

SIEMENS

SIMATIC

Industrial PC SIMATIC IPC Wizard for Widescreen Devices

Operating Manual

Preface

Overview

1

Installing IPC Wizard

2

Software description

3

Changing, repairing, or
uninstalling the IPC Wizard
software

4

Updating IPC Wizard
software

5

Technical support

A

Legal information

Warning notice system

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.


indicates that death or severe personal injury will result if proper precautions are not taken.

 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.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

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.

Proper use of Siemens products

Note the following:

 WARNING
Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

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

Purpose

This operating manual is part of the documentation of SIMATIC IPCs.

This operating manual contains all the information required for using the SIMATIC IPC Wizard for widescreen devices.

Conventions

The following abbreviations of product names are used in this document:

Long form	Abbreviation
SIMATIC IPC Wizard for Widescreen Devices	IPC Wizard
SIMATIC IPC	PC, device
SIMATIC IPC touch/key, SIMATIC IFP Touch/Key	Keyboard unit
Windows Embedded Standard 7	Windows Embedded Standard
Windows 7 Ultimate	Windows 7

Style conventions

Style convention	Scope
"Add screen"	<ul style="list-style-type: none">• 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

The present manual contains images of the software described. The images can deviate slightly from the supplied software.

Trademarks

The following designations marked with the symbol ® are registered trademarks of Siemens AG:

- SIMATIC®; SIMATIC HMI®; SIMATIC Flat Panel®; SIMATIC IPC®
- WinCC®

History

Edition	Comments
09/2012	First edition
11/2012	Chapter "OSK for Windows 7 and Windows Embedded Standard 7" was updated. Chapter "Touch in Extended Monitor Mode" was supplemented.

Table of contents

	Preface	3
1	Overview.....	7
1.1	Product description	7
1.2	System requirements	8
2	Installing IPC Wizard	10
3	Software description	12
3.1	KeyTools_Phone	12
3.1.1	Overview	12
3.1.2	Clone mode.....	13
3.1.2.1	Notes on clone mode	13
3.1.2.2	Interlock mechanism in clone mode	13
3.1.2.3	Configuring the timeout.....	13
3.1.3	Operating KeyTools_Phone	15
3.1.3.1	"Status" area	16
3.1.3.2	"Keycode table" area	16
3.1.3.3	"Security features" area	23
3.1.3.4	Controlling LEDs of the key devices	27
3.1.4	Language selection for key devices.....	31
3.2	PhoneKeyPad scope of functions	35
3.3	OSK for login.....	36
3.3.1	OSK for Windows 7 and Windows Embedded Standard 7.....	36
3.4	UPDD	38
3.4.1	Overview	38
3.4.2	Notes on clone mode	39
3.4.3	Calibrate touch screen	40
3.4.3.1	Standard calibration	40
3.4.3.2	Extended calibration	41
3.4.4	Touch functionality	42
3.4.4.1	Deactivate touch functionality	42
3.4.4.2	Extended Touch touch functionality.....	43
3.4.4.3	Touch in Extended Monitor mode	44
3.5	Panel PC Tools	46
3.5.1	Overview	46
3.5.2	WinMove	47
3.5.3	SetBrightness.....	48
3.5.3.1	Command line call	49
3.5.3.2	Troubleshooting in graphic mode	50
3.5.4	BbcScreenSaver	51

4	Changing, repairing, or uninstalling the IPC Wizard software	53
5	Updating IPC Wizard software	55
A	Technical support	56
A.1	Service and support	56
	Index.....	57

Overview

1.1 Product description

With SIMATIC IPC Wizard for SIMATIC Industrial PCs, you install device-specific software and drivers for operating your devices.

The SIMATIC IPC Wizard recognizes the existing hardware components and automatically installs the associated software.

Industrial PCs with pre-installed software are already equipped with the SIMATIC IPC Wizard, which runs automatically on initial start-up.

On SIMATIC Industrial PCs without pre-installed software, the SIMATIC IPC Wizard can be installed from the "Documentation and Drivers" CD/DVD.

The SIMATIC IPC Wizard consists of the following software components:

- KeyTools_Phone (Page 12)
- UPDD (Page 38) (Universal Pointing Device Driver)
- Panel PC Tools (Page 46)
- OSK for login (Page 36) (On Screen Keyboard)

Note the compatibility of the software components with the different operating systems in the following section.

See also

PhoneKeyPad scope of functions (Page 35)

1.2 System requirements

Hardware requirements

For the SIMATIC IPC Wizard you require the following hardware:

- SIMATIC Industrial PCs
- Keyboard
- Mouse
- 100 MB of free hard disk space on the C:\ partition
- SIMATIC Industrial Flat Panel (optional)

Note

Using a uniform display type

The combination of 4:3 and 16:9 displays is not supported by SIMATIC IPC Wizard. Drivers and applications can cause malfunctions with mixed operation.

Note for Industrial Flat Panels

- If you use a SIMATIC Industrial Flat Panel with the PC, connect the Industrial Flat Panel to the PC before first commissioning.
 - During first commissioning only one Industrial Flat Panel may be connected to the PC.
 - After completion of first commissioning, you can connect another Industrial Flat Panel to the PC.
-

Supported operating systems

SIMATIC IPC Wizard can run on SIMATIC Industrial PCs with the following operating systems:

Microsoft Windows (32 bit)

- Windows 7 Ultimate
- Windows Embedded Standard 7

Microsoft Windows (64 bit)

- Windows 7 Ultimate
- Windows Server 2008 R2

You need administrator rights for the installation.

SIMATIC IPC Wizard software and operating systems

The following table shows the operating systems for which the software components of the SIMATIC IPC Wizard are available:

IPC Wizard software component	Operating system		
	Windows 7 Ultimate	Windows Embedded Standard 7	Windows Server 2008 R2
OSK Windows 7 and higher	x	x	x
UPDD_Touch	x	x	x
PPC_Tools	WinMove	x	x
	SetBrightness	x	x
	BbcScreenSaver	x	x
PhoneKeyPad	x	x	x
OSK_Logon	x		
KeyTools	x	x	x

¹ Not for SIMATIC Industrial Flat Panels

Software requirements

- One of the operating systems named in "Supported operating systems" section is installed.
- The driver for the graphics adapter is installed.
- The installed graphics driver supports reading of EDID data.

Note

The Microsoft VESA driver is not supported by the SIMATIC IPC Wizard.

Setup cancels the installation.

Installing IPC Wizard

Note

Uninstall driver files from earlier installations

The SIMATIC IPC Wizard checks for existing driver files from previous installations, removes them if necessary and reboots the computer. After the reboot, the IPC Wizard starts again automatically.

Checking the language selection for key devices

If you are installing the IPC Wizard from the "Documentation and Drivers" CD/DVD, check the language settings before installation. See section "Language selection for key devices (Page 31)".

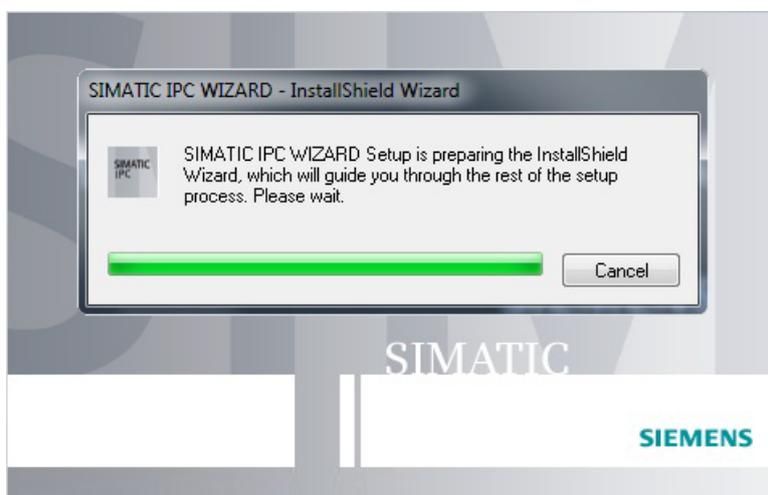
Requirement

The system requirements (Page 8) are met.

Procedure

Proceed as follows:

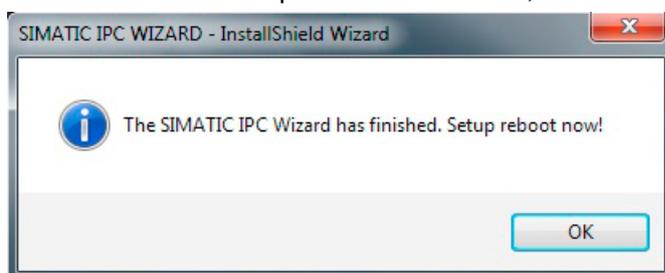
1. Connect the mouse and keyboard to the PC.
2. Turn on the PC.
 - In the factory state, the SIMATIC IPC Wizard is already preinstalled. The installation starts the first time the PC is switched on.
 - If your SIMATIC IPC was delivered without pre-installed software, start the installation of the SIMATIC IPC Wizard from the "Documentation and Drivers" CD/DVD by running "\\Drivers\IPC_WIZARD\setup.exe".



3. Follow the instructions.

The SIMATIC IPC Wizard recognizes the existing hardware components and automatically installs the associated software. This operation can take several minutes.

When all software components are installed, the the following dialog is displayed:



Note

In the case of server operating systems the dialog contains the "Now" and "Later" buttons instead of "OK".

4. Finish the installation with the "OK" button; for server operating systems use "Now".

The PC is restarted.

Result

You have installed the software of the SIMATIC IPC Wizard.

Note

If the IPC Wizard is already installed, setup can be restarted with "Start > Siemens Automation> Simatic > IPC_Wizard".

The following options are available:

- Modify: Add or deselect features
 - Repair: Repair all installed features
 - Remove: Remove IPC Wizard including all components
-

Software description

3.1 KeyTools_Phone

3.1.1 Overview

SIMATIC IPC KeyTools_Phone offers the following functions for key devices:

- Configure keyboard layout properties for operating the keys
- Configure clone mode with multiple operator panels, including key interlock
- Configure extended functions in clone mode, for example:
 - Set a minimum time between two key operations
 - Display the status of the operator panel
- KeyTools status display
Summary of KeyTools information
- Configure keycode table
Load and edit keycode tables
- Configure security features
Activate and deactivate safety-related settings
- Control LEDs
Control of LEDs using the "LedControl" tool for front panels that have function keys with LEDs

Note

Front panel keyboard

The term "front panel keyboard" used in the following applies only for keyboards on the operator panels.

Selecting the language

To display all pre-programmed characters correctly, the input language and language properties in Windows must be set to "United States-International". See section Language selection for key devices (Page 31).

3.1.2 Clone mode

3.1.2.1 Notes on clone mode

Note

Clone mode is secured by means of an interlocking mechanism. It is not possible to execute an operator action simultaneously on multiple operator panels.

Note

Maximum of two key devices in clone mode

A maximum of two key devices can be operated simultaneously in clone mode. If you connect two key devices with different key layouts to an industrial PC, incorrect mapping of the key layout table can result in malfunctions.

3.1.2.2 Interlock mechanism in clone mode

Function of the interlock mechanism

The interlock mechanism in clone mode prevents simultaneous operation of two devices.

A timeout defines how long the unoperated device is locked.

The timeout is set in a registry key, see section Setting the timeout (Page 13).

Type of interlocking	Brief description
Timer mode	"Timer mode" is always active. The timeout in timer mode is assigned to an device as soon as operator input occurs. As long as the timeout has not expired, no input is permitted on another device.

3.1.2.3 Configuring the timeout

The timeout is configured in the Windows registry.

This data is read in at system startup and used as start values for the driver.

The respective procedure is described in the following sections.

Setting the timeout

Defining the runtime for timeout after keystroke

This variable defines the value of the runtime in milliseconds.

The variable is a DWORD. The interface to the driver can only process positive values. The runtime is entered into the registry as a hexadecimal value.

During the driver installation at system startup, this variable is automatically created in the registry by the INF files (default value is 3000 ms).

