/patches of the third-party software, if these have been distributed as part of a Siemens software update service contract or officially released by Siemens AG. Otherwise, updates/patches are undertaken at your own risk. You can find more information about our Software Update Service offer on the Internet at Software Update Service (http://www.automation.siemens.com/mcms/automation-software/en/software-update-service).

Notes on protecting administrator accounts

A user with administrator privileges has extensive access and manipulation options in the system.

Therefore, ensure there are adequate safeguards for protecting the administrator accounts to prevent unauthorized changes. To do this, use secure passwords and a standard user account for normal operation. Other measures, such as the use of security policies, should be applied as needed.

Panel Drivers and Tools software

<div align="right" style="font-size:3em">2</div>

2.1 Product description

The SIMATIC IPC PDT software installs the "IPC Configuration Center" and, optionally, the "IFP Ethernet Monitor" software. The existing hardware components are automatically detected by the associated software.

The most important features of the software are:

- Easy dialog-guided installation
- Simple configuration via the IPC Configuration Center:
  - Brightness
  - Information
  - Screen saver
  - Tools
  - Touch settings

2.2 System requirements

Supported operating systems

The PDT software can run on PCs with the following operating systems:

- Microsoft Windows 32-bit operating system *
  - Windows 7 Ultimate SP1
  - Windows Embedded Standard 7P/E SP1
- Microsoft Windows 64-bit operating system *
  - Windows 7 Ultimate SP1
  - Windows Embedded Standard 7P/E** SP1
  - Microsoft Windows 10 Enterprise, Version 2019 LTSC (Build 17763) 64-bit
    Microsoft Windows 10 Enterprise, Version 1607 (Build 14393) 64-bit
    Microsoft Windows 10 Enterprise, Version 2016 LTSB (Build 14393) 64-bit
    Microsoft Windows 10 Enterprise, Version 2015 LTSB (Build 10240) 64-bit

* 2 GB free hard disk memory required.

** WES 7E is only supported in single-touch mode, see section "Toggling touch mode (Page 35)".

NOTICE
Security vulnerabilities in Microsoft operating systems and software
Immediately install all security and quality updates recommended by Microsoft for your Windows and .net. Each update is described in a separate Knowledge Base article "KBxxx", which you can find in the Microsoft support database via the unique article number "xxx".

NOTICE
Windows Embedded Standard 7E on CFast card
For systems with Windows Embedded Standard 7E on a CFast card, the data is compressed and must be unzipped for the installation. The installation of the PDT software can take up to 40 minutes.
Windows Embedded Standard 7E in single-touch mode
In single-touch mode, a maximum of two monitors can be connected to one PC and operated in clone mode.

Software requirements

- One of the operating systems listed in the section "Supported operating systems" was installed.
- The driver of the device manufacturer for the graphics adapter is installed.
- Installed SIMATIC software must be uninstalled.
  - IPC Ethernet Monitor V1.x
  - IPC PDT V1.x
  - IPC Wizard V1.x to 2.x.x

Hardware requirements

For the PDT software, you need a PC with the following properties:

- DVD drive or external USB data storage medium for the installation of software
- Display port or DVI interface
- 1.6 GHz processor or higher, 64-bit (x64)
- 2 GB RAM
- 3 GB free hard disk memory
- Use graphics driver matching the graphics interface in use

Note
Number of IFPs on a PC

The number of IFPs which can be connected to a PC depends on the system configuration and operating mode. You can find the possible combinations in the FAQ 109483774 on the Internet (https://support.industry.siemens.com/cs/us/en/view/109483774).

Multi-touch mode

During installation, a device in multi-touch mode is switched to single-touch mode.

Mixed operation not allowed

The simultaneous operation of the following device combinations in connection with a PC is not allowed:

- Devices with resistive single-touch screen and devices with capacitive multi-touch screen
- Device with display diagonal 4:3 and devices with display diagonal 16:9

> **Note**
>
> **Basic Display Adapter (network adapter)**
>
> The Windows Microsoft Basic Display Adapter and network adapter cannot be used.

2.3 Setup

2.3.1 Initial commissioning

A PDT software is pre-installed on preconfigured SIMATIC IPC which automatically installs the Configuration Center and the corresponding software component for the connected device type.

Requirement

- The system requirements (Page 9) are met.
- Keyboard and mouse are connected to the PC.
- The SIMATIC IPC/IFP is connected to the PC with a matching video cable.

> **Note**
>
> **Administrator rights required**
>
> Installation must be performed with a user account with administrator rights.

> **Note**
>
> **Secure Windows logon with "<Ctrl+Alt Gr+Del>"**
>
> If secure logon is configured for Windows 7 on the PC, the dialog "Press CTRL+ALT+DELETE or use the Windows Security button to log on." is displayed.
>
> The shortcut "<Ctrl+Alt Gr+Delete>" cannot be entered during logon, and users cannot log on.
>
> Follow these steps to log on users:
> 1. Using a DisplayPort cable, connect the PC with a monitor, keyboard and mouse.
> 2. Under Windows, activate the "On Screen Keyboard" (OSK).
> 3. Shut down the PC.
> 4. Perform the commissioning process.
> 5. For Windows logon, activate the OSK and enter the shortcut "<Ctrl+**Alt Gr**+Delete>".
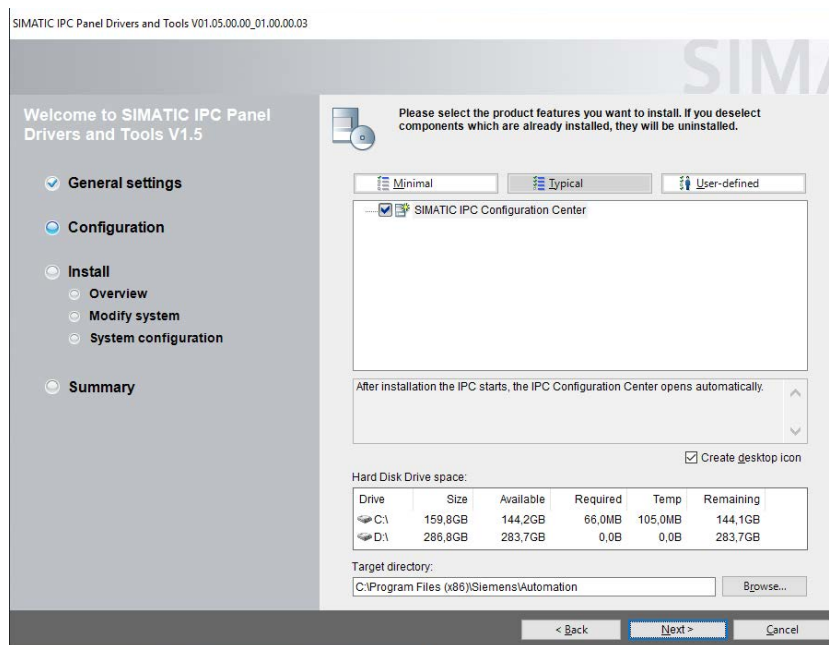
Procedure

