User Manual

K-BUS® AirHome Manager Software

AirHome Manager_V1.0

KNX/EIB Home and Building Automation System

CONTENT

Chapter 1 Software Overview

AirHome Manager is a software that allows the installer to configure Air1 Server gateway and its software for mobile and tablet – AirHome Remote Pro APP. The software is designed to be easy and friendly so that the programmers can use both its basic and pro functions. This manual is an introduction of the AirHome Manager software which helps users understand how to finish the configuration of the APP.

Note: for installation of Air1 Server gateway, please refer to *Air1 SERVER - Installation Manual*.

Chapter 2 Software Introduction

2.1 Function Overview

The software support two difference user interface: list and functional map, which means you can either use listed smart functions or functions split in your apartment/house map. It's also very easy to use, starting from an ETS project (KNX) in fact you can create a user interface in a few minutes and apply to our app in any smartphone or PC to control the building.

Protocol conversion is an important function for smart control. In AirHome Manager, you can easily realize basic KNX functions like switching, dimming, curtain/blinds control, Dali light control, background music, HVAC, scene control etc. Besides, you can also use Air1 Server to connect and talk to other protocols like Modbus, RS485 or RS232, realizing more sophisticated smart home functions like logic operation, calculations, graphics, value sending, message delivery, color sequences timers and more.

User interface creation

Drag & drop function

Icons customization

Layout resizing

Instant feedback

Protocol Conversion

ETS projects import

Connection visualization

Function search

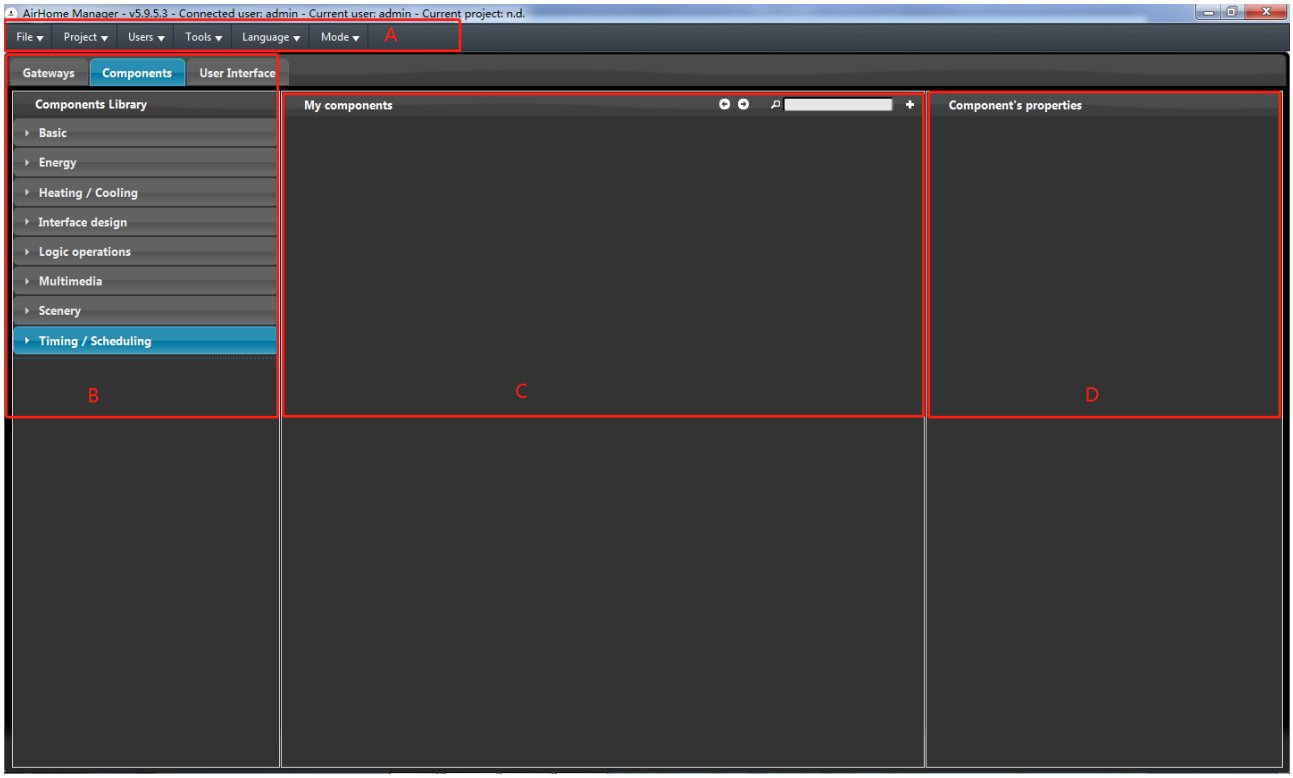
Multiuser management

2.2 PC System Requirement

PC Operation System: Windows 10 (64bit)

Operation Environment: directly run AirHomeManager.exe, no need to install.

Chapter 3 Software Interface



Pic 3 Starting Page

Find and double click “AirHomeManager.exe” in the AirHome Manager software folder to start the software. There will be a main page consisting of four parts: A, B, C, D, these functional blocks are the ones we will be using in our future configuration:

A Block is the Tool Bar with options of File, Project, Users, Language, Mode, it’s for system setting or functions like files import/export, language etc.

B lock is a column with “Gateways”, “Components”, “User Interface” included, we will be choosing gateways, components and interfaces from here when programming.

C Block is the collection of the components we have chosen and grouped, during configuration, one can drag and drop any components from block B to C and group randomly.

D Block is the “Component properties”, this is where to edit component property, and link to different addresses,

value, or object.

More details of these four functional blocks will be reveled in later chapters.

3.1 File

Click “File” In the main column above you will see a drop-down menu as picture 3.2.

Picture 3.1

New: create a new project

Open: open an existing project file (.eve)

Open recent: open recent project file

Save: save the programmed file

Save As: save in a proper path

Preferences: set a preferred path for opening projects

Exit: exit the software.

3.2 Project

Picture 3.2

Connect: click Connect to get a pop-up window as picture 3.2(1), click Search to search for the gateways in the same LAN. Connect directly if correct IP address, license ID, user name and password are known.

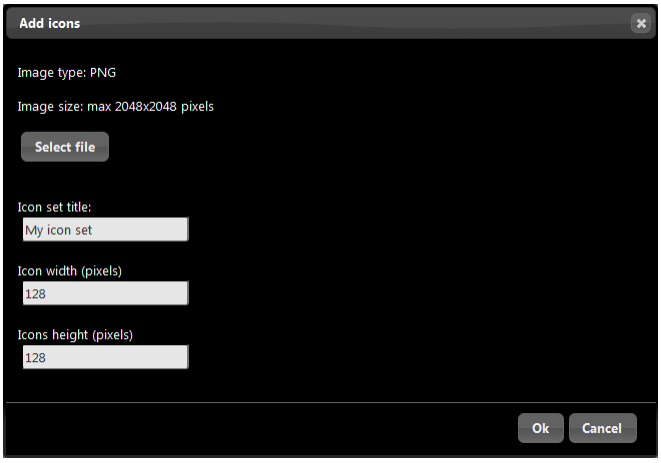
Picture 3.2(1)

Disconnect: click to disconnect the current gateway.

Upload: click to get similar pop-up window like Connect, search or fill in information to upload projects to relevant gateway.

Download: click to get similar pop-up window like Connect, search or fill in information to download projects saved in relevant gateway.

Add icon set: click to get pop-up window like picture 3.2(2), then click Select file to choose your customized icons. Icons must be .PNG format, max. 2048*2048 pixel.



Picture 3.2(2)

To add new icons it is necessary to make use of professional photo editor software such as Photoshop:

(1) Create the new PNG file. Set width and height (Max 2048 x 2048 Pixel);

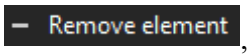
(2) Set a grid for the better management of the space. We suggest to set a 128×128 Pixel grid. This will allow you to get 256 squares corresponding to 256 icons.

(3) Copy & Paste the customized icons on the PNG file being aware to not add icons bigger than the set grid.

(4) Save the PNG file on your PC. Click **Project** - > **Add icon set**， choose right path and upload the icon then confirm with OK.

After all the steps finished correctly, the new icon set is linked to your Pc. This means it will be available for the user interface creation of this and next projects. Also, the new icon set will be available any time you will

download a project from server containing the PNG file.

(5) Delete icon set. Choose the icon set to be deleted and right click 

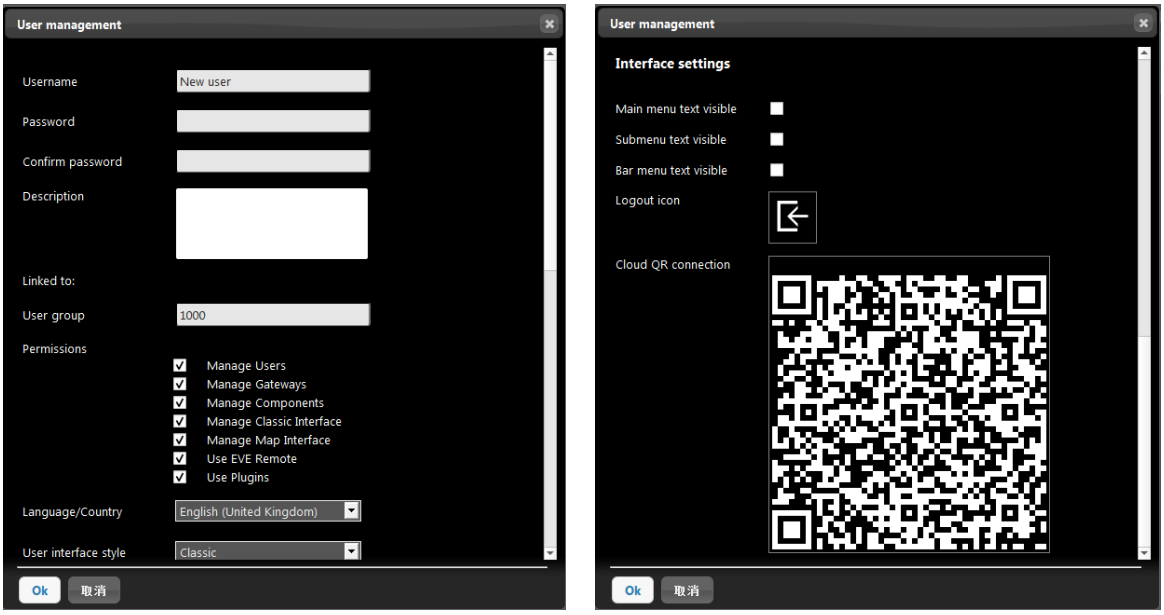
, then it's deleted.

Note: We suggest to set icons size a little bit smaller than the set grid in order to avoid any possible overlay.

3.3 User

Picture 3.3

New user: click to get a pop-up window as picture 3.3(1), new user can set its own user name, password, description, user group name, language, menu color etc. Confirm with OK when it's finished, then use AirHome Remote App to scan the QR code to get the ready configuration on App when programming is finished.



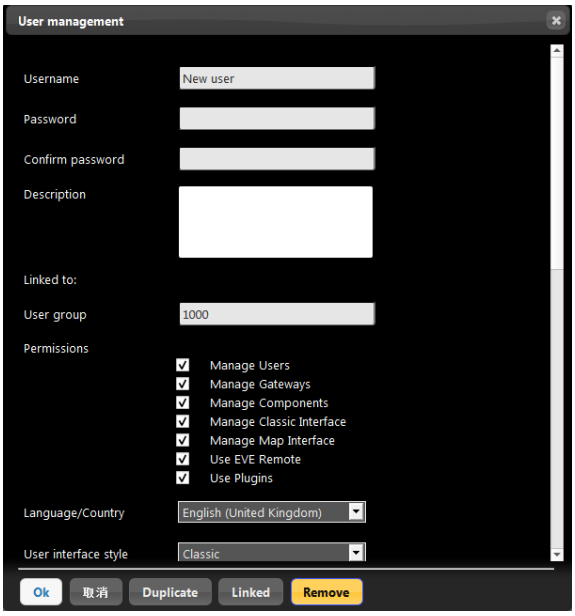
Picture 3.3(1)

Edit user: click to get the user information window as picture 3.3(2), all information here can be edited. In the bottom of the window there are 3 buttons: Duplicate, Linked, Remove.

(1) Duplicate: duplicate the current user. It is used to create many users with the same user interface especially when no changes or little changes are made in big projects.

(2) Linked: duplicate and link it to the current user.

(3) Remove: remove the current user.



Picture 3.3(2)

Admin: the current user's name. The user name with icon  is the current user.

Admin is by default and can't be changed or deleted, no duplicate/linked are available for admin.

Note: AirHome offers new users 2 different app view (classic and map-view), classic view is as default, difference of these two will be explained in Chapter 6.

Map-view can be chosen in **User interface style** when creating a new user or editing user as in picture 3.3. Details of interface can be edited here as of picture 3.3(3). If the user needs two different interfaces, then two different users must be created and set.

Picture 3.3(3)

3.4 Tool

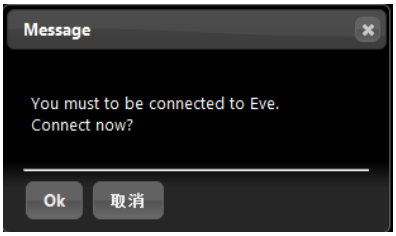
图 3.4 【工具】下拉菜单

① Import: menu in the right side will show 6 database possible to be imported, that is, Ets groups, Ets project, (Satel, Vimar by-me and Tecnospa Io.T are not discussed here).

② Execute file script: choose relevant script to update software.

③ Plugins: click to import plugins of AirHome software, steps are as follows：

(1) Connect to Air1 Server gateway. **Please get software and Air1 connected before this or else error will occur as picture 3.4(1).**

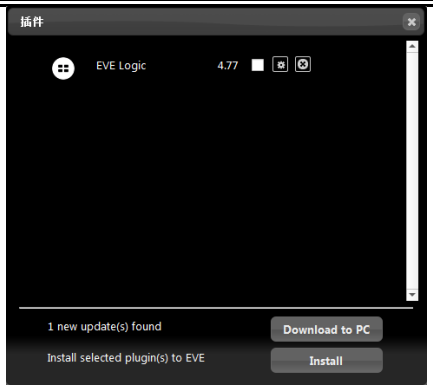


Picture 3.4(1)

(2) Download plugins. Click “Download to PC” to download plugin to PC.

(3) Choose and install plugin. **After download, make sure it’s connected to and installed to Air1 Server, or else it will not work.**

(4) Click  to set plugin and  to delete.



Picture 3.4(2)

④ Start/Stop logic: to start or stop logic.

⑤ Start/Stop KNX gateway: to start or stop communication between Air1 Server gateway and ETS.

3.5 Language

Picture 3.6

Under language there are 5 options: English, Italian, French, German and Chinese, by default the system is in English, each time when language is changed, please RESTART the .exe file to finish setting.

3.6 Mode

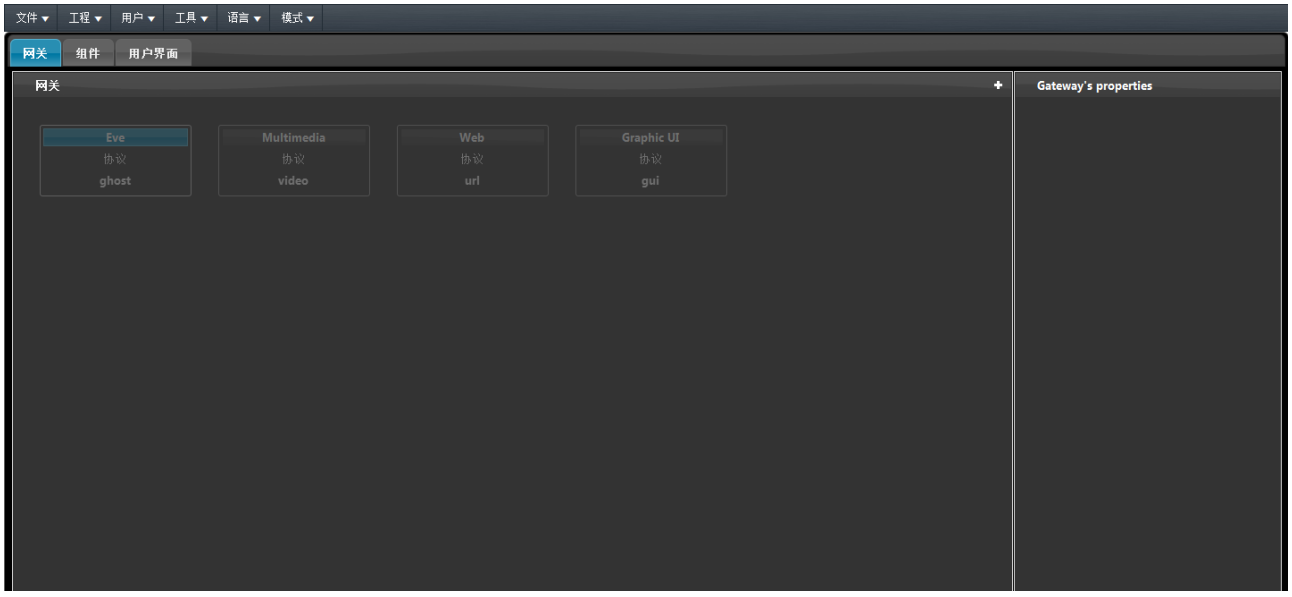
图 3.7 【模式】下拉菜单

Lite: lite version which contains 4 component sets - Basic, Heating/Cooling, Scenery, Time/Scheduling.

Pro: professional version which contains 8 component sets - Basic, Energy, Heating/Cooling, Interface design, Logic operations, Multimedia, Scenery, Time/Scheduling.

Chapter 4 Gateway and Protocol

A “gateway” is a device that connects and makes communication between protocols, here we are talking about bus system such as KNX/EIB, RS485, RS232, TCP/IP etc. Air1 Server gateway and its software is one that allow these protocol conversion, for instance, protocol exchange in KNX and Modbus/rs485/RS23, hence the integration of devices with different protocols becomes much easier. Choose Gateways in AirHome Manager and the software interface will turn into picture 4.



Picture 4

4.1 Gateway Management

Gateway interface can be divided to two areas, gateway and gateway’s properties.

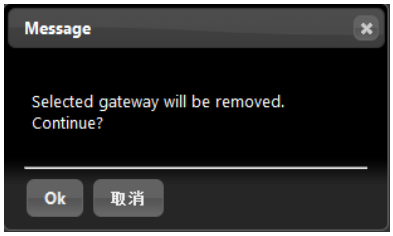
1. Gateway area： here shows all possible gateways to be added – picture 4.1(1), including all system default gateways (Eve、Multimedia、Web、Graphic UI) and those others added specially for projects.

Picture 4.1(1)

It's possible to add, remove and copy gateways in this area:

(1) Add a gateway: click  or right click mouse to add a new gateway 

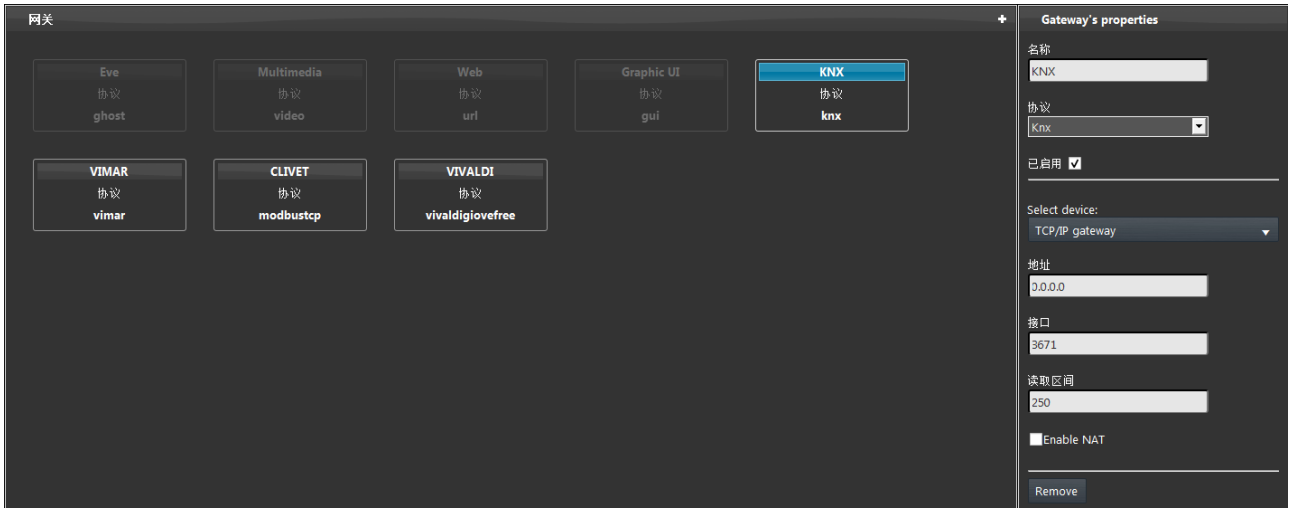
(2) Remove a gateway: approach your mouse to any gateway and click  to remove – picture 4.1(2), or simply right click mouse and choose "Remove gateway"



Picture 4.1(2)

(3) Copy a gateway: choose any gateway and right click mouse to choose "copy", then right click mouse in empty area to "paste" the same gateway, suggestions are to change the name of the new gateway to distinguish.

2. Gateway properties area: this area shows all properties of the chosen gateway, including name, protocol, select device, address, port, read interval etc. – picture 4.1(3). All properties changes with protocol and are editable.



Picture 4.1(3)

4.2 System Gateway

There are four default gateways listed in gateway area: Eve, Multimedia, Web, Graphic UI, they cannot be copied, removed or changed as they are to maintain the system stability and support certain component in software.