Path

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\filter]
```

```
"TimeOut"=dword:00000bb8
```

Visualization interfaces to other applications

On the application level, data can be read or sent from the driver. An application that implements the corresponding driver interfaces is required for this purpose. Access by the application is possible via three user interfaces in the USB keyboard controller driver (package version 2.4 or higher). These interfaces with examples for access in C++ are described in the following sections.

The interfaces are IOCTL commands. The calls are executed as functions in the driver to change the status of the driver.

Updating the timeout value

If this command is called, the timeout value is read for the driver from the registry during runtime. The updated value is then returned.

Calling the command in C++

You access the command as follows in C++:

```
#define IOCTL_ADMIN_TIMEOUT_READ_REG CTL_CODE(FILE_DEVICE_UNKNOWN,
0x805, METHOD_BUFFERED, FILE_ANY_ACCESS) //GTA update the Timeout
value from the registry

HANDLE hdevice = CreateFile("\\\\.\\?\\KeyHookFilter", GENERIC_READ |
GENERIC_WRITE, 0, NULL, OPEN_EXISTING, 0, NULL);

if (hdevice == INVALID_HANDLE_VALUE)
{
    AfxMessageBox(" INVALID_HANDLE_VALUE - KeyHookFilter - Not
found! ");
}
else
{
    DWORD junk;
    volatile DWORD Admin_MODE_Status; //volatile DWORD
KeyHookFilterStatus;
    Timeout = 0;