1. Switch on the power supply of the PC.

2. Switch on the PC.

   Installation of the PDT software starts automatically on preconfigured SIMATIC IPCs. If not, see the section "Procedure for PCs that are not preconfigured".

3. The installation dialog opens: The installation steps on the left are are completed from top to bottom.

   First accept the license conditions and click "Next".

4. The required software components are displayed in the "Configuration" tab, depending on the device type. Click "Next".

5. Follow the instructions. The setup installs the associated software.

   This process may take anywhere up to thirty minutes.

6. Restart the PC and log into the user account with administrator rights.

Procedure for PCs that are not preconfigured

If the PDT software does not exist and/or does not start automatically:

1. If the PC does not have an operating system, install an operating system with all the required components.
   - Install Windows from the appropriate data storage medium.
   - If you are installing from the restore data storage medium: Restart the PC once installation is complete.
     Continue with step 3 in the section "Procedure".
2. If a setup of the SIMATIC IPC Wizard or SIMATIC IPC Panel Drivers and Tools V1.1 is already installed on the PC:
   - Uninstall this setup via the Control Panel.
   - Restart the computer.
3. If the software is on a CD or DVD and the PC does not have a DVD drive, copy the entire directory of the PDT software including subdirectories from the "Documentation and Drivers" CD/DVD to a USB storage medium.
4. Place the "Documentation and Drivers" CD/DVD into the DVD drive of the PC. Alternatively, connect the USB storage medium or the "Documentation and Drivers" data storage medium to the PC.
5. Start the installation with the "Start.exe" file in the directory of the PDT software.
6. Continue with step 3 in the section "Procedure".

2.3.2 Support information

The link "IPC_Service&Support" on the desktop provides a brief summary of the PC hardware information. This HTML page is created at the time of installation and can be called later in the browser.

Call the diagnostics for the support via the link in the bottom-left:

- IPCLogFileSaver opens.

- For error analysis, general device data is transmitted and stored in an archive.

- No customer data is read out.

PC Hardware Information	
IPC Configuration Center	
PC Model:	SIEMENS AG SIMATIC IPC427E
Windows-Edition:	Windows 10 Enterprise 2016 LTSB 64 Bit Build 14393
DotNet Framework Version V4:	4.6.01586
Bios Info:	SIEMENS AG V21.01.08 Release Date: 02/27/2018
CPU Typ :	Intel(R) Celeron(R) CPU G3902E @ 1.60GHz
Physical Memory in GB (usable)	3.9
Free Space C: in GB:	43
Volume Size C: in GB:	60
Device Type:	SIEMENS IPC capacitive Multitouch
Device label: SIEMENS Ethernet Monitor	IFPxxFHD_ETH
Service & Support	Support & Download
Readme	Starting to diagnose with IPCLogFileSaver.exe

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2.3.3 Removal

Requirement

- The SIMATIC PDT software is installed.

Note

Administrator rights required

The software must be uninstalled with a user account with administrator rights.

Procedure

1. The following applies to Box PCs: Connect an external monitor to the DisplayPort or DVI interface on the PC.

2. If you have activated the "Right-click Selector" or Winmove" tools, disable these tools.

3. Uninstall the SIMATIC PDT software.

4. Restart the PC and log into the user account with administrator rights.

See also

Toggling touch mode (Page 35)

IPC Configuration Center

3

3.1 Product description

Along with the PDT software, various software components are installed on your PC depending on the device features, allowing you to configure the SIMATIC IPC or connected SIMATIC Industrial Flat Panel. The IPC Configuration Center provides a convenient interface for operating these software components.

You can use the Configuration Center to configure your device directly or open the respective setting dialogs of the operating system.

3.2 Overview and tabs

Requirement

- The SIMATIC Panel Driver and Tools have already been installed (see Initial startup): The existing hardware has been detected and the required software components have been automatically installed.

- The system requirements (Page 9) are met.

Note

Device detection

If you connect another device of the same SIMATIC device type during operation, for example, a second device with resistive single-touch screen or if a device is not recognized, close the Configuration Center and open it again. The additional devices will then be detected. Alternatively, refresh the Configuration Center using the menu.

If you connect a SIMATIC device type (see above) for which no corresponding software component has been installed on the PC yet, the device is not recognized. You must install the missing software component as follows:

1. Remove the connection of the device type from the PC.
2. Uninstall the Panel Drivers and Tools software.
3. Connect the device type with the PC.
4. Install the Panel Drivers and Tools software again via the setup. Alternatively, select its "Repair" function.

The missing software component is installed and the SIMATIC device type is recognized afterward.

If a SIMATIC device type is still not recognized, check the connecting cables and the device version.

Note

Windows Fast User Switch

Only one instance of the Configuration Center can be open at a given time. This is why "Windows Fast User Switch" for switching between multiple simultaneously logged on users is not supported.