EVE Protocol: GHOST	For each component configured with Ghost Protocol does not match a real device in the physical world. In other words a component with Ghost protocol is a “virtual” component. Components used with this type of configuration are components with supporting function: they are created to be used in the AirHome Remote interface or to perform calculations on the server. For example, a virtual Switch component can be used as input of a logic gate to enable / disable a sensor, or as an output to be used later in the IF component. Again, a virtual Info component can be used as output of Calculator component to display sum of several energy values on the AirHome Remote interface.
MULTIMIDIA Protocol: Video	This gateway is one of the default system gateways. It cannot be edited much less deleted as it contains specific configuration parameters that allow you to manage specific components in the system.
WEB Protocol: URL	This gateway is one of the default system gateways. It cannot be edited much less deleted as it contains specific configuration parameters that allow you to manage specific components in the system.。
GRAPHIC UI Protocol: GUI	This gateway is one of the default system gateways. It cannot be edited much less deleted as it contains specific configuration parameters that allow you to manage specific components in the system.

4.3 Protocols

AirHome has implemented several protocols (KNX, MODBUS TCP) which allow to integrate different systems. Any protocol require a specific configuration, this is why we provide a brief description of all the available protocols and then get further information on the dedicated web pages.

Here is a list of all the available protocols yet implemented:

KNX	To connect the system to the KNX bus it is possible to use IP Gateway -> KNX. In this case, it is necessary to enter the IP gateway and the port used by the gateway parameters. If you use Raspberry as server, you can install additional devices that are controlled through a serial port or USB.
HTTP	It is possible to send HTTP messages to devices operating through this type of call in order to control them.
MODBUS TCP	This is one of the most widely spread protocols (coming from RTU evolution) used within the control of heating/air conditioning. However, there are many other types of devices that use the same protocol. In case of TCP devices, it is not necessary to use either converters or adapter.
MODBUS RTU / ASCII	This is one of the most widely spread protocols. When using RTU / ASCII devices it is necessary to use a serial server converter to act as the master and control devices connected to the bus.

Chapter 5 Components

AirHome has offered two types (Lite and Pro) of components for its clients to meet their configuration, both versions can be switch during programming.

5.1 General parameters setting

Each component has different parameters according to the protocol to which it is associated, however, some are in common for all components. This is the case of the component's registry area that summarizes basic info for its unique identification within the project. Also, there are configuration parameters which determine the component's behavior in the project regardless of its category. Here is a list of common properties in Airhome components:

Name: editable field for component's name.

Gateway: gateways in drop-down menu to choose from

Select Tags: selecting a tag here to differ the component for a quicker search

User interface/Google/Alexa: title shown on user interface, editable any time, if title is not set, then default component will be shown.

User interface icons: icons shown on user interface, editable

Save last value: check box. Airhome will record the last value of the component in the event of a blackout the status of the device will be set to the existing value.

Use recurring values: this checkbox allows to keep all the telegrams inside the BUS, if unchecked only the changing telegrams will be considered.

Copy value to: It allows the synchronization of two components also of different protocols making it possible to use the system as a gateway between protocols.

Bidirectional linking: activating this flag you will have the possibility to activate the bidirectionality of the data, this allows the continuous synchronization of data between two components. If not activated, the data will be sent to the component in unidirectional mode.

Show custom data: parameter for developers only, integrator can pass.

Common icon operations are as follows:

1. Change icons.

The programmer can edit all icons in either component or user interface. All changes taken in component will also be updated in user interface, but please note that CHANGES TAKEN IN USER INTERFACE WILL NOT BE UPDATED IN COMPONENT. Double click the icon to be edited there will be pop-up editing window. (for more icon edit tools please refer to Chapter 6.1).

2. Copy icons

If more than one component uses the same icon, use the copy/paste/link  to realize it, which avoids having to access the icon editor of each component of the project. Steps to quickly copy:

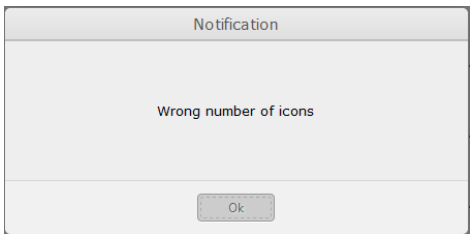
(1) Create a new component

(2) Copy with clicking  under the original component

(3) Choose the new component and click  or  to paste. When using  to paste, these two components are linked so when one is changed the other change too, while  only paste does not link.

(4) Change icons when linked pasted. If a single icon needs to be changed after linked pasted is applied, you can consider changing in user interface instead of component interface. (See above point 1 change icons)

Note: when linked paste is applied, component icons are one to one, i.e. if two icons are displayed, then pasted icons should be two, or else error will occur as picture 5.1.



Picture 5.1

When it's under map view mode, three view modes are available - Classic，Model 和 Hidden, details please refer to Chapter 6.2.

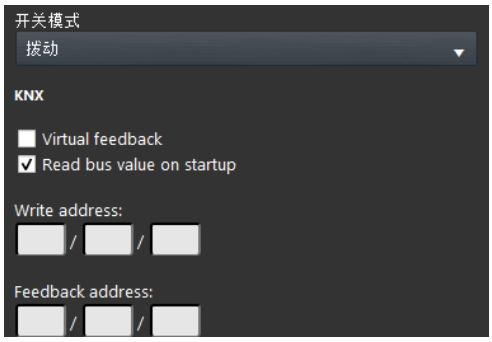
5.2 Basic

5.2.1 Switch

 It can represent the On / Off state of a sensor, it can command an actuator changing the parameter's value. Also, it can be used as input of AND / OR logic, as a system command to activate scenarios or it can be controlled by weekly timers to generate events.

Examples:

- The user can activate the main pump of the irrigation system.
- The user can arm an alarm.
- The user can use it like a trigger component for other components.



Properties: customizable component's title and icon. Please refer to "Chapter 5.1" guide.

Switch mode: It allows to automatically enable/disable the object state of the device in case of reboot or power off into the selected status in the drop-down menu.

This component's sample is made by using KNX protocol:

Write address: write address in KNX

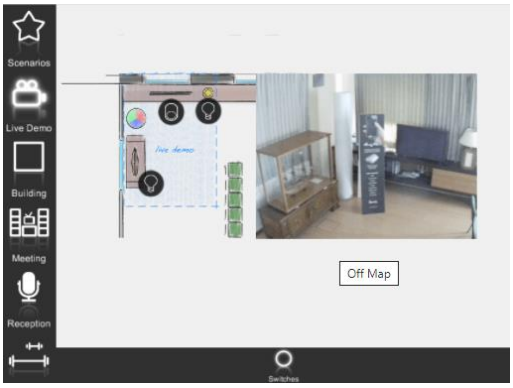
Feedback address: feedback address in KNX

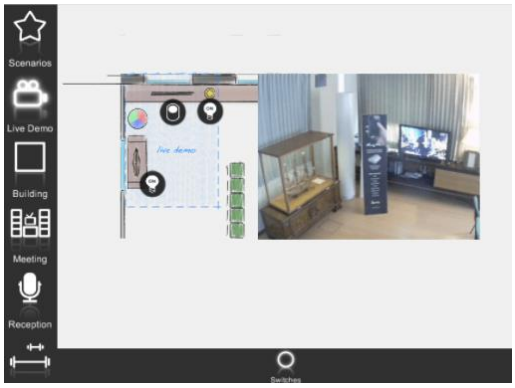
Virtual feedback: check box, the message created by protocol, when hardware does not support function of creating new message on this, check the box and create feedback.

Read bus value on startup: if boxed checked, gateway will be able to read the value on KNX bus.

View mode:

1. Map view mode





Icons of this component can be customized by actual demands including symbol, color and dimension. It's one of the view mode on AirHome Remote software, in this case we can see 3 switches with different layout:

(1) Lights ⇒ Light icon

 State Off (empty light)

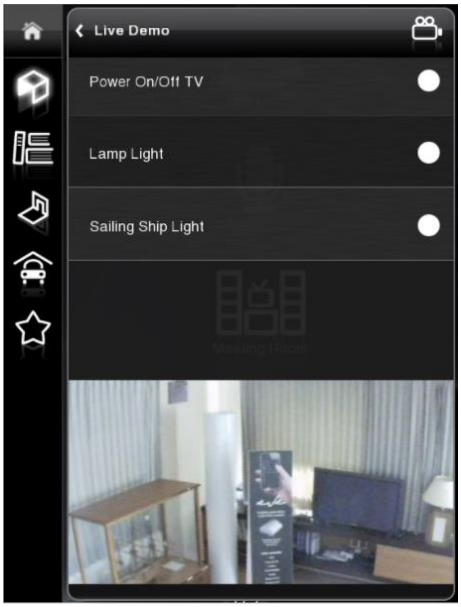
State On (full light)

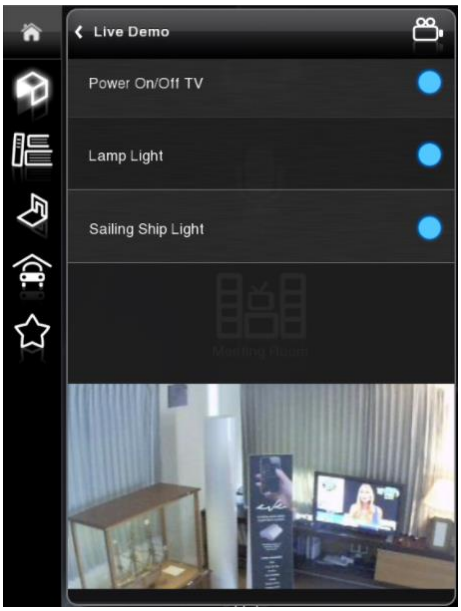
(2) TV ⇒ Lever icon

 State Off (lever down)

 State On (lever up)

2. Classic view mode





Here is the visual result of the component on AirHome Remote Pro (Classic Style). Switches are displayed as an empty button which lights up when selected.

Switches ⇒ Switch Icon

 State Off (white circle)

 State On (blue circle)

5.2.2 Lock

 Similar to switch component, however it is necessary to enter a security code in order to change the state of an actuator.

Examples:

- You can add more protection to the entrance door with a password and allows only the authorized users.
- You can use the lock component to set a password for an IP camera so only the authorized user can see it.

Properties:

Password component: (dropdown) in this field we recommend to use the "Info" component. Remember to enable the checkbox "save the last value" into the component properties;

Reset password(pulse)： (dropdown) using the "Pulse" component allows the user to reset the password in the AirHome Remote Pro App;

Password request: (dropdown) see the options below:

Always: password needed in both lock and unlock

On activation: password needed only in the unlocking action

On deactivation: password needed only in the locking action.

Password text entry： (dropdown) allow the user to type the password, we recommend using the "Text entry" component;

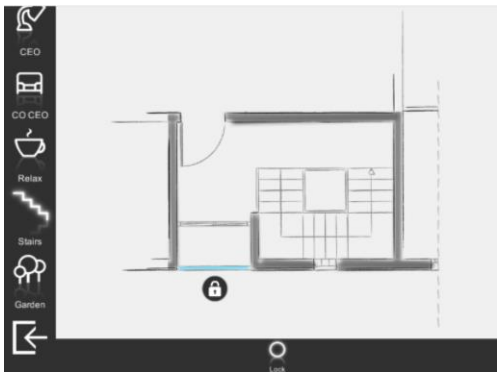
Password： (empty field) you can fill this text field with your personal password to unlock the component;

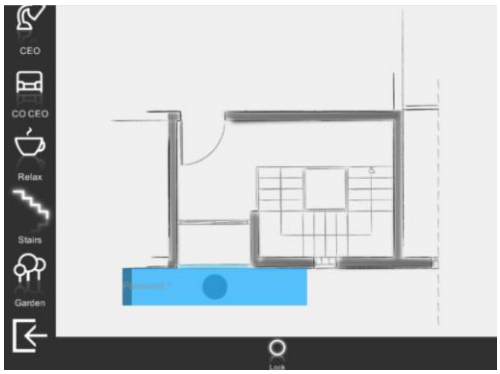
Reversed value: (checkbox) the component will be unlocked when at 0 and locked when at 1.

View mode:

1. Map view mode

This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:





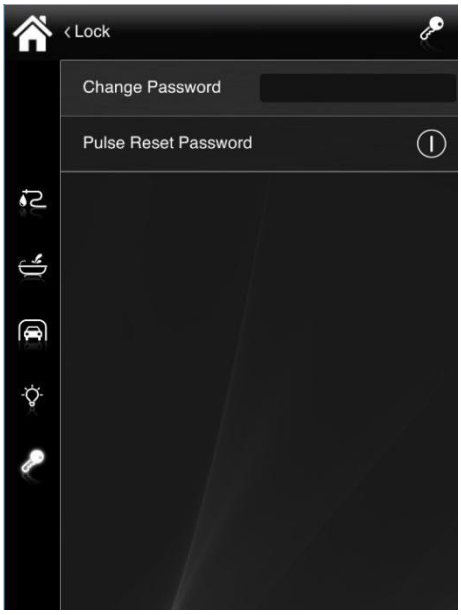
Doors, Safes, etc. ⇒ Lock icon


State Off——Lock (customizable icon)


State On——Unlock (customizable icon)

Password bar (lock/unlock icon)

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). The lock is displayed as an icon which lights up when unlocked within the correct password.。

Doors, Safes, etc. ⇒ Lock mask

State Off – Lock (customizable icon)

State On – Lock (customizable icon)

Password field (lock/unlock icon)

After typing the correct password you can change the old password by clicking the “Pulse” icon. After that, you can type in the “Change password” field the new one.

Pulse Icon (click/tap for the start/reset procedure)

Type your new password in this field.

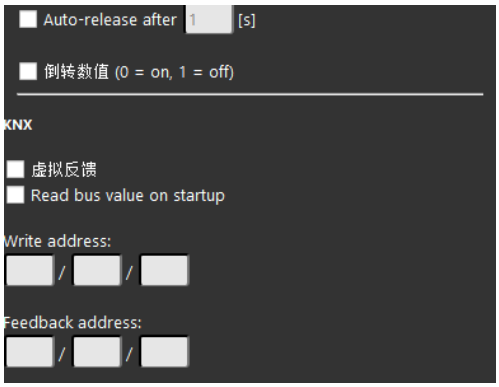
5.2.3 Pulse

This component sends an ON/OFF pulse to the actuator.

Examples:

- The pulse component can be used as a trigger component for a scenario.
- The pulse component can be used to open a gate.

Properties:



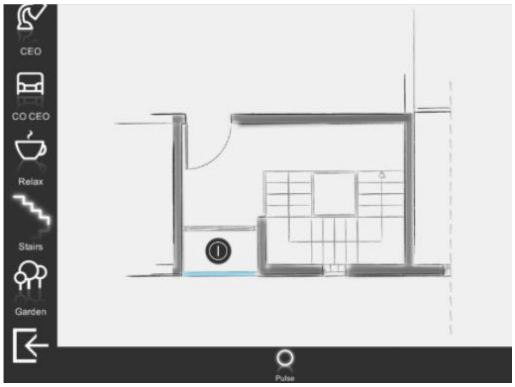
Auto-release after (checkbox): if ticked it allows you to change seconds' value.

(..)s (number): it defines the seconds before component returns to 0;

Reversed value (checkbox): it reverses the value 0=on and 1=off.

View mode:

1. Map view mode



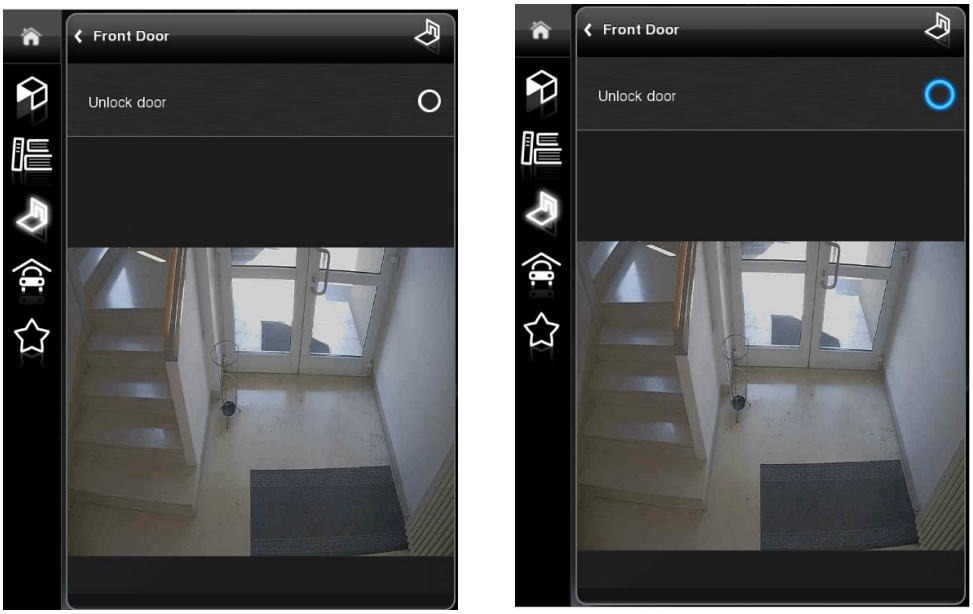
This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

Doors, Gates, etc. ⇒ Pulse icon

 State 0 and 1 (customizable icon)

Pulse provides a transition from value 0 to 1 then back again to the value 0. The time for the return to the value 0 is set in the component parameters.

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). Pulse is displayed as a white circle which light up when selected.

Doors, Gates, etc. ⇒ Pulse icon

 State 0 (white circle)

 State 1 (blue circle)

Pulse provides a transition from value 0 to 1 then back again to the value 0. The time for the return to the value 0 is set in the component parameters.

5.2.4 Color Information

 This component shows the ON/OFF switch status using colored icons.

Examples:

- The color info can be used as changing value visualizer for the movement sensors, as soon as the movement sensor picks up a movement in its range the color info will change state.
- The color info can be used as feedback for closing and opening doors, the color info will change its state every time the door or window will be closed or opened. Same for the lights.

Properties:

Color value 0： choose the icon color when the value is 0 (left click on the mouse);

Color value 1： choose the icon color when the value is 1 (left click on the mouse).

View mode:

1. Map view mode

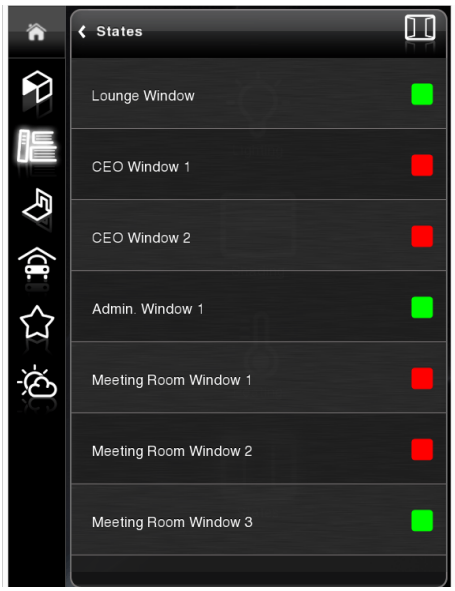
This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

Sensors ⇒ Color Info icon

Default icon when the value is 0 (customizable icon)

Default icon when the value is 1 (customizable icon)

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). Color Info is displayed as a square which takes the color of the corresponding value.

Sensors ⇒ Color Info Icon

 Icon when the value is 0 (color info icon)

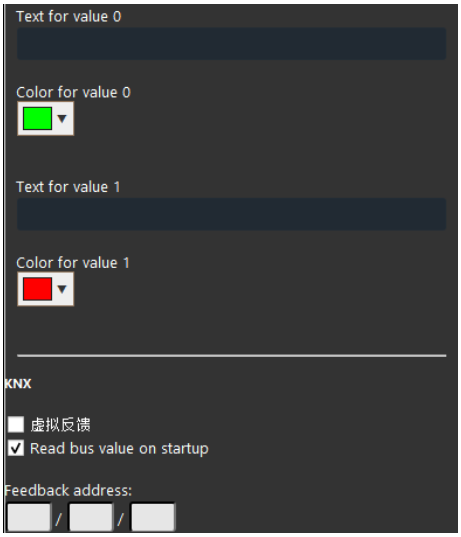
 Icon when the value is 1 (color info icon)

5.2.5 Text Information

 This component allows you to set different texts with different colors on the AirHome Remote user interface according to the On / Off status value.

Examples:

- You can use this component to make customized text feedbacks linking to other components such as switches etc.…



Properties:

Text for value 0: enter the text that should be visualized on the interface when the value is 0;

Color value 0: choose the icon color when the value is 0 (left click on the mouse);

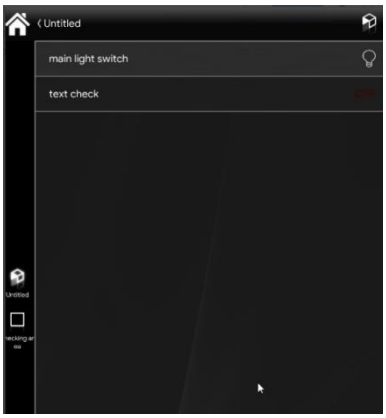
Text for value 1: enter the text that should be visualized on the interface when the value is 1;

Color value 1: choose the icon color when the value is 1 (left click on the mouse).

View mode:

Classic view mode

Here is the visual result of the component on AirHome Remote (Classic Style). As set the text info component will change when the linked component change its state.



Text info in state ON

Text info in state OFF

5.2.6 Slider

The slider is the component that represents a percentage. The percentage control of a dimmer is performed by the Slider. If it is necessary to indicate a value other than 100 as the maximum value, you can change the default settings. It is also possible to subdivide the percentage at various points and define what icon should be used for each interval.

Examples:

- You can use the cursor component to dimmer the lights, or you can use it to move flats on the shatters.

Properties:

Min (value): Minimum value from 0 to 100;

Max (value): Maximum value from 0 to 100;

Step(value): step value from the previous and the following change;

Digits(number): digits after the comma;

Suffix(symbol): %

No label (checkbox): it allows to hide the component label on the interface visual result;

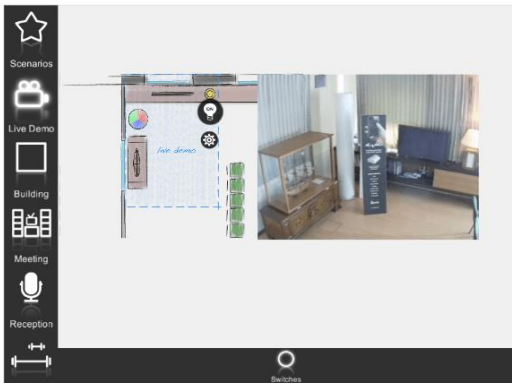
Values range:

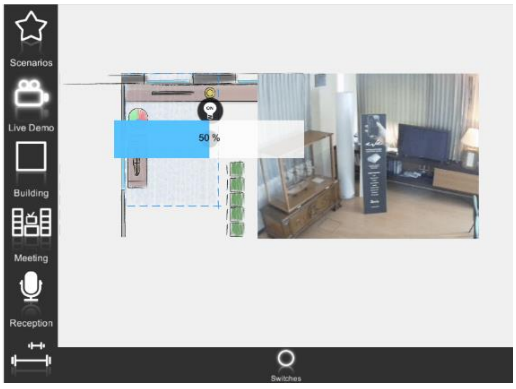
From： (value): Lowest value;

To： (value): Higher value. Select the icon and a new icon will be created to identify the new range. Select the icon and the icon will be removed.