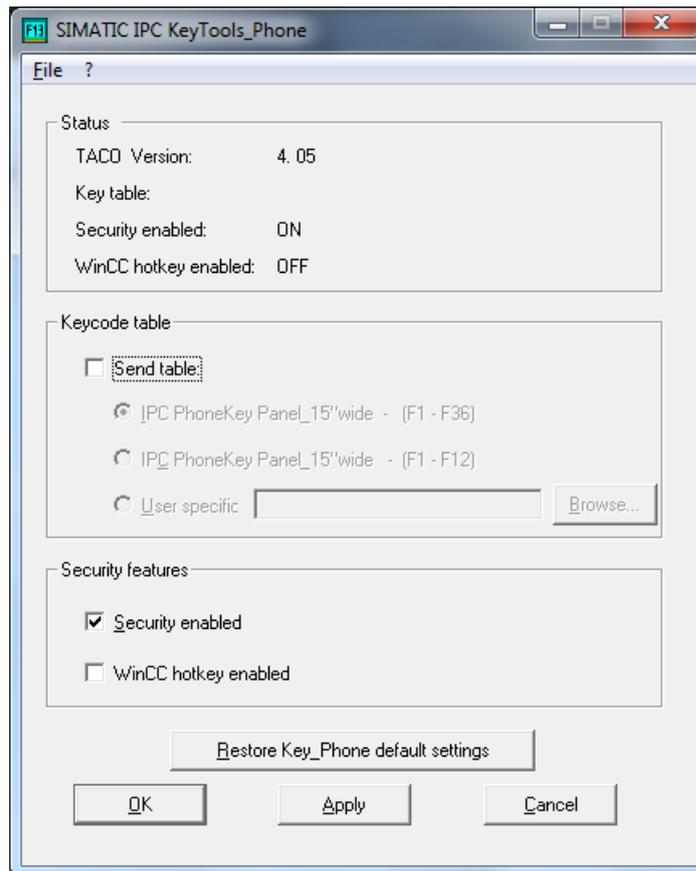
    if( DeviceIoControl(hdevice, IOCTL_ADMIN_MODE_STATUS, NULL, 0,
(PVOID)& Timeout, sizeof(Admin_MODE_Status), &junk, NULL))
    {
        AfxMessageBox("Timeout update is: %d", Timeout);
    }
    CloseHandle(hdevice);
}
```

3.1.3 Operating KeyTools_Phone

Procedure



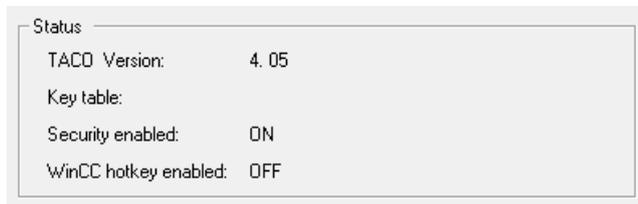
1. Open the SIMATIC IPC Key Tools Phonekey with the associated desktop icon or select "Start > Programs > Siemens Automation > SIMATIC > IPC Wizard > IPC KeyTools > IPC Key Tools".



2. Use the "Restore Key_Phone default settings" button to restore the key assignment to the factory state.
3. Use the "OK" button to exit the program and apply the changes made to the KeyTools setting.
4. Use the "Cancel" button to exit KeyTools. The changes are not applied.
5. Use the "Apply" button to apply changes made to the KeyTools setting.

3.1.3.1 "Status" area

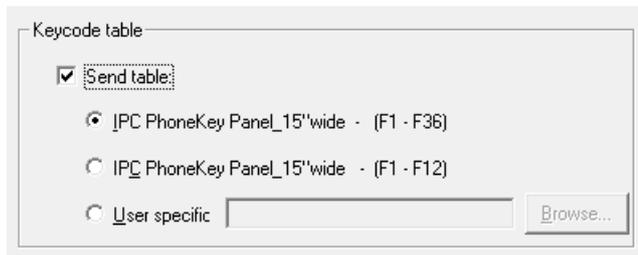
When the program is called for the first time, no value is displayed for "Key table" in the "Status" area. Values are only displayed after a keyboard table is loaded.



Status	Information display
Controller version	Release version of USB keyboard controller
Key table	Last file loaded for the USB keyboard controller
Security enabled	Activation status of security settings
WinCC hotkey enabled	Activation status of "WinCC hotkey" function

3.1.3.2 "Keycode table" area

Select one of the options in the "Keycode table" area.



"IPC PhoneKey Panel_15"wide – (F1 – F36)" option

When you select "IPC PhoneKey Panel_15"wide – (F1 – F36", a pre-defined default keycode table is loaded. This key assignment corresponds to the factory state.

Keys	Keycode
F1 to F12	F1 to F12
F13 to F24	Shift + F1 to Shift + F12
F25 to F36	Ctrl + F1 to Ctrl + F8
Alphanumeric, cursor and control keys	USA international

The default settings of the function keys <F13 to F20> correspond to the specifications required for using the keys, for example in the **SIMATIC HMI** software.

Note

The security features are activated – see section:

- "Status" area (Page 16)
 - "Security features" area (Page 23)
-

Procedure

To send the keycode table to the keys of the key device, follow these steps:

1. Activate "Send table".
2. Select the option "IPC PhoneKey Panel_15"wide – (F1 – F36)".
3. Click on "Apply" or "OK" to confirm.

The keycode table is sent. The sent keycodes are activated immediately.

The keycode table cannot be changed.

"IPC PhoneKey Panel_15"wide – (F1 – F12)" option

When you select "IPC PhoneKey Panel_15"wide – (F1 – F12)", a PC-compatible keycode table is loaded. The following applies:

- The function keys F1 to F12 correspond to the mapping of a PC keyboard
- Function keys F13 to F36 are not used.

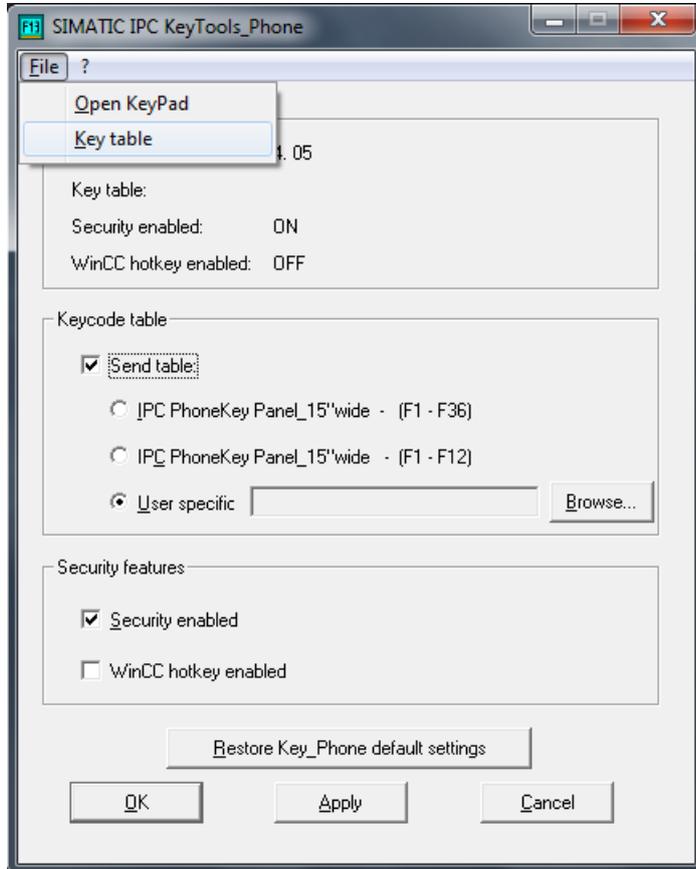
Option "User specific"

Select the "User specific" option to:

- Load a custom keycode table and assign the keys of a key device
- Edit the key mapping

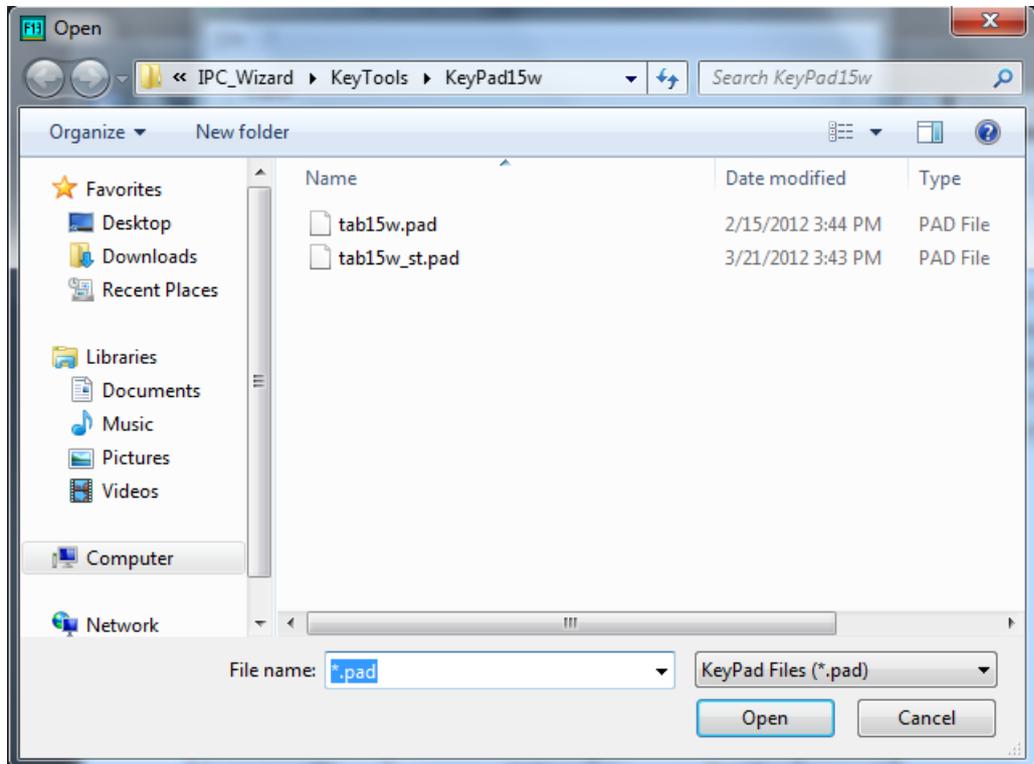
Load a custom keycode table and assign the keys

1. Activate "Send table > User specific".



2. Press the "Browse" button or select the menu command "File > Key table"

The "Open" dialog box is displayed.



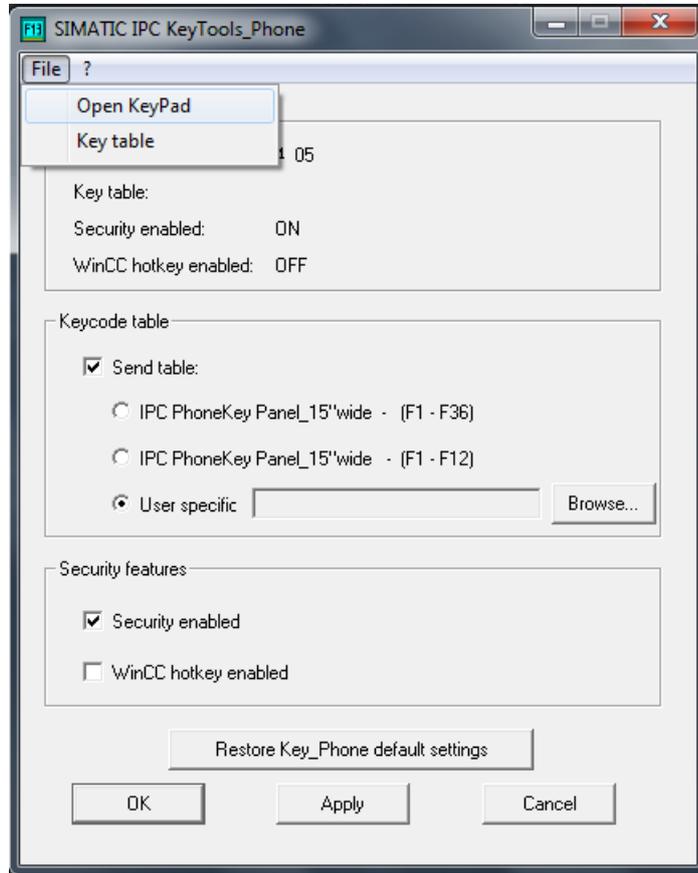
The "C:\Program Files\Siemens\IPC_Wizard\KeyTools\KeyPad_15w" directory contains the following files for a 15" widescreen key device:

- The file "tab15w.pad" with the keycodes "Default Panel PC"
 - The file "tab15w_st.pad" with the keycodes "Standard PC compatible"
3. Select the desired file and click "Open".
 4. Select "Apply" to assign the selected keycode table to the keys of the key device or "Cancel" to abort.

Editing the key mapping

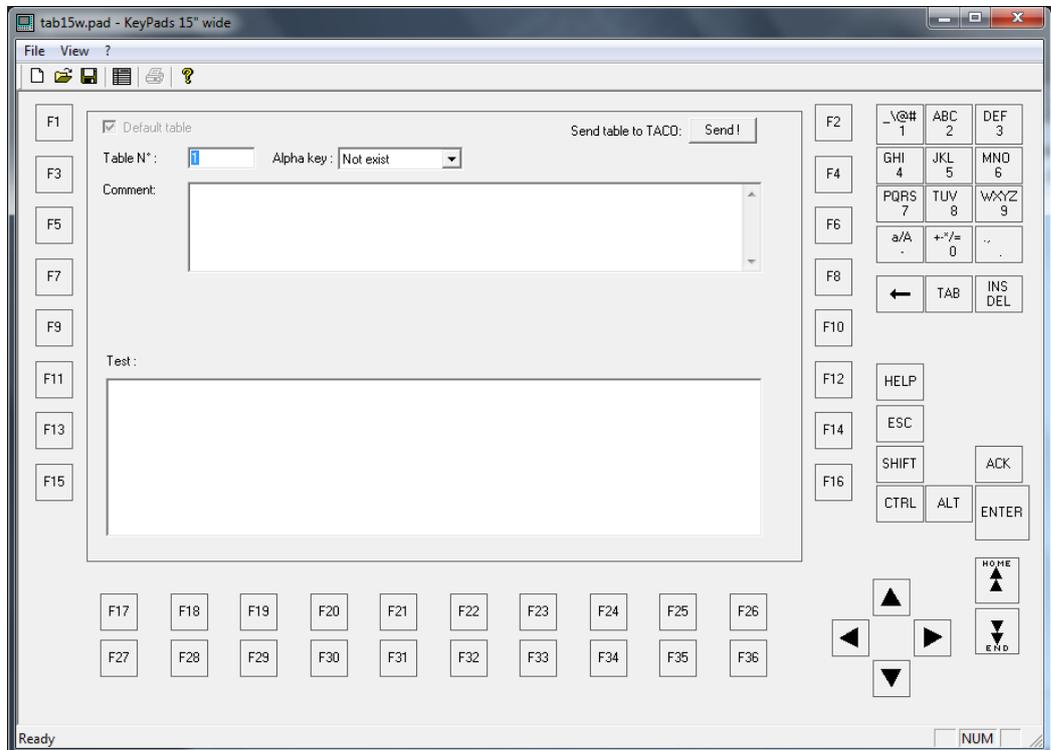
If you load a custom keycode table and assigned to the keys of the key device, you can edit the key mapping of the F keys using the KeyPad.

1. Activate "Send table > User specific".



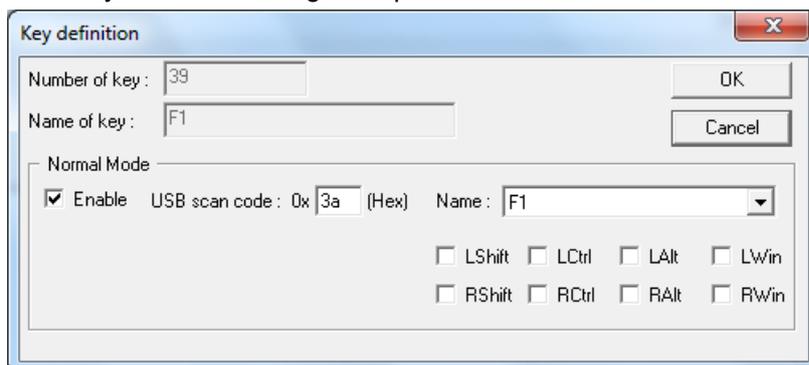
2. Select "File > Open KeyPad".

The KeyPad opens.



3. Open the assignment of an F key with a mouse click use the "Enter" key.

The "Key definition" dialog box opens.



- In "Normal mode", define which keycode is to be sent.
- The options allow you to specify which keycode is assigned in addition to the keycode under "Name".

Example:

Name	Option	Display/function
F1	-	F1
F1	LCtrl	F1 + Ctrl

The section "Keycode table (Page 31)" contains a list of all names which can be selected in the "Name" group. The "Display/function" column lists the display or function which is triggered when the respective button is clicked.

- Pressing the "Send!" button assigns the complete, edited keycode table to the keys.

The changes take effect immediately.

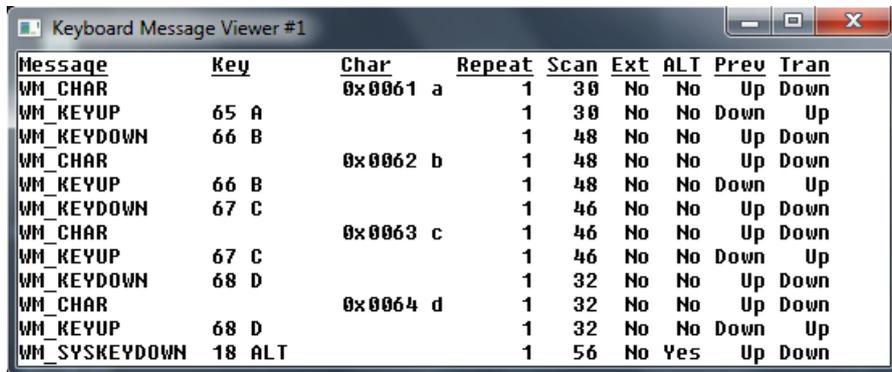
Note

The "Send!" button is only enabled if the application has been started on a key device. The keyboard layout is English (USA international). Please note that the layout of an external keyboard must correspond to the international character set. This layout guarantees that the characters on the keys agree with the characters on the screen.

You can use the "IPC Keyview" program to view the keycodes of pressed keys.

Open "IPC Keyview" with Start > Programs > Siemens Automation > SIMATIC > IPC Wizard > IPC KeyTools > IPC Keyview".

As soon as you press a key, the corresponding codes appear in the "IPC Keyview" window.



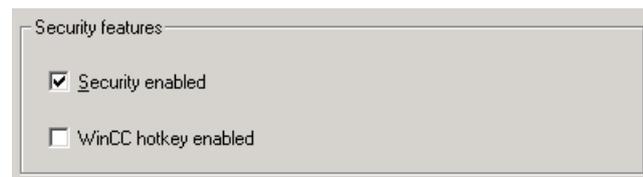
3.1.3.3 "Security features" area

Function "Security enabled"

With the "Security enabled" option, the F keys of a key device are interlocked.

The "Security features" are always activated in the factory state of a SIMATIC IPC.

 WARNING
Personal injury or property damage can result from malfunctions due to lacking key interlock
For security reasons it is recommendable to always use the "Security features" and not to deactivate them.
If "Security features" is nevertheless deactivated by the user, it must be guaranteed that no malfunctions can be triggered in the application program.
Clone mode is only permitted if the "Security features" are activated.
The interlocking mechanism is inactive during deactivation.



- If you activate "Security enabled", the "Security features" are effective immediately. You do not need to restart the device.