1. Close the Configuration Center.
2. Open the Configuration Center as a different user.

Opening the Configuration Center

- Start the IPC Configuration Center ICC using the associated Desktop icon or - if enabled - using the icon in the information area of the taskbar (see section "Configuration Center Settings").

  Alternatively, select "Start > All Programs > Siemens Automation > IPC Configuration Center > IPC Configuration Center".

The Configuration Center starts and retrieves the data of the connected devices. This process may take several minutes.

Closing the Configuration Center

You close the Configuration Center in the menu bar via "Menu > Exit".

Alternatively, close the Configuration Center - if enabled - using the icon in the information area of the taskbar: Select the menu item "Exit" in the shortcut menu of the "ICC" icon.

You conserve system resources by closing the Configuration Center. The functions of the Configuration Center are still being executed, e.g. screen saver, right-click, etc.

Refreshing the Configuration Center

You refresh the Configuration Center in the menu bar via "Menu > Refresh". The Configuration Center updates the information on the connected IFPs.
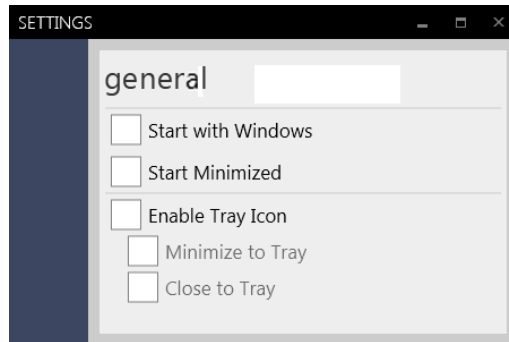
Start settings

You configure the Configuration Center in the dialog "Settings", which you open in the menu bar via "Menu > Settings".

Alternatively, open the "Settings" dialog - if enabled - using the icon in the information area of the task bar: Select the "Settings" menu item in the shortcut menu of the "ICC" icon.

The following options are available:

- "Start with Windows": The Configuration Center is also started with the operating system (Autostart).

- "Start minimized": When the Configuration Center is started, it is minimized in the task bar.

- "Enable Tray Icon": The "ICC" icon (Tray Icon) appears in the information area.

The following options are available when the "ICC" icon is enabled:

- "Minimize in information area": If you activate the "Minimize window" Windows icon in the Configuration Center, it does not appear minimized in the taskbar, but as "ICC" icon in the information area.

- "Close in information area": If you activate the "Close window" Windows icon in the Configuration Center, it is not closed, but is displayed as "ICC" icon in the information area. To close the Configuration Center, proceed as in the "Close Configuration Center" section.

Applies only to Ethernet monitors: Alternative start with the Scheduler

If you start the Configuration Center with the operating system (Autostart), the Ethernet monitors are not recognized because the Ethernet monitor software has not yet been fully started. Therefore, the start of the Configuration Center must be delayed, which is possible with the "Scheduler":

1. In the Windows Start menu, select "Start > All programs > Accessories > System programs > Task Scheduler".

2. Click the "Task Planning Library" folder on the left.

3. In the "Actions" window, right-click on "Create task".

4. In the "General" tab, enter "Start_ICC" under "Name".

5. Open the "Trigger" tab.

6. Click "New". The "New trigger" dialog opens.

7. Under "Start task", select "At logon".

8. In the "Settings" area, activate the option "Specific users".

9. In the "Advanced settings" area, enable the option "Delay for" and select "1 minute".

10. Close the dialog box with the "OK" button.

11. Open the "Actions" tab.

12. Click "New". The "New action" dialog opens.

13. In the "Settings" area, select the file path to the ICC program under "Program/Script": "C:\Program Files\Siemens\Automation\ICC\IPCConfigurationCenter.exe".

14. Close the dialog box with the "OK" button.

15. Open the "Settings" tab.

16. Clear the option "Close task if it executed for more than".

17. Click "OK".

The task is saved. If you log on to the PC, the Configuration Center starts with a delay of 1 minute.

Operating the Configuration Center

The **menu bar** is located below the Configuration Center lettering:

● Menu: Calls the actual Configuration Center menu, referred to below as "Menu".

● Help: Starts the online help of the Configuration Center.

● ICC: Exact version of the ICC and PDT software.

Depending on the device features, one or more software components on the device are shown in summary in several **tabs** at the left. The following figure shows an example.

Change a setting directly on the interface. All settings are immediately applied and permanently stored.
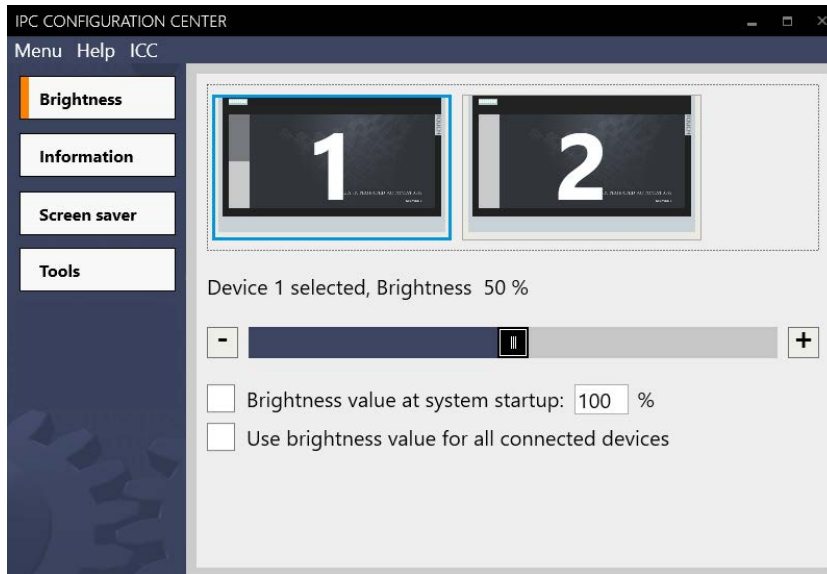
- "Brightness" tab: individual adjustment of the brightness of all connected devices.

