ekinex

CONTROL YOUR LIVING SPACE

User Guide

Ekinex SIGNUM

EK-EV2-TP
EK-EV2-TP-S

Summary

| Revision	Modifications	Author	Date
1.0	First draft	G. Schiochet	20/09/2022

1   Scope of the document

This user guide describes the main functions for configuring and customizing the Ekinex SIGNUM entrance panel, using the dedicated app.

2   Introduction

2.1   Overview

SIGNUM is an evoluted wall-mounted KNX push button, with a touch screen instead of physical buttons. It can act as lighting and motorization control, scene trigger, thermostat, multiroom audio control and much more, depending on the configuration.
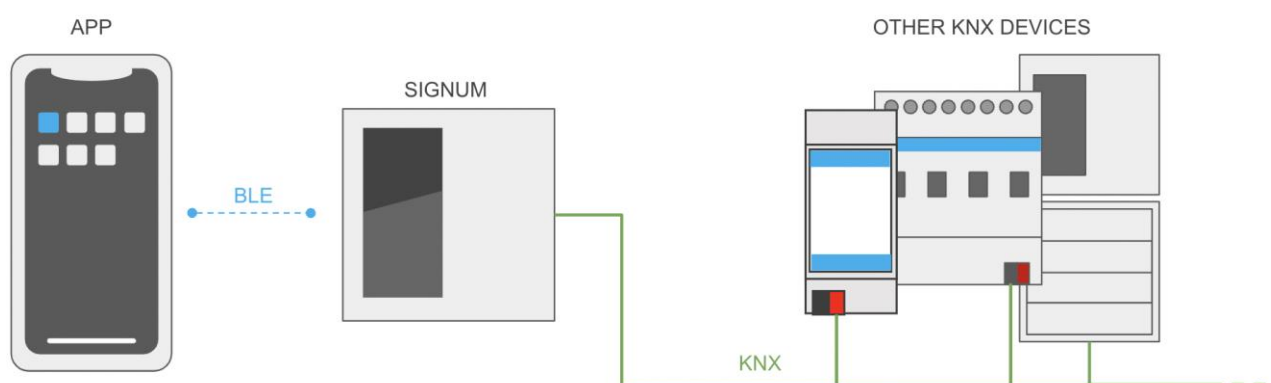
Being a certified KNX product, SIGNUM must be configured with ETS PROFESSIONAL.

Once configured and commissioned, SIGNUM can be further customized with EXINEX TOOL app for mobile phones (available for Apple iOS and Android systems); in this way, installers and/or end users can modify the appearance and behavior of the device, without having to modify the ETS project any more.
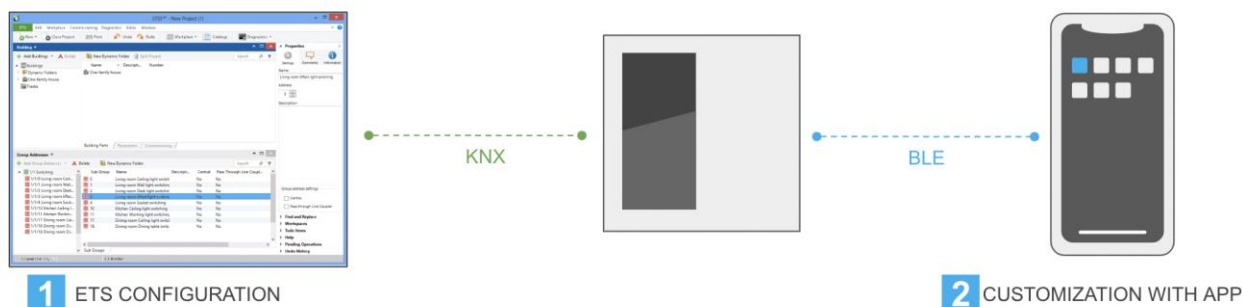
2.2 Functions

SIGNUM offers the following functionalities:

- Up to 12 configurable buttons
- Integrated thermostat
- Audio multi-room control

The buttons can be configured in several ways:

- Lighting control (ON/OFF, dimming, white temperature adjustment)
- Shutters / blinds control
- Scenes triggering
- Switch commands
- …

The integrated thermostat regulates the climate of the room where SIGNUM is installed, with heating and/or cooling and ventilation control.

A KNX-compliant audio multi-room system can be controlled with SIGNUM, by choosing the streaming source, the specific artist and track to listen, adjusting volume and equalization, and setting the playback mode.

2.3 Additional licenses

The following pages must be unlocked with an additional license voucher:

- Thermostat page
- Audio multi-room

Please follow the instructions in the dedicated section of this manual, to learn the procedure to redeem license vouchers.

The climate controller integrated in SIGNUM can be configured in ETS and used without the need for additional licenses, as happens in the other EKINEX pushbutton product families.

The license voucher is only required to unlock the thermostat page on the device display.

2.4 Requirements

2.4.1 ETS configuration

ETS PROFESSIONAL release 5.0 or higher is required in order to configure SIGNUM; it can be purchased by KNX ASSOCIATION. A personal computer equipped with Microsoft Windows OS is necessary to run ETS PROFESSIONAL; for detailed requirements please visit the following URL:

https://www.knx.org/knx-en/for-professionals/software/ets-professional/

The ETS library can be downloaded from the online catalogue, or found in ekinex.com website.