- If you deactivate "Security enabled", the "Security features" become ineffective immediately.



 WARNING
<p>Personal injury or property damage can result from malfunctions due to lacking key interlock</p> <p>If you deactivate "Security features", significant malfunctions may occur in the user software when using function keys <F13 to F36> or when using custom keycode tables. The keycodes associated with the function keys can also be triggered by keys other than the configured ones.</p> <p>The following is generally applicable: Malfunctions can also be triggered by external input devices or combinations of external input devices and key devices. The "Security features" are ineffective in such cases.</p>

- When using function keys within WinCC (TIA Portal), a reaction in the automation process is directly assigned to individual keys by the configuration settings.
- To guarantee safe operation of the automation process, make sure that only the configured key triggers the desired reaction.
- If the same keycode can be sent using other function keys, so-called "ghost keys" then exist. This must be prevented.
- Triggering of "ghost keys" from the front panel keyboard is prevented by the activated "Security features".

Principle of operation of the "Security features"

If one of the "Default Panel PC" keycode tables is loaded, the following strings are sent by the keyboard controller of the front panel keyboard when an <F> key is pressed:

Key pressed	Keycode string sent
F1 to F12	F (1 to 12)
F13 to F24	Shift + F(1 to 12)
F25 to F36	Ctrl + F(1 to 12)

The <F1 to F12> keys of the front panel keyboard send the same keycodes as an external USB or PS/2 keyboard. An extension of the keycode string has been defined for the remaining 24 <F> keys because only a limited number of keycodes is made available by the operating system. These <F> keys are defined by the keycode string <Shift> or <Ctrl+F(1 to 12)>.

If the <Shift> and <Ctrl> keys as well as the <F> keys are pressed simultaneously, "ghost keys" may be triggered in the customer application as a result of the combination of keycode strings. Examples are listed in the following table.

Key 1	Key 2	Desired key	Activated key	
Shift (Shift)	F1 (F1)	Shift and F1	F13	(Shift, F1)
Ctrl (Ctrl)	F1 (F1)	Ctrl and F1	F25	(Ctrl, F1)
F14 (Shift, F2)	F1 (F1)	F14 and F1	F14 F13	(Shift, F2) (Shift, F1)

Key 1 and key 2 are pressed simultaneously. The desired key and the actually activated key are displayed ("Security features" are deactivated). The sent keycode string is shown in parentheses.

Simultaneous pressing of two <F> keys, as well as combination of the <Shift> or <Ctrl> key with an <F> key is therefore blocked by the "Security features" in the factory state.

The following checks must be made in this case:

- Can an undesired function be triggered by simultaneously pressing the <Shift> key and an <F> key?
- Can an undesired function be triggered by simultaneously pressing the <Ctrl> key and an <F> key?
- Can an undesired function be triggered by simultaneously pressing two <F> keys?

Functions triggered by mistake can be avoided by:

- Changing the keycode table by editing using "Keycode table > User specific > Edit"
- Changing the user application

Example

Two functions are defined in the customer application, where the following prerequisites apply:

- "Security features" are deactivated and the "IPC PhoneKey Panel_15"wide – (F1 – F36)" keycode table is loaded.
- The desired function "X" is triggered by simultaneously pressing the <Shift> and <F1> keys.
- The function "Y" is triggered by pressing the <F13> key.

Note

The following keycode sequences exist for <Shift + F1> and <F13>. The customer application cannot distinguish which keys have been pressed. The result is an undefined reaction of the customer application:

- The function "Y" can be triggered by pressing the two keys <Shift+ F1>.
 - The function "X" can be triggered when pressing the <F13> key.
-

Solution

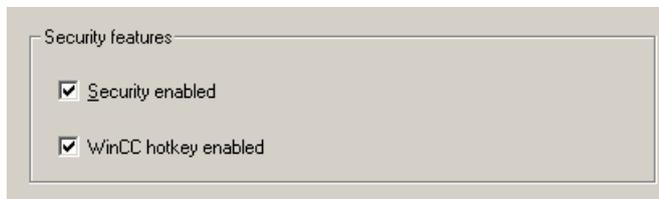
Approach 1:

The keycode table is modified using "User specific > Edit" such that a different keycode string is sent when pressing the function key <F13>, e.g. <ALT + F1>. The customer application must be able to appropriately evaluate this new keycode string.

Approach 2:

The customer application is modified such that the function "Y" is not assigned to function key <F13> but e.g. to <F12>. The function keys <F1> and <F12> have different keycodes in the keycode table "IPC PhoneKey Panel_15"wide – (F1 – F36)".

Function "WinCC hotkey"



Certain programs, for example, WinCC (TIA Portal), interpret the sequence of keycodes sent over the keyboard interface in their own manner. The function "WinCC hotkey" permits adaptation to this response.

Example

If you activate "WinCC hotkey enabled", the keycode for "Releasing a function key" is sent in the exchanged keycode string expected from WinCC (TIA Portal).

The following tables list the keycode strings sent with the "WinCC hotkey" function activated or deactivated:

- Keycode string with function "WinCC hotkey" deactivated:

Function keys	Press key	Release key
F1 to F12:	F (1 to 12)	F (1 to 12)
F13 to F24:	Shift, F(1 to 12)	Shift, F(1 to 12)
F25 to F36	Ctrl, F(1 to 12)	Ctrl, F(1 to 12)

- Keycode string with function "WinCC hotkey" activated:

Function keys	Press key	Release key
F1 to F12:	F (1 to 12)	F (1 to 12)
F13 to F24:	Shift, F(1 to 12)	F(1 to 12), Shift
F25 to F36:	Ctrl, F(1 to 12)	F(1 to 12), Ctrl

If "WinCC hotkey enabled" is activated, the "WinCC hotkey" function is automatically started when booting the Panel PC.

3.1.3.4 Controlling LEDs of the key devices

The LEDs are controlled using the command shell application "LEDControl" with the following functions.

- Switch off LED
- Switch on LED
- Flash LED
- Query current status of LED

See also

Parameter (Page 28)

Command shell application "LEDControl"

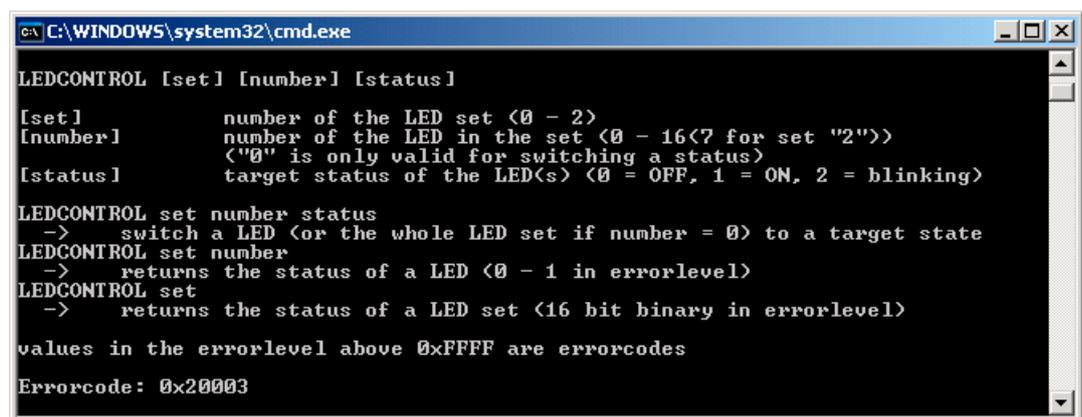
Procedure for actuating the LEDs

1. Open the command shell application with "Start > Run > cmd".
2. Confirm with "OK."
3. The shell command prompt is displayed.
4. Enter the command "LEDControl" and confirm the entry.

The command shell dialog box is opened.

Access: LEDControl [set] [number] [status]

Example:



```
C:\WINDOWS\system32\cmd.exe

LEDCONTROL [set] [number] [status]

[set]          number of the LED set (0 - 2)
[number]       number of the LED in the set (0 - 16<7 for set "2")
               ("0" is only valid for switching a status)
[status]       target status of the LED(s) (0 = OFF, 1 = ON, 2 = blinking)

LEDCONTROL set number status
-> switch a LED (or the whole LED set if number = 0) to a target state
LEDCONTROL set number
-> returns the status of a LED (0 - 1 in errorlevel)
LEDCONTROL set
-> returns the status of a LED set (16 bit binary in errorlevel)

values in the errorlevel above 0xFFFF are errorcodes

Errorcode: 0x20003
```

The application is defined by the parameters "Set", "Number" and "Status".

"Set" and "Number"

Set	Number
0	0 to 16
1	0 to 16
2	0 to 7

The buttons are grouped in "Sets". For the assignment, see section "Parameters (Page 28)".

The "Number" parameter stands for the actuation of the LEDs. "Number" 0 stands for the entire set; 1...16 or 1...7 control individual LEDs.

"Status"

- 0 = off
- 1 = on
- 2 = flashing

Error codes

If an error in the program occurs, an error code is output.

The variable %errorlevel% represents the return value from the program.

Description	Outputs on the screen	Output variable %errorlevel%
Driver error	0x20001	131073
Program errors	0x20002	131074
Invalid parameter	0x20003	131075

Parameter

Note

The variable "%errorlevel%" represents the value that is returned by the "LEDControl" program.

LED designation of keys	LED off set/number/status	LED on set/number/status	LED flashing set/number/status	Comments
F4; F9..F12; F14; F17..F19; F23..F26; F27..F29	0 0 0	0 0 1	0 0 2	Set 16 bit / Decimal 65535 (-1) (Set 0)
F1...F3; F5..F8; F13; F20..F22; F33..F36; a/A	1 0 0	1 0 1	1 0 2	Set 16 bit / Decimal 65535 (-1) (Set 1)
HELP; ACK; F15; F16; F30..F32	2 0 0	2 0 1	2 0 2	Set 8 bit / Decimal 127 (Set 2)

LED designation of keys	LED off set/number/status	LED on set/number/status	LED flashing set/number/status	Comments
F1	1 1 0	1 1 1	1 1 2	
F2	1 6 0	1 6 1	1 6 2	
F3	1 3 0	1 3 1	1 3 2	
F4	0 16 0	0 16 1	0 16 2	
F5	1 8 0	1 8 1	1 8 2	
F6	1 4 0	1 4 1	1 4 2	
F7	1 5 0	1 5 1	1 5 2	
F8	1 2 0	1 2 1	1 2 2	
F9	0 2 0	0 2 1	0 2 2	
F10	0 13 0	0 13 1	0 13 2	
F11	0 4 0	0 4 1	0 4 2	
F12	0 15 0	0 15 1	0 15 2	
F13	1 7 0	1 7 1	1 7 2	
F14	0 12 0	0 12 1	0 12 2	
F15	2 1 0	2 1 1	2 1 2	
F16	2 2 0	2 2 1	2 2 2	
F17	0 6 0	0 6 1	0 6 2	
F18	0 1 0	0 1 1	0 1 2	
F19	0 3 0	0 3 1	0 3 2	
F20	1 15 0	1 15 1	1 15 2	
F21	1 14 0	1 14 1	1 14 2	
F22	1 16 0	1 16 1	1 16 2	
F23	0 11 0	0 11 1	0 11 2	
F24	0 9 0	0 9 1	0 9 2	
F25	0 14 0	0 14 1	0 14 2	
F26	0 10 0	0 10 1	0 10 2	
F27	0 7 0	0 7 1	0 7 2	
F28	0 5 0	0 5 1	0 5 2	
F29	0 8 0	0 8 1	0 8 2	
F30	2 5 0	2 5 1	2 5 2	
F31	2 7 0	2 7 1	2 7 2	
F32	2 6 0	2 6 1	2 6 2	
F33	1 10 0	1 10 1	1 10 2	
F34	1 9 0	1 9 1	1 9 2	
F35	1 12 0	1 12 1	1 12 2	
F36	1 13 0	1 13 1	1 13 2	
HELP	2 4 0	2 4 1	2 4 2	
ACK	2 3 0	2 3 1	2 3 2	

Examples

Example: Switch on LED "S16"

#> LEDControl 2 2 1

Parameter	Explanation of the parameters
2 [set]	The LED is in set 2.
2 [number]	The LED number 2 is set.
1 [status]	The LED is switched on.

Example: Query status of LED "S16"

#> LEDControl 2 2

Parameter	Explanation of the parameters
2 [set]	The LED is in set 2.
2 [number]	The LED number 2 is set.
Status	The status is output in %errorlevel% and displayed as 1.

Note

If the LED flashes a current status cannot be correctly returned. Only the "LED switched on" status can be queried.

Example: Query status of an LED set (16 LEDs)

#> LEDControl 2

Parameter	Explanation of the parameters
2 [set]	The LED set 2 is queried.
Status	The status is output in %errorlevel%. The value is between 0 and 65535.

Assumption: "F15" and "F16" are switched on. Status of the LEDs: Decimal 3 (F15 \triangleq 1, F16 \triangleq 2)

Note

If a set consists of 16 LEDs and the status of an LED is shown as binary, 16 bits or 2 bytes are returned. The return value is thus between 0 and 65535 (2^{16} or 0xFFFF).

3.1.4 Language selection for key devices

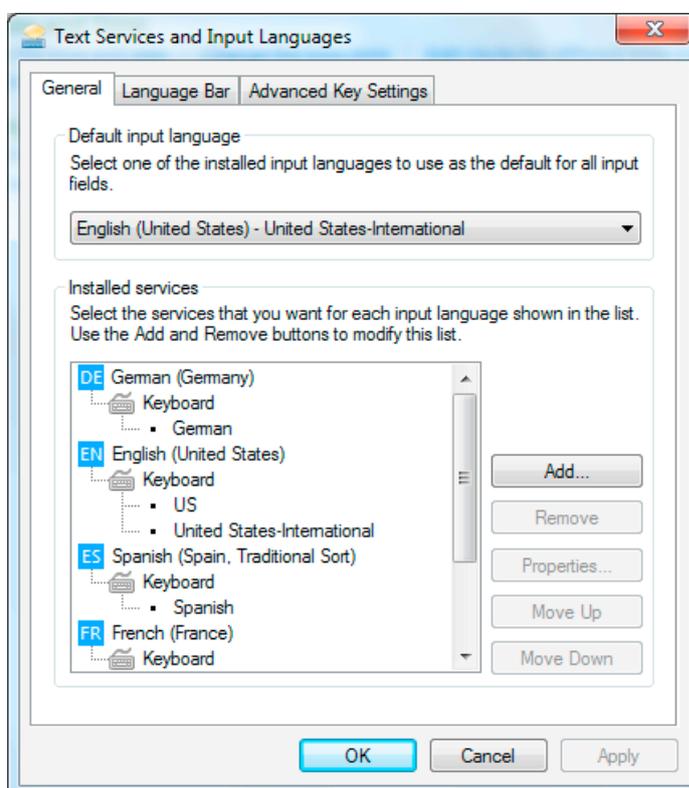
In order to ensure that all pre-programmed characters for key devices are displayed correctly in connection with the KeyTools, the languages for dialogs and keyboard layout must be set to "United States-International".

Note

For SIMATIC IPCs with preinstalled software, "United States-International" is the default setting.

Procedure

1. Open the "Text Services and Input Languages" dialog.



2. Under "Default input language" and "Installed services", activate the "United States-International" setting. Significance:
 - "Default input language" defines the dialog language
 - "Installed services" defines the language for the keyboard layout

The table below is a list of all the characters for all keys that are programmed in the table tab15w.pad and in PhoneKeyPad.

In the SIMATIC IPC KeyTools_Phone window under Open KeyPad menu, you can use the "KeyPads15w.exe" tool to reprogram the keys F1 to F36.

The other keys are not programmable.

The table shows the default programming with the factory settings. Whereby the first three lines specify the key function when the PhoneKeyPad is deactivated, and the next two lines show the key function when the PhoneKeyPad is activated.

Name	Code (Hex) 0x	Check box	Display/function
1 !	1E	-	1
		L Shift/R Shift	!
		R Alt	¡
		R Alt + L Shift / R Shift	¹
		PhoneKeyPad	\@#%?!\"';;<>(){}€\$&\$^°~ _1
		PhoneKeyPad + LShift	\@#%?!\"';;<>(){}€\$&\$^°~ _1
2 @	1F	-	2
		L Shift/R Shift	@
		R Alt	²
		PhoneKeyPad	abc2
		PhoneKeyPad + LShift	ABC2
3 #	20	-	3
		L Shift/R Shift	#
		R Alt	³
		PhoneKeyPad	def3
		PhoneKeyPad + LShift	DEF3
4 \$	21	-	4
		L Shift/R Shift	\$
		R Alt	¤
		R Alt + L Shift / R Shift	£
		PhoneKeyPad	ghi4
		PhoneKeyPad + LShift	GHI4
5 %	22	-	5
		L Shift/R Shift	%
		R Alt	€
		PhoneKeyPad	jkl5
		PhoneKeyPad + LShift	JKL5
6 ^	23	-	6
		L Shift/R Shift	^
		R Alt	¼
		PhoneKeyPad	mno6
		PhoneKeyPad + LShift	MNO6
7 &	24	-	7
		L Shift/R Shift	&
		R Alt	½
		PhoneKeyPad	pqrs7
		PhoneKeyPad + LShift	PQRS7

Name	Code (Hex) 0x	Check box	Display/function
8 *	25	-	8
		L Shift/R Shift	*
		R Alt	¾
		PhoneKeyPad	tuv8
		PhoneKeyPad + LShift	TUV8
9 (26	-	9
		L Shift/R Shift	(
		R Alt	'
		PhoneKeyPad	wxyz9
		PhoneKeyPad + LShift	WXYZ9
0)	27	-	0
		L Shift/R Shift)
		R Alt	'
		PhoneKeyPad	+*/=0
		PhoneKeyPad + LShift	+*/=0
Return	28	-	Return
Escape	29	-	Escape
Backspace	2A	-	Backspace
Tab	2B	-	Tab
- _ a/A	2D	-	-
		L Shift/R Shift	_
		a/A & PhoneKeyPad	LED off - a, b, c, d, ...
		a/A & PhoneKeyPad	LED on - A, B, C, D, ...
. >	37	-	.
		L Shift/R Shift	>
		a/A & PhoneKeyPad	LED off - . ,
		a/A & PhoneKeyPad	LED on - . ,
DEL	4C	-	Delete
Page Up / Home	4B	-	Page Up
Page Down / End	4E	-	Page Down
Cursor right	4F	-	Right Arrow
Cursor left	50	-	Left Arrow
Cursor down	51	-	Down Arrow
Cursor up	52	-	Up Arrow
HELP	0B	L Alt	hH & LAlt
ACK	3A	L Alt	F1 & LAlt
F1	3A	-	F1
F2	3B	-	F2
F3	3C	-	F3
F4	3D	-	F4
F5	3E	-	F5

Name	Code (Hex) 0x	Check box	Display/function
F6	3F	-	F6
F7	40	-	F7
F8	41	-	F8
F9	42	-	F9
F10	43	-	F10
F11	44	-	F11
F12	45	-	F12
F13	3A	LSHIFT	F1 & LShift
F14	3B	LSHIFT	F2 & LShift
F15	3C	LSHIFT	F3 & LShift
F16	3D	LSHIFT	F4 & LShift
F17	3E	LSHIFT	F5 & LShift
F18	3F	LSHIFT	F6 & LShift
F19	40	LSHIFT	F7 & LShift
F20	41	LSHIFT	F8 & LShift
F21	42	LSHIFT	F9 & LShift
F22	43	LSHIFT	F10 & LShift
F23	44	LSHIFT	F11 & LShift
F24	45	LSHIFT	F12 & LShift
F25	3A	LCtrl	F1 & LCtrl
F26	3B	LCtrl	F2 & LCtrl
F27	3C	LCtrl	F3 & LCtrl
F28	3D	LCtrl	F4 & LCtrl
F29	3E	LCtrl	F5 & LCtrl
F30	3F	LCtrl	F6 & LCtrl
F31	40	LCtrl	F7 & LCtrl
F32	41	LCtrl	F8 & LCtrl
F33	42	LCtrl	F9 & LCtrl
F34	43	LCtrl	F10 & LCtrl
F35	44	LCtrl	F11 & LCtrl