- "Information" tab displays basic information about the device.

- "Screen Saver" tab: activates and configures the "IPCScreenSaver" screen saver.

- The "Tools" tab includes the following additional functions:

  – Triggering a right-click.

  – Moving the screen content on devices with a vertical resolution of ≤ 600 pixels. This gives you access to operator controls that are located outside the screen.

  – Set display size for characters and objects (PPI resolution).

- "Interlock" tab: The interlock prevents simultaneous operation of multiple devices.

- "Touch settings" tab:

  – The following **procedure** only applies to operating systems with Multitouch function:

    Assigning several connected touch devices via "Tablet PC settings".

Note

Touch assignment: Extended monitor mode with two or more screens

To extend the desktop to include all connected touch devices, you must assign the physical touch devices to the respective screens under Windows for the first time:

1. Restart the PC.
2. Connect an external keyboard to the PC.
3. In the "Interlock" tab, disable the "Activate interlocks" option.
4. Click "Tablet PC settings".
5. Change to the "Display" tab.
6. Click "Setup".

   Next you will see a white screen with a prompt. Touch this screen to identify it as touch screen.
7. Touch the touch screens one after the other (number 1, 2,... in the display), two times each, and exit using any key on the external keyboard.
8. For touch devices in Clone mode, the white screen is displayed on both monitors simultaneously. Touch the left touch screen, for example.
9. To complete the assignment, press any key once again.
10. Check whether the touch assignment to the individual touch devices is correct and the touch screen can be operated. If this is not the case in Clone mode, repeat the assignment starting with step 3 and select the right touch screen in step 7.

  – "Switch Mode": toggles between multi-touch mode and single-touch mode.

  – Screen display: Toggles all connected devices between portrait and landscape orientation.

Description of the interface

4

4.1 General information

Note

Full device detection

If you connect or remove an IFP while the Configuration Center is open, this change is not immediately detected by the Configuration Center. Only when an IFP has been fully detected can you make settings for this IFP in the Configuration Center. For full detection or update of the devices in the Configuration Center, select "Menu > Refresh" or restart the Configuration Center.

4.2 Brightness - SetBrightness

4.2.1 Overview

Adjusts the display brightness for all connected and detected devices. If the PC used is a Panel PC, then the display brightness of the Panel PC is adjusted.

4.2.2 Setting the display brightness

Procedure

Note

**Device recognition with consecutive numbering**

A device icon with consecutive numbering is displayed for each connected "device". To find out which device is assigned to a device icon, double-click the device icon: The corresponding "monitor" repeatedly changes its brightness (short flashing).

Deviating numbering

Depending on the graphics chip and operating system, the sequential numbering of the devices may deviate from the numbering in Windows:

---

1. Open the Configuration Center and go to the "Brightness" tab.

2. Select the device whose brightness display you want to change. The following example shows two device displays. Device "1" and device "2" are selected in the example. If no device is selected, the display brightness of all devices is changed to the same degree.
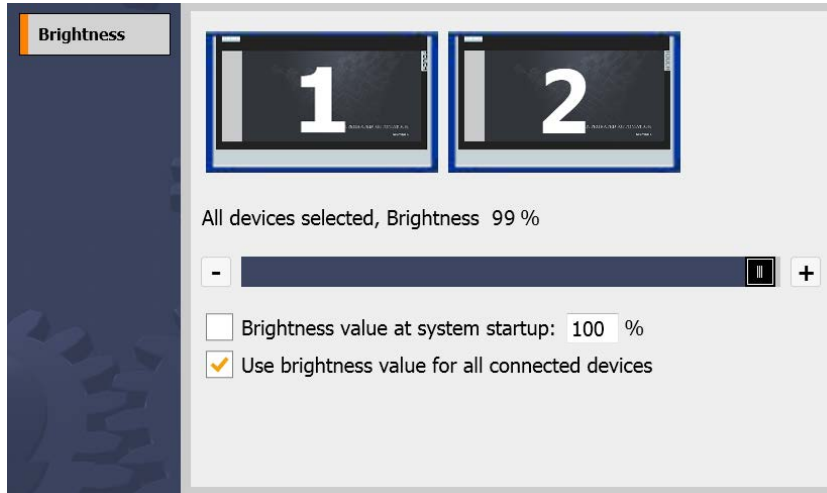
3. Set the desired display brightness. You have the following setting options:

   – Using the slider. The set value is applied when you release the slider.

   – Using the "Increase brightness (+)" and "Decrease brightness (-)" buttons.

   Note

   The minimum value for the brightness setting is 10%. If you select a value of less than 10% using one of the setting options, the brightness value is automatically set to 10%.

   ---

4. To set a fixed brightness value for all devices at every system startup, except for hibernation (standby), select "Brightness value at system startup".

   Enter the desired brightness in percent in the box on right. The setting is valid only for the current user and first takes effect upon logon.

   If you disable "Brightness value at system startup", the brightness value set in step 3 takes effect.

5. If necessary, enable "Use brightness value for all connected devices". Alternatively, click in the white area next to the device icons. Then the brightness is the same again for all devices.

Buttons in the preview window

If the Configuration Center is started and appears as an icon in the taskbar, you can also change the brightness using the small buttons above the icon in the preview window.

4.2.3   Command line call

Call parameters

A parameter can be specified for the command line call of the "SetBrightness" program.

Note

To prevent incorrect operation, the first entry is discarded.

If no Ethernet monitor is connected, the minimum value is set to 0% in contrast to the graphical interface. This will darken the screen. By pressing an input device, for example, a touch screen or keyboard, the display is switched on again with 100% brightness value. In order not to trigger any unintentional functions in the machine or plant, the first input event, for example touch of the touch screen or mouse click, is not evaluated.

[VALUE] parameter

Value	Explanation
0 (No Ethernet monitor is connected)	Backlighting is switched off.
1 to 100	Brightness in percent

Example of command line call: `setbrightness.exe 50` sets the brightness to 50%.