> ⚠️ A good knowledge of KNX programming in ETS PROFESSIONAL is expected, in order to properly follow the instructions contained in this manual.

2.4.2 App customisation

The EKINEX TOOL is available for free download on Google Play (for Android) and App Store (for Apple iOS).

- **ANDROID:**

  The application "Ekinex Tool" is available within the Google Play Store and to work properly requires that the device has Android version 6 or higher. To install the app, you need to search the Google Play Store by entering the name of the application you want to install and pressing "Install".

  Alternatively, you can directly view the download page via the following address:

  https://play.google.com/store/apps/details?id=com.ekinex.configurator&gl=IT

- **IOS:**

  The "Ekinex Tool" application is available within the App Store and requires iOS or iPadOS version 12 or higher to work properly. To install the app, you must search the App Store by entering the name of the application you want to install and pressing "Install". Alternatively, you can directly view the download page via the following address:

  https://apps.apple.com/it/app/ekinex-tool/id1577535378

3   Customisation

## 3.1   Preliminary configuration

In order to allow the customization of a SIGNUM device with the EKINEX TOOL app, bluetooth communication must be enabled in the general parameters of the ETS library.

To protect the device from unwanted access via the app, it is also possible to specify a PIN code in ETS, which will be requested every time the app connects to SIGNUM. Enabling PIN protection is strongly recommended.

3.2   Add new device

The first time EKINEX TOOL application is launched after install, it requires permission to access the user's localization; this permission is required by the app to detect SIGNUM devices nearby and to connect via bluetooth BLE.

The application initially shows an empty list of devices:
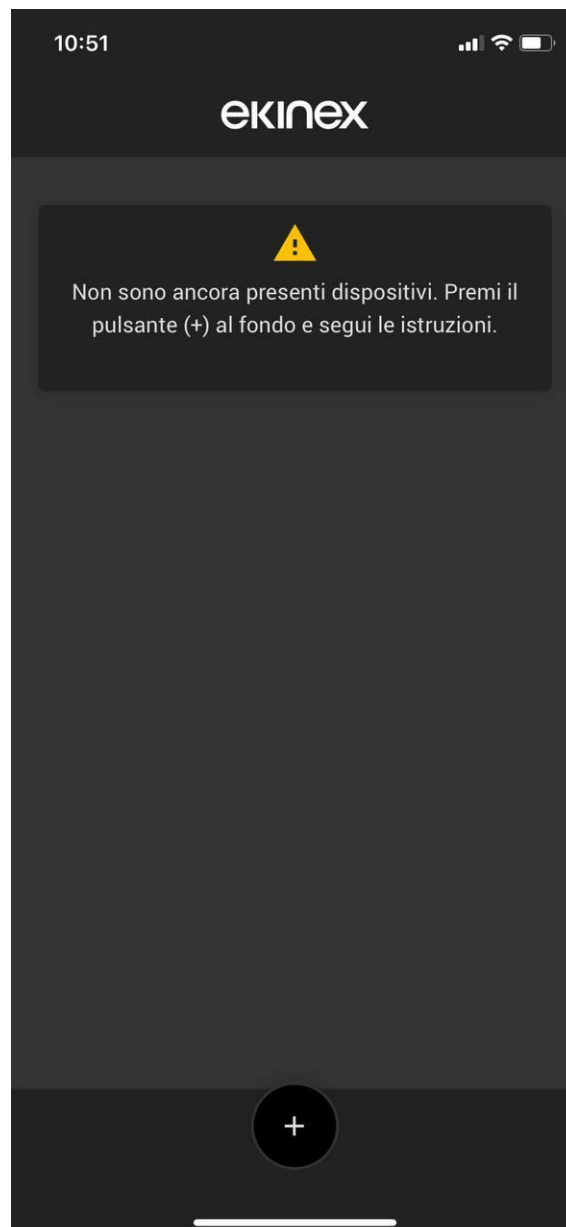
When one or more EKINEX devices are configured, it can be later found in this main screen.

To add a SIGNUM device, press the [+] button; the following screen allows you to choose the type of product to be customized:
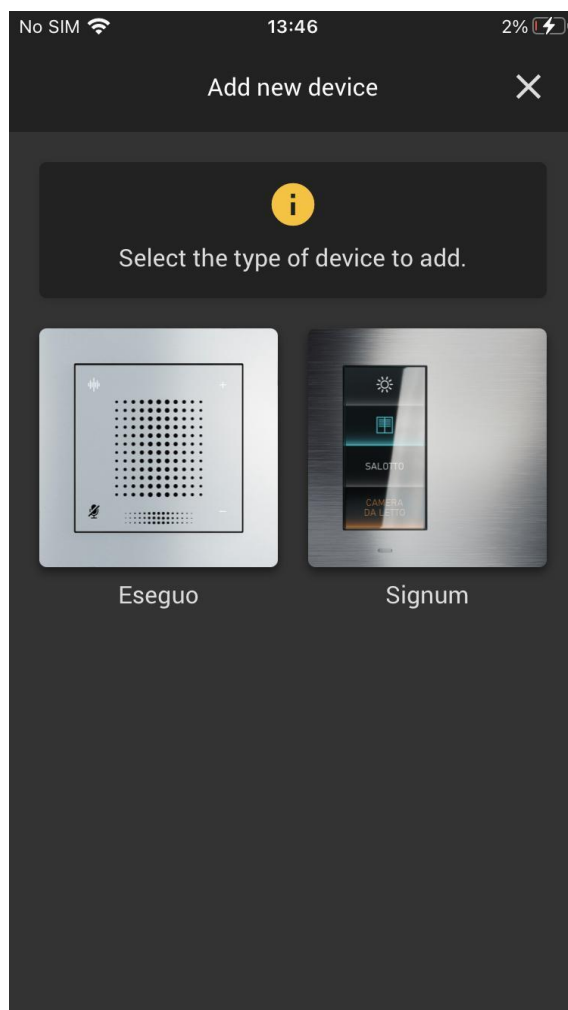
By selecting SIGNUM, the application prompts you to enter a name to be assigned to the device. A name without special chars or other invalid chars is expected; an error is shown otherwise.