F36	45	LCtrl	F12 & LCtrl
SHIFT	0	LShift	
ALT	0	LAlt	Alt
CTRL	0	LCtrl	Ctrl

3.2 PhoneKeyPad scope of functions

Introduction

The alphanumeric input keys of the key devices have the same operating concept as the keypad of a cell phone. Each system key is assigned several letters and special characters of the alphabet and one number.

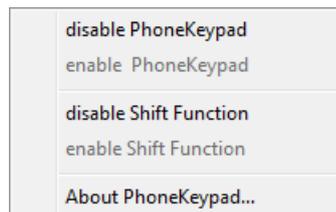
The "PhoneKeyPad" program provides supports by displaying the character selection with a preview window, which is shown directly below each input field.

Example preview window



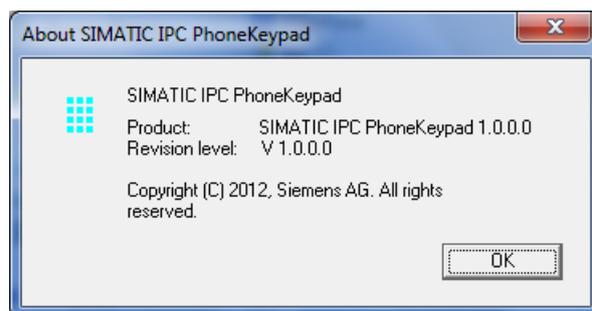
Activate/deactivate PhoneKeyPad

The "PhoneKeyPad" and "Shift" functions can be activated and deactivated with the shortcut menu of the "PhoneKeyPad" in the shortcut menu.



Functional description

- "disable PhonekeyPad": Deactivates the PhoneKeyPad functions. Only the standard keyboard functions are available, the preview feature is disabled.
- "enable PhonekeyPad": Activates the PhoneKeyPad functions.
- "disable Shift Function": Deactivates the shift function in combination with the "Home", "End" and "Ins" keys.
- "enable Shift Function": Activates the shift function in combination with the "Home", "End" and "Ins" keys.
- "About PhoneKeyPad": Shows the version information of the PhoneKeyPad.



3.3 OSK for login

OSK Software provides a screen keyboard for the Windows logon on a touch device. The following OSK software is available:

- OSK for Windows Embedded Standard 7 and Windows 7

Note

The virtual keyboard must be started manually for logon with Windows Server 2008. This is performed using icon at the bottom left (Easy Access).

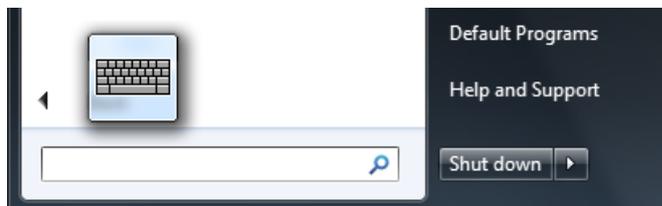
3.3.1 OSK for Windows 7 and Windows Embedded Standard 7

Windows 7 and Windows Embedded Standard 7 provide an on-screen keyboard in the operating system.

OSK for operating systems with TabletPC Feature Pack

Proceed as follows to use the OSK on operating systems with TabletPC functionality, for example, under Windows 7:

1. Activate the "Extended Touch" option for the UPDD driver, see Chapter "Extended Touch touch functionality (Page 43)".
2. Open the OSK under Windows as follows:
 - Touch the input field in the Start menu and then the OSK icon.



- Touch the minimized OSK icon in the left-hand screen margin and drag the OSK onto the desktop.



3. You use the OSK in the Windows logon by activating the keyboard icon.

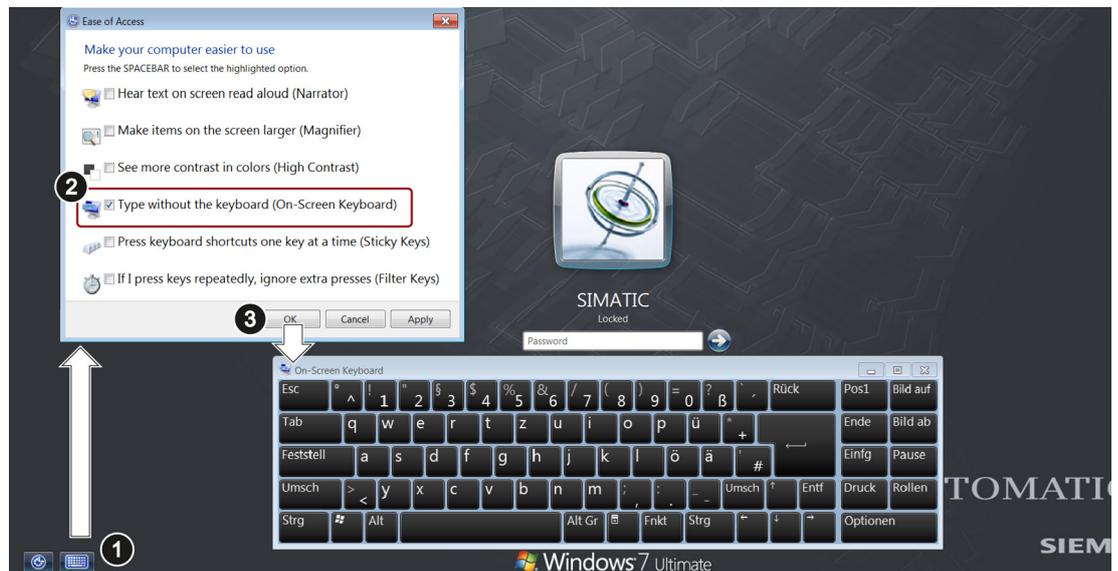


OSK for Windows Embedded Standard 7

Proceed as follows to use the OSK on operating systems without TabletPC Feature Pack, for example, under Windows Embedded Standard 7:

OSK for Windows logon:

1. Open the "Ease of Access" dialog by using the associated button in the Windows logon window.



2. In the "Ease of Access" dialog, select the "Type without the keyboard (On-Screen Keyboard)" option.

3. Close the dialog with "OK".

The OSK for the Windows logon is opened.

4. After logon call up the OSK as follows using the Start menu:

"Start menu > All Programs > Accessories > Ease of Access > On-Screen Keyboard"

3.4 UPDD

3.4.1 Overview

The UPDD driver offers the following functions for touch panels:

- Configure clone mode with several operator panels, including touch interlock
- Configure extended mouse functions
- Configure properties for operating the touch screen
- Calibrate the touch screen and check the calibration
- Display the status of the operator panel

This chapter describes the following typical applications:

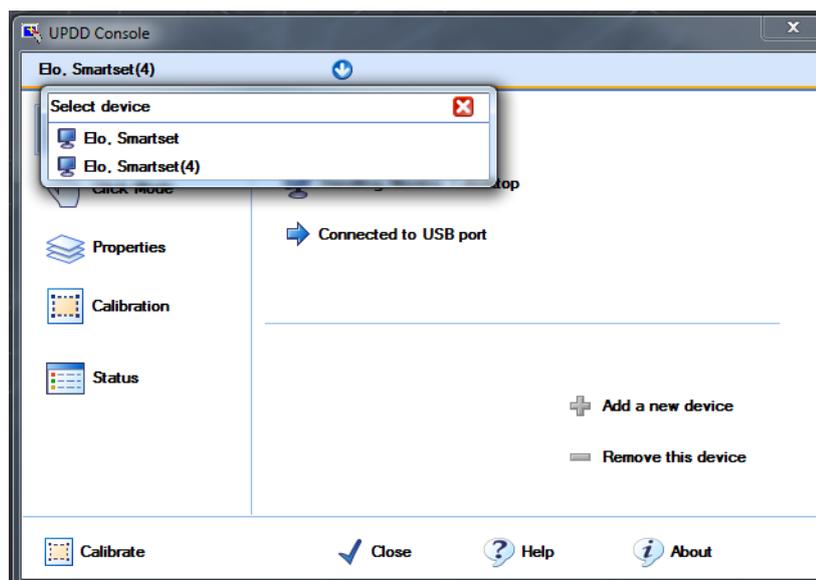
- Calibrate touch screen (Page 40)
- Deactivate touch functionality (Page 42)
- Activated extended touch functions (Page 43)
- Touch in Extended Monitor Mode (Page 44)

For the meaning of all UPDD parameters, refer to the Online Help.

The UPDD Console

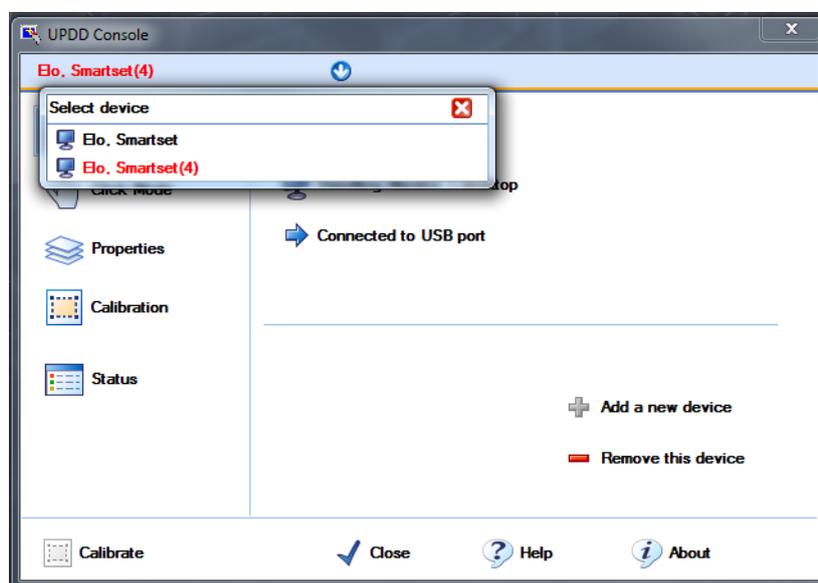
The UPDD Console is used to configure the UPDD driver. You open the UPDD Console with Start > Programs > UPDD > Settings".

You can display the touch controllers of those devices recognized by the UPDD driver in the "Hardware" tab.



If you remove one of the devices recognized by the UPDD driver, the associated touch controller is marked red.

In the following example the connection to the device with the "Elo.Smartset(4)" touch controller was removed.



If you reconnect the device with the "Elo.Smartset(4)" touch controller, the "Elo.Smartset(4)" entry is highlighted in black again.

If you no longer need the device with the "Elo.Smartset(4)" touch controller, you can select the touch driver and remove it by using the "Remove this device" button.

Note

Removing disconnected devices from the list

To ensure proper functioning of the UPDD driver, remove the touch controllers of all devices that are not connected from the touch controller list.

3.4.2 Notes on clone mode

Note

The touch screen is secured by means of an interlocking mechanism. It is not possible to execute an operator action simultaneously on multiple operator panels.

Note

Maximum of two touch operator panels in clone mode

A maximum of two operator panels can be operated simultaneously in clone mode.

In clone mode with multiple touch panels, always use operator panels with identical diagonal display dimensions.

3.4.3 Calibrate touch screen

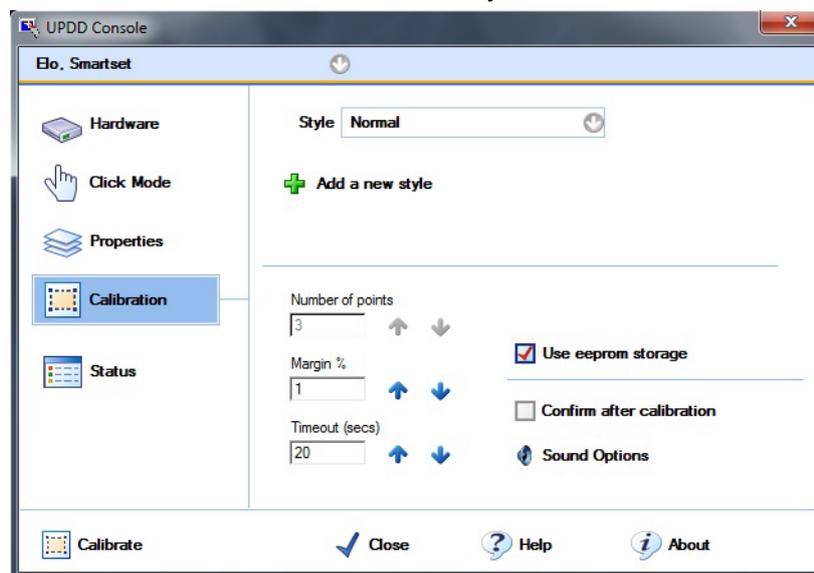
3.4.3.1 Standard calibration

Procedure

1. Select "Start > Programs > UPDD > Settings".

The "UPDD Console" dialog box opens.

Select the touch controller of the device you want to calibrate in the header of the dialog.



2. Click the "Calibration" tab.
3. Activate the option "Use eeprom storage". For Touch Controllers with EEPROM, the option box is pre-selected.
The option box "Number of points" shows "3-point calibration".
4. Click the button "Calibrate".
The calibration screen is displayed in the selected display.
5. Quickly touch the corresponding selections one after the other.
The entry is confirmed by a check mark, the next selection is displayed.
6. Confirm all input prompts (arrows, or crosses in the center) until the complete screen has been calibrated.

Note

If the screen does not respond to touch as expected, check the controller selected under "1." in "UPDD Console" and repeat the calibration. Only an active touch controller can be calibrated. A removed touch controller is displayed in red.

If the accuracy of this 3-point calibration is not sufficient, you can clear the "Use eeprom storage" option box and use the extended 25-point calibration instead.

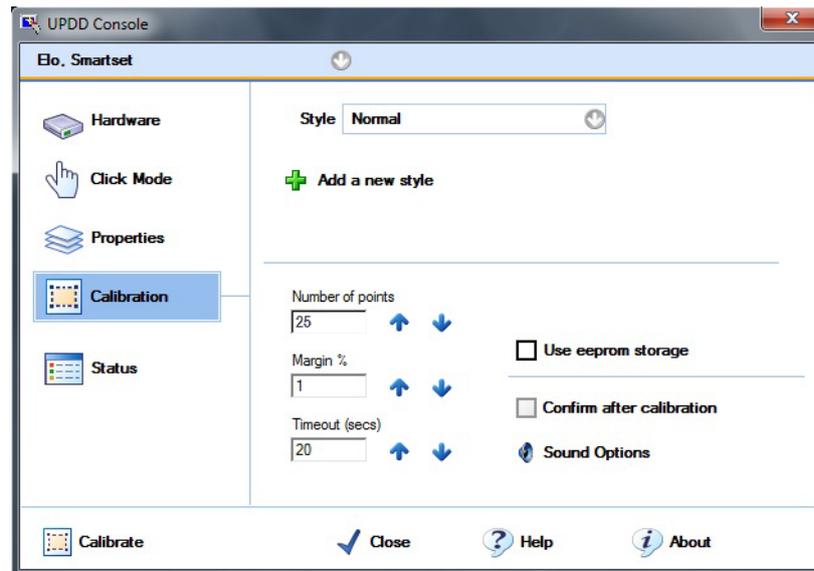
3.4.3.2 Extended calibration

Procedure

1. Select "Start > Programs > UPDD > Settings".

The "UPDD Console" dialog box opens.

Select the touch controller of the device you want to calibrate in the header of the dialog.



2. Click the "Calibration" tab.
3. Deactivate the option "Use eeprom storage".
4. Enter the value "25" under "Number of points".
5. Click the button "Calibrate".
The calibration screen is displayed in the selected display.
6. Touch the corresponding selections one after the other.
The entry is confirmed by a check mark, the next selection is displayed.
7. Confirm all input prompts (arrows, or crosses in the center) until the complete screen has been calibrated.
8. Finally, confirm the input prompt "Confirm".

3.4.4 Touch functionality

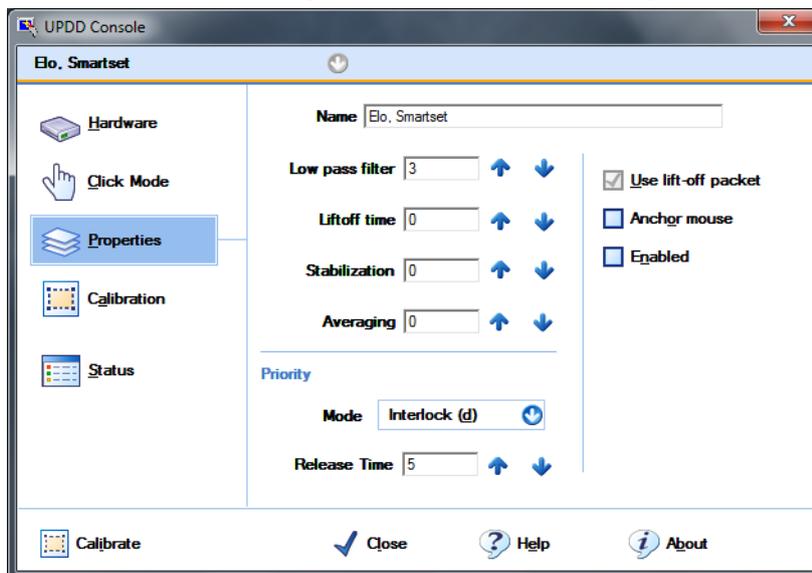
3.4.4.1 Deactivate touch functionality

Procedure

1. Select "Start > Programs > UPDD > Settings".

The "UPDD Console" dialog box opens.

In the header of the dialog, select the touch controller you want to deactivate.



2. Select the "Properties" tab.