Suppression of batch process window

With a command line call, a black Windows output window of the batch process is displayed briefly.

To suppress the Windows output window, start the "SetBrightness.exe program via the following example source code in C# syntax:

```
var process = new Process
{
   StartInfo = new ProcessStartInfo
   {
      FileName = "SetBrightness.exe",
      Arguments = "[number]", // [number] Value (0-100)
      WindowStyle = ProcessWindowStyle.Hidden
   }
};
process.Start();
```

4.3 Information

Introduction

The "Information" tab shows the device configuration and connected components of SIMATIC IPC/IFP whose data is currently being read out by the device. Information about the device and the connected network connections can also be displayed.

Note
Different information

Different information can be displayed depending on the connected hardware. The software automatically detects the connected hardware. If components such as network adapters are changed, the Configuration Center must be refreshed, see "IPC Configuration Center" section.

IPCLogFileSaver provides detailed information on the current device data, see "Support information (Page 13)", "Support information" section.

Displayed information

The following information is read out:

Area	Information
Device	Basic information on the device: • Device name • Device type • Order number: MLFB of the device • BIOS version • Touch mode: Resistive single touch or capacitive multitouch • Monitor info: Read out device names of all connected monitors, separated by semicolons
Software	Information on software components: • Operating system • Build number
Communication	For each connected network adapter, for example LAN: • IP address • Subnet mask • MAC address

4.4 Screen saver - IPCScreenSaver

Introduction

The SIMATIC screen saver "IPCScreenSaver" is a standalone software component that is installed via the PDT software. You can configure the screen saver in the Configuration Center, from which you also open the Windows standard dialog "Screen Saver Settings".

The "IPCScreenSaver" switches on after a configured time, for example, after one minute. The brightness of all connected devices is hereby reduced to the configured value, for example 23%. In contrast to most conventional screen savers, the "IPCScreenSaver" can save energy: The power consumption of screens with reduced brightness is smaller.

NOTICE
Using an IPCScreenSaver as the only screen saver
If a Windows standard screen saver is active during operation and the user touches the touch screen to deactivate it, then the display and the touch screen are activated again immediately. Touch operation is immediately evaluated, which can initiate unintended functions in the plant. With "IPCScreenSaver", the first touch of the touch screen is not evaluated and the current screen content is displayed again. This means that the first touch to deactivate the screen saver does not initiate any unintended functions. For this reason, use only "IPCScreenSaver" and set the "Turn off the display" option to "Never" under "Start > Control Panel > Power Plan Settings > Choose when to turn off the display".

Procedure

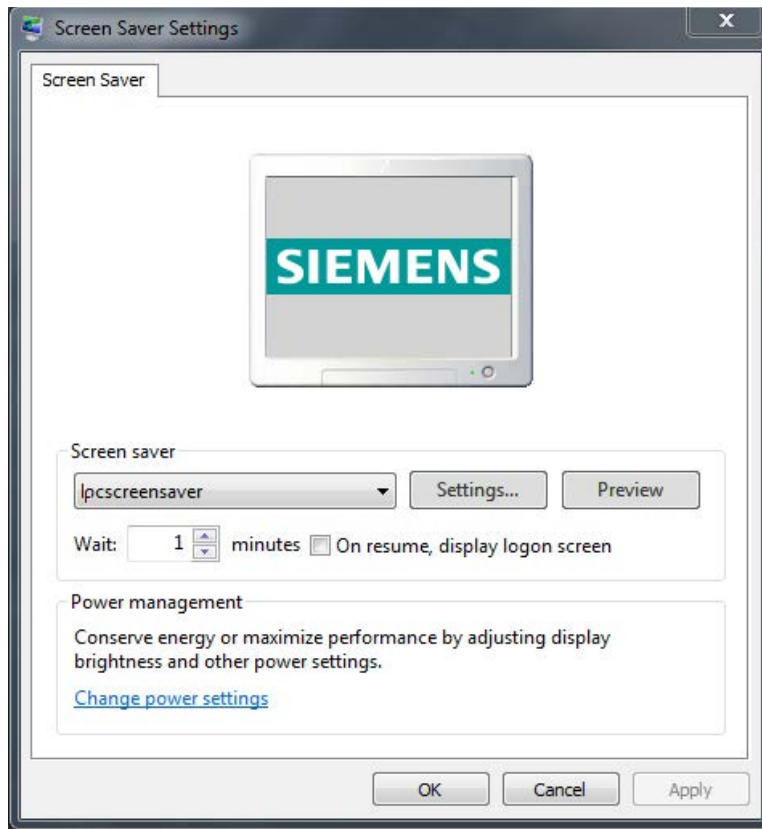1. Open the Configuration Center and go to the "Screen Saver" tab.
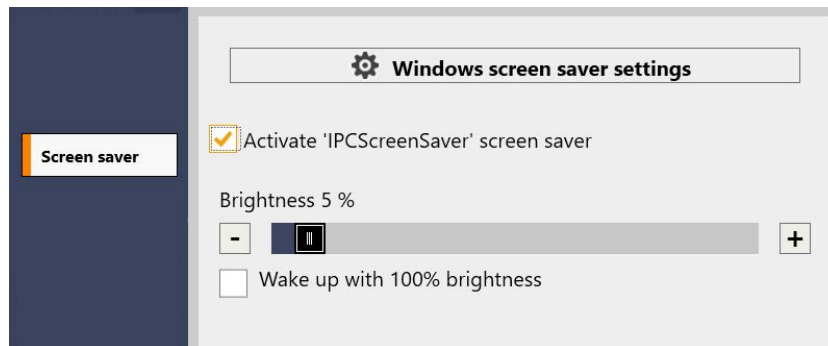
2. Select "Activate 'IPCScreenSaver' screen saver".

3. Set the desired "Brightness" for all the connected devices during the activity of the screen saver using the slider or the "-" and "+" buttons.

   If you set the value "0%" as the "Brightness", the backlighting of the display is disabled. This does **not** work with IFP Ethernet monitors.