View mode:

1. Map view mode

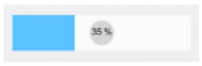




This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

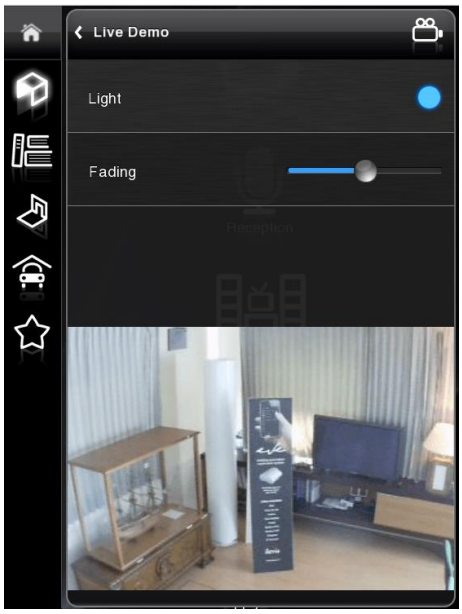
Dimmer ⇒ Setting icon


Default icon (customizable icon)



Sliding bar

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). Sliders are displayed as sliding bars which light up along the way.

Dimmer ⇒ Slider mask


Sliding bar 0%


Sliding bar 50%

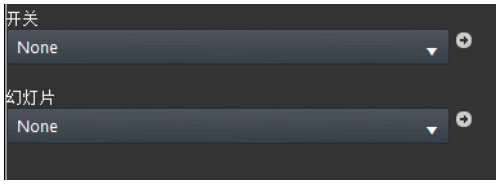
5.2.7 Dimmer


Dimmers are devices used to control the brightness of lights. By changing the voltage waveform applied to the lamp, it is possible to control the intensity of the light output.

Examples:

- The user can combine two components to create one complete dimmer, that allows to controll both the toggle ON/OFF and the brightness of the light.

Properties:

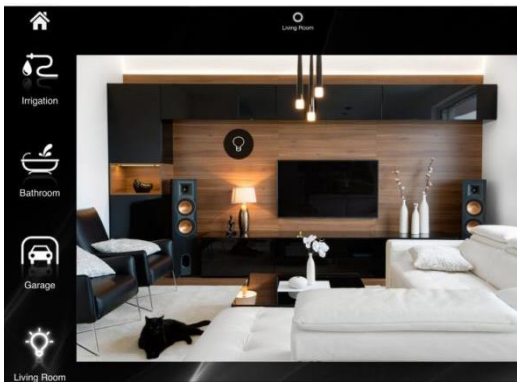


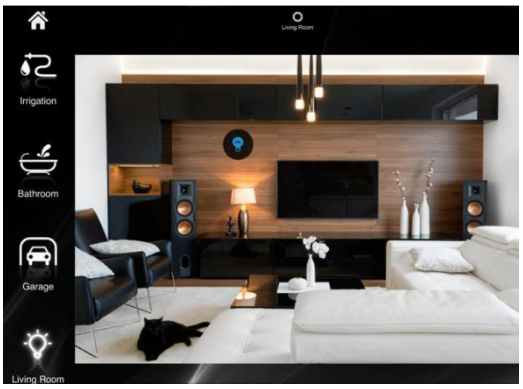
Switch:(dropdown) that allows to turn on/off the light or the relative component connected, we recommend using the "Switch" component.

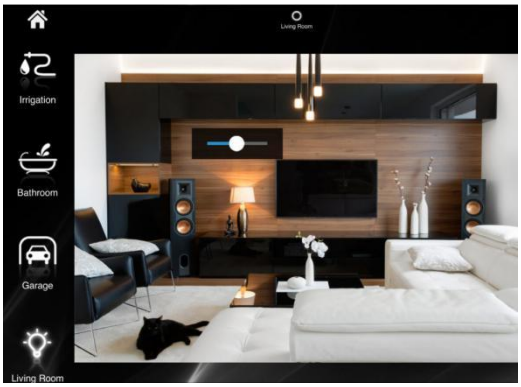
Slider: (dropdown) that allows you to insert a "Slider" component to control the brightness of lights.

View mode:

1. Map view mode







This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the dimmer widget (slider + switch):

Light on/off ⇒ Tap Bulb icon


Light Off (empty bulb)

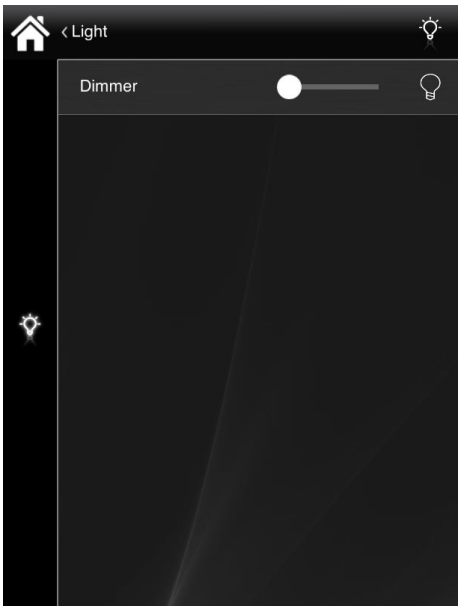
Light On (bulb on)

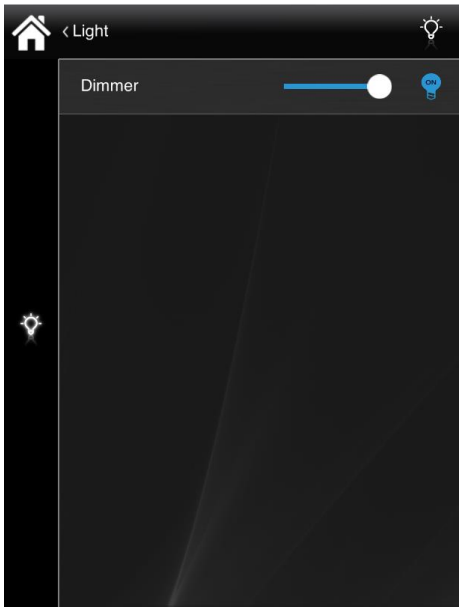
Hold the bulb to activate the slider


Slide left (darker light)

 Slide right (brighter light)

2. Classic view mode





This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Switches are displayed as an empty button which lights up when selected.

Switches

 Light Off (white empty bulb)

Light On (blue bulb)

The Slider is a component used to control the brightness of a light.

 Slide left (darker light)

 Slide right (brighter light)

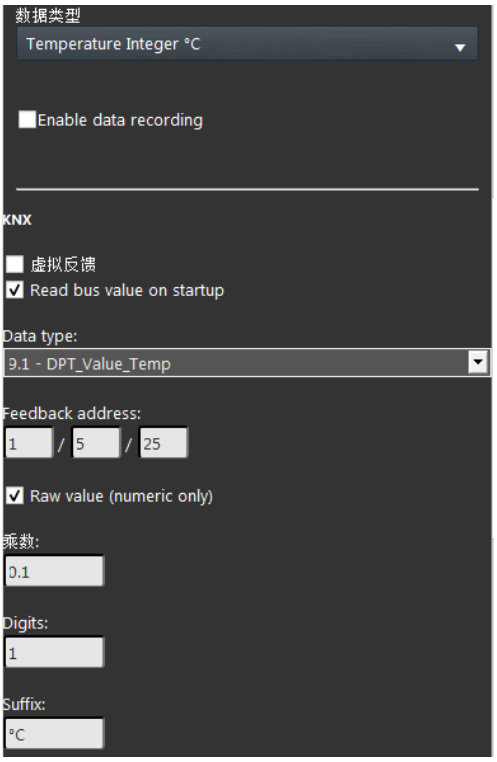
5.2.8 Information

 This component represents a generical information, any value in the system is read and managed through this component.

Examples:

- The user can set this component to read the temperature of a thermostat.
- The user can use the info component can display how much free space do you have in your device

Properties:



Data type: Select Tags. Options as follows:

Today date: the current date displayed in the user interface;

Today date/time: current date/time displayed in the user interface;

Today time: current time displayed in the user interface;

Show in recorder webpage: you can see its function on the Recorder component;

Disk Free Space: shows the remaining free disk space of the MicroSD inside the server.

Data type: drop down of values that define the type of data (temperature, voltage, etc.). We recommend always using this feature because if not used, the correct unit of measurement will not be displayed. For the KNX protocol setting, please refer to 5.2.1 Switch

Raw Value (Numeric Only): (checkbox) it provides DPT Type without suffix;

Multiplier: (number) it allows you to convert different scale units;

Digits： (number) digits after the comma;

Suffix： (symbol) a suffix of the DPT Type. Don't apply the suffix if the component's value will be displayed inside a chart.

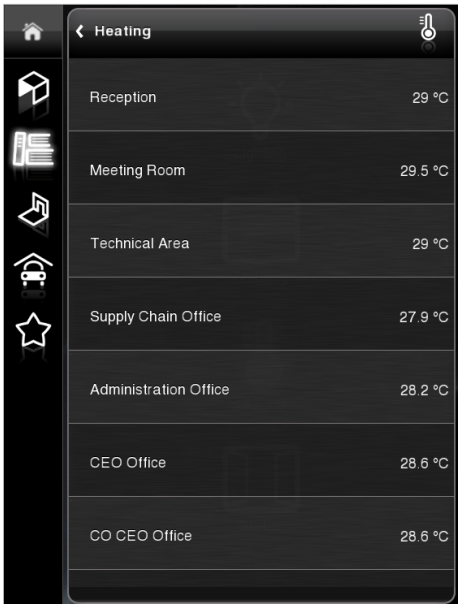
View mode:

1. Map view mode

Here is the visual result of the component on AirHome Remote (Classic Style). With the only text view mode

configuration, you immediately see the Information data. It is possible to edit dimensions of your Info data depending on your necessities. Also, you can disable the circle and set a different color for the Info data text.

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). Info is displayed as text data next to the element title.

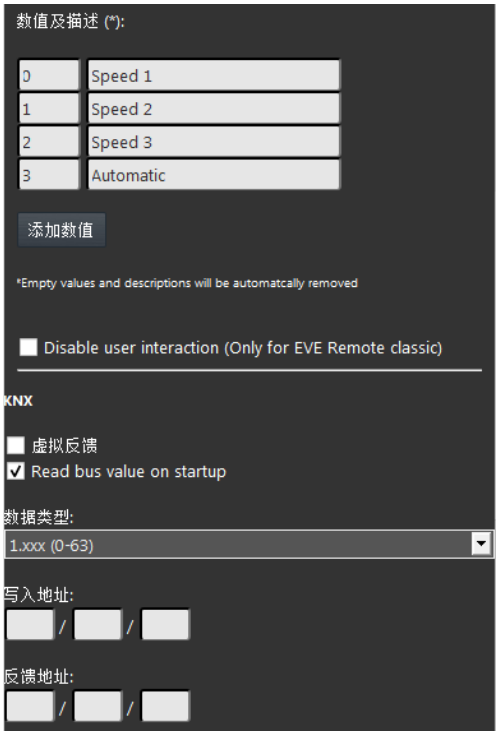
Temperature, Humidity, Time, etc. ⇒ Information icon

5.2.9 Drop Down

This component allows you to create a list of options selectable by the user on AirHome Remote.

Examples:

- With the drop-down component, you can create a menu with several modes to control a thermostat, for example in comfort mode or winter or summer.



Properties:

Values and descriptions (*):

Value (number): it defines the value of the command;

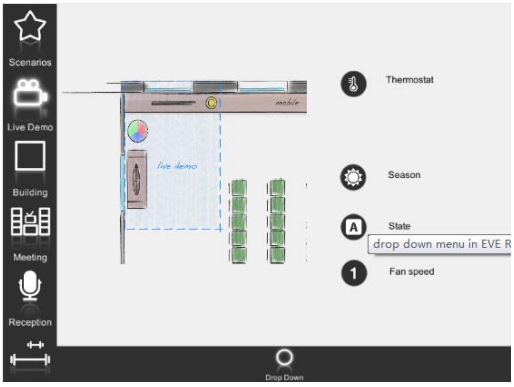
Description (text): enter the command title for the corresponding value;

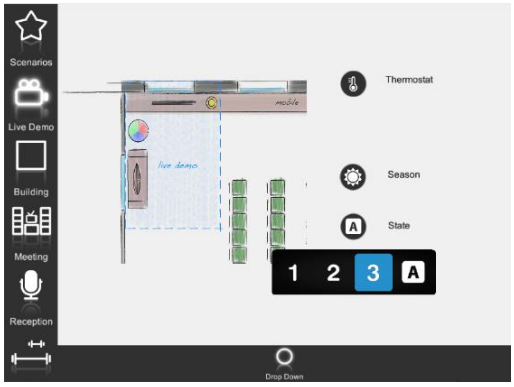
Add value (button): it allows to add a new row for adding a new option;

Disable user interaction (checkbox): it allows to disable the interaction with the component on the AirHome Remote (Classic Style).

View mode:

1. Map view mode





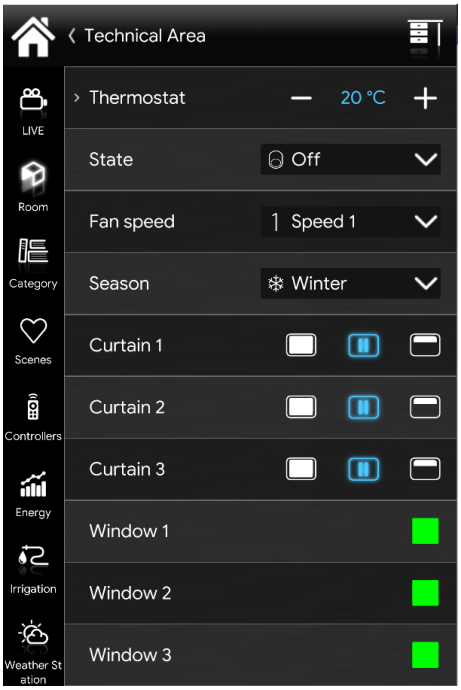
This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

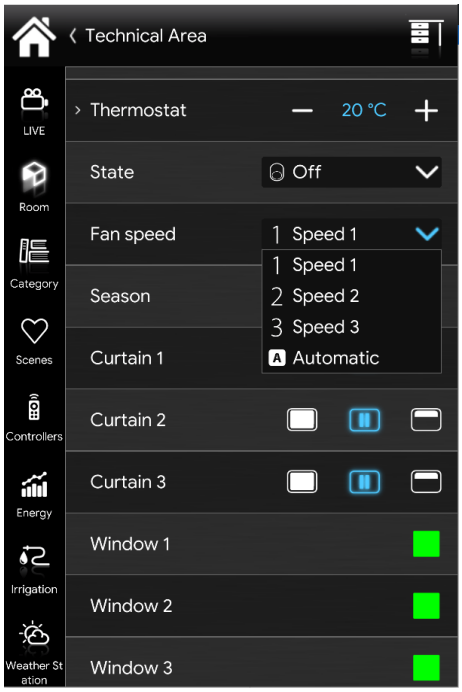
Menus ⇒ Drop Down icon

The first value of the list (customizable icon)

Drop-down menu

2. Classic view mode

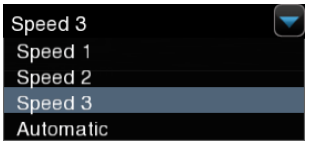




Here is the visual result of the component on AirHome Remote (Classic Style). Drop down component is displayed as a drop-down menu which opens thanks to the arrow on right.

Menus ⇒ Drop down icons

The first value of the list



Drop down menu

5.2.10 Seeker

Used to call two scenarios with a dedicated graphics component. For example, to switch to a previous and next track of a CD player. The scenarios may be of any type, they can send different infrared or call the component feed track Vivaldi protocol

Examples:

♦ The user wants to control a Cd player can be controlled by a external unit with infrared, you can easily change tracks by pressing a button in the User interface,

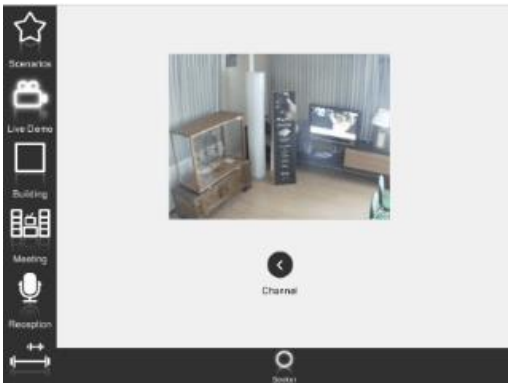
Properties:

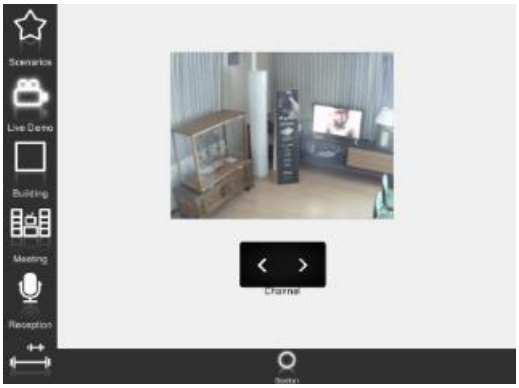
Scenario: Icons setting. Create the component here.

`

View mode:

1. Map view mode





This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

Channels, CDs, etc. ⇒ Seeker icon

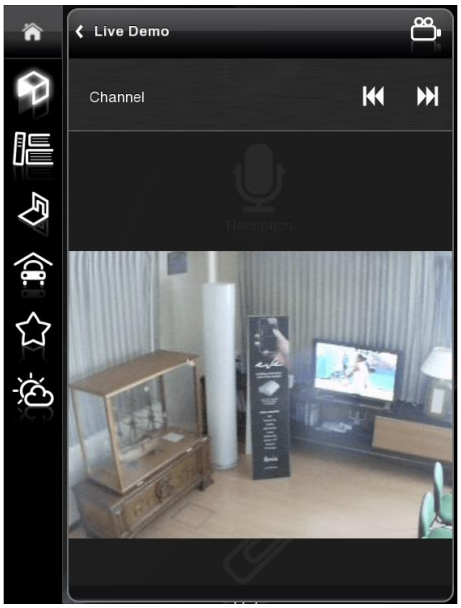
 The first value of the list (customizable icon).

 Seeker mask.

 First scenario selection (customizable icon).

 Second scenario selection (customizable icon).

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). Seeker is displayed with the following icon.

Channels, CDs, etc. ⇒ Seeker icon

 Seeker icon

 First scenario selection (seeker icon).

 Second scenario selection (seeker icon).

5.2.11 Changeable Value

This component works similarly to the slider component. However, it shows the actual component's value on the BUS rather than being a percentage. It may indicate a level of LUX of a sensor. It can also be used to set a brightness threshold to use as a comparison in other components to activate lights or other types of automatisms.

Examples:

- It is possible to use the changeable value to be able to set a flight for example for the volume of a multimedia support such as radio or CD player.
- Set the brightness to a dimmable light.

Properties:

Data type： the type of data that you use to control (Temperature, Power, Airflow etc.).

Min (value): Minimum value from 0 to 100;

Max (value): Maximum value from 0 to 100;

Step (number): step value from the previous and the following change;

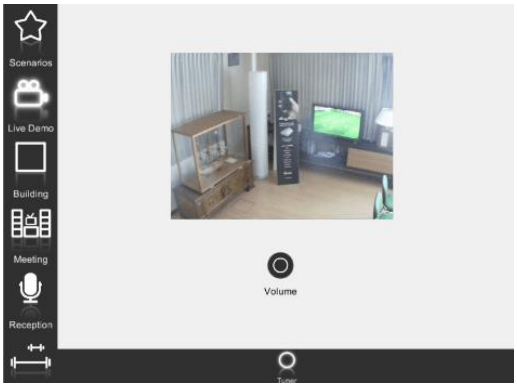
Digits (number): digits after the comma;

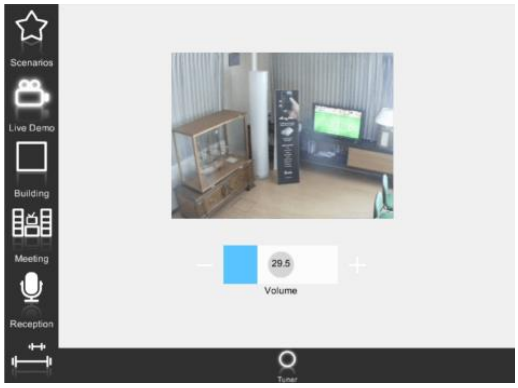
Suffix： (symbol): %

No label (checkbox): it allows to hide the component's label on the interface visual result;

View mode:

1. Map view mode

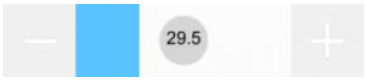




This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

Volume, Thresholds, etc. ⇒ Changeable Value icon

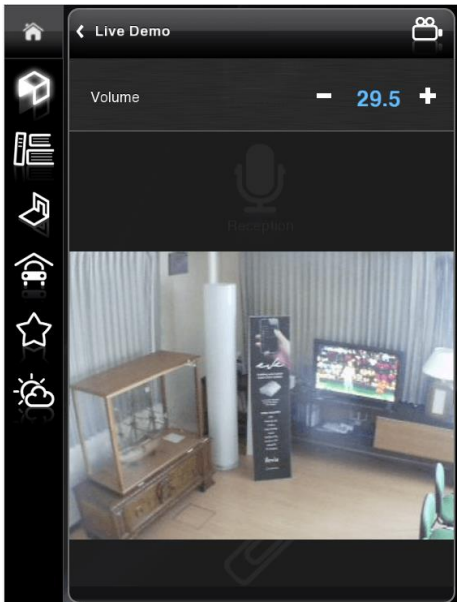
 Default icon (customizable icon).



