Graphic controllers

SmartTouch-K

v1.1.10

User manual

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Index

1 General description

The SmartTouch (Ref. DS342X00) is a full colour capacitive 4.3" touch screen to control and monitor any KNX installation, using 3D plans, photographs, friendly-icons, etc.

It allows to program up to 4 pages with 8 icons in each page with which to control lights, shutters, thermostats, RGB leds, executing scenes and control any other KNX installation devices being ideal to work as a room controller.

It incorporates two user levels (normal user and administrator) and the appearance of the pictures, menus and icons shown is completely customizable by the programmer with the programming software SIDEKNX that allows creating different themes. The appearance theme can be also changed manually by the user or automatically by programmed hours.

General characteristics:

- Admits up to 4 control pages (background: 3D plans, photographs, etc.).

- 8 control icons per plan.

- Scenes, on/off, dimming, shutter, thermostats, RGB Leds control.

- Internal temperature sensor and chronothermostat.

- Fully customizable themes (icons, background and menus appearance).

- Wi-Fi connectivity for programming and wireless local control via Android/iOS applications.

- Programmable automatic theme change by hour.

- Two user level modes: administrator and standard user.

2   Working mode

2.1   Introduction

The Smart Touch interface is divided in three zones:

- A central zone where the user find the icons with which to control all the elements of the installation (lights, shutters, thermostats, etc.). It is possible to have up to 4 pages with 8 icons in each page.
- The internal thermostat control interface that it is shown by sliding upwards the main screen (if the Smart Touch has an internal thermostat incorporated).
- An options menu that it is shown by sliding downwards the main screen. In this menu can be configured the visual theme, brightness, Wi-Fi, language, password, etc. Only an Administrator user can have access to the options menu.

You will find below a detailed explanation of each of the zones of this user interface.
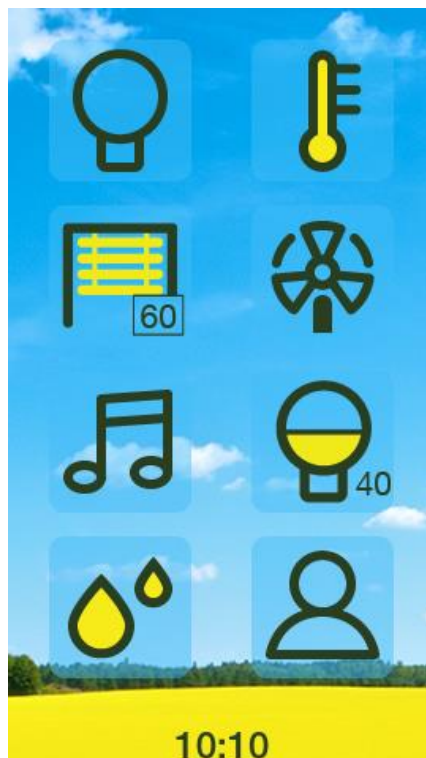
2.2   Control icons

In the following section is explained each of the control functions that can be programmed in the Smart Touch. The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.
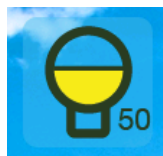
2.2.1   Lights

Switch on/off lighting: this icon allows controlling the light of the corresponding room or zone simply by clicking on it. The status of the light is permanently updated and the bulb will be either on or off according to it.
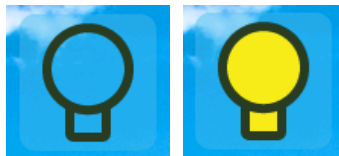
2.2.2   Dimmers

Lightning regulation: this icon represents the current brightness level of a dimmering light.

By clicking on the icon, a control dialogue appears and allows to switch on/off the light or setting a new brightness value by sliding the finger (the command is sent when release). It is also indicated graphically as well as numerically the value (in percentage) of the light intensity.
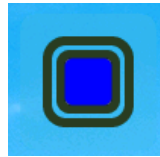

Press the arrow at the bottom left to go back to the main window.

2.2.3   RGB Leds

RGB lights control: this icon represents the current colour of an RGB led light.

By clicking on the icon, a control dialogue appears and allows selecting a colour from the palette and setting a brightness value by sliding the finger. It is also indicated graphically as well as numerically the value (from 0 to 255) of the brightness and colour intensities.

Press the ok button on the right to send a new colour and brightness setting.

Press the arrow at the bottom left to go back to the main window.

2.2.4   Shutters/Blinds

Shutter/Blind control: this icon represents the current position of a shutter or blind.