4. If needed, select "Wake up with 100% brightness". After the screen saver is switched off, the screens of all connected devices are operated with 100% brightness.

5. You can change the "Screen saver settings" of the operating system, using the "Windows screen saver settings" button.

The screen saver "Ipcscreensaver" is activated.

Note

"Ipcscreensaver" is automatically activated, as the option "Activate 'IPCScreenSaver' screen saver" was activated in the Configuration Center, see step 2. If you select a different screen saver than "Ipcscreensaver" in the "Screen Saver Settings" dialog, then the "Activate 'IPCScreenSaver' screen saver" option is automatically deactivated in the Configuration Center.
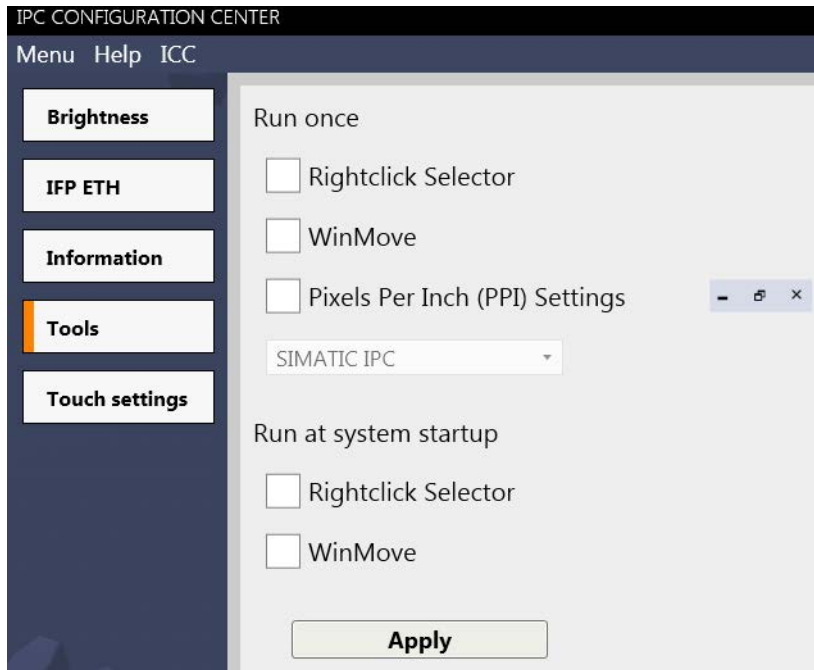
6. Change the waiting time until a screen saver switches on to the required value.

7. Make additional settings as needed. Close all open dialogs and save the settings with "OK".

4.5 Tools - Rightclick, WinMove and PPI

4.5.1 Overview

In the "Tools" tab, you can activate or deactivate the programs "Rightclick Selector", "WinMove" and PPI.

Distinguish between the following cases:

- "Run once" activates the respective program for the ongoing session.

- "Autostart" activates the respective program every time you start the PC on which the Configuration Center is installed.

You activate the changed settings with the "Apply" button and the corresponding program icons are displayed:

"Rightclick Selector" icon   "WinMove" icon

The following subsections describe the functions of the programs. You can find a description of PPI in the section "Setup".

4.5.2 Rightclick Selector

When you activate the "Rightclick Selector" icon, the next mouse click or the next touch of the touch screen is executed as a right-click.

Note

Rightclick selector in Extended Monitor mode

The rightclick selector always relates to the screen on which the icon is visible. If you use two monitors in Extended Monitor mode, first move the "Rightclick selector" symbol to the required screen before pressing the symbol. After the restart of the device, the "Right-click Selector" must be moved again to the required screen.

Delay time

There is no delay time in single-touch mode: The right-click function is executed immediately.

If the touch is used as multi-touch, the right-click function is executed with a specific delay. In Windows 7 you can set the delay time with a slider, but you cannot reduce it to zero.

For a multi-touch, Windows must be able to distinguish whether it is evaluating an operation or a right-click that causes the delay time.

Alternatives for right-click

Only with Windows 7: Alternatively, touch and hold the screen with one finger while briefly tapping the screen with another finger ("Press and Tap"). The shortcut menu is display.

Windows 10: Alternatively, touch the screen with one finger and hold for a moment until the shortcut menu appears.

4.5.3 WinMove

"WinMove" allows you to move program windows vertically in order to display window areas that extend beyond the display area. "WinMove" is mainly used on devices with a vertical resolution of ≤ 600 pixels.

Procedure

1. Open "WinMove" using the Configuration Center.

   The "WinMove" window with the "Up" and "Down" buttons are displayed.

2. Move the open program window using the "Up" and "Down" buttons.

Note

Unintentional reaction in Windows 10

WinMove also moves the desktop search option and the lock screen. Therefore, use WinMove only in the active session.

4.5.4 PPI settings for new users

The operator controls of Windows applications have a different size depending on the different screen sizes and resolutions. By adjusting the display size for characters and objects (PPI resolution) you set the operator controls to an operable size.

Procedure

1. In the "Tools" tab in the Configuration Center, activate the settings "Pixels per inch (PPI)".

2. Select between two profiles:

   – "SIMATIC IPC": A new PPI resolution (for an enlarged display on the screen) is set for the current user.

   To prevent the representation from becoming too large, set scaling to 100% in the "Display settings" of the operating system (for Windows 10 in the shortcut menu of the desktop).

   – "Windows defaults": The standard PPI resolution of the operating system for a small display is set for the current user.

   Select this profile if a scaling > 100% is already set in the "Display settings" of the operating system (for Windows 10 in the shortcut menu of the desktop), for 4K monitors 125% is recommended for example.

Note

Standard user

The PPI resolution is only set up for the current user that is logged on at this time, not for other users.

• To set the PPI resolution for a different user, log on as new user with your own Account and activate the settings "Pixels per inch (PPI)" in the "Tools" tab in the Configuration Center.