Sliding bar (tuner mask).

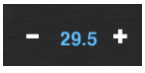
In this case, the tuner slider will never close.

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). The tuner is displayed with the following icon：

Volume, Thresholds, etc. ⇒ Tuner mask



Step command (value changeable).

5.2.12 Set Point

This component allows you to change a set-point of a thermostat.

Examples: You can use the set point to control a thermostat for example.

Properties:

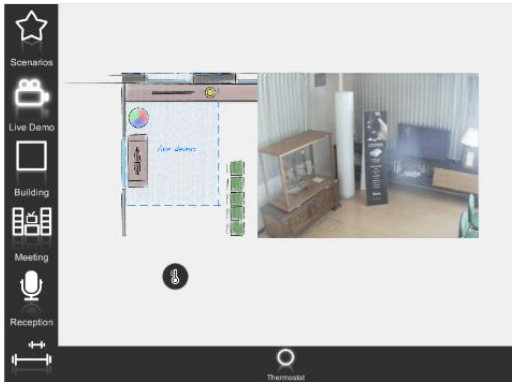
Min (value): Minimum value;

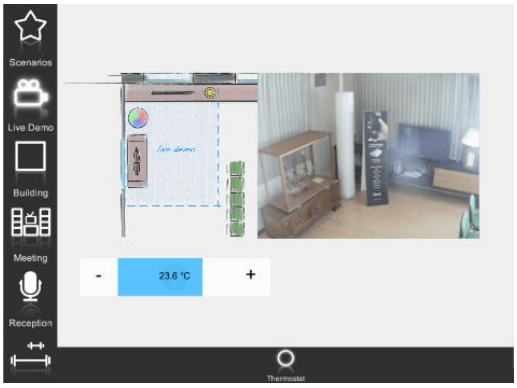
Max (value): Maximum value;

Step (value): step value from the previous and the following change.

View mode:

1. Map view mode





This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

Heating ⇒ Thermostat icon


Default icon (customizable icon)

Sliding bar

2. Classic view mode

Here is the visual result of the component on AirHome Remote (Classic Style). The thermostat is displayed with the following icon:

Heating ⇒ Thermostat icon

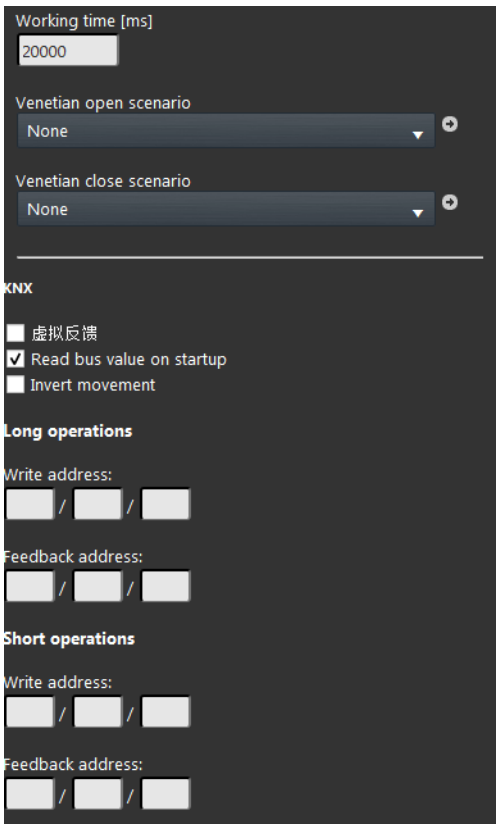
Step command

5.2.13 Shutter

This component allows you to control shutter actuators.

Examples:

- This component allows you to open close and set the rotation of the blinds with only a click.



Properties:

Working time [ms] (number): the time for opening/closing the curtain (milliseconds);

Venetian open/close scenario (dropdown): allows the venetian to rotate adding two scenarios components into the drop-down menu;

KNX Protocol:

Long operation (KNX address): keeping the key pressed for X seconds allows the Venetian blind to be opened or closed completely automatically;

Short operation：(KNX address) by pressing the key quickly (click), will open or close the venetian blind to a defined status to what has been defined inside ETS (for example a few centimeters);

Ghost Protocol：

Down/Close (dropdown): using the Switch allows you to control the venetian down/close movement;

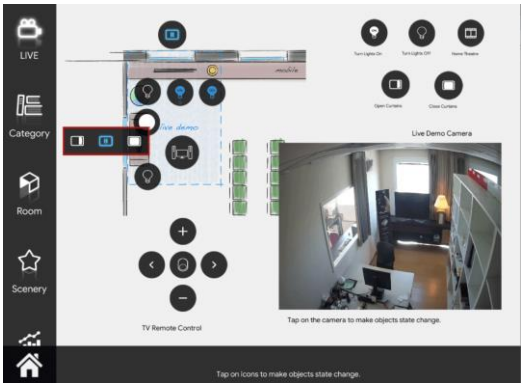
Stop (dropdown): by using a Switch it is possible to interrupt the movement of the venetian blind;

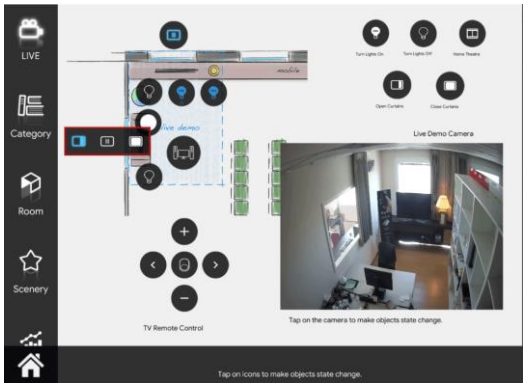
Up/Open (dropdown): using the Switch allows to control the Venetian descent/closing movement;

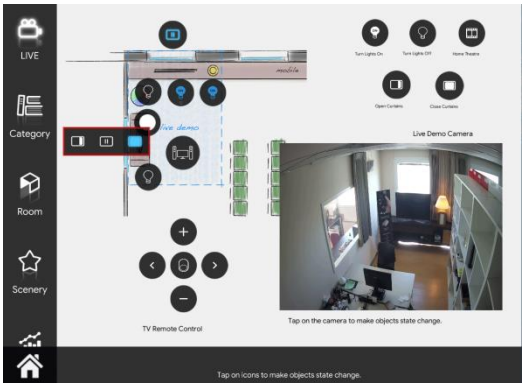
Percentage: (dropdown) via Slider component it's possible to control the Venetian blind, for example setting it to 50% the Venetian blind will be half open;

View mode:

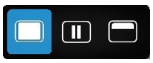
1. Map view mode



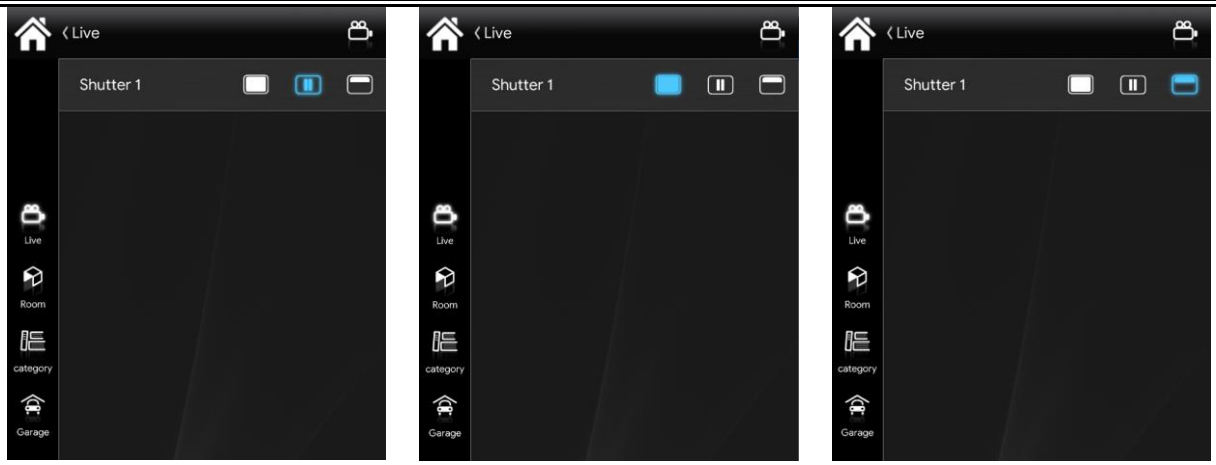




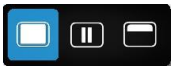
This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension.In this case, we can see the default icon layout:

 Stop button  Open button  Close button

2. Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). The shutter is displayed with the following icons:

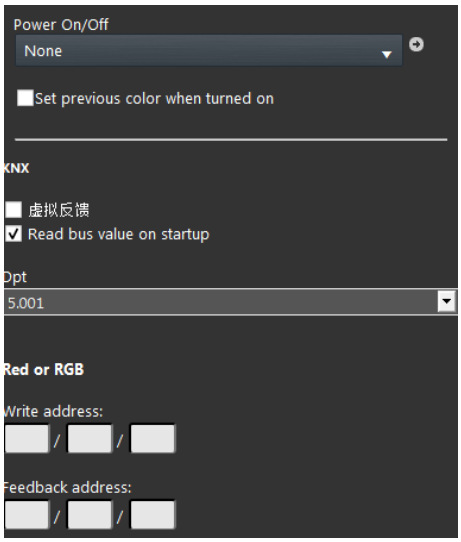
 Stop button  Open button  Close button

5.2.14 RGB Light

 This component represents RGB light color, it allows you to control any kind of RGB light.

Examples:

- With this component, you can control RGB lights with several protocols, for example you can use it to control a KNX RGB light.



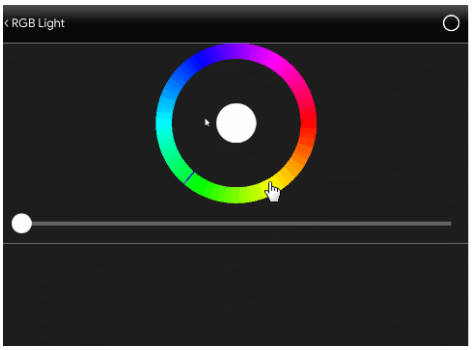
Properties:

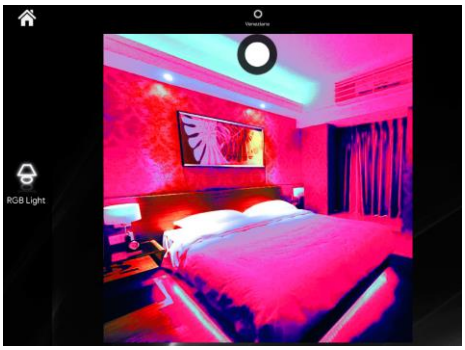
Power On/Off: Switch component to switch on and off the RGB light;

Red/Green/Blue or RGB: Put the KNX address and set the red/green/blue or other RGB colors.

View mode:

1. Map view mode





This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, press the  icon, then it will turn to the color setting window. We can see the default icon layout:

RGB Light⇒RGB Light Icon

 Light off = empty light

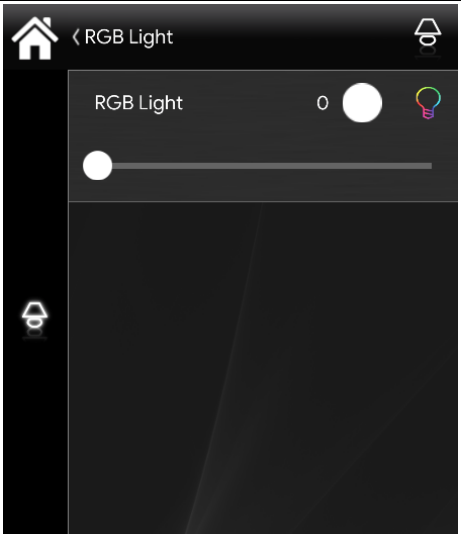
Light on= full light

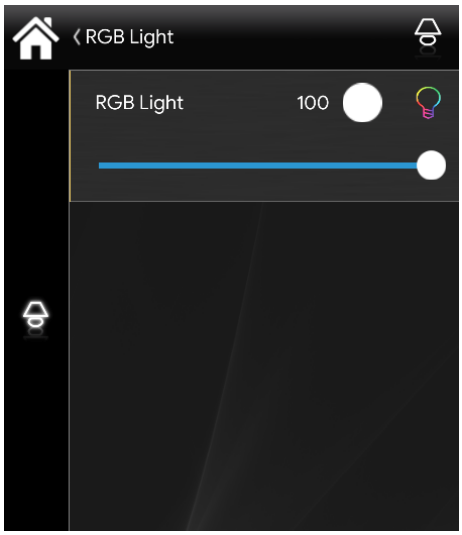
RGB Light □ RGB Icon

 Luminosity

 Color

2. Classic view mode





Here is the visual result of the component on AirHome Remote (Classic Style). RGB Light is displayed with the following icon:

RGB Light ⇒RGB Icon

 Light off = empty light

 Light on= full light

RGB Light □ RGB Icon

 Color

 Luminosity

5.3 Energy

5.3.1 Power Meter

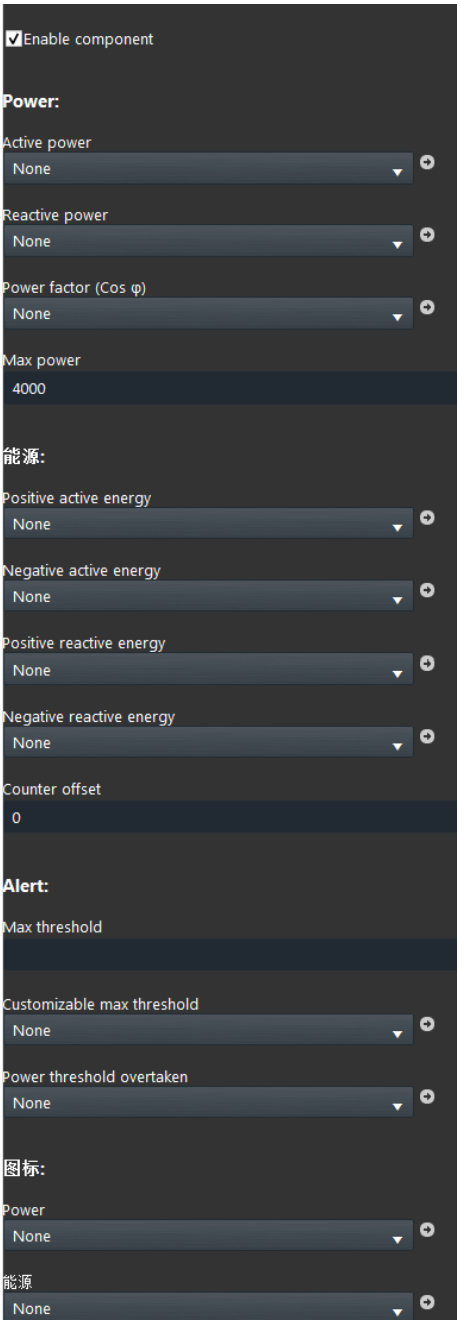
This component is necessary for the configuration of the Load control plugin module. However, you can use it to keep under control power consumption/power reduction and energy and set an alert when the power threshold is overtaken.

Note: This component is necessary during the configuration of the Load control plugin module.

Examples:

- You can use this component to monitor the energy production of your solar panels and in the same way the energy consumption.

Properties:



Power: (the info added in user interface for users to read power data)

Active power: info component referring to the active power of the used device;

Reactive power: info component referring to the reactive power of the used device;

Power factor (cosφ): info component referring to the power factor of the used device;

Max power: this value is measured in Watt and it sets the max power consumption.

Energy: (the info added in user interface for users to read power data)

Positive active energy: info component referring to the positive active energy of the used device;

Negative active energy: info component referring to the negative active energy of the used device;

Positive reactive energy: info component referring to the positive reactive energy of the used device;

Negative reactive energy: info component referring to the positive reactive energy of the used device;

Counter offset: this text field is typically used as a counter for the energy consumption or it can be used, in case of a physical broken device, as a placeholder so you can set the last valid gathered data;

Alert: (this color info/text info can be added to the user interface to let users know the level has been reached)

Max threshold: power threshold beyond which the alarm is sent;

Customizable max threshold: changeable value component that allows customizing the threshold value; this tuner can be added to the user interface to let users customize the max power threshold.

Power threshold overtaken: Color info / Text info components which alert you about the reached level. It could also be chosen as a Switch component to trigger a different alarm such as sending an email;

Charts:

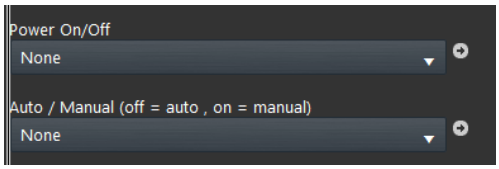
Power: this component allows you to create power graphs using gathered information and display in the user interface;

Energy: this component allows you to create energy graphs using gathered information and display in the user interface.

5.3.2 Load

This component is necessary for the configuration of the Load control plugin module. Use this component to define each new load, setting power on / off and auto / manual buttons.

Properties:



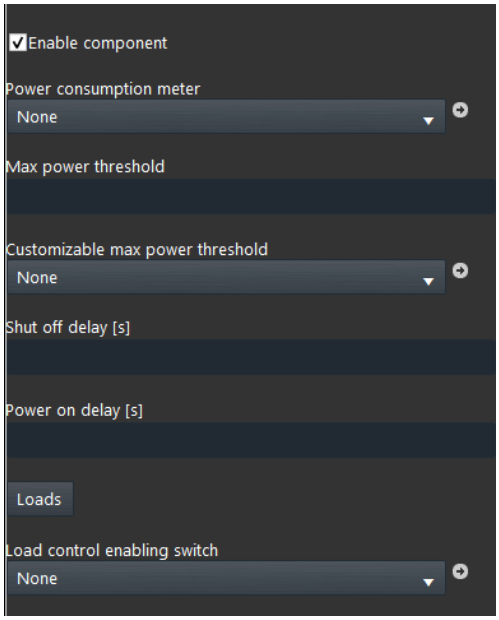
Power On / Off: Switch component that powers On or shuts Off the load;

Auto / Manual: Switch component that defines whether the load is set on "Auto" or "Manual" mode.

This component's sample is made by using Graphic UI gateway, refer to "Gateways / Protocols" guide to get further info. Both these switches can be added to the user interface to let users interact with the load's settings.

5.3.3 Load Control

This component allows you to supervise the energy consumption of the system and schedule the shutdown of several loads when reaching a defined threshold.



Enable component: check box which defines whether the function is enabled or disabled on the system;

Power consumption meter: Power meter component in charge of power consumption metering;

Max power threshold: threshold [Watt] beyond which the first load is powered off;

Customizable max power threshold: Changeable value component that allows to customize the threshold value; this Changeable value can be added to the user interface to let users customize the max power threshold.

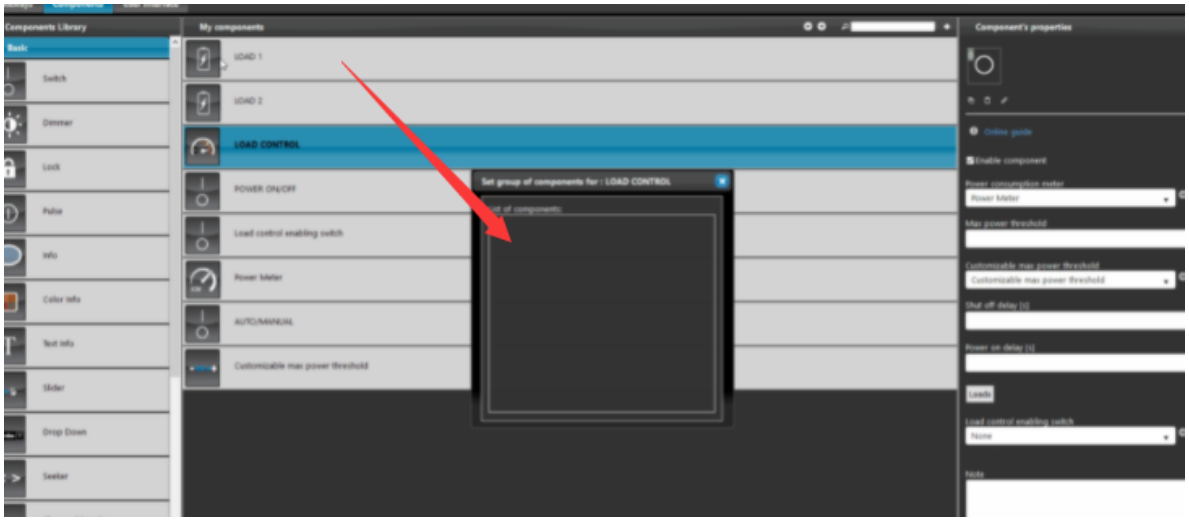
Shut off delay [s]: delay between shutdown of a load &another [seconds];

Power on delay [s]: delay between the power on of a load and another [seconds];

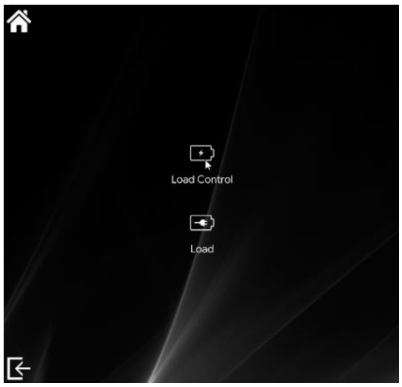
Load: in this list you will have to import the Loads components to turn OFF when the threshold will be overtaken;

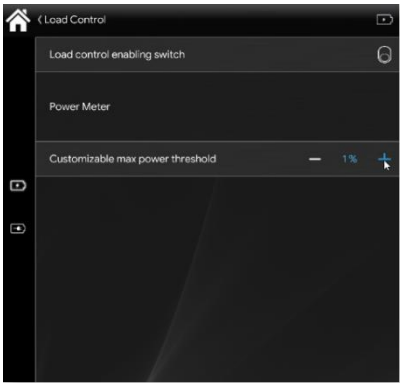
This component's sample is made by using Graphic UI gateway, refer to "Gateways / Protocols" guide to get further info.