2.2.4.1 Shutter

By clicking on the icon, a control dialogue appears and allows setting a new position value by sliding the finger. It is also indicated graphically as well as numerically the value (in percentage) of the current position.

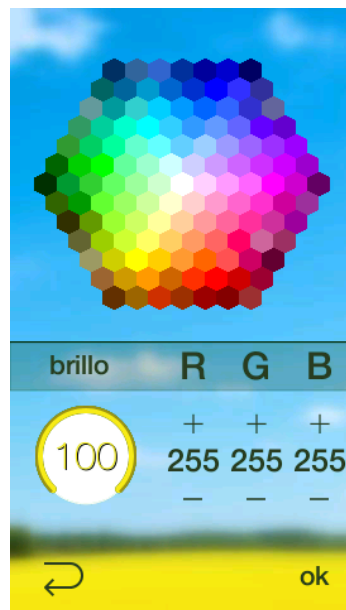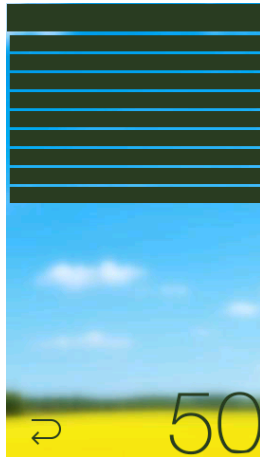Press the arrow at the bottom left to go back to the main window.

2.2.4.2 Blinds (with lamellas)

When controlling blinds an angle icon appears above the position indicator to show the lamella function and opening/close status.

The position of the lamellas is also represented by the width of the slats and can be changed by sliding the finger from left to right (closing) or right to left (opening).
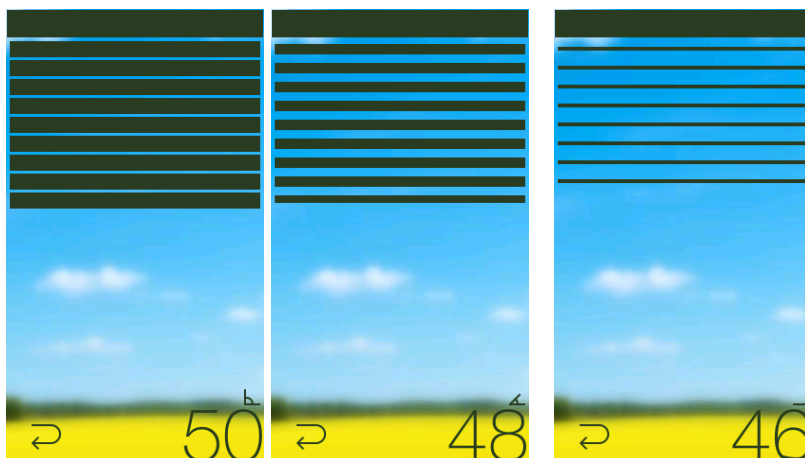
When the position of the lamellas change, the vertical position of the blind may change too according to received values.

2.2.5 Thermostats

External thermostat control: this icon allows controlling an external thermostat of the home automation installation.
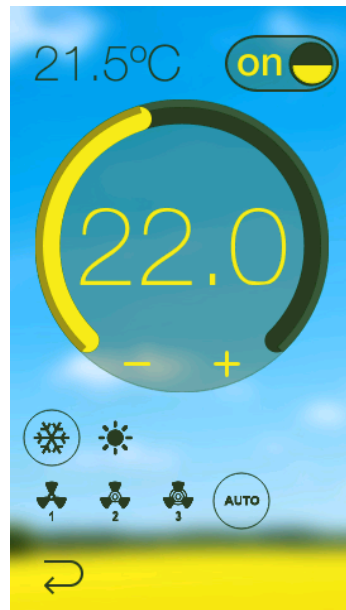
By clicking on this icon, a control dialogue appears and allows to switch on/off the thermostat or setting a new set point temperature by sliding the finger over the circular scroll bar (the command is sent when release). The current measured temperature is also indicated at upper left corner (from 0 to 51 ^{o}C).
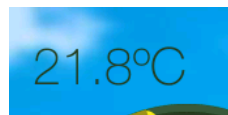
Use the icons below the set point scroll bar to control other characteristics of the thermostat, such as working modes, fan speed, etc. The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.

Press the arrow at the bottom left to go back to the main window.

2.2.6 Scenes

Scene execution: Scene icons allow executing programmed scenarios or moods, this means a group of actions that are executed simultaneously, for example, switch off all the lights, raise up all the shutters, etc.