> The device name can be changed later by selecting it again from the main screen, even without connecting to it.

3.3   Connection

Before pressing the CONNECT button, SIGNUM must be put in configuration mode; to do so, make two swipes on the touch display to the right direction, until the page containing a QR code is reached (swipe back to the left to cancel the operation and return back to standard pages). The bluetooth connection is possible only when this specific page is displayed on the screen.

In case the EKINEX TOOL app has not been already installed, it can be downloaded from the app store by scanning the QR code presented on the display.

When done, press the CONNECT button and remain in range of the device for the entire operation; the connection is expected to happen in a few seconds, necessary to load the actual configuration from the device.

It is possible to configure only one SIGNUM at a time. If multiple devices are in configuration mode, the application will fail to connect; make sure that only one device is discoverable at time.

If a PIN code has been configured in ETS, the mobile app will require you to enter it each time you log in, as shown in the following picture:
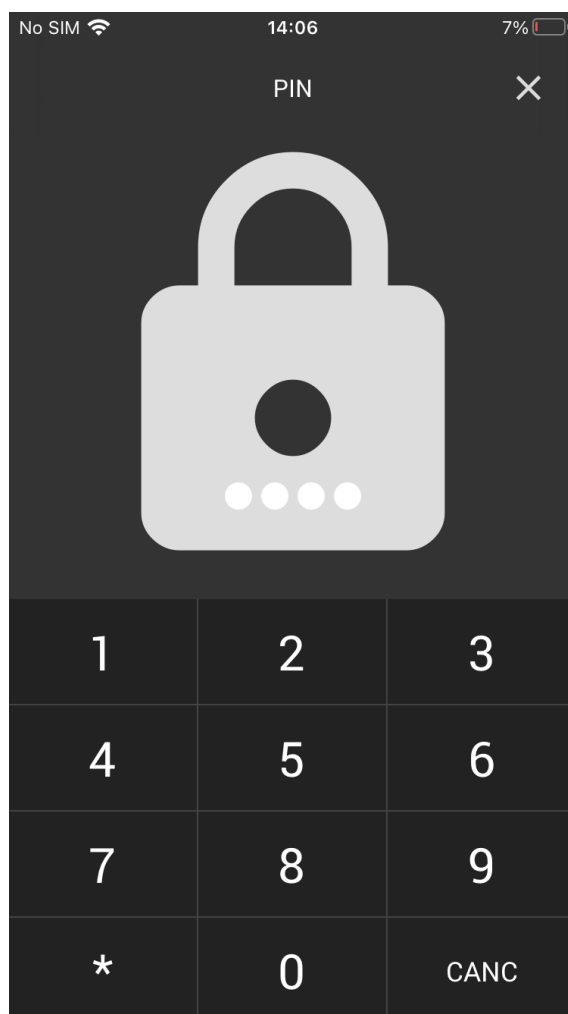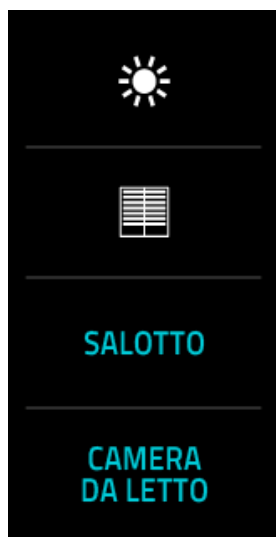
For security reasons, the PIN code can be only changed or disabled by means of ETS PROFESSIONAL.