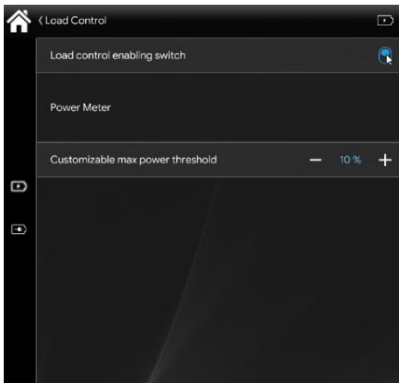
Click "Load" in property list and a window of the component will pop out, drag and drop the component to the pop out window.



Loads priority: the order of this list defines the shutdown priority of the loads (priority from top to the bottom) and the activation priority of the loads from the bottom to the top.







Customizable max power threshold: Changeable value component that allows to customize the threshold value;

Load control enabling switch: Switch component that defines if the function is enabled or disabled;

Click  to enable/disable function.

Reminder before continuing:

Remember to install or update the EVE Logic plugin to use this component;

After loading the .eve project on the server, wait a couple of minutes to perform functional tests.

5.4 Heating/Cooling

5.4.1 Timed Thermostat

This component allows the user to schedule the temperature of a thermostat.

Example:

- The user can control the thermostat and make any sort of timed configuration to suite its schedule.

Properties:

Min： Minimum value. Options: 0-100

Max： Maximum value. Options: 0-100

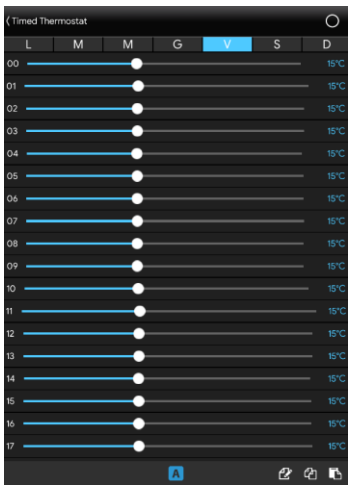
Step： step value from the previous and the following change;

Setpoint： Drop-down menu settings, activate switch temperature.

Auto/Manual switch： Drop-down menu settings. Use a “Switch” component to set the thermostat to auto mode or manual mode.

View mode:

1. Map view mode



This is just one of the visual result possibilities of the component on the AirHome Remote. Icons can be customized depending on your necessities. In this case, we can see the default icon layout:


Copy setting

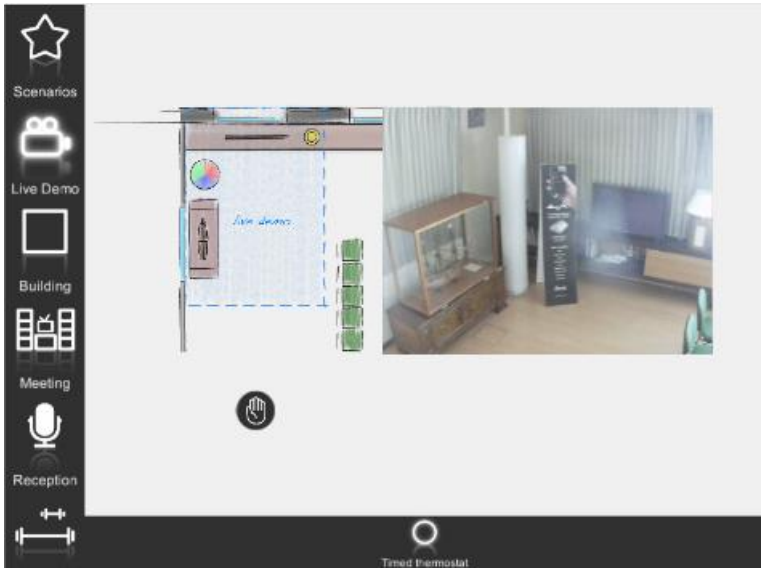

Paste setting

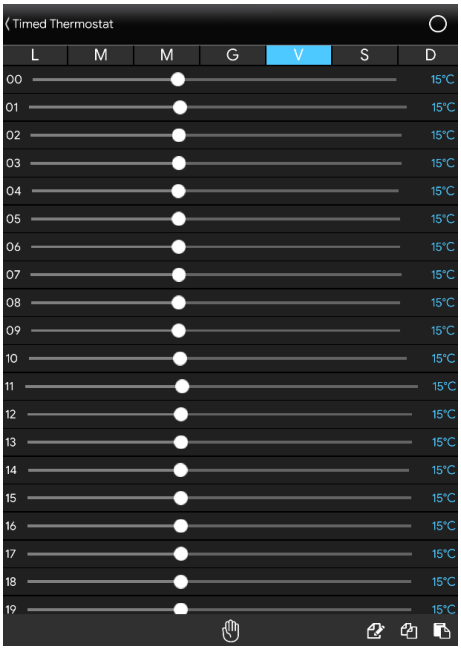

Edit setting

Sliding bar from 5°C to 30°C (timed thermostat icon).

1). Timed thermostat under manual mode

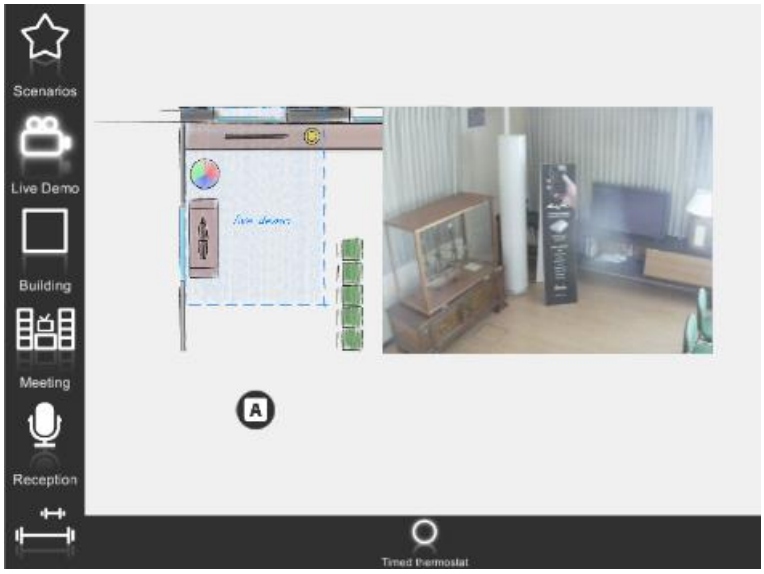

Default icon (customizable icon)

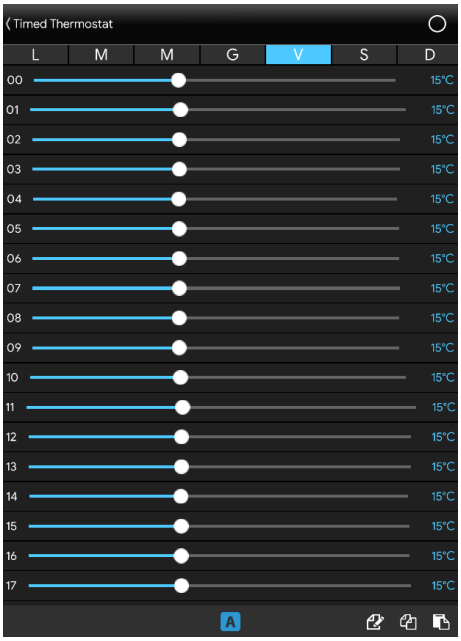




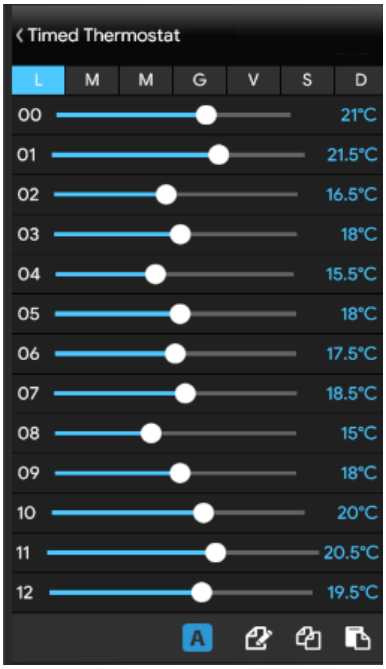
2). Timed thermostat under automatic mode


Default icon (customizable icon)





2. Classic view mode



Here is the visual result of the component on Airhome Remote (Classic Style).The timed thermostat is displayed with the following icons:

Timed thermostat ⇒ Timed thermostat icon

Day selection (Mon, Tue, Wed, Thu, Fri, Sat, Sun);

Sliding bar from 5°C to 30°C (timed thermostat icon).

Temperature is set through a sliding bar which lights up along the way;

 Manual mode;

 Auto Mode;

PRACTICAL GUIDE FOR THE TIMED THERMOSTAT CONFIGURATION

The main benefit obtainable in the use of one or more timed thermostat in your home is the ability to adjust the temperature according to schedules set by us, with the aim of using the heating only in times of real and effective need. **Using the Airhome Remote Pro App** it will be possible to enable the heating automatically as of the time bands chosen by us or simply to control them manually.

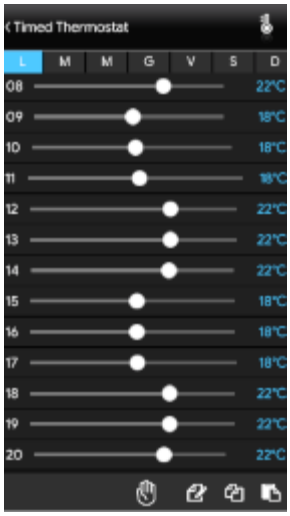
The use of multiple timed thermostats in a home allows you to keep the sleeping area cooler, for example, during the day and to heat it only from the evening hours. The discrimination between zones and different time slots ensures significant **energy savings**.

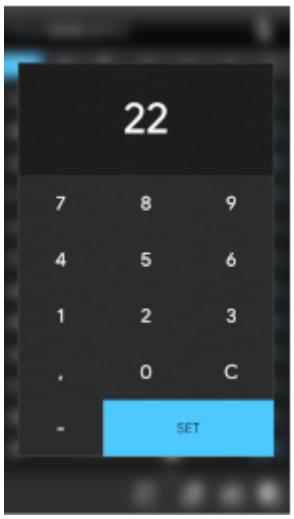
How to configure a timed thermostat:

1. **The timed thermostat** has two icons, pressing the **thermometer**  icon will enter the programming mode that we will see in the next steps and the icon of a **hand**  , which means that the timed thermostat is currently set to manual mode and therefore not will take into account the programming we have made. If you press the hand icon, this will change to  that will instead activate the weekly schedule we have made.

2. The thermostat controls the temperature using the – and + commands.

To enter the programming mode of our **timed thermostat**, press the **thermometer** icon once. The screen that appears contains the **7 days** of the week and the **24 hours** of the day. With the horizontal cursors it will be possible to **increase** or **decrease** the temperature of a specific time, instead keeping the ball of our cursor pressed you can set the value using the virtual keypad. For example, in this image we have set a typical working day schedule by increasing the temperature only when the person is at home.





The icons at the bottom right represent respectively:

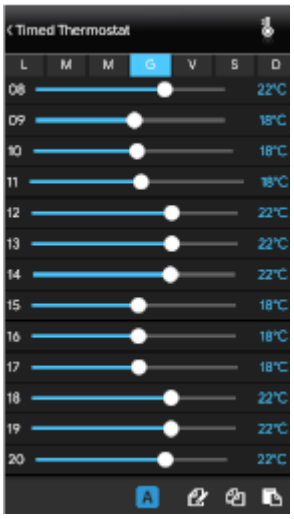
Copy/Paste values of the day.

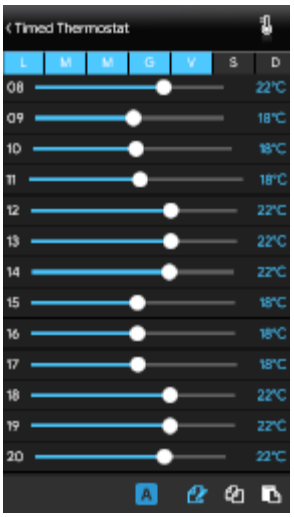
Copy timed thermostat values

Paste values to another timed thermostat.

To copy the values of a day we press the copy icon of the day that we want to use as a reference and **select the relevant days of the week** by pressing the day button, for example, **Thursday** G on which to copy this value.

Once pressed again  , the days will be copied as the day of reference initially selected by us.





In the case of several programmable timed thermostats, it will be possible to copy the values of the timed thermostat 1 and paste them on the timed thermostats 2,3,4 etc. To perform this operation, simply press the icon  on the timed thermostat with the original values, move to the desired timed thermostat and paste the values by pressing the icon  .

5.4.2 Clima

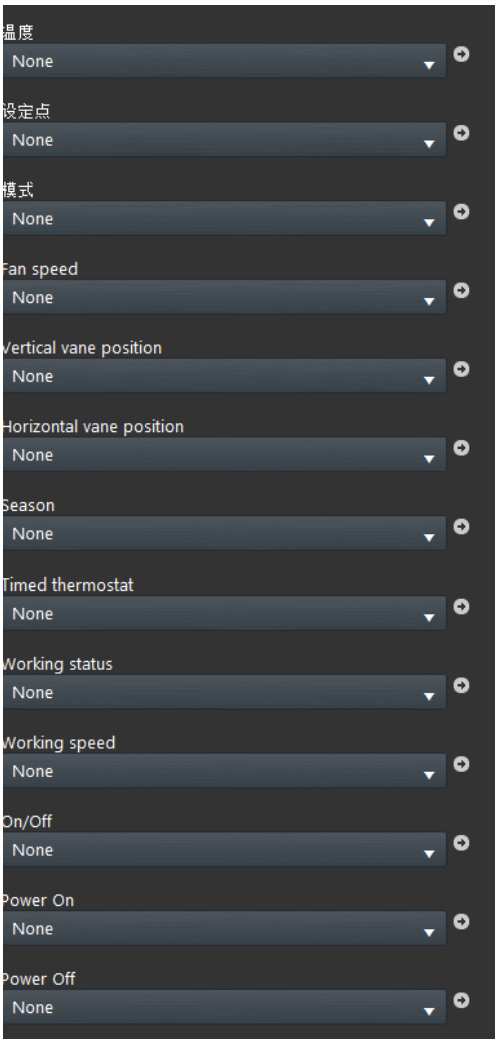
 Clima is the widget that allows to gather all the functions of your thermostat and control them all in one place. Temperature, thermostat's power on / off, thermostat's modes, fan speed and season are managed in the same user interface.

Example:

- The user can control its thermostats around your home. Allows you to control your heating devices from anywhere.

This component's sample is made by using Graphic UI gateway.

Properties:



Temperature: Info that displays the current temperature;

Setpoint: Set point which allows to raise and lower the temperature;

Mode: Drop Down that let you choose the thermostat's mode according to the device's settings;

Fan speed: Drop Down that let you choose the speed of the fan according to the device's settings;

Vertical vane position: Drop Down that let you choose the direction of the vertical vanes (if the device supports it);

Horizontal vane position: Drop Down that let you choose the direction of the horizontal vanes (if the device supports it);

Season: Drop Down that let you choose the season according to the device settings;

Timed thermostat: Timed thermostat which allows to set automatic and manual mode;

Working status: Drop Down that let you set the working status of the device.

Working speed: Drop Down that let you set the working speed of the device.

On/Off: Drop Down that let you choose to turn on/off the device (for remote controller with power on and power off buttons);

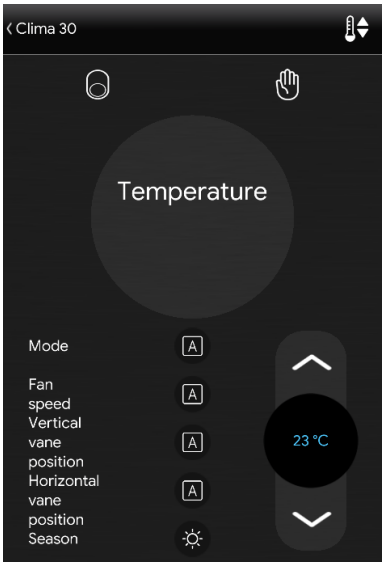
Power On: Scenario to turn on the device (KNX scenario or Ghost scenario containing a switch);

Power Off: Scenario to turn off the device (KNX scenario or Ghost scenario containing a switch);

Note: text field available for additional information on the component from the admin side.

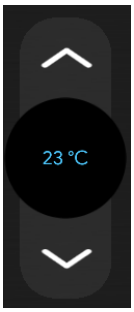
Classic view mode

This is just one of the visual result possibilities of the component on the AirHome Remote. Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:



⇒ Temperature display.

⇒ Power On / Off device scenes.



⇒ Thermostat tool to set the temperature.

Tap on the above arrow to raise the temperature, tap on the below arrow to lower it. Long press on the numerical text to enter the temperature range manually.

⇒ Power On / Off device scenes.

Tap on the icon to turns your timed thermostat settings from automatic to manual and viceversa.

Long press on the A/M (timed thermostat) icon to open the settings and schedule the temperature.

5.5 Interface design

5.5.1 Bar Graph

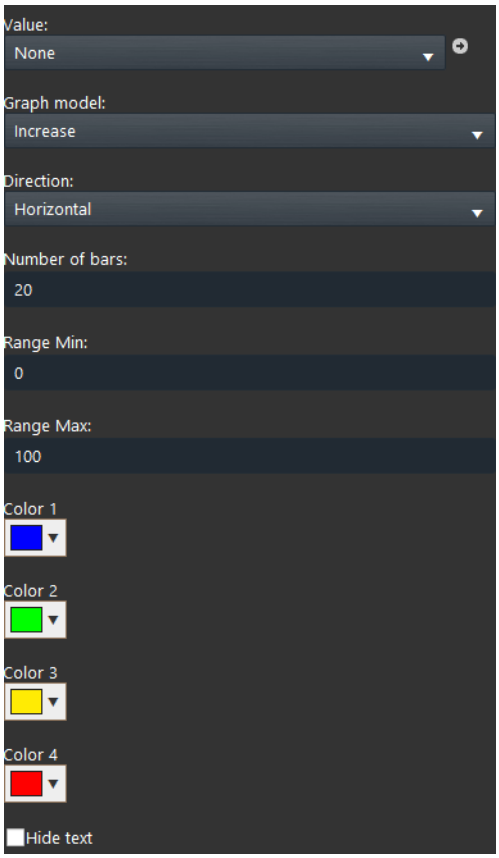
It is used to represent values using histograms or speedometer with colored bars layout. There are several layout options which define how the value should be visualized.

Example：

- You can use this component to track the current power that your solar plant is producing real time.

This component's sample is made by using Graphic UI gateway.

Properties:



Value (drop down): select the info you want to represent on the graph;

Parameters:

Graph model (drop down): choose the graph model between square, circle, increase or decrease;

Direction (drop down): choose the direction of the values when increasing on the chart;

Number of bars (number): it defines how many bars in the chart;

Range min (value): minimum value of the chart;

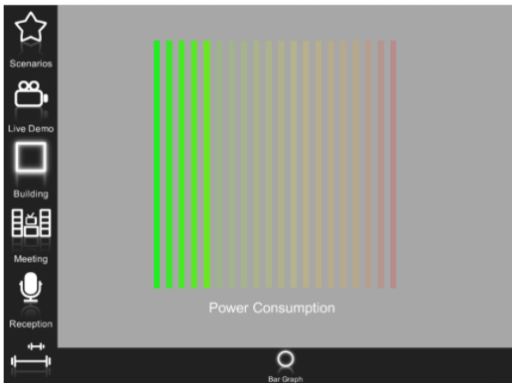
Range max (value): the maximum value of the chart;

Color (drop down): choose every single color of the graph bars (left click on the box). You can choose multiple colors to create a customized graph according to your needs;

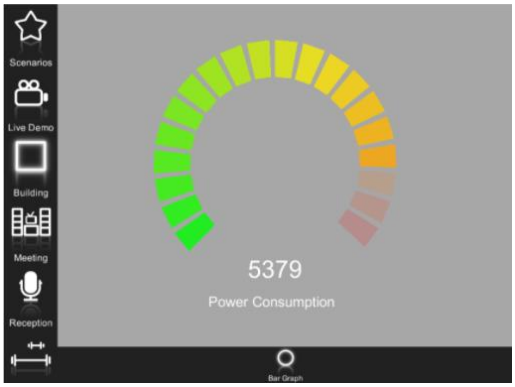
Hide text： Check box settings, after checking, hide text information in the user interface

Map view mode

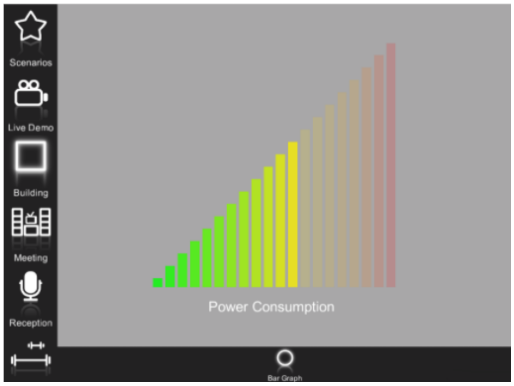
Graph model: square



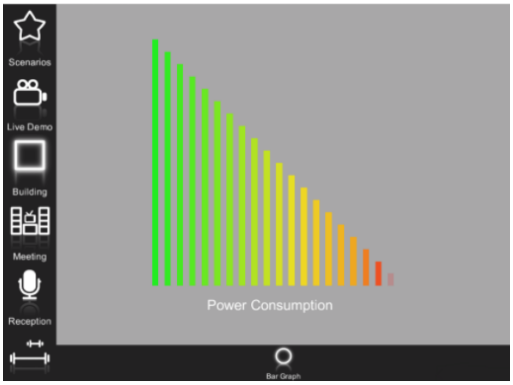
Graph model: circle



Graph model: increase



Graph model: decrease



Above are the visual results of the component on Airhome Remote (Map Style).It is possible to edit the dimensions of your Bar Graph depending on your necessities. Also, you can add as many Bar Graph as you need in the same user interface tab.