A scene can also be memorized by pressing the icon for some seconds. This functionality allows the user to change the status of the lights, blinds, etc. involved in the scene by updating the current status.

2.2.7 List of available icons

The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.

Icons in page

1	2
3	4
5	6
7	8

Page 1			
Position	Icon	Name	Function
1			
2			
3			
4			
5			
6			
7			
8			

Page 2			
Position	Icon	Name	Function
1			
2			
3			
4			
5			
6			
7			
8			

Page 3			
Position	Icon	Name	Function
1			
2			
3			
4			
5			
6			
7			
8			

| Page 4			
Position	Icon	Name	Function
1			
2			
3			
4			
5			
6			
7			
8			

2.3 Internal thermostat

The Smart Touch can incorporate an internal thermostat to measure and control the temperature of the room where it is installed. If an internal thermostat is installed, its current status is shown at a bottom bar of the main window and it is alternately displayed with the current time.

2.3.1 Set point and room temperature

Do click on the bottom bar or slide upwards to show the control dialogue of the internal thermostat.
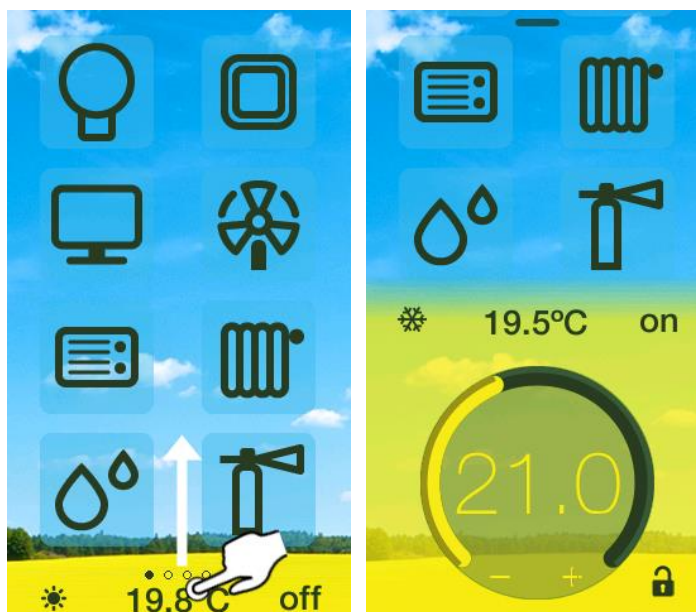
From left to right side it is shown the working mode, the measured temperature and the actual status (on/off) of the internal thermostat.

A new set point temperature can be stablished by sliding the finger over the circular scroll bar (the command is sent when release).

2.3.2   Switch on/off

The thermostat can be switched on and off by clicking over the following icon on the right:

When clicking the off button, the switch-off actions are executed: the heating or cooling is switched off depending on the current status.

2.3.3   Working mode

The working mode is changed just by clicking over the icon:

- Summer mode: when the set point temperature is lower than the measured one, the thermostat will switch on the cooling system.
- Winter mode: when the set point temperature is higher than the measured one, the thermostat will switch on the heating system.
- Mix mode: Summer and winter mode simultaneously.

2.3.4   Operation mode

The current operation mode is indicated with the following icons at the bottom right corner:

- Lock mode: In this mode, the user cannot change the set point temperature, the working mode of the thermostat or switch it on/off.
- Unlock mode: In this mode, the user has complete control over all thermostat functions.

The operation mode of the Smart Touch internal thermostat can be stablished by other devices of the home automation system and cannot be changed by clicking on the icon.

2.3.5   Chronothermostat

If available, the configuration of the chronothermostat is done by going to the time menu in the options menu of the screen (see next paragraph and point 2.4.1.4 Chronothermostat setup pag.15).
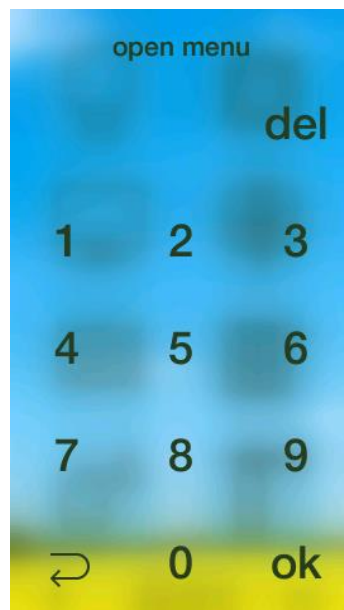
2.4 Options menu

The options menu allows configuring the appearance, brightness or language of the Smart Touch among other things. If the menu is unblocked (administrator mode disabled) any type of user will be able to change any configuration. In this case, use the bar at the top of the main window to slide down the menu.