3. Deactivate the "Enabled" option.

The controller is deactivated.

Note

If you close the dialog box using "Close", the touch functionality remains deactivated.

If you have not connected a mouse, you can also reactivate the touch panel by means of a keyboard entry. Restart the "UPDD Console" via the start menu.

The keyboard entry <Alt+p> opens the "Properties" tab. Then the touch panel can be reactivated by entering <Alt+n>. (Option button "Enabled")

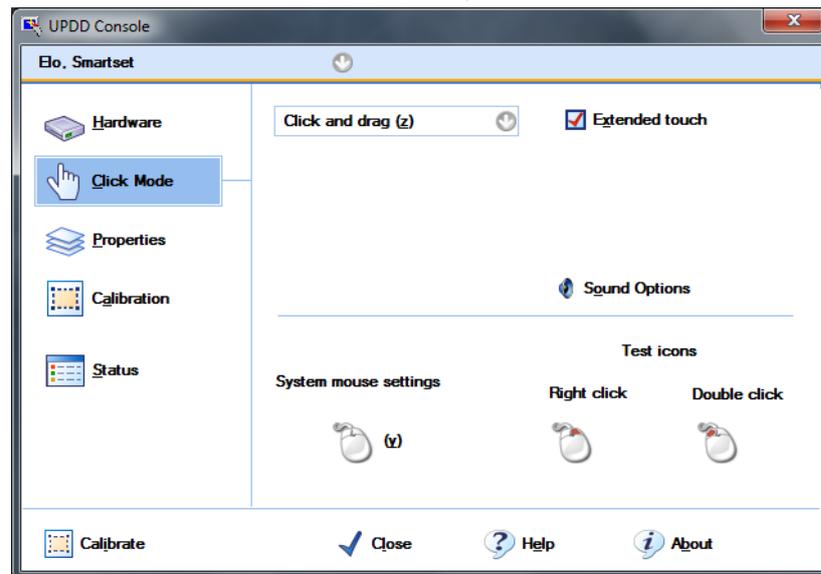
3.4.4.2 Extended Touch touch functionality

Procedure

1. Select "Start > Programs > UPDD > Settings".

The "UPDD Console" dialog box opens.

Select the touch controller of the device you want to activate the extended touch functions for in the header of the dialog.



2. Select the "Click Mode" option.
3. Activate the option "Extended Touch".

Note

"Extended touch" is only available for the Windows 7 Ultimate operating system.

If "Extended touch" is activated, the extended touch functions of Windows 7 are also available, such as permanently touching the touch screen, which corresponds to the right mouse button function. In addition, the OSK is opened automatically at Windows logon and at the activation of entry fields.

3.4.4.3 Touch in Extended Monitor mode

In Extended Monitor mode you can operate a PC with several touch devices.

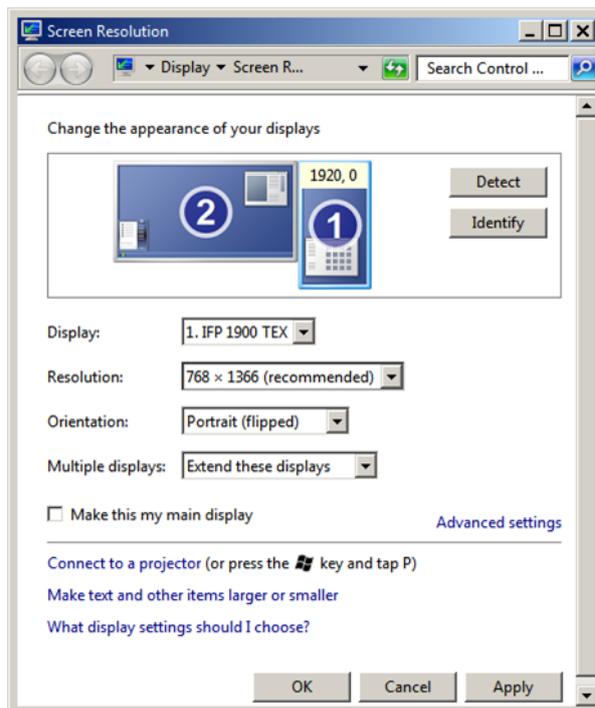
Requirement

- Both touch devices are connected to the PC.
- Both touch devices have been commissioned.

Procedure

In the following description for setting up Extended Monitor mode, one touch device is set up in portrait format and one touch device in landscape format. The description can also be applied for two touch devices in landscape format.

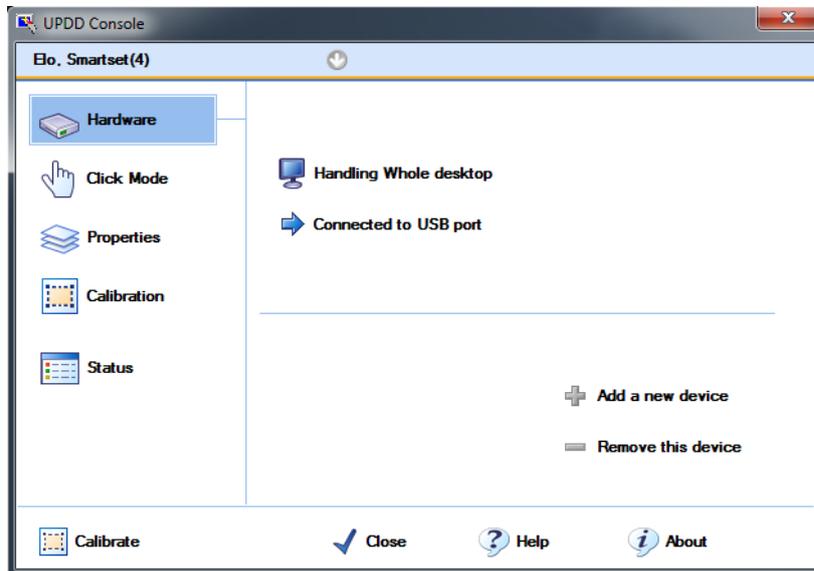
1. Open the Windows display settings using one of the following methods:
 - Select "Start > Control Panel > All Control Panel Items > Display > Screen Resolution"
 - Right-click on the desktop. Select "Screen Resolution" from the shortcut menu.
 - Select "Start > Run", enter "desk.cpl" and confirm the command with <RETURN>.



2. Set the resolution and orientation of the connected touch devices:
 - Select the resolution under "Resolution".
 - In the "Orientation" input box select the entry "Landscape" or "Portrait (flipped)".
3. Close the dialog with "OK."

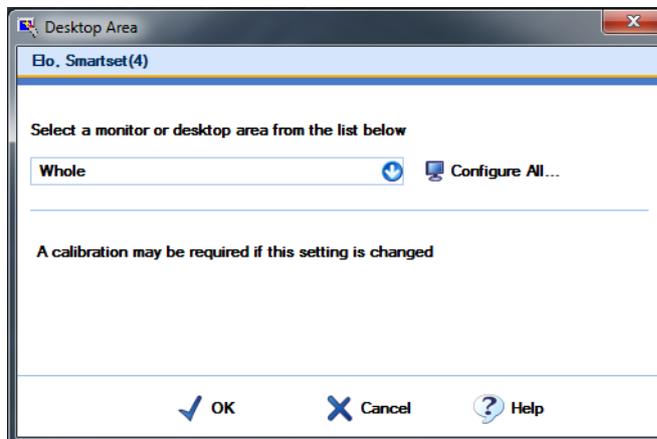
4. Select "Start > Programs > UPDD > Settings".

The "UPDD Console" dialog opens.



5. Click the "Hardware" tab.
6. Click "Handling Whole desktop".

The "Desktop Area" dialog box opens.



7. Click "Configure All ...".

You are prompted to touch the touch screens of the connected touch devices one after the other.

When you are finished, the UPDD driver includes the assignment of the monitors to the corresponding touch screens.

8. Calibrate the touch screens of the touch devices one after the other. All touch devices must be calibrated with an extended calibration of at least 9 points. A description of the calibration procedure is available in chapter "Calibrate touch screen (Page 40)".

Note

Limitations on the Extended Monitor

The "Extended Touch" functions are not available on the Extended Monitor.

For the "Right-click" function use the Event Selector or the "Interactive Touch" click mode of the UPDD driver. For detailed information, refer to the Online Help of the UPPD driver.

If you need an on-screen keyboard on the Extended Monitor, use the Windows OSK.

See also

OSK for Windows 7 and Windows Embedded Standard 7 (Page 36)

3.5 Panel PC Tools

3.5.1 Overview

SIMATIC IPC Panel PC Tools provide the following functions:

- "WinMove" for vertical movement of program windows
- "SetBrightness" for individual setting of intensity of the backlighting of all connected display devices
- "BbcScreenSaver" with screensaver functions, for example, reduction of the backlighting intensity after a certain time

3.5.2 WinMove

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

Procedure



1. Open "WinMove" using the corresponding icon on the desktop.

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



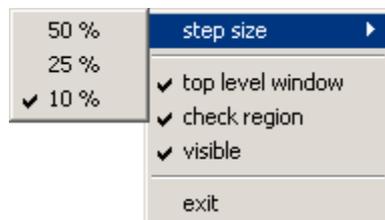
2. Move the open program window using the "Up" and "Down" buttons.

WinMove parameters

As soon as the "WinMove" window is visible, the "WinMove" icon is displayed in the taskbar:



By right-clicking on the "WinMove" icon, you open the "WinMove" shortcut menu:



Via the shortcut menu, you can set the following WinMove parameters:

- "Step size": Determines the increment when you press the "Up" and "Down" buttons.
- If "top level window" is activated, only the program window in the foreground is moved. Otherwise, all open program windows are moved.
- If "check region" is activated, it is not possible to move program windows completely out of the desktop area.

Note

If the taskbar parameter "Auto-hide the taskbar" is not activated, windows which are moved downwards can disappear behind the taskbar, even if the "WinMove" parameter "check region" is activated.

- With the "visible" parameter, you display or hide the "WinMove" window.

Use "exit" to end WinMove.

3.5.3 SetBrightness

SetBrightness allows you to set the brightness of all identified SIMATIC devices.

Note

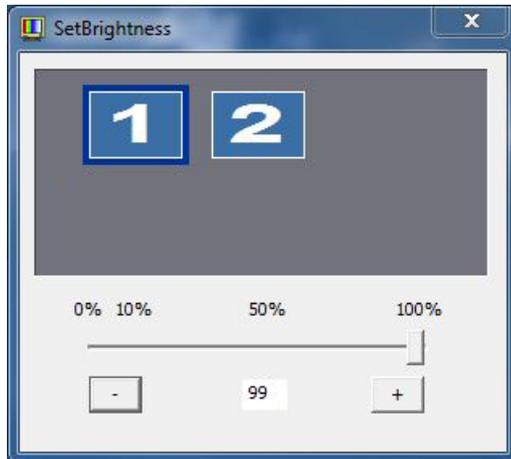
If an additional display device, such as a Flat Panel, is connected during operation, then restart the PC. After the restart, SetBrightness detects the additional display device.

The Windows 7 "Fast User Switch" for switching from multiple simultaneous users is not supported.

Procedure



1. Open the dialog box for setting the brightness by clicking the "SetBrightness" icon on the desktop. The following figure shows the dialog box using an example with two devices.



2. Select the device whose display brightness you want to change. In the example, device "1" is selected, all other devices are not selected.
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 keyboard input in the text box
 - 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%.

3.5.3.1 Command line call

Call parameters

The "SetBrightness" program can be called in command line mode. The option "-?" (or incorrect parameters) displays a help text that explains the corresponding call parameters. If the "SetBrightness" program is started with the parameter "-experthelp", an extended help text is displayed. The "SetBrightness" program can be called in the command line with the following options:

SetBrightness.exe -ACTION [VALUE] [-device DEVICENUMBER]

Note

In contrast to the graphical interface, the minimum value is set to 0% in command line mode. In this case, the display is switched off. By pressing an input device, for example touch or keyboard, the display is switched on again and set to the most recent configured brightness level. The first input event, for example a mouse click, is discarded in this case to avoid the triggering an unintended action.

Parameter -ACTION [VALUE]

The "ACTION" parameter must be specified for each command line call of the "SetBrightness" program. The following options are available for selection:

Value	Explanation
-get	Returns the currently set brightness. There must not be any other value specified for VALUE.
-set	The brightness value specified by VALUE (0-100) is applied.
-getdevicecount	Supplies the number of connected displays. There must not be any other value specified for VALUE.

Option [-device DEVICENUMBER]