If the connection with the remote device is successful and if the PIN sequence is correct, the app will show the actual configuration of the device, and offer the possibility to customize it:
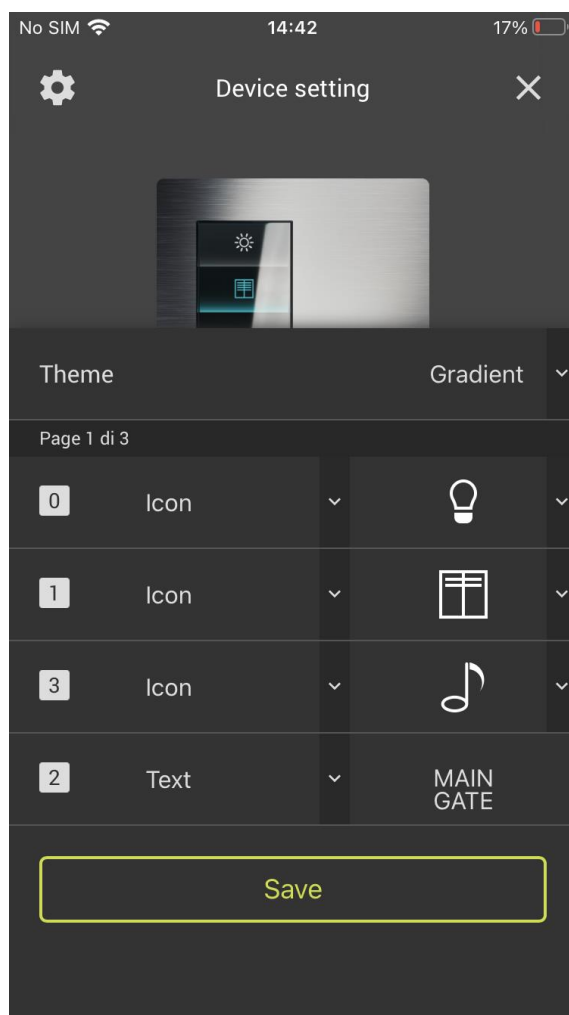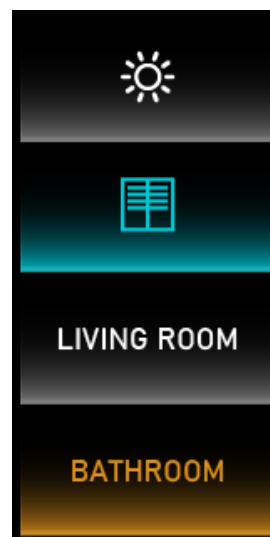

3.4 Themes

SIGNUM offers two different graphic themes:

FLAT THEME   GRADIENT THEME

The positioning of the elements is the same in the different themes; consequently, it is possible to change the theme at any time, keeping all the functions of SIGNUM unchanged.

The THEME selector allows you to choose which graphical skin has to be used on the device display.

3.5 Buttons customisation

According to the configuration carried out in ETS, the buttons provided on the various pages are listed in the lower part (from 1 to a maximum of 3). For each of the buttons, you can customize the following:

- Position within the page (drag & drop to change the order)
- Style (whether to show text or a graphic symbol)
- Symbol (selected within the library) or
- Text (One or two lines of text)
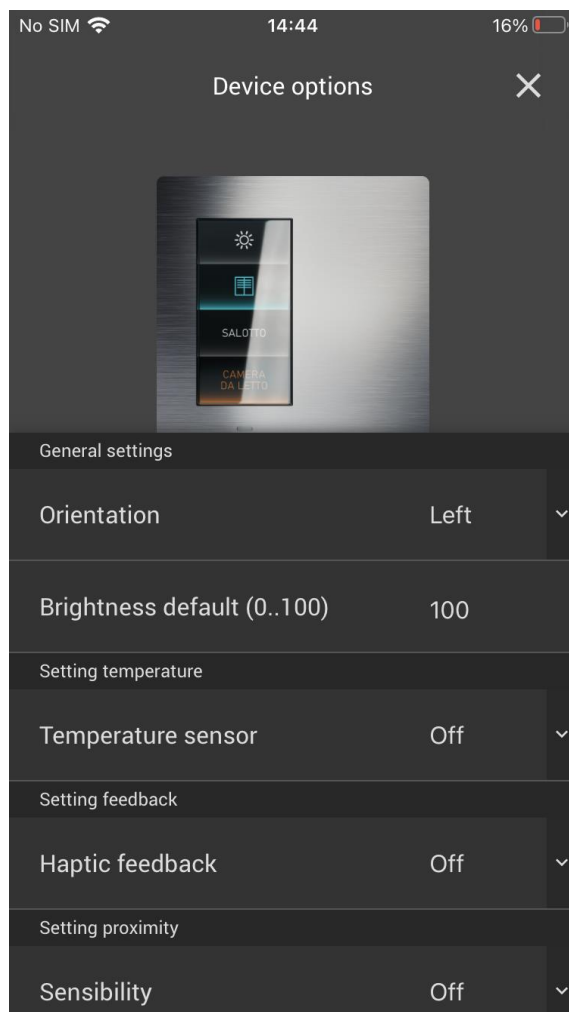
To move from page to page, swipe horizontally on the button setting section.

⚠️ It is not possible to add or remove buttons, nor to move a button to another page. All those kinds of settings must be done in ETS.

3.6 Device options

By pressing on the "gear" symbol in the upper left-hand corner, it is possible to set a list of general options, determining the behavior of the device.

Below are listed the available settings:

CATEGORY	SETTING	DESCRIPTION
General	Orientation	Vertical rotation of the display; change this setting according to mounting side of the device and cover
	Brightness default	Default brightness level of the display. Default value: 100.
Temperature	Temperature sensor	Enable the integrated temperature sensor
Feedback	Haptic feedback	Enable the haptic sensor installed under the display
Proximity	Sensibility	Sensibility level of the proximity sensor. When the proximity sensor is enabled, the display automatically switches on when approaching the device.

CATEGORY	SETTING	DESCRIPTION
Stand-By	Stand-By	Enable the automatic switch-off of the display
	Timer	Time for automatic switch-off
Thermostat	Unit of measure	Measure unit for the visualization of temperature (°C or °F)
	Granularity	Step value for the increase / decrease of the temperature setpoint. Possible values: • 0,1°C • 0,5°C • 1°C Note: in case of °F unit, the granularity is fixed to +/- 1°F

When done, press the SAVE button to send the new configuration to the device, and make it restart with the new settings.