It is possible to block this menu depending on the programming of the device, so it can be only available for administrators. If the menu is blocked (administrator mode is enabled) press in the centre of the main window for 5 seconds approximately and use the keyboard to enter the access password.

The options menu shows the following 6 submenus that are explained next:
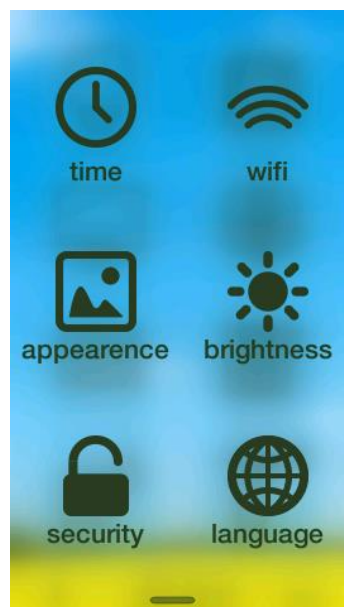
2.4.1 Time

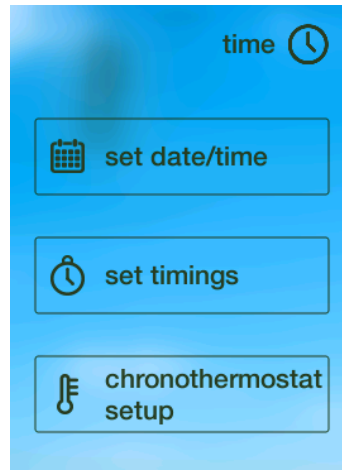In the time submenu it is possible to configure the date and time of the screen, to program timings (schedule events or macros to be executed automatically), or configuring the internal chronothermostat.

2.4.1.1 Set date/time

The Smart Touch can work as date and time slave in the KNX bus by receiving the corresponding data by telegrams from any other KNX clock.

The current date and time can also be configured manually with this option of the menu. Set the desired values using the left and right arrows for every field as shown next:

Press the arrow on the left to go back to the main window without saving the date and time changes.

Press ok on the right to accept the new configuration. By doing this, the Smart Touch will send the date and time to the other devices of the home automation system.

2.4.1.2 Set timings

The smart Touch can execute macros scheduled by the user weekly using this menu. A macro is an event or group of events that are executed simultaneously.

The following options are explained next:

- Number: Is the number of the current program or schedule. There are up to 10 macro schedules available.

- Enable: Select yes if you want the schedule to be executed.

- Macro: Select what macro among the available will be scheduled (see next list).

- Days: Here you can activate/deactivate the days of the week when the schedule will be executed. Do click on each hyphen to activate the corresponding day (hyphen = day deactivated / Initial = day activated).

- Hour and minute: Time of the day when the schedule is executed.

2.4.1.3 List of available macros

The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.

| Macro name	Function(s)

2.4.1.4 Chronothermostat setup

In the following submenu, the chronothermostat can be configured by the user to schedule internal thermostat actions quickly and easily for the next week.

- Number: Is the number of the current program or schedule. There are up to 10 chronothermostat schedules available.

- Enable: Select yes if you want the schedule to be executed.

- Days: Here you can activate/deactivate the days of the week when the schedule will be executed. Do click on each hyphen to activate the corresponding day (hyphen = day deactivated / Initial = day activated).

- Hour and minute: Time of the day when the schedule is executed.

- Mode: This is the mode that the thermostat changes to when the schedule is executed. It can be Heat, Cool, Auto or Off.

- Set point: Is the set point temperature that is established for this schedule.