The "device" option can be specified for the command line call of the "SetBrightness" program. It specifies the number of the display for which the current brightness is to be read out or set. If the option is not used, the Display with the number 1 is always used. The following are examples of this:

SetBrightness -get	Returns the brightness of display "1".
SetBrightness -set 50 -device 2	Sets the brightness of display "2" to 50%.

Advanced options -plugin PLUGINNAME

To increase the execution speed, it can be specified explicitly for the command line call that not all available plugins are loaded, but rather only the plugin indicated by PLUGINNAME. Notice: The respective numbers of the operable displays are shifted accordingly. Example:

SetBrightness.exe -set 75 -device 2 -plugin FPPlugin.dll	Sets the brightness of display "2" to 75%. Only the "FPPlugin.dll" plugin is loaded.
--	--

3.5.3.2 Troubleshooting in graphic mode

Troubleshooting in graphic mode

If the "SetBrightness" program is started in graphic mode, any problems arising are displayed in a special area of the "Device selection window". The Display icons are displayed in gray. An input is then not possible.

Troubleshooting in command line mode

If the "SetBrightness" program is started in command line mode, any problems arising are displayed in corresponding return values.

Return value	Explanation
0x80000001	A device number was specified that could not be found.
0x80000002	No action was specified.
0x80000003	The "get" action was called. However, other values or invalid values were specified.
0x80000004	The "set" action was called. However, a valid value was not specified.
0x80000005	The "getdevicecount" action was called. However, other values were specified.
0x80000008	A required plugin could not be loaded.
0x80000009	A display could not be found
0x8000000A	A connection to the specified display could not be established.
0x8000000B	The current brightness value could not be determined.
0x8000000C	The brightness value could not be controlled.
0x8000000D	The "SetBrightness" program is already running.

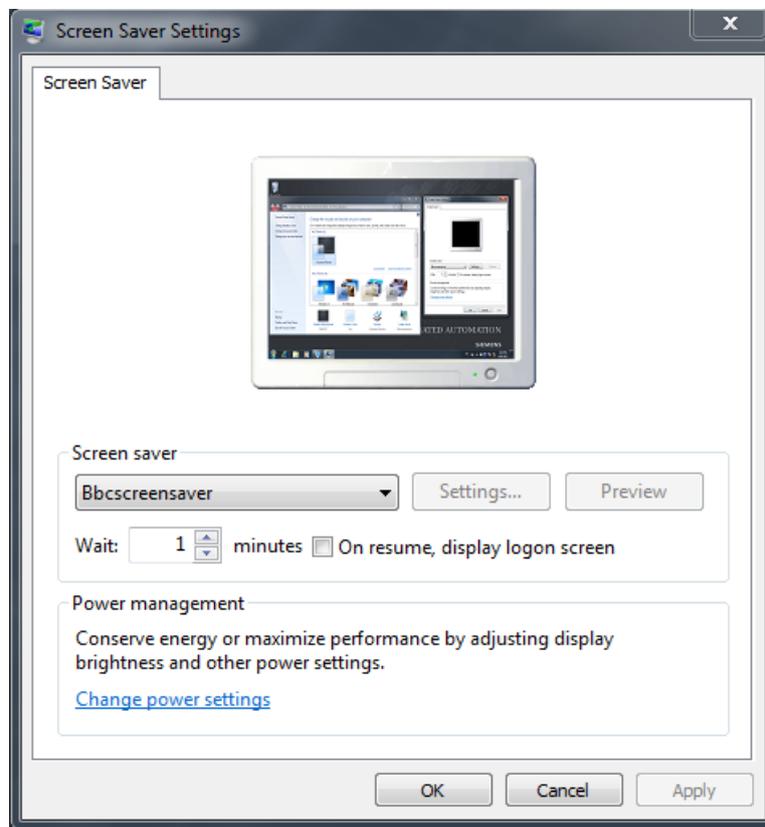
3.5.4 BbcScreenSaver

Note

If an additional display device connected to the PC during operation, the PC must be rebooted. During the start of Windows, the additional device is recognized by the service of the screensaver and integrated.

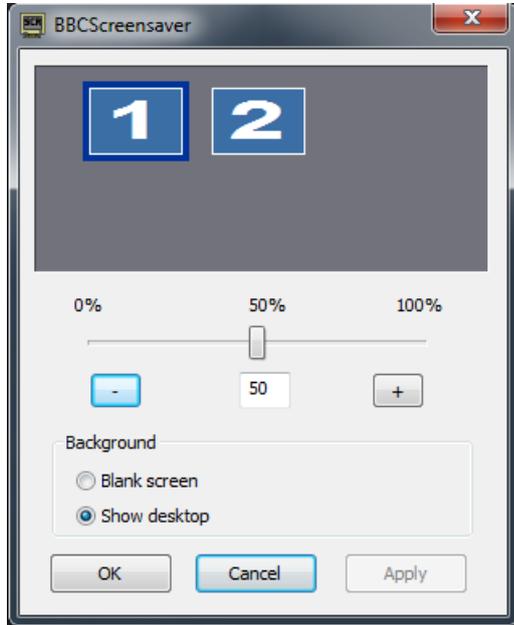
Procedure

1. Open the "Screen Saver Settings" dialog with "Start > Settings > Control Panel > Display".



2. Select the "BbcScreenSaver" under "Screen Saver".
3. Click on the "Settings" button. The "BbcScreenSaver" dialog box opens.

The following figure shows the dialog box using an example with two devices. A secondary device is optional and is not supported by all devices.



4. Set the desired brightness value for the activated display using the slider or the "-" and "+" buttons.

Note

The set value is retained following a restart and you can only change it in the "BBCScreenSaver" dialog box.

5. Under "Background" select from the following options:
 - "Blank screen": The desktop is shown with a black background.
 - "Show desktop": The desktop will be transparent.
6. Confirm the set values with "OK" or terminate the input with "Cancel" without saving the modified settings.

Note

If you set the value 0, the backlighting of all connected monitors is turned off.

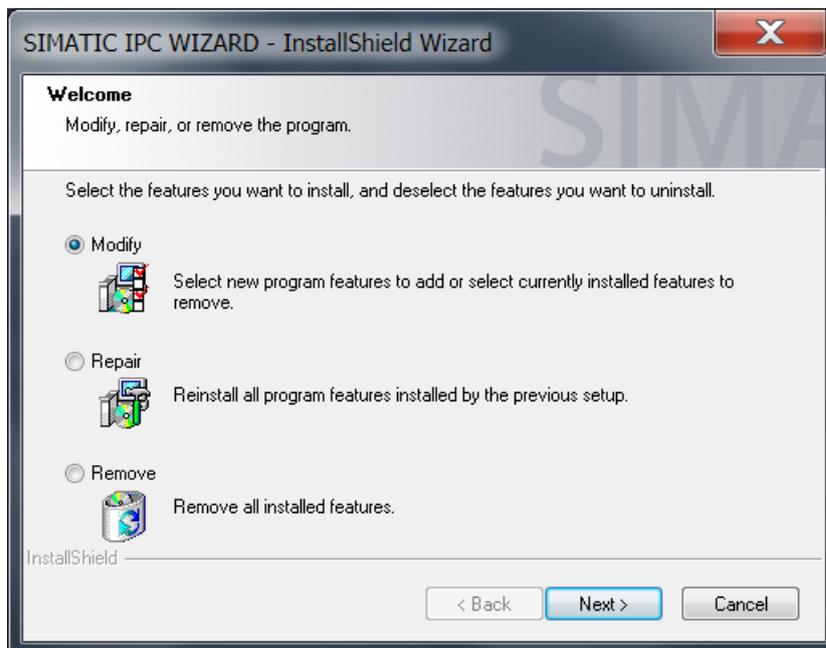
Changing, repairing, or uninstalling the IPC Wizard software

4

Procedure



1. Open the "InstallShield Wizard" dialog via the "IPC Wizard" desktop icon.
Alternative: "Start > Setting > Control Panel > Programs and Features > SIMATIC IPC Wizard > Change".

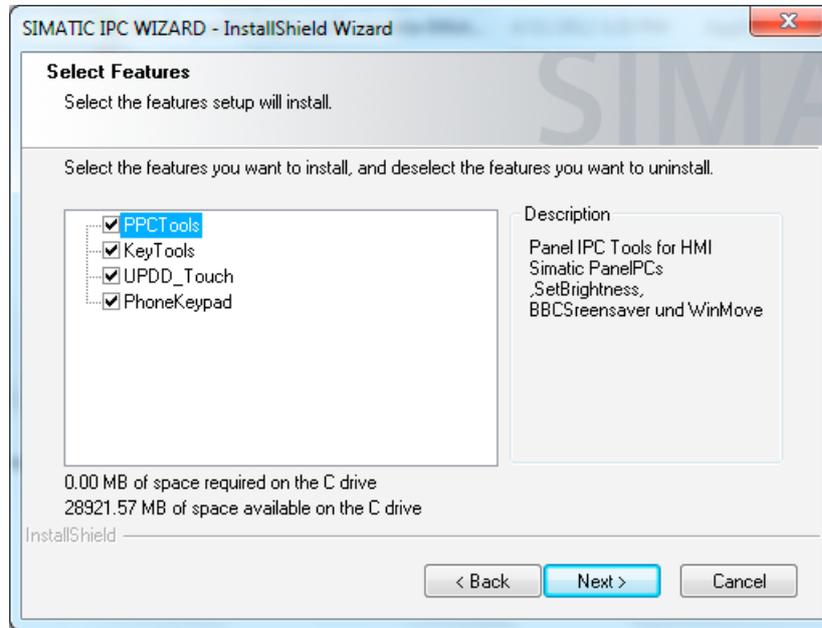


2. Select one of the following options:
 - "Modify"
With this option, you can add or remove software components of the IPC Wizard.
 - "Repair"
With this option, you repair the installed software components of the IPC Wizard.
 - "Remove"
With this option, you uninstall the IPC Wizard and all installed software components.
3. Click the "Next" button.

4. Depending on the selected option, the IPC Wizard responds as follows:

- "Modify"

The Select Features dialog box is displayed



Note

However, only the features supported by the detected hardware are displayed.

Select the check boxes for the software components you want to add.

Clear the check boxes for the software components you want to remove.

Click the "Next" button.

- "Repair"

All installed software components of the IPC Wizard will be repaired. The progress is displayed in the "Setup Status" dialog.

- "Remove"

All installed software components of the IPC Wizard will be uninstalled. The progress is displayed in the "Setup Status" dialog.

Note

With "Remove", the drivers for the keyboard controller are also is uninstalled.

At the end of the change, repair or removal of IPC Wizard components, the message appears indicating that the device will be restarted.

5. Confirm the message with "OK".

Updating IPC Wizard software

Introduction

In some cases, you may need to update of the drivers and tools because of new features or bug fixes.

Requirement

- The update function is supported by the IPC Wizard version V1.0.4.6 or later
- There is enough storage space on C: (>100MB)
- The device has received special device commissioning from the factory
- The graphic driver is installed.
- The Panel Tools panel or an IPC Wizard V1.0.x.x is installed
- The operating system is supported by the IPC Wizard

Procedure

Run the setup of the IPC Wizard on the computer to be updated.

The first window contains information about the version of the IPC Wizard currently installed and the version with this update.

Follow the instructions on the screen, the update is then performed automatically. The IPC Wizard checks the installed version of each driver and tools and performs an update of needed.

During the update, the computer may reboot several times. In order for the IPC Wizard to continue after rebooting, a "User Account Control" window must be confirmed.

Note

- The previously installed drivers are completely removed.
 - The sources of old panel drivers are also deleted in the directory "C:\Drivers".
 - The hardware configuration of the devices must not be changed.
-

Technical support

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 (http://www.siemens.de/automation/csi_en_WW)
- 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 (<http://mall.automation.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).

Index

C

- Clone mode
 - Interlocking mechanism, 13
 - Security features, 23
- Controller version
 - Status, 16
- Convention
 - Style, 3

D

- Default Panel PC, 17
- Default settings
 - Restoring, 15
- Driver interfaces
 - IOCTL commands, 14

F

- Front panel keyboard, 12

H

- History, 4

I

- IOCTL commands, 14
 - IOCTL_ADMIN_TIMEOUT_READ_REG, 14
- IPC Keyview, 22
- IPC Wizard, 3

K

- Key assignment in factory state, 15
- Key table
 - Status, 16
- Keycode table, 16
- KeyTools
 - LEDControl, 27
 - Security features, 23
 - Status, 16
 - WinCC hotkey, 26
- KeyTools_Phone, 12

L

- LEDControl
 - Description, 27
 - Examples, 30
 - Procedure, 27

M

- Modify, 53

O

- Operating system requirements, 8
 - KeyTools, 8
- OSK, 7, 36

P

- Panel PC Tools, 46

R

- Remove, 53
- Repair, 53

S

- Screen saver, 51
- Security enables
 - Status, 16
- Security features
 - Security enabled, 23
- SetBrightness, 48
- SIMATIC IPC Wizard, 3
- Softkeys, 16
- Status
 - Controller version, 16
 - Key table, 16
 - Security enabled, 16
 - WinCC hotkey enabled, 16

T

Timer mode, 13

U

UPDD, 7, 38

V

Visualization

IOCTL commands, 14

W

WinCC hotkey, 26

WinCC hotkey enabled

Status, 16

WinMove, 47