   Restart the computer to apply the values for the desktop.

4.6 Interlock in clone mode

4.6.1 Notes on clone mode

In clone mode, all screens of the connected devices show the same content.

The touch screen is secured by means of an interlock mechanism in clone mode; this mechanism prevents incorrect operations due to simultaneous operation.

4.6.2 Activating the interlock mechanism

Introduction

If you have connected two or more touch screens, which are operated spatially separate from one another, two operators can use the same application simultaneously. You use the interlock to prevent reversing an input made by Operator1 through Operator2: A touch operation blocks the operation on all other devices for some time that is reset with each new touch operation.

If you remove a connected device from the PC while it is locked, it releases as soon as you connect it to the PC again. The interlock of a device is a setting in the non-permanent, volatile memory and therefore is only effective during operation.

Note

Activation and 2 multi-touch devices required

When you activate the interlock mechanism, it takes effect as of the second multi-touch device, even in extended monitor mode.

Detect lock

You can assign each device a device name, which is displayed on the screen on the hardware side, e.g. Station 1. If the operator sees the configured image from Station 2, the screen at Station 1 and cannot be operated. The operator can only track third-party operations. If no more operations are performed, the block is removed and the operator can then perform operations at Station 1 again.

Procedure
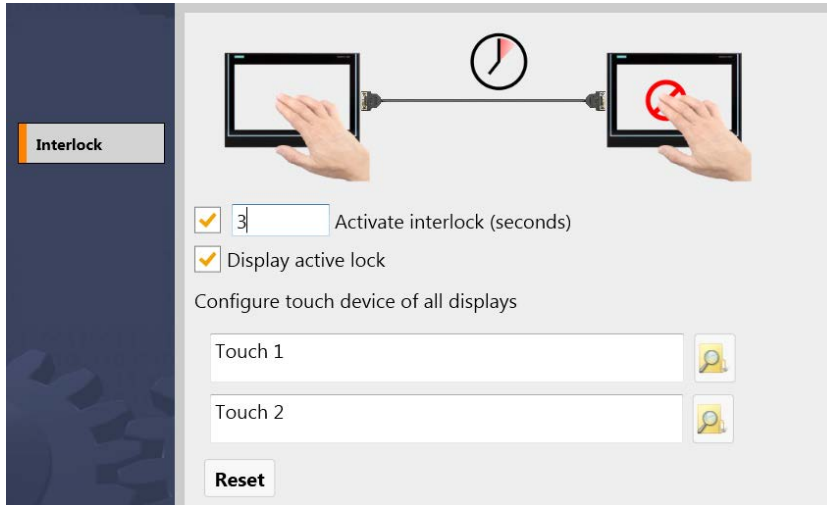
1. Open the Configuration Center and go to the "Interlock" tab.

2. Activate "Activate interlock" (default: activated)

3. Specify the "Timeout", for example, 10 seconds.

   As soon as operation is performed on a device, operation of the other device is blocked for 10 seconds. An input or touch of the touch screen then has no effect for 10 seconds.

4. If you activate "Display active lock", an optical signal indicating the interlock appears on displays that are connected to the PC. In clone mode, the same signal appears on both displays.

5. Touch a touch device, e.g. "Touch 2". The associated input box is marked blue under "Configure touch device of all displays". In this field, assign a device name which is displayed on the associated touch device.

   Alternatively, open the file selection dialog on the right and select a .png image which is displayed instead of the device name. Some standard images are stored in the directory "...\Siemens\Automation\ICC". With a graphics program, you can create an image yourself and store it in this directory as a .png image. You need administrator rights to store your own images.
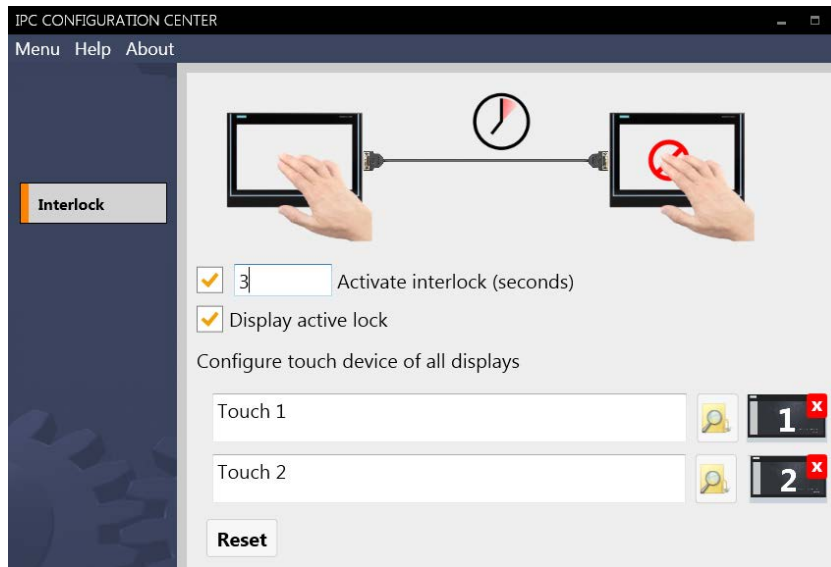
The selected image is displayed in the preview with a red "close" cross. When you click the "Close" cross, the image is discarded as the display and the device name is displayed again.

Clicking the "Reset" button resets all the settings.

Optical signaling of the interlock during operation

The following figure shows an example of the icon which appears on all displays during interlock. The text "Touch 2" was used in the example.
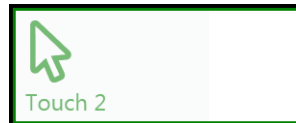
You can change the position of the icon on each display by selecting the icon, keeping it selected and moving the icon.

4.7 Touch settings - Switch Mode

4.7.1 Overview

You operate a device a with a capacitive multi-touch screen using up to five fingers. In doing so, the device recognizes gestures such as swiping, zooming, and rotating.