3.7 Firmware update

If a firmware update for the SIGNUM device is available, a dedicated button appears in the DEVICE OPTIONS section of the app:
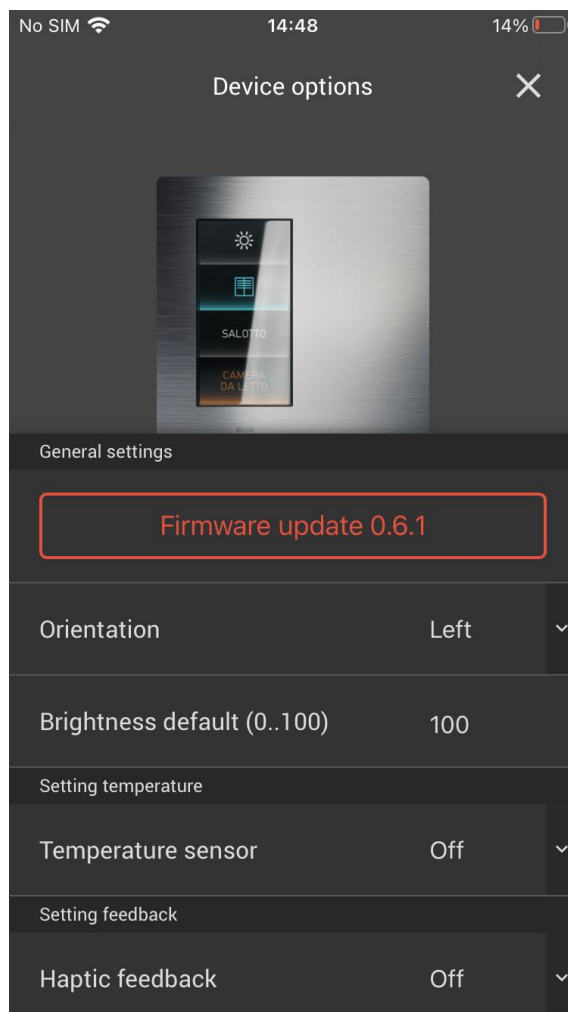
During this operation, it is recommended to keep the mobile phone in range with the device, and not to power-off the device itself.

During the update process, a progress bar informs about the advance; the entire procedure can take up to 10 minutes to be completed.

⚠️ In case of failure during the procedure, it could be necessary to press the ABORT button on the device display.

3.8   Voucher redeem

To enable the thermostat and / or multi-room audio control pages with a voucher code, access the device setting section, and press the ACTIVATE NEW FUNCTIONS button.

Scan the QR code or enter it manually, and press the PROCEED button; at that point an EKINEX TECH PORTAL portal window opens, in which you need to enter your login credentials. If you don't have an account yet, you can create it directly from this screen.

Once the voucher has been confirmed in the summary screen, the redemption procedure is started; once validation has been obtained from the cloud, the app unlocks the required functionality in the device, and displays a confirmation message.

⚠️ Once redeemed, a voucher code can no longer be used on other devices. However, it is possible to apply it again to the same SIGNUM push-button panel (following, for example, a reset to the factory state).

4 Usage

4.1 Navigation

The functions offered by SIGNUM are organized in pages:

- Up to 3 pages containing each 1, 2 or 4 button(s)
- Thermostat page
- Audio multi-room page

Not all pages are necessarily visible; their visibility depends on the configuration.

Users can navigate among pages with *vertical swipe* gestures; when the last page is reached, the next swipe in the same direction, brings back to the beginning.
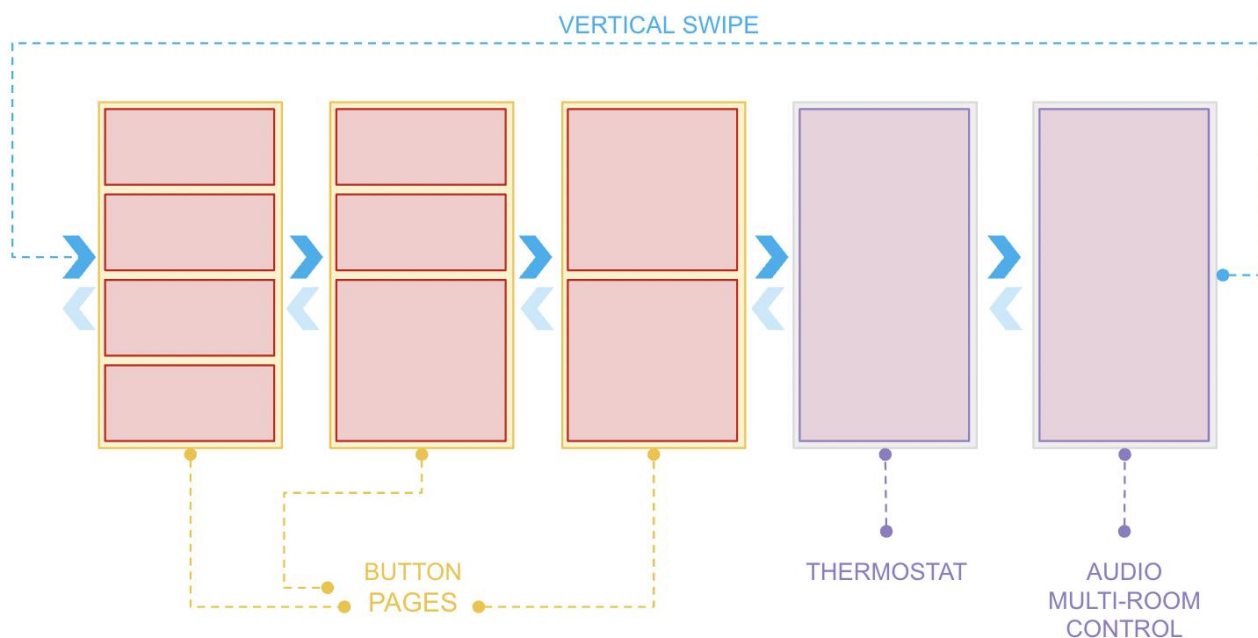