5.5.2 Go to

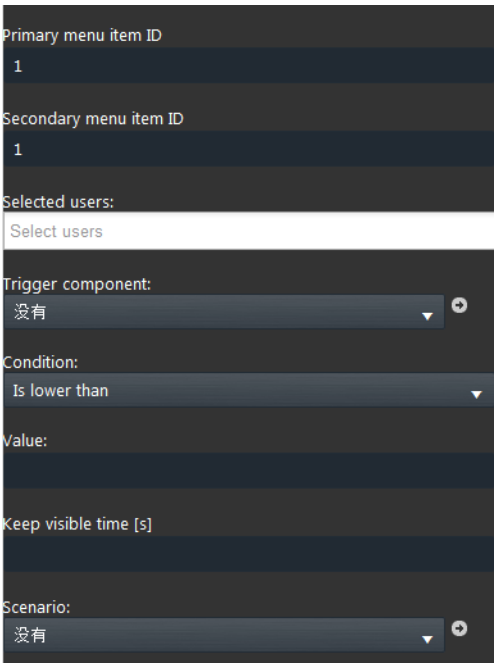
This component has been developed in order to speed up the navigation when using EVE Remote Map app. In fact, it allows you to jump from a tab to another with a simple click on the Go to icon placed where you want within the map interface.

Example:

- You can use this component to link to another page within the project to speed up the process within the project itself.

This component's sample is made by using Graphic UI gateway.

Properties:



Primary menu item ID: enter the desired coordinate of the primary menu;

Secondary menu item ID: enter the desired coordinate of the secondary menu;

Selected users: select the users that will have access to this component;

Trigger component: (dropdown) we recommend to use a "Switch" or "Dropdown" components to trigger the event and change the relative state (0/1);

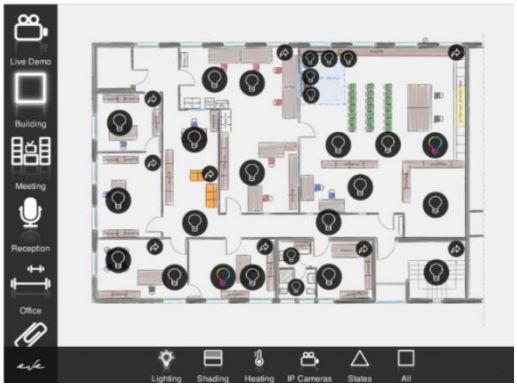
Condition: (dropdown) let you choose the condition to enable the trigger, for example: If the value (textbox below) is lower than 0 "GO TO";

Value: the value that the user can set to trigger an event;

Keep visible time [s]: how many seconds the window will remain visible;

Scenario: Drop down that let you select the scene to jump to, use the scene component

Map view mode



 and  —> Go to the icon. Tap on it to jump to the defined tab.

5.5.3 Image

 It allows you to enter an image on your EVE Remote user interface.

Example:

- You can use this component to add plans of your building to give more knowledgement about your spaces inside your Home.

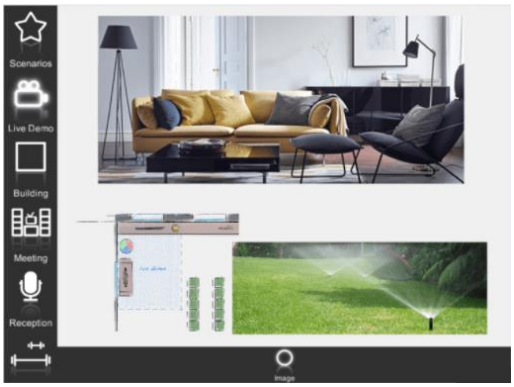
This component's sample is made by using Graphic UI gateway.

Properties:

Select image: select the file image from your pc;

Previews: a preview of the file image.

Map view mode:



Here is the visual result of the component on Airhome Remote (Map Style). With the “only image” view mode configuration you immediately see the image. It is possible to edit the dimensions and positions of your components “Image” depending on your necessities. Also, you can add as many images as you need in the same user interface tab playing with layers.Likewise, you can also add other components to the interface and bring/send them to front/back.

5.5.4 Text entry

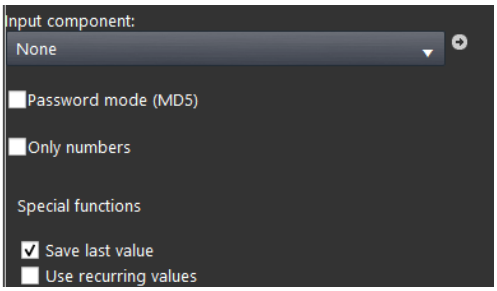
 It allows you to enter text in a Info component and to enter text for specific operations.

Example：

- The user can use this component to add a password to unlock a switch that control a load.

This component’s sample is made by using Graphic UI gateway.

Properties:



Input component:(dropdown) select the Info component to whom insert a text;

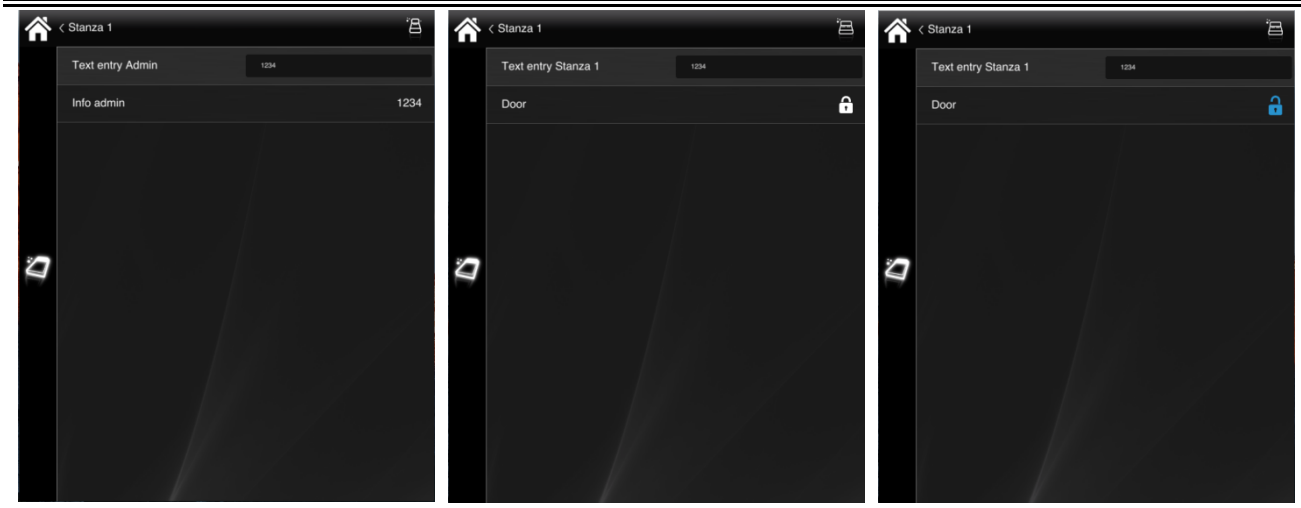
Password mode (MD5):(checkbox) The checkbox can be used to make the text entered into a password field using the MD5 cryptographic hash function;

Only numbers：(checkbox)The check box can used to set only numbers can be entered。

View mode

1. Classic view mode

This mode is demonstrated with examples, such as the setting of room password:

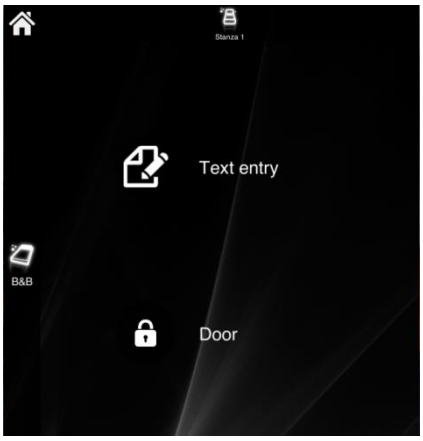


1) The manager of bed & breakfast with The user admin sets the room password in the Text entry field that will come registered in the Info component.

1) The client of the bed & breakfast with the client user for open the door have to insert the correct password in the Text entry field that will come register in another Info component.

2) If the password is correct, the door will open.

2. Map view mode



Here is the visual result of the component on Airhome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the default icon layout:

 Default icon (customizable icon)

 Empty field (Text entry icon)

5.5.5 List view

 It allows to see the components selected that have a certain value.

Example：

♦ The user can make custom lists of components to use without going out of the remote control component to turn on a light

This component's sample is made by using Graphic UI gateway.

Properties:

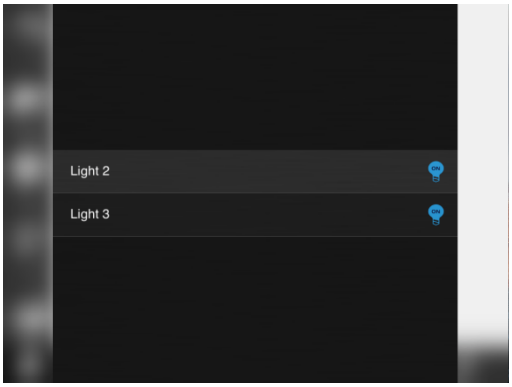
Filter value: It allows to filter components selected for a value. For example, if you want to see in the list all the selected switches that are ON, in the text field insert 1.

Components: It allows to choose the components to be added to the list. Selection is carried out by dragging components from "My components" area to the list box.

Tags： Selecting Tags。

View mode:

1. Map view mode



Here is the visual result of the component on Airhome Remote Plus (Map Style). Press the List View icon to see the components list that was selected and that it has the value set in the field "Filter value".

In this list, you can change the components value pressing on the icons.

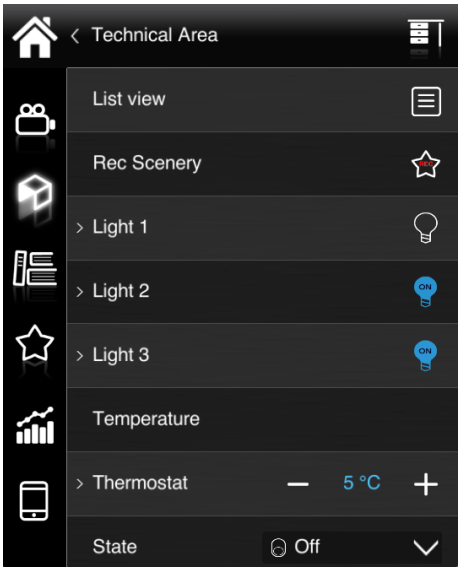
Icons can be customized depending on your necessities from symbol to color and dimension.

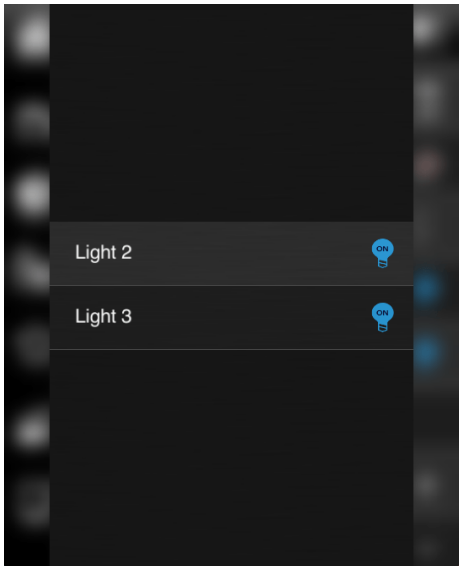
In this case, we can see the default icon layout:

List View ⇒ List View icon

 Default icon (customizable icon)

2. Classic view mode





Here is the visual result of the component on Airhome Remote Plus (Classic Style). The functionality is the same described on the Map Style section. List View is displayed with the following icons:

List View ⇒ List View mask

 Default mask (List View mask)

5.5.6 Map template

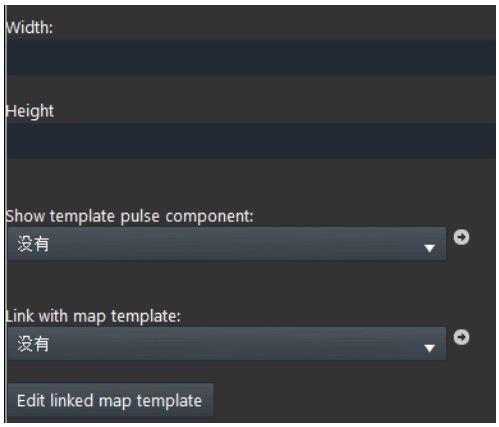
 This component allows you to build a customized map template inside the Classic user interface, wich means that you can create multiple Maps with interactible components within it. Each map template can be customized singolarly.

Example:

- The user wants to build a custom interface where to check each room by consulting a map instead of a menu.
- An owner of a B&B could use this component to check the status of each of its building rooms.

This component's sample is made by using Graphic UI gateway.

Properties:



Width: This text filed allows you to set a specific width to the map template component inside the User interface;

Hight: This text filed allows you to set a specific Hight to the map template component inside the User interface;

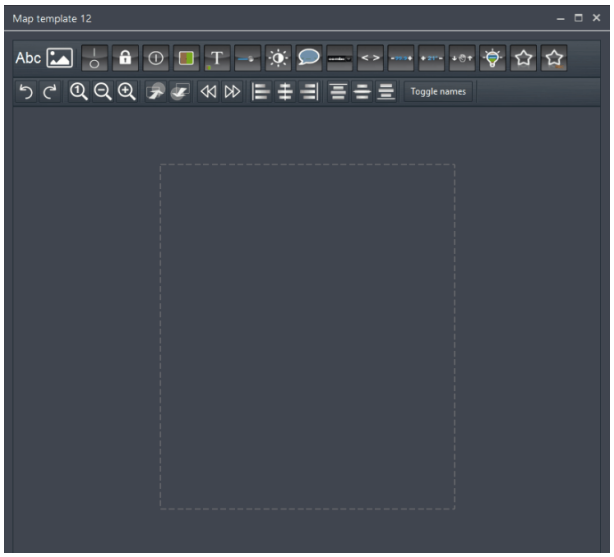
Show template pulse component: This drop down allows you to link a Pulse component in order to open the Map template inside the User interface;

Link with map template: This drop down allows you to link another Map template;

Edit Template: By clicking this button a dialog window will apear, this window allows you to build the actual map template with the components set in the project.

Template editor:

By clicking on the "**Edit template**" button inside the component's Properties you will have access to the map template edit table, here you will be able to build your custom map template with the components you have set up inside the project with their own gateways.



1. How to add a background image inside the Edit template tab?

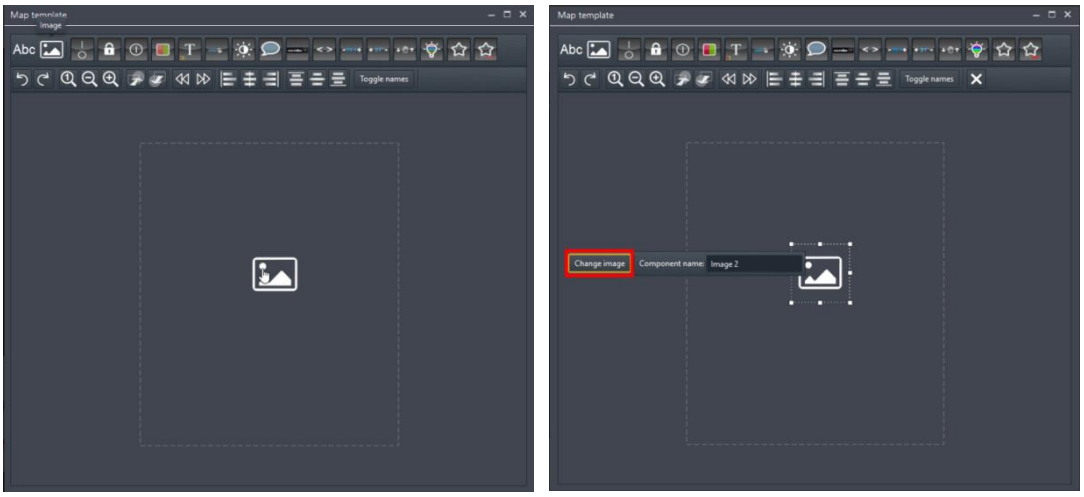
Step 1:

In order to add a background image inside the map template, you will need to get inside the edit template tab and add a image component.

Step 2:

Now in order to select the desired image, double click on the image component then click on change image and select an image.

Note: The image can be resized to your discretion, you can add more then one image component.



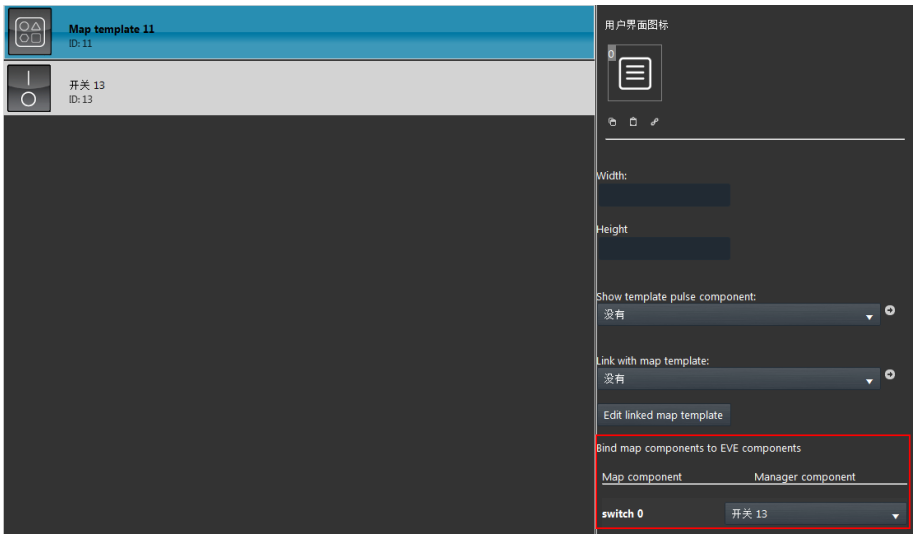
2. How to link the project's components inside the Map template component editor?

The Map template component gives you the possibility to create new components that will be linked to existing components inside the "My components" section.

To link the components inisde the Map template component you will need to:

Step 1.1: Add the specific component by dragging it from the component's menu inside the edit table of the Map template component Properties;

Step 2.1: To link the component added inside the Edit template table, enter the Map template editor, below the edit template button a new section will appear, this section allows you to link the switch inside the "**My components**" tab that we added previously.



Edit table interface's tools

Undo & Redo	This two Tools allow you to undo or Redo action inside the Edit Template Tab.
Zoom Reset, In, Out	This three Tools allow you to do zoom actions within the edit Template Tab.
To Front, Back	This two Tools allow you to move behind or move in front of the background image a specific object
Previous and Next shape	This two Tools allow you to select the part that needs to be edited
Align Left, Centre or Right	This three tools allow you to align the selected components to the closest component side of the chosen align position
Align Top, middle or Bottom	This three tools allow you to align the selected components to the closest component side of the chosen align position

5.5.7 Time Editor

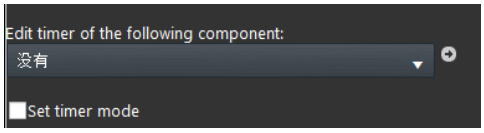
 Allows you to enter in the week timer of the selected component without having to activate timer configuration mode.

Example：

- You can use this component as a shortcut to get in the timer mode quickly. If you have to make a fast change on the schecdule of a specific component, the Timer editor will allow your to speed up the procedure.

This component's sample is made by using Graphic UI gateway.

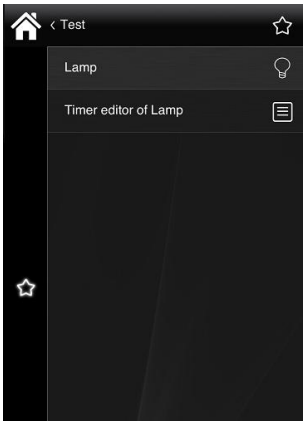
Properties:

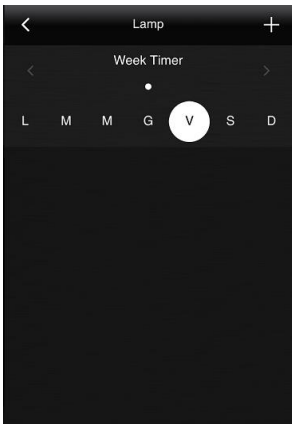


Edit timer of the following component: select the component to which you want to change the week timer.

Set timer mode： Set the timer mode.

Classic view mode





Here is the visual result of the component on Airhome Remote (Classic Style). By clicking on the icon you will directly access the editing of the week timer of the associated component in Airhome Manager.

Timer Editor ⇒ Timer Editor Icon

 Timer Editor Icon

5.5.8 Custom widget

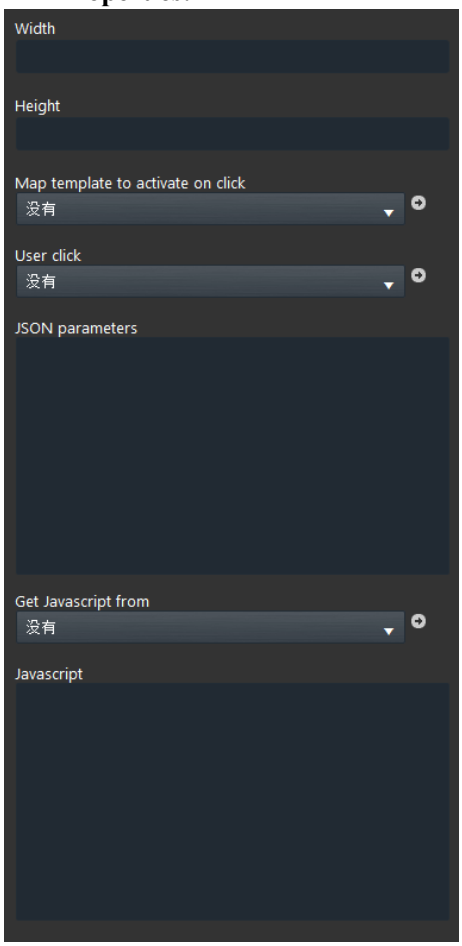
 This supports the creation of all custom widgets, tailored to display the desired information, such as temperature, status, movement, etc.