Example: From Monday to Friday, the heating must be switched on to 20°C at 07:30. After two hours, the set point temperature must drop to 18°C until 19:00, then it must be increased to 21°C. Finally, the thermostat must be switched off at 23:30.
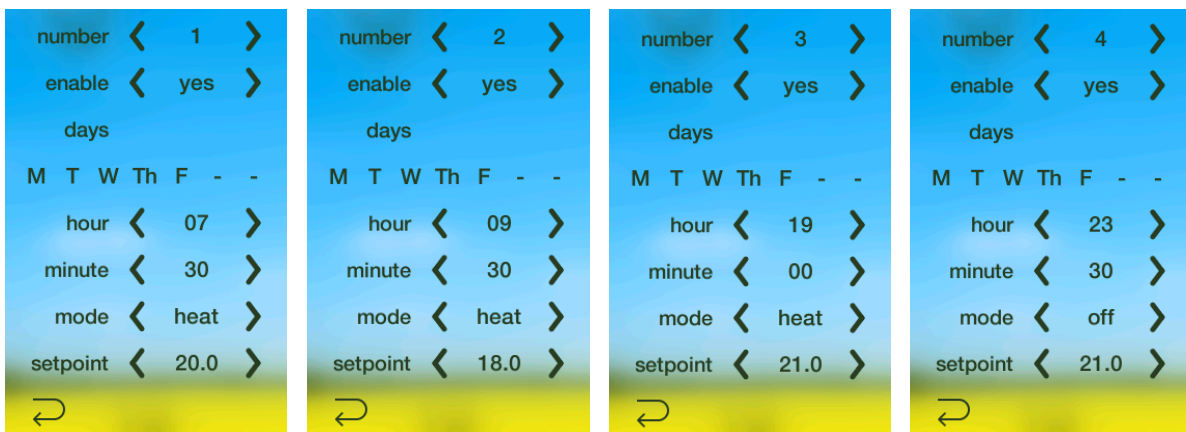
2.4.2 Wi-Fi

The Smart Touch incorporates Wi-Fi connectivity which allows the user to control the home automation system locally through any wireless device such as smartphones or tablets and also for the programmer to download the project. It works as an access point creating a Wi-Fi network that any PC, smartphone or tablet can connect to, and operate it with the Ingenium Android and iOS available applications.
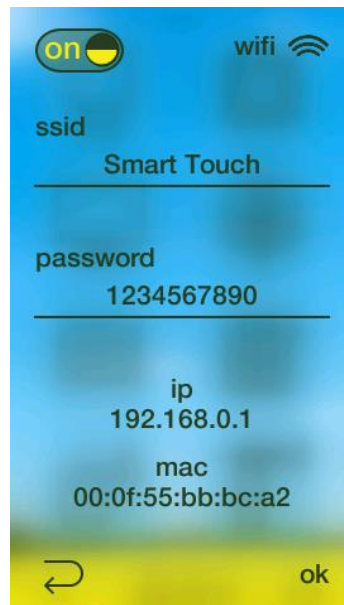
The Wi-Fi network is generated by the Smart Touch with the name (SSID) and password configured in this menu. This network has no internet access, so it is not possible to navigate through the web or control the home automation system from outside the house or installation.

⚠ The type of security of the network generated is WPA and the password must have at least 8 characters.

The Wi-Fi access point creation can be disabled by pressing the on/off button. Press ok at the bottom right corner to accept every configuration setting and create a network. Below the Wi-Fi settings there is information about the IP of the Smart Touch and MAC address.

Press the arrow on the left to go back to the main window without saving changes.

Press ok on the right to accept the new configuration.

The control applications are free and can be found in the corresponding markets (the Android app is called aSC and it is available in Google Play; the iOS app is called iSC and it is available in the App Store). See their corresponding manuals for further information.

2.4.3   Appearance

In this option menu, the appearance of the screen icons and colours can be changed by selecting different themes according to the customer likes.

The Smart Touch incorporates 3 default themes (predefined) to change the appearance of the screen with different colours and icon styles, but it can also incorporate another 3 themes that can be customized by programming (ask the administrator of your home automation system).

2.4.3.1   Change automatically

The device can show a fixed theme or a list of themes that will change automatically by programmed hours, to do so, change the appearance mode to auto and select the time of the day to change. The Smart Touch will show the programmed themes every day at the configured times for each one.

To select a theme to be included in the auto change sequence do click on the upper right corner of it.
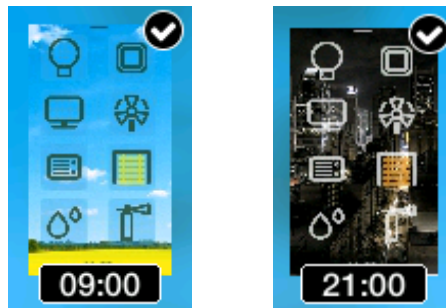
Then write the desired hour of change with the keyboard by clicking over the clock at the bottom of each theme.

Click ok at the bottom right corner of the keyboard to accept the settings and go back to the main window saving changes with the arrow button.