Some specific buttons can open a "modal" page, which is a sort of "popup" offering specific detail actions; the modal closes with the [X] button in the top-left corner or after a timeout.

Additionally, two system pages are available for configuration:

- System info, KNX programming and factory reset
- Customization with the mobile app

The configuration pages can be reached with a *horizontal swipe*, starting indifferently from any other page:

KNX CONFIGURATION
& SYSTEM INFO

MOBILE APP
CUSTOMIZATION
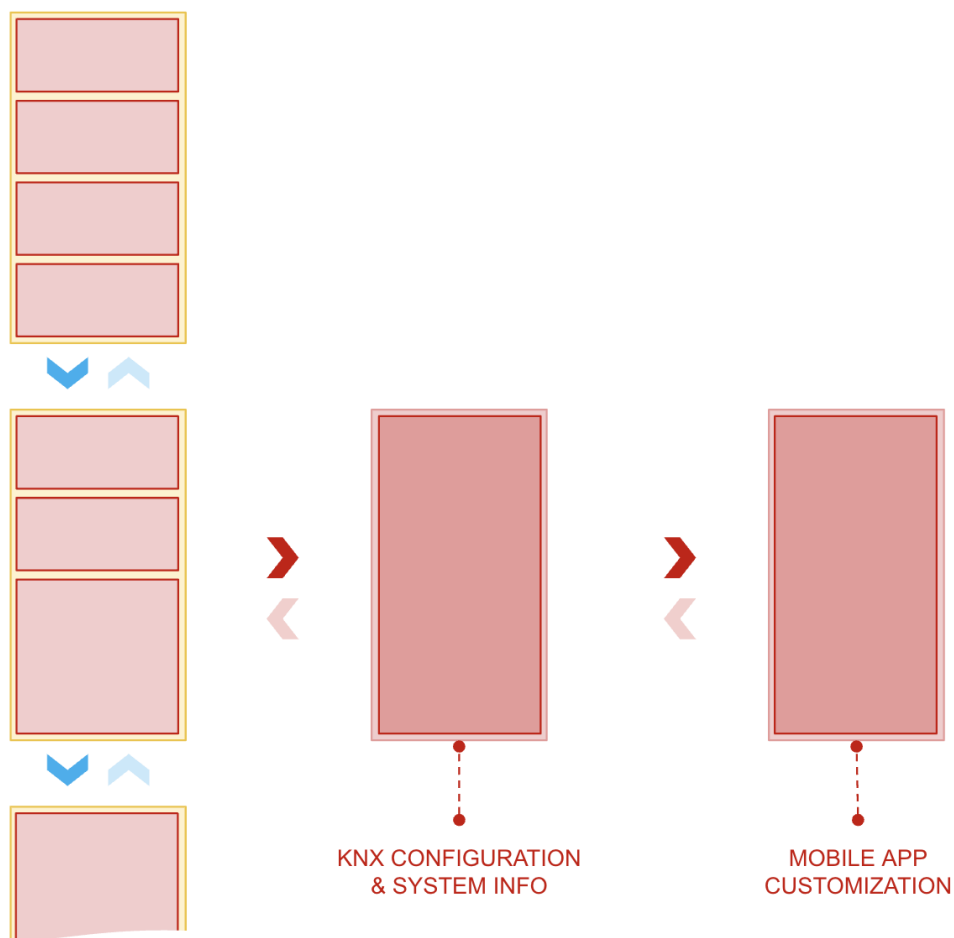
Which pages are visible, the number and function of the buttons, and their arrangement in the configurable pages, can only be set in ETS. Through the mobile app it is possible to modify texts, symbols, and visual effects of the user interface, and to set a series of options for the general operation of the device.

4.2 Button pages

4.2.1 Generic commands

In general, the buttons can be pressed and released in the same way as normal buttons in "physical" keypads.

The behavior when the button is pressed and released, and the eventual command associated with a long press, depend on the configuration of the ETS library.