Example:

- Build a responsive room map where you can check the component status of all rooms in the house
- A B&B manager can use this widget to make a system in which all parameters of the components in a specific room can be changed and checked, for example: the temperature or state of the room, if the room is empty or occupied.

This component's sample is made by using Graphic UI gateway.

Properties:



Width: This text filed allows you to set Set the width of the SVG image in the user interface.

Height: This text filed allows you to set Set the height of the SVG image in the user interface.

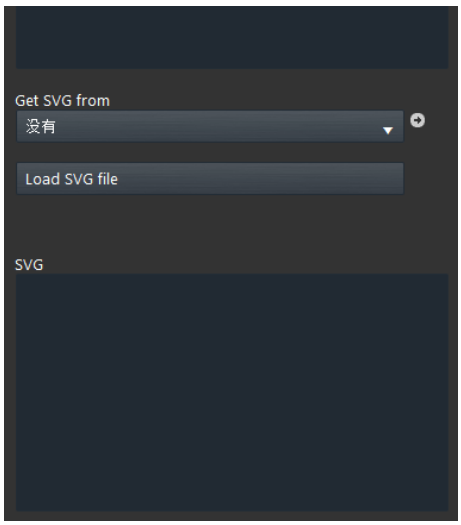
Map template to activate on click: (dropdown) supports linking existing map module components, which can be opened when you click this component in the user interface.

User click: Add components to the SVG image to open the map. When you click the SVG image, the associated components will open a map module component.

JSON parameters： Support writing custom json. For example, build a custom field in an SVG file. When the SVG is applied to the user interface, the field will be automatically updated;

Get Javascript from: (dropdown) select the source of javascript. For example, if you need to create more objects of same javascript parameters.

Javascript: Here you can import javascript that will affect the SVG file by clicking from the user interface.



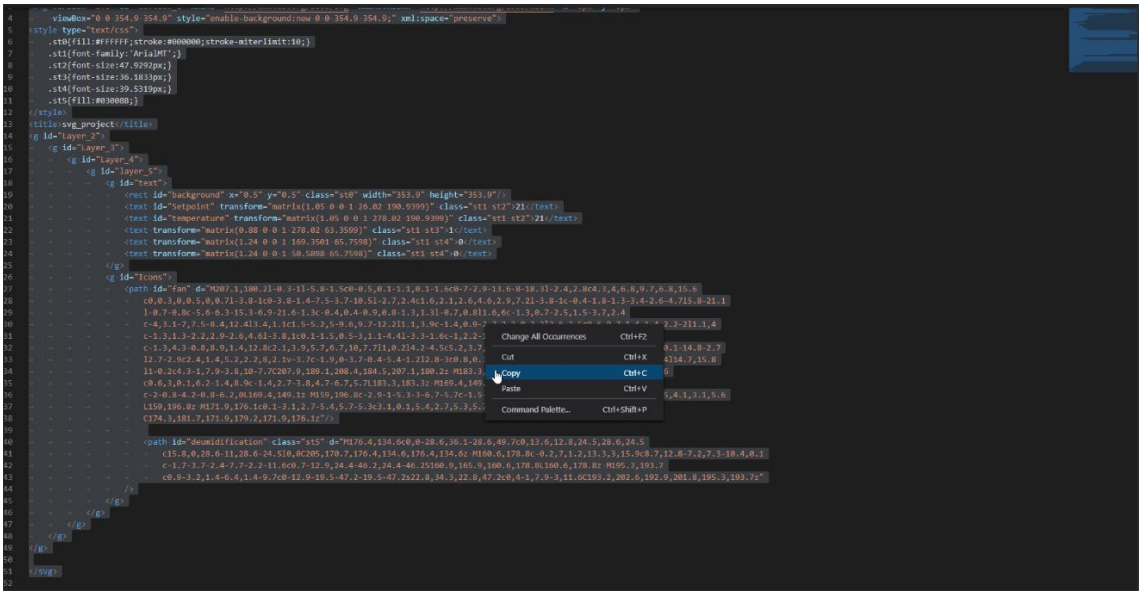
Get SVG from: (dropdown)Support linking existing SVG files from existing custom components in AirHome Manager.

Load SVG file: Import a file in .svg format.

SVG: Supports input of SVG file code, which can be obtained by opening the SVG file in any code visualization tool (such as Microsoft Visual Studio or notepad++).

Set the parameters in order, the operation to correctly display the value in the SVG file is as follows:

1. Extract the .svg file and open it in an editor (Visual Studio, notpad++, sublime), then copy the generated code and paste it into the SVG text box in the custom component in AirHome Manager.



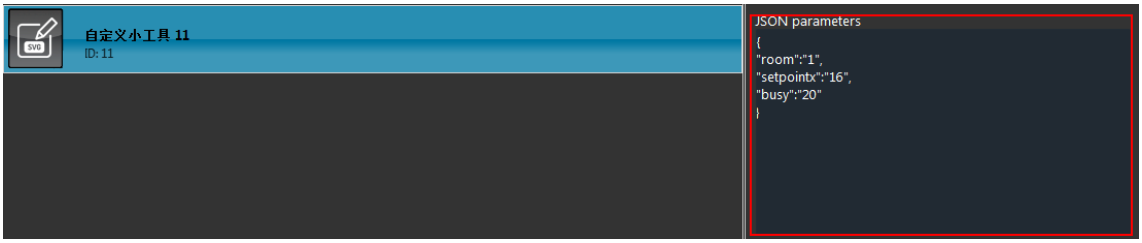
2. Set the code so that the correct value is displayed in the user interface. The code is completely user-defined.

The following is an example of creating code.

```
var Svg = importNamespace('Svg');
var Color = importNamespace('System.Drawing.Color');
var room="201";
var temp=13;
var setpoint=16;
var fan_opacity=1;
var cool_opacity=0;
var heat_opacity=0;
var deumidification_opacity=0;
var mode=17;
var background="f37421";
var busy=20;

var svg_room= svg.GetElementById("room");
var svg_room_background= svg.GetElementById("room background");
var svg_background= svg.GetElementById("background");
var svg_temperature= svg.GetElementById("temperature");
var svg_setpoint = svg.GetElementById("setpoint");

var svg_deumidification= svg.GetElementById("deumidification");
var svg_fan= svg.GetElementById("fan");
var svg_heat= svg.GetElementById("heat");
var svg_cool= svg.GetElementById("cool");


function temperature_changed()
{
var val=getValueAsInt(temp);
log ("Temperature changed to:"+val);
svg_temperature.Text = (parseInt(val*10)/10).toString()+"°";
UpdateWidget();
}


function mode_changed()
{

var val=getValueAsInt(mode);
log ("Mode changed to:"+val);
if (val==0) svg_deumidification.Visibility="Visible"; else svg_deumidification.Visibility="Hidden";
if (val==1) svg_fan.Visibility="Visible"; else svg_fan.Visibility="Hidden";
if (val==2) svg_heat.Visibility="Visible"; else svg_heat.Visibility="Hidden";
if (val==3) svg_cool.Visibility="Visible"; else svg_cool.Visibility="Hidden";

UpdateWidget();
}

function setpoint_changed()
{

var val=getValueAsDouble(setpoint);
log ("Setpoint changed to:"+val);
svg_setpoint.Text = (parseInt(val*10)/10).toString()+"°";

UpdateWidget();
}

function busy_changed()
{
var val=getValueAsBoolean(busy);
log ("Busy changed to:"+val);

if (val==true)
{
svg_background.Fill =getColor(255,243,116,33);
}
else
{
svg_background.Fill  =getColor(255,100,100,100);
}

UpdateWidget();
}

setTrigger(temp,"temperature_changed");
setTrigger(mode,"mode_changed");
setTrigger(setpoint,"setpoint_changed");
setTrigger(busy,"busy_changed");
```

Use the same JavaScript but use different json settings to customize the operation of the SVG component:

1. Create specific parameters in [JSON parameters]. After this operation, it can be applied to the custom widget components in the user interface. As shown in the example below, it can be set as a component.

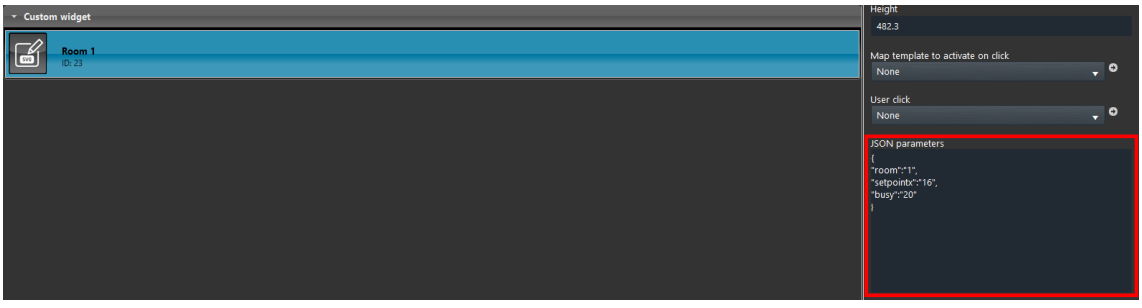


2. Device variable is based on JSON parameter device variable. These variables will get their values based on the custom widgets displayed in the user interface.

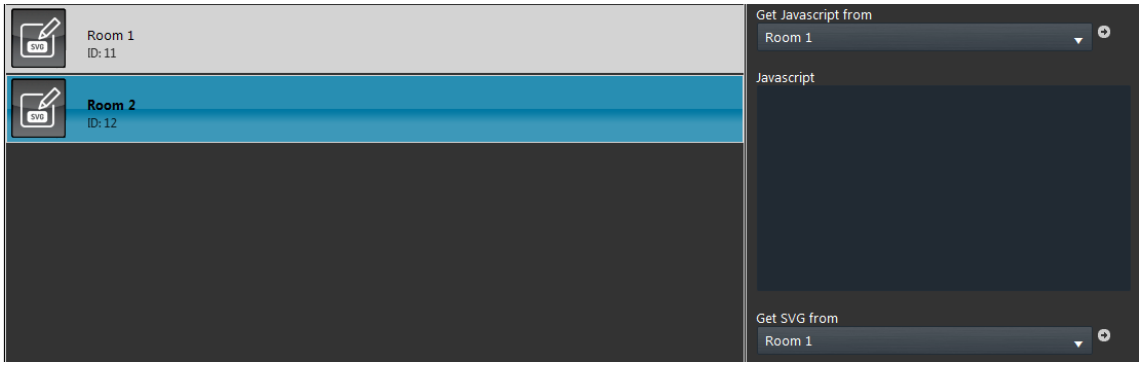
For example: variable setting: var variable name = getEMParam("JSON parameter name");

```
1  var Svg = importNamespace('Svg');
2  var Color = importNamespace('System.Drawing.Color');
3  var room=getEMParam("room");
4  var temp=13;
5  var setpoint=getEMParam("setpointx");
6  var fan_opacity=1;
7  var cool_opacity=0;
8  var heat_opacity=0;
9  var deumidification_opacity=0;
10 var mode=17;
11 var background="f37421";
12 var busy=getEMParam("busy");;
13
```

3. After creating a variable in the javascript code, you need to specify this variable in the AirHome project. Define the room number in the JSON text box, which is used to display the current room temperature setting value, and the room status.



4. If there are multiple custom components, other custom components can be linked to components that have created javascript and svg file codes. For example, the Room 2 component chooses to link to the Room 1 component.



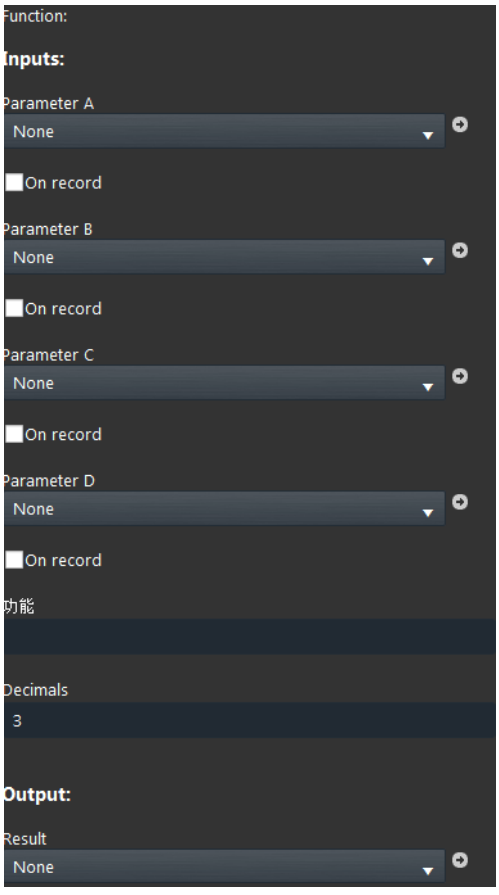
5.6 Logical operation

5.6.1 Calculator

 This component performs for your calculations on values of other parameters and then display the result directly on the user interface or use it in other components such as the component If Then. You can use up to 4 components as function variables calculated. The functions of this component are also available in Excel.

Example:

- This component can be applied to multiple outputs, you can get this outputs through Info components that register the output value and process them inside the Calculator component.



Properties:

Parameter A: Insert a component to perform a mathematical operation (Switch, Pulse, Info, Slider, Changeable value).

Parameter B: Insert a component to perform a mathematical operation (Switch, Pulse, Info, Slider, Changeable value).

Parameter C: Insert a component to perform a mathematical operation (Switch, Pulse, Info, Slider, Changeable value).

Parameter D: Insert a component to perform a mathematical operation (Switch, Pulse, Info, Slider, Changeable value).

On record: (checkbox) the value is activated at the time the parameter is registered.

Function: Enter the mathematical operation you want to do. Example: If in the parameters A and B I have inserted two Slider and I want to know the sum, in the field I enter “a+b”.

Decimals: Set the number of decimal places.

Result: Insert a component to perform a mathematical operation (Switch, Pulse, Info, Slider, Changeable value).

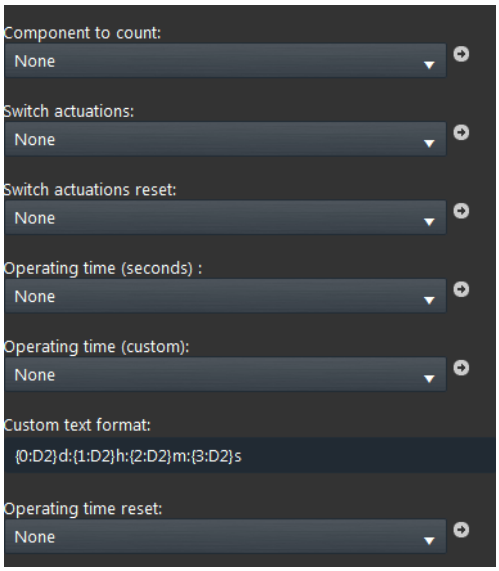
5.6.2 Counter

This component allows counting how many times a Switch component is activated and also for how much time is left activated. The counter is used to carry out assessments of preventive replacements or consumption.

Example:

- the user wants to know how many times a specific component has been activated;
- the user wants to know how long a component has been On, such as a light or an engine.

Properties:



Component to count: the component (Switch) you want to take into account.

Switch actuations: the component (Info) you want to show the counter result.

Switch actuations reset: the component (Pulse) you want for a reset command.

Operating time(seconds): the component (Info) you want to show the counter/timer result in seconds.

Operating time(custom): the component (Info) you want to show the timer result.

Custom text format: the editable text format for the counter/timer info (Days, Hours, Minutes, Seconds);

Operating time reset: the component (Pulse) you want for a reset command;

Map view mode

1. Recording Scenario:

 ⇒ Remote Scenario icon Long press on Remote Scenario icon to START recording a scenario.

As long as the recording mode is ON:

 ⇒ Remote Scenario icon turns RED;

⇒ REC alarm display.

Choose the actions you want the scenario to play (turn On/Off lights, open/close curtains, etc.)

Long press on Remote Scenario RED icon to STOP recording a scenario.

From now on when you will tap on the this Remote Scenario icon, the recorded actions will be played.

2. Change Scenario:

To change the scenario, press the Remote Scenario icon and reset any action to play to the state 0.

Stop recording the reset scenario then record again the new scenario.

3. Example of Application in TV:

Power On TV: this is the component (Switch) that we will take into account;

Counter TV: the component (Info) which displays how many time you turned On the TV;

Counter reset: the component (Pulse) which allows you to reset the Counter TV info;

Timer TV: the component (Info) which displays how long the TV has been On;

Total seconds: the component (Info) which displays how long the TV has been On (seconds);

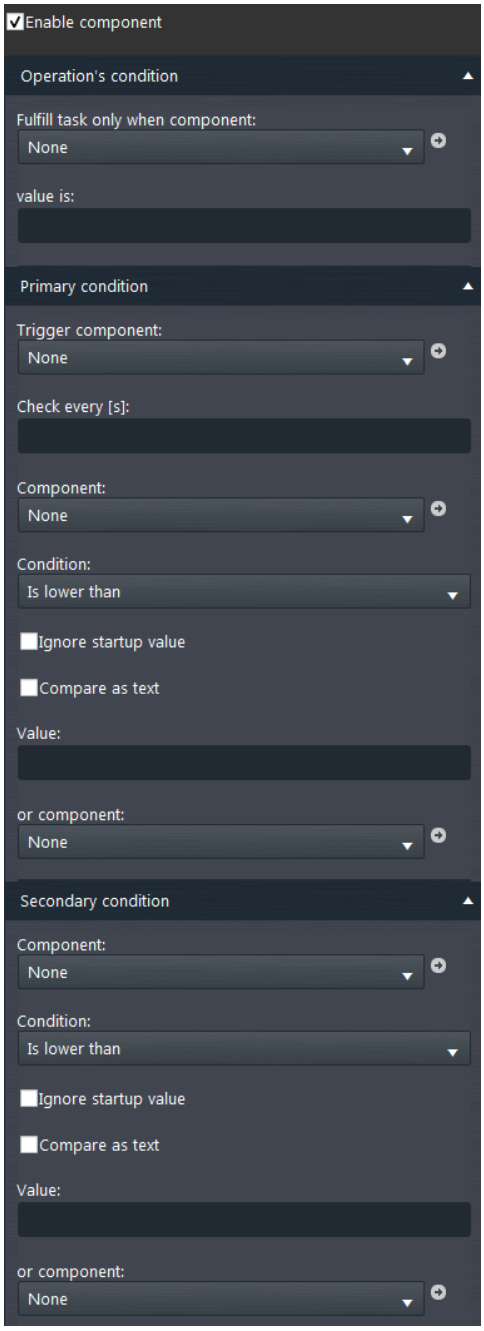
Timer reset: the component (Pulse) which allows you to reset the Timer TV info;

Text format: the editable text format for the counter/timer info (Days, Hours, Minutes, Seconds).

5.6.3 If Then

 This is a component widely used as it allows to carry out specific tasks upon the occurrence of certain conditions. If a component passes to a state or if a value of a sensor changes to be higher by a value set by the user, this can generate a specific action.

Properties:



Enable component: checkbox which defines whether the function is enabled or disabled on the system.

Operation's condition (Optional)

Fulfil task only when: a component that defines the condition under which the operation is executed;

Value is: the component's value that defines the condition under which the operation is executed.

Primary condition & Secondary condition The secondary condition is optional, it should be completed only if you want to insert two conditions because something happened.

Trigger component: component whose value defines when the operation is executed (Optional);

Check every [s]: Set check all time, unit (s).

Component: Drop Down, Info, Color info, Text info, Switch, Lock or Pulse component that defines the condition under which the logic is executed;

Condition： - is lower than: IF is evaluated only when the component's value is lower than …;

- is equal to: IF is evaluated only when the component's value is equal to …;

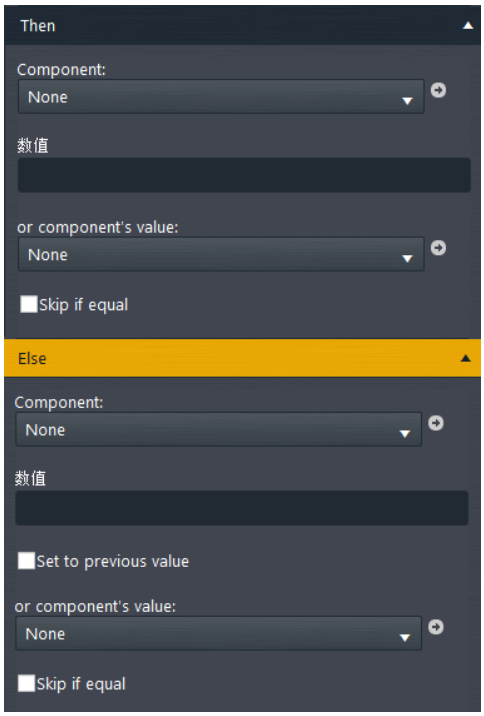
- is higher than: IF is evaluated only when the component's value is higher than …;

Ignore startup value: it allows to ignore the component's value at the system startup;

Compare as text: Compare text messages.

Value: component's value that defines when the IF condition is evaluated;

Or component: the component that defines when the IF condition is evaluated;



Then first component on which the logic acts.

Component: Drop Down, Info, Color info, Text info, Switch, Lock or Pulse component;

Value: the value to assign to the component when the logic is executed;

Or component's value: the component value to assign to the component when the logic is executed;

Skip if equal: Skip the same conditions.

Else other components on which the logic acts.

component: Drop Down, Info, Color info, Text info, Switch, Lock or Pulse component;

Value: the value to assign to the component when the logic is executed;

Set to previous value: Set to the previous value.

Or component value: the component value to assign to the component when the logic is executed;

Skip if equal: Skip the same conditions.