2.4.3.2   Change by bus telegram

The appearance can also be changed by bus telegrams from any other device of the home automation system. The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.

2.4.4   Brightness

This option of the menu allows configuring the brightness behaviour of the screen backlight. There are three parameters to configure that are explained next:

Active [3 - 15]: Is the brightness level when the screen is being used.

Standby [0 - 15]: Is the brightness level that it is set after a period of idle time. Set this value to 0 to switch off the brightness completely when the Smart Touch is not being used.

Time [5 - 60 seconds]: Is the time that the screen waits to set the standby brightness level since the last pulsation.

Press the arrow on the left to go back to the main window without saving changes. Press ok on the right to accept the new configuration.

Press the arrow on the left to go back to the main window without saving changes.

Press ok on the right to accept the new configuration.

2.4.5   Security

The Smart Touch can be locked with a 4 digits password to avoid its use. Do click on the corresponding button to enable or disable the lock of the screen (the password is required for any change of this function).

The default password is 1234 and it can be changed by clicking on the corresponding button in the centre of the window.
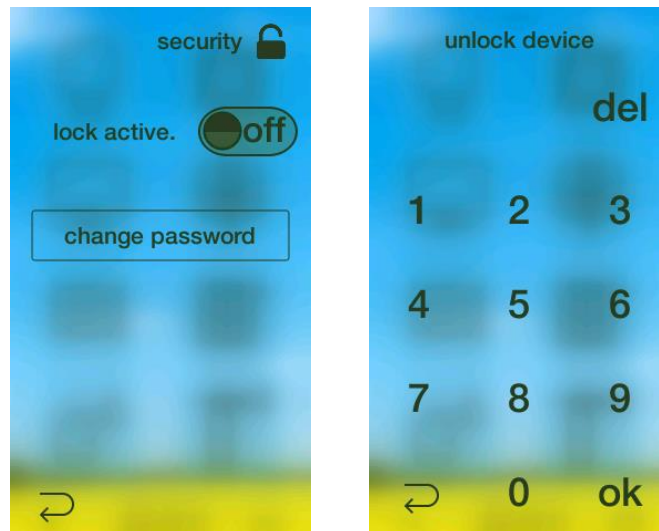

If the lock mode is enabled, the screen will ask for the password every time that changes from standby to active mode. If the lock mode is disabled, the Smart Touch can be activated and therefore used by anyone just by clicking on the screen.

2.4.6   Language

Use this menu to change the presentation language of the Smart Touch. Choose between English, Spanish and French by clicking on the left and right arrows.
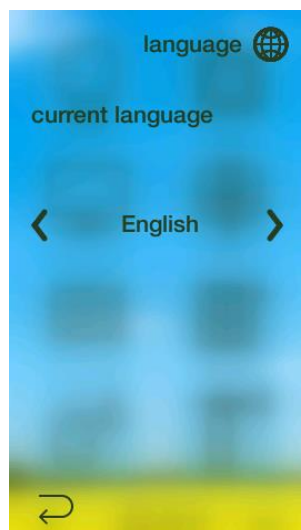
Press the arrow on the left to go back to the main window and accept changes.

2.5   Default actions

2.5.1   Gesture control

The Smart Touch allows executing some programmed actions by gesture control. When the screen is off or locked it is possible to execute some actions without needing to unlock it, just sliding the finger upwards or downwards.


The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.

2.5.2   List of available default actions

The available functions could be different depending on the user's needs and the programming done. Ask the programmer / integrator of the home automation system for further information about the possibilities.

Control gesture	Function(s)
Slide upwards	
Slide downwards	
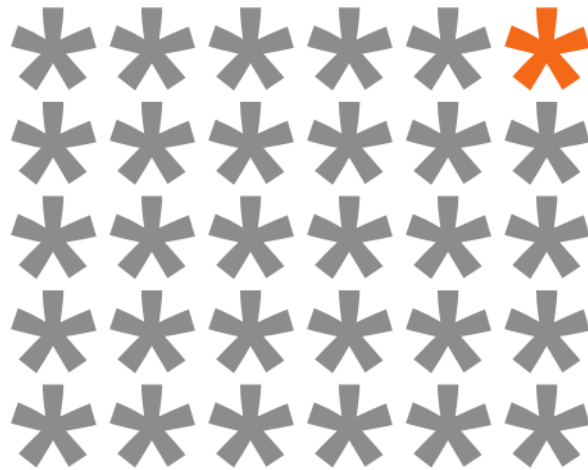
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Manual version: v1.1