The "Switch Mode" button switches the touch controller of a connected multi-touch device (five fingers, gestures) to single-touch mode. In single-touch mode, the device react like a single-touch device that you operate with a single finger only and without gestures.

After the changeover, you can operate your multi-touch device with the WES7E operating system.

Differences and limitations in single-touch mode

- **Opening the shortcut menu**: In order to open the shortcut menu in single-touch mode, follow these steps:

  Tap and hold a position 1 and briefly tap on any position 2 while doing so.

- **Changeover** Multi-touch / single-touch mode in "Landscape" orientation.

  In single-touch mode, you can operate up to two touch devices in Clone mode. If more than two touch devices are connected to a PC with WES7E, only two touch devices can be operated.

The standard display and mouse functions can be used without any restrictions.

Double-click under a second user

In single-touch mode, the sensitive range around your finger is expanded for a double-click. The expanded range is saved in the user profile with the switch to single-touch mode. In order for the expanded range to also be saved in the user profile for a newly created user, follow these steps:

1. Log on as the new user.

2. Toggle to multi-touch mode

3. Toggle to single-touch mode

The next time you call the function, the sensitive range remains expanded.

4.7.2 Toggling touch mode

Device detection

All detected devices are displayed in a list in the center of the "Touch settings" tab in the Configuration Center. In addition to the device name, the touch mode of a device is shown: Multi-touch mode or single-touch mode.
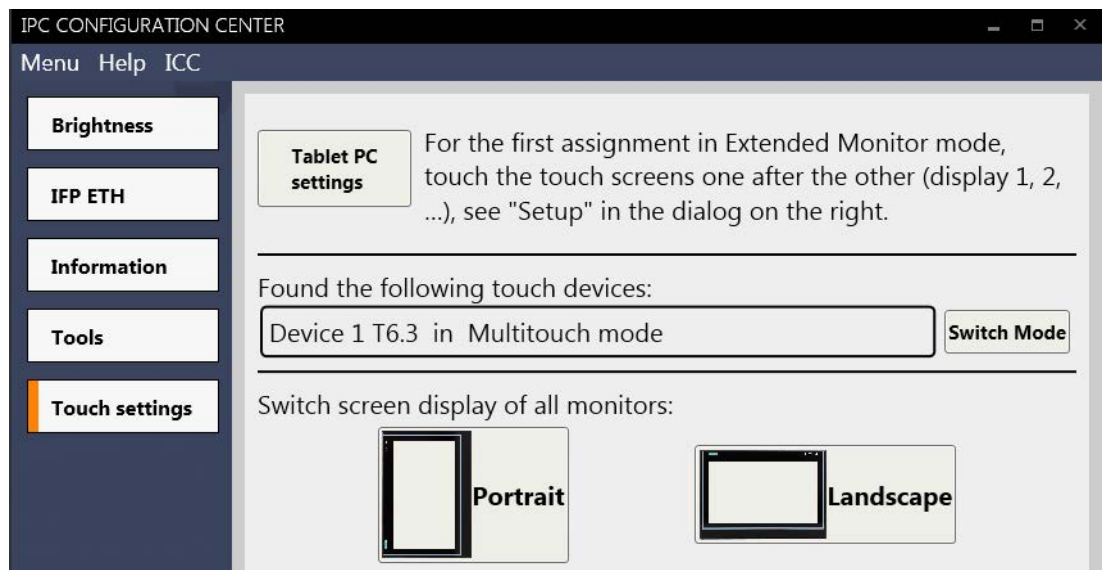
Procedure

1. To determine which entry in the list belongs to a given device, operate the connected devices one by any with a touch input. The connected devices are displayed by means of a button.

2. To change the touch mode for a device, click on the respective "Switch Mode" button. The touch mode of the device displayed next to the button changes.

   Toggling can change the order of the devices in the list. Multi-touch devices are always displayed first.

Toggling in single-touch mode

1. Click "Switch Mode".

   The device is in **single-touch mode.**

2. **Check**: If you draw a rectangle on the touch screen with your finger, you will see an arrow – the typical mouse pointer – under your finger.

Toggling in multi-touch mode

In order to change back to multi-touch mode, follow these steps:

1. Click "Switch Mode".

   The device is in **multi-touch mode.**

2. **Check**: If you draw a rectangle on the touch screen with your finger, you will see a small dot under your finger.

Switchover without Configuration Center

You can also switch the touch mode of a device without the Configuration Center, which requires the extensive .net environment: The "Switch Touch Mode" tool is slimmer and consumes less resources:

1. Uninstall the SIMATIC PDT software.

2. Install the "Switch Touch Mode" tool.

   The device is in **single-touch mode.**

3. To switch back to **Multitouch mode**: In the Start menu, select "All Programs > Siemens Automation > IPC Switch Touch Mode > IPC Switch Touch Mode".

   Click "Multitouch".

Removal

Note

If the device is left in single-touch mode, it is no longer switched to multi-touch mode during removal. This means you can continue to use multi-touch mode even after removal.

Technical support

<div style="text-align: right; font-size: large;">A</div>

A.1 Service and support

You can find additional information and support for the products described on the Internet at the following addresses:

- Technical support (https://support.industry.siemens.com)
- Support request form (http://www.siemens.com/automation/support-request)
- After-sales information system for SIMATIC PC / PG (http://www.siemens.com/asis)
- SIMATIC Documentation Collection (http://www.siemens.com/simatic-tech-doku-portal)
- Your local representative (http://www.automation.siemens.com/mcms/aspa-db/en/Pages/default.aspx)
- Training center (http://sitrain.automation.siemens.com/sitrainworld/?AppLang=en)
- Industry Mall (https://mall.industry.siemens.com)

When contacting your local representative or Technical Support, please have the following information at hand:

- Order number of the device (MLFB)
- BIOS version (industry PC) or image version (HMI device)
- Installed additional hardware
- Installed additional software

Tools & downloads

Please check regularly if updates and hotfixes are available for download to your device. The downloads are available on the Internet under "After Sales Information System SIMATIC PC/PG" (see above).