The button color may vary according to the press state and/or the status feedback of the corresponding actuator / KNX function; multiple colors can be associated to different statuses, as described more in detail in the instruction on ETS configuration.
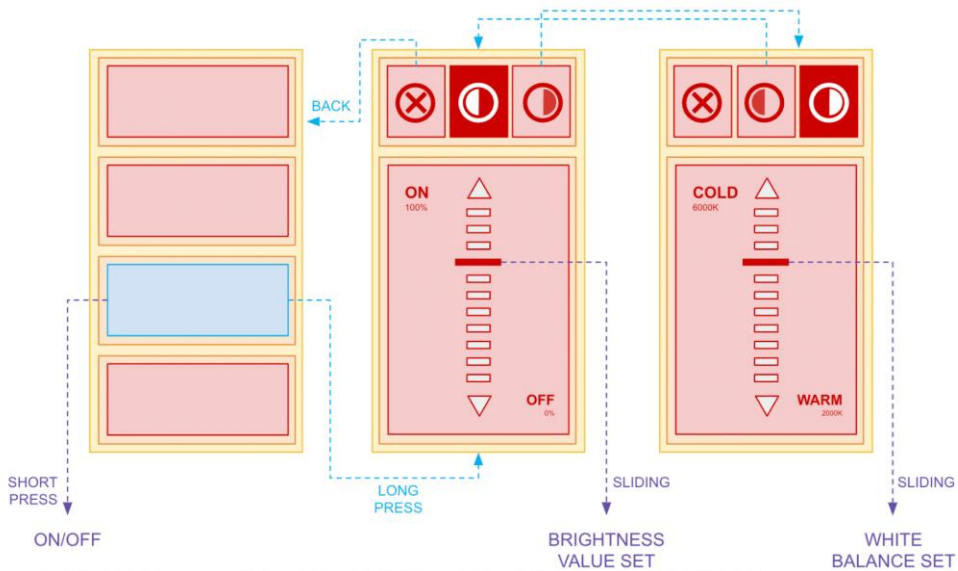
4.2.2 Dimmer

A button configured as dimming control behaves in the following manner:

- Short press: toggles the light ON/OFF
- Long press: opens the dimming control modal page

The modal page allows the set of the level for the corresponding light, between 0% and 100%:
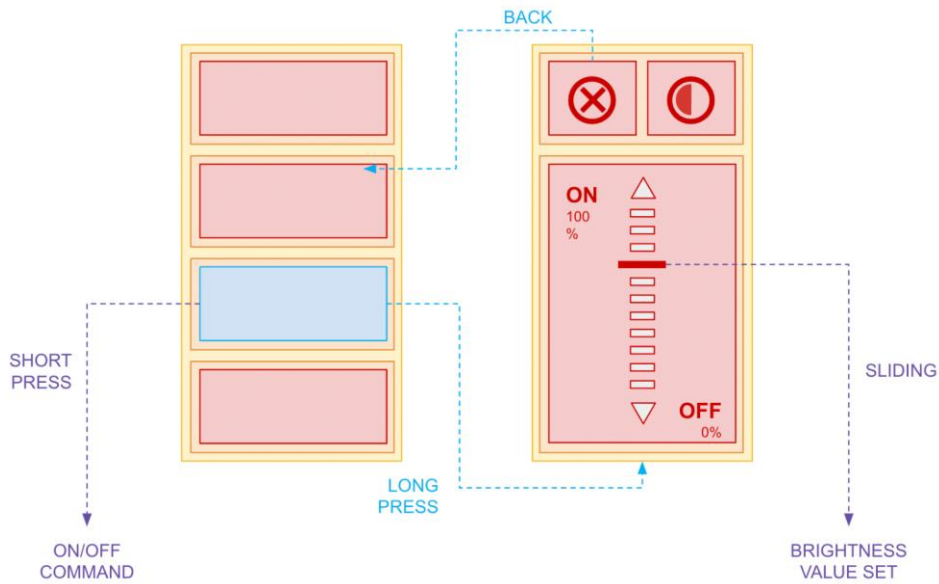
If the white balance control is enabled in ETS (color temperature adjustment) the modal contains two different *sliders*; use the buttons in the upper part of the screen to move between the two sliders, as shown in the following scheme:

> ℹ️ The aspect of the slider can vary according to the selected theme.
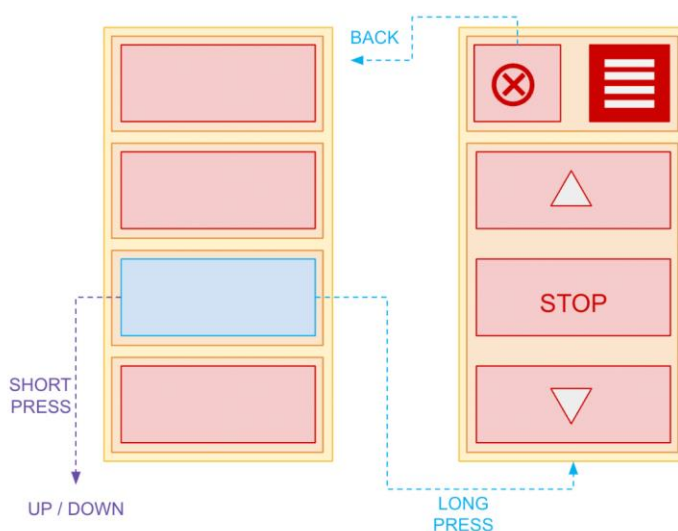
4.2.3 Shutters / blinds

A button configured for shutters / blinds control behaves in the following manner:

- Short press: toggles the motorization UP/DOWN
- Long press: opens the control modal page
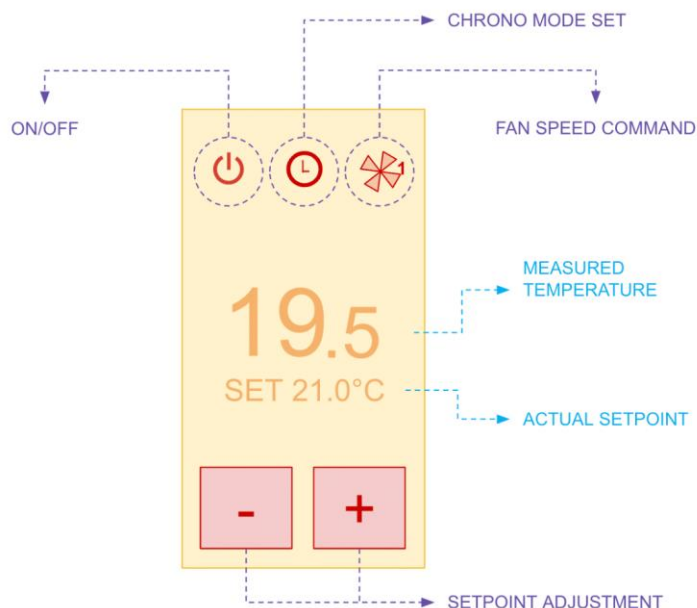
The modal contains three buttons:

- UP
- STOP
- DOWN

UP and DOWN buttons support the short & long press, according to the configuration in ETS (useful e.g. for slats control).

4.3 Thermostat page

4.3.1 Temperature control

The thermostat page offers the following information and action buttons:

In order to adjust the actual setpoint, do the following:

- Press the + / - button once; the setpoint starts blinking
- Press again the +/- button until the desired level is reached
- Wait a few seconds until the setpoint stops blinking

The setpoint label's color depends on the actual demand of the integrated regulator:

- White: no demand
- Orange: heating demand in progress
- Light blue: cooling demand in progress

4.3.2   Chrono mode

If the clock symbol in the upper-center part of the page is visible, it can be used to enable or disable the CHRONO MODE (when enabled, the setpoint is controlled by an external scheduler) with a long-press.

When the CHRONO MODE is active, it is still possible to adjust the temperature setpoint manually; in such a case, a countdown starts (by using the corresponding setting) and the new setpoint is used temporarily (TIMED CHRONO mode).

When the countdown reaches the end, or the clock symbol is pressed once again, the regulator returns back to standard CHRONO MODE, and the scheduled setpoint is used.

4.3.3   Fan-coil management

In case of fan coils, the ventilation speed can be controlled by pressing the FAN symbol in the upper-right part of the screen.

Press the button repeatedly to set a specific speed and/or to set the ventilation to AUTO mode.

4.4   Multi-room audio page

4.4.1   Source & playback control

The multi-room audio management page looks like the following figure:
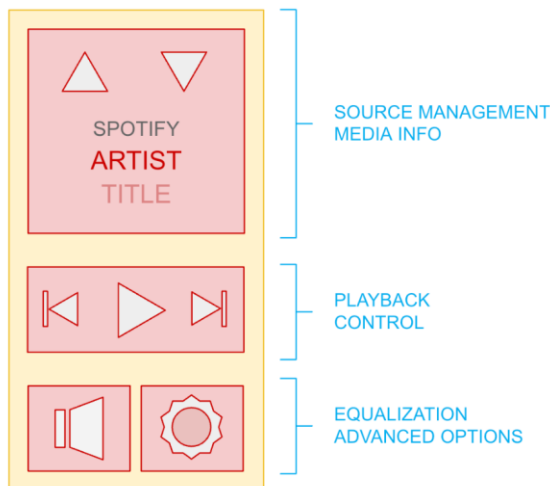
The upper part of the screen allows the change of the audio source, and contains the information about the artist and title being listened to at the moment (when available).

The controls in the center of the screen allow you to manage playback (PLAY / PAUSE) and progress between tracks (PREV / NEXT), while the buttons at the bottom allow you to manage the equalization and advanced options.

The left button opens a modal that allows you to control the volume of the audio area, and adjust the treble and bass. A long press on the same button activates the MUTE function.

The right button, on the other side, opens a modal containing the buttons for switching off the source, and for activating the SHUFFLE and / or REPEAT playback modes.

4.5   Configuration pages

4.5.1   System info / Program reset

By swiping right in any page of the screen (except for the modals) a technical page is shown with the following information:

- KNX physical address
- Firmware versions

The PROGRAM button puts the device in programming mode for ETS; this operation is necessary the first time. A long press for at least 3 seconds is required.

By pressing the FACTORY RESET for at least 5 seconds, the device is restored to the initial state; the physical address and all the settings go lost after this operation.

5   Warnings

- The installation, electrical connection, configuration and commissioning of the device can only be Opening the device container causes the immediate forfeiture of the warranty.
- It is recommended NOT to spray chemical agents or stain removers directly on the product, both to preserve the integrity of the plastics, and to avoid compromising the contacts.
- Defective ekinex® KNX devices to be returned to the manufacturer must be sent to the following address:

    EKINEX S.p.A. - Via Novara 37, I-28010 Vaprio d'Agogna (NO) Italy.

6   Additional information

- For more information on the product, please contact the ekinex® technical assistance service at the e-mail address support@ekinex.com or visit the website www.ekinex.com
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