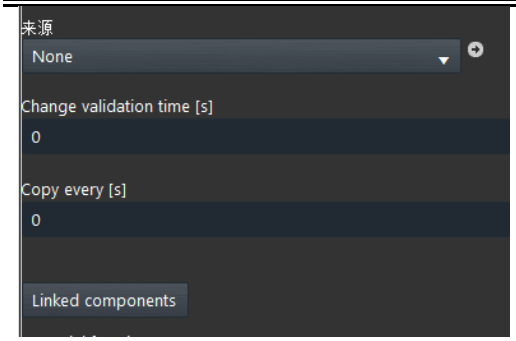
5.6.4 Linker

 This component allows copying the state of a component in other components. For example, a series of lights must be switched together but are configured with different protocols. In this way, a switch Modbus can be "copied" in a switch with another protocol (KNX, Vimar or change station of Vivaldi device).

Example:

- If the user wants to change the temperature a series of thermostat.
- The user want to switch a series of multiple load controls.

Properties:



Source: component from which to copy the value;

Change validation time [s]: waiting time (seconds) before the value is copied from the source component to the selected components;

Copy every [s]: Whenever the source component value is copied to the selected components as the destination;

Linked components: components in which to copy the value of the source component. To select the components you have to use the function drag and drop from the "My components" area to the component selection window;

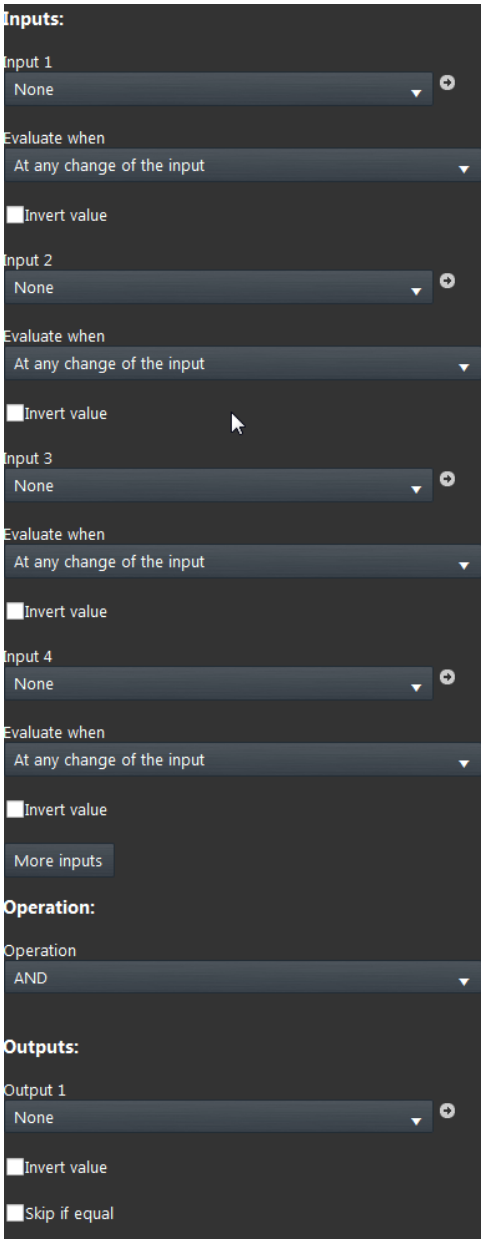
5.6.5 Logic

This component allows you to perform Boolean operations (AND / OR / XOR / NOT). This is done when the status of one of the inputs change. There is the possibility to define, for each input, whether to consider changing the ON / OFF or OFF / ON. You can define up to 4 outputs, each of which will acquire the value resulting from the operation.

Example:

- The user can use this component to calculate parameters coming from the load control and perform a result out of it.

Properties:



Inputs: components can be used as inputs of the logic.

Input: optional with Drop Down, Color Info, Text info, Switch, Lock, Pulse component;

Evaluate when:

– Input "n" changes from Off to On: operation is carried out only when the input goes to On;

– Input "n" changes from On to Off: operation is carried out only when the input goes to Off;

– At any change of the Input "n": operation is carried out anytime input goes to On and Off;

Invert value: a checkbox that allows inverting the input values into 0=On, 1=Off;

More inputs: The component's parameters area allows you to take into account up to 4 different inputs. However, you can add countless inputs to the operation. To do this just drag & drop the required inputs into the dialogue box which appears after clicking "More inputs" button.

OPERATIONS: they define the circumstance under which the logic is executed.

Operation: AND/OR/XOR/SUM/AVERAGE/MAX/MIN

Outputs: components can be used as outputs of the logic.

Output: Drop Down, Color Info, Text info, Switch, Lock, Pulse component;

Invert value: a checkbox that allows inverting the output values into 0=On, 1=Off.

Skip if equal: Skip the same conditions.

Active inputs counter: Info component that shows the number of inputs at On.

5.6.6 Signal

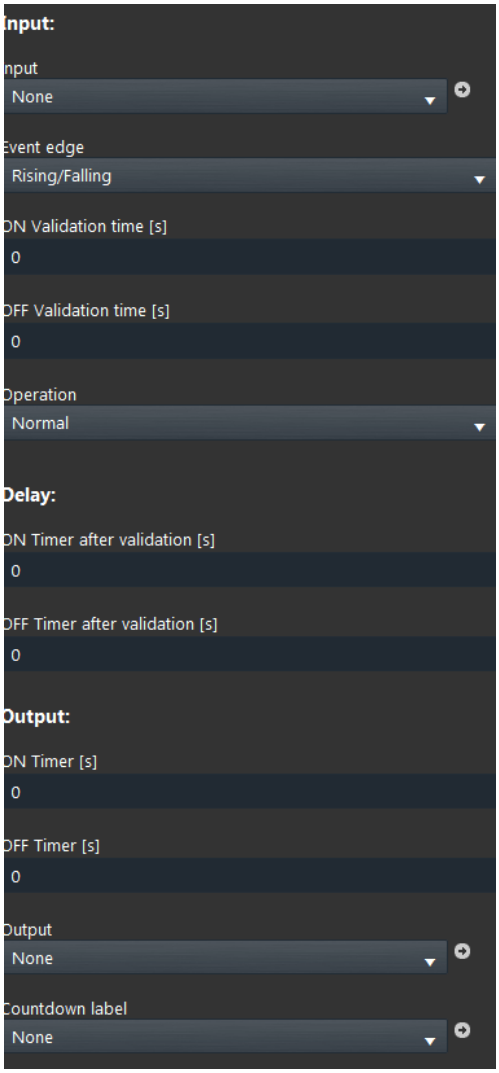
 This component is an operator which allows processing the single signal to add delays or activate functions after verifying the stability of the same signal for a certain time. It gives the possibility to manage

operations that can be performed even with scenarios. However, it is more convenient to control events in detail, distinguishing the ON/OFF timing.

Example:

- The user want to turn on a light when a movement sensor trigger.

Properties:



Input:

Input: Select the Input switch component.

Event edge: Select whether the event is rising, falling, or both.

ON Validation time (seconds): Enter the time that must elapse so that the ON value of the input component both valid.

OFF Validation time (seconds): Enter the time that must elapse so that the OFF value of the input component both valid.

Operation: Select if the operation is carried out normally or if it is reversed.

Delay：

ON Time after validation [s]: Enter the time that elapses after that the ON value of the input component has been validated.

OFF Time after validation [s]: Enter the time that elapses after that the OFF value of the input component has been validated.

Output：

ON Timer [s]: Enter how long the output component will have the ON value.

OFF Timer [s]: Enter how long the output component will have the OFF value.

Output: Select the Output switch component.

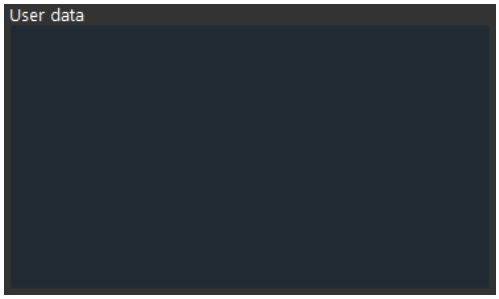
Countdown label： Countdown sign.

5.6.7 Script

JavaScript is a powerful scripting language that allows with few lines of code to implement simple to complex logic on EVE Manager and will give you the possibility to make your own script.

Example:

- The user wants to create an additional rule customized on his necesities;
- The user wants to customize a rgb light to make it into a loop.
- The user wants to create a script that control a VMC device and record the max temperature and the date when the max temperature is reached. Click the link to fin out more about this script.



Properties:

User data(text-box): This simple window is the core of the script, here you can write your own code following simple rules like:

getValueAsString(ID): this method will get the value of the component using the ID that you can find on EVE Manager as a String (“this is a string”.);

getValueAsInt(ID): this method will get the value of the component using the ID that you can find on EVE Manager as an Integer (1,2,3,4,5 etc.);

getValueAsDouble(ID): this method will get the value of the component using the ID that you can find on EVE Manager as a Float (1,5 2,4 3,7 ecc.);

getValueAsBoolean(ID): this method will get the value of the component as a boolean that represents one of two value: true or false you can find the ID of the component on EVE Manager;

setValue(ID,ValueoftheComponent): this method will let you set the value (for example a Switch that have 0/1 values) of your desired component;

setTrigger(ID，function): this method triggers the specified event and the default behavior of an event, it’s really important to remember that the setTrigger will not work without a component ID and a”function”;

removeTrigger(ID): this method will let you remove the specified trigger set for the specific component ID.

setInterval(seconds，function): this method will continue calling the function every X seconds set by the user.

removeInterval(function): this method will let you remove the specified function that you previously used

inside the setInterval. object can be used to request data from a web server.

setTriggerEdge(function,” value change from state”,” function”): This method will trigger the function only when the status changes to on.

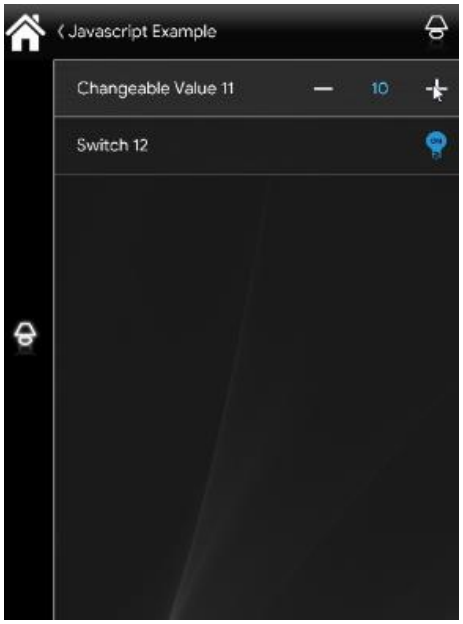
Log: allows the user to keep tracking of what is happening inside the script. This functionality’s not still present and it will be available on the next release of the EVE Manager.

HTTPRequest: this method can be used to request data from a web server. An example can be: var x =HTTPRequest(“URL”);

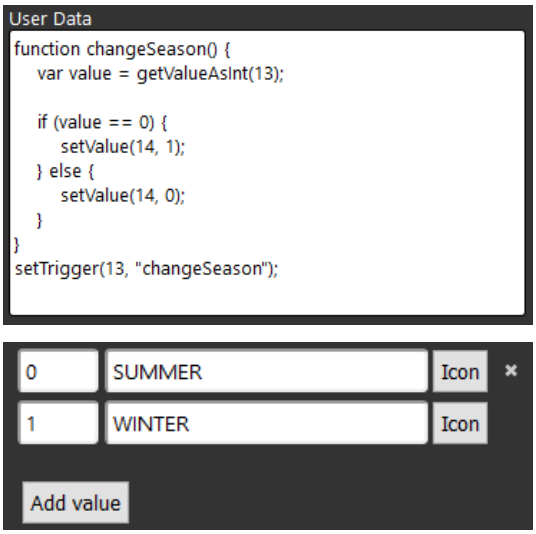
If…Else Statement

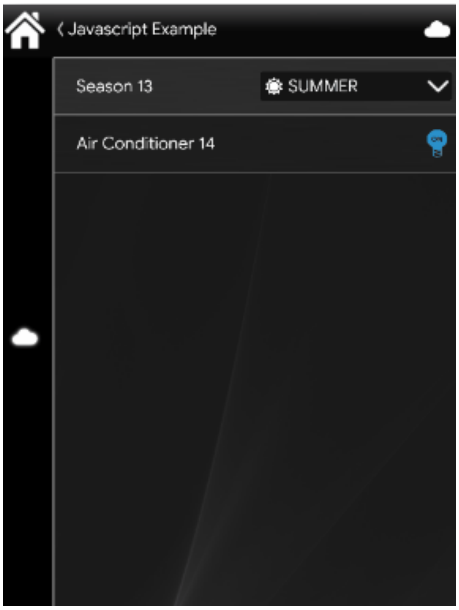
User Data

```
function changeWhenReached() {

    var value = getValueAsInt(11);

    if (value >= 10) {
        setValue(12, 1);
    } else {
        setValue(12, 0);
    }
}
setTrigger(11, "changeWhenReached");
```



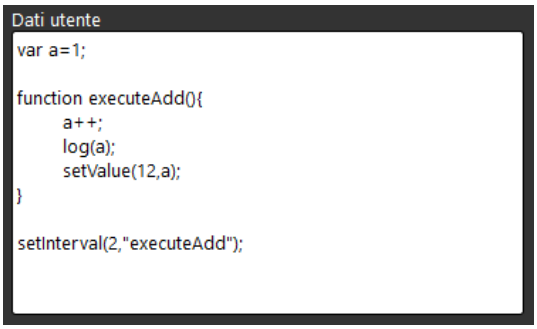
In this example we are using a Switch with the ID “12” and a “Changeable Value” with the ID “14”. Using an if statement we will able to tell to EVE Manager to enable the Switch when the Changeable Value reaches the number 10 or higher. A perfect use for this script is when you need something to happen when a certain value is reached.

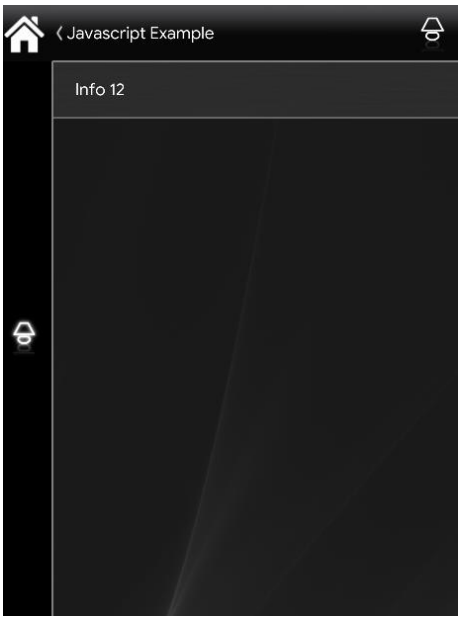




In this example we are using an Info component with the ID "12". Using a function we will able to increase the Info value by 1 every 2 seconds. In this case to call the function we have to put it inside the method set Interval(2," execute Add "); as you can see the first argument inside the parenthesis is for how long in seconds we should increment by 1 (++) the value of the variable a, in the second argument we simply call the function.

Javascript functions:



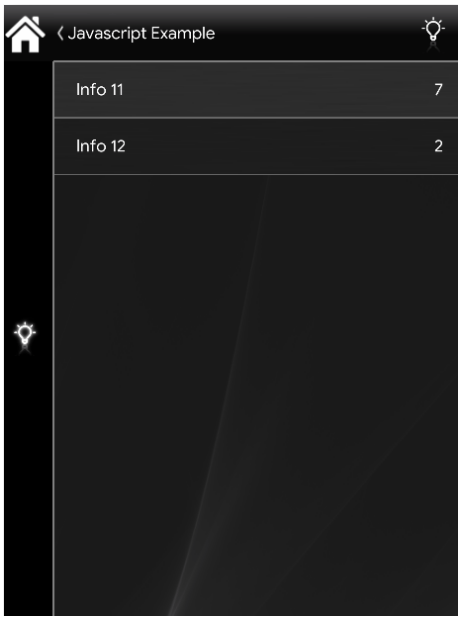


In this example we are using an Info component with the ID "12". Using a function we will able to increase the Info value by 1 every 2 seconds. In this case to call the function we have to put it inside the method setInterval(2," executeAdd "); as you can see the first argument inside the parenthesis is for how long in

seconds we should increment by 1 (++) the value of the variable a, in the second argument we simply call the function.

Dati utente

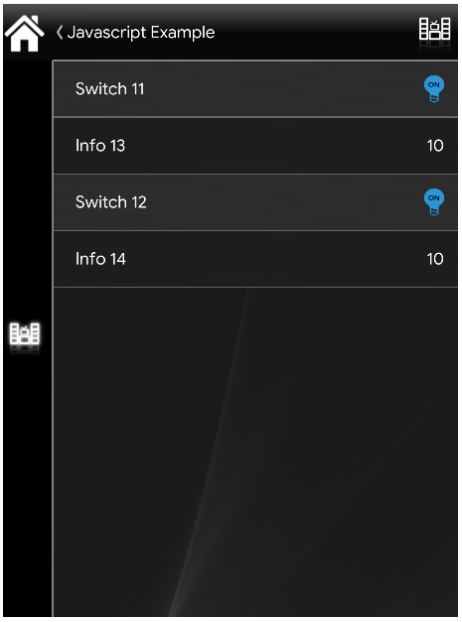
```
var a=1;
var b=1;

function executeAddEvery2S(){
        a++;
        log(a);
        setValue(11,a);
}
function executeAddEvery10S(){
        b++;
        log(b);
        setValue(12,b);
}
setInterval(2,"executeAddEvery2S");
setInterval(10,"executeAddEvery10S");
```



In this example we are using two Info components with the ID “11” and “12”. Using a function we will able to increase the first Info value by 1 every 2 seconds and the second Info by 1 every 10 seconds. In this case to call the function we have to put it inside the method setInterval(2,” executeAddEvery2S”) and setInterval(10,” executeAddEvery10S”); as you can see the first argument inside the parenthesis is for how long in seconds we should increment by 1 (++) the value of the variable a, in the second argument we simply call the function that will, as said before, add 1 to the variable a.

Dati utente

```
var a=1;
var b=1;

function executeWhen11Clicked(){
        a++;
        log(a);
        setValue(13,a);
}
function executeWhen12Clicked(){
        b++;
        log(b);
        setValue(14,b);
}

setTrigger(11,"executeWhen11Clicked");
setTrigger(12,"executeWhen12Clicked");
```



In this example we are using two Switch components with the ID “12” and “13” and two Info components

with the ID “14” and “15”. Using a function, we will able to increase the first Info value by 1 every click on the Switch the same happens if we click the second Switch with the other Info. A perfect use of functions is when you need to execute some code when something happens. In this case to call the function we have put it inside the method setTrigger(12,”executeWhen12Clicked”) and setTrigger(13,”executeWhen13Clicked”); as you can see the first argument inside the parenthesis is the component that we should increase by 1 (++) the value of the variable a, in the second argument we simply call the function that will, as said before, add 1 to the variable a after clicking the component 12 or 13.

5.7 Multimedia

5.7.1 Remote Control

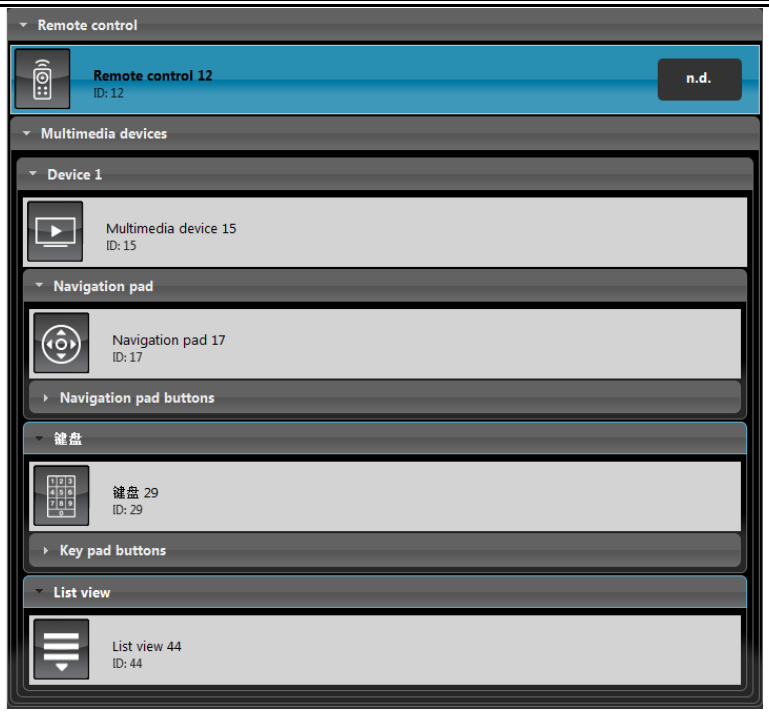
 Component to allow using a Remote control to control any device (TV, DVD, etc.).

Example:

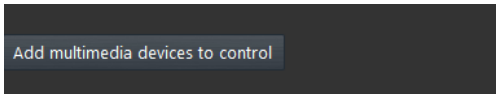
- The user wants to control the TV through simple commands from the EVE Remote Plus App;
- The user wants to change radio station from remotely, from another room for example, without being in front of the device.

Automatic group creation

As always you are asked to drag and drop the required components on “My components” area. The particularity of this component is given by the automatic creation of a remote-control group where all the necessary components for its configuration are already added (see picture below). Not only this, also all the required buttons of the Multimedia device are already configured in order to speed up and simplify the process of the remote-control creation, but open to your editing.



Properties:



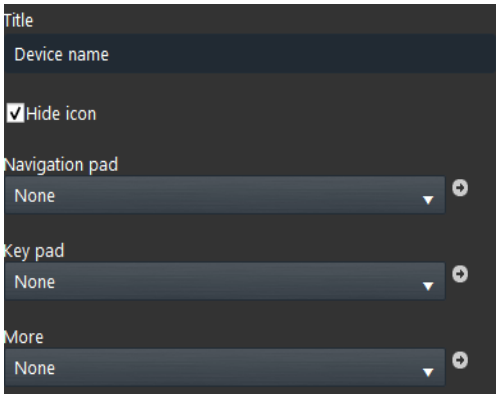
Add multimedia devices to control: List of Multimedia device components to control.

Thanks to the automatic configuration of the remote control component, this list is already created. However, you might want to control several devices (TV, DVD, etc.) with the same Remote control which is possible. In this case, you need to drag and drop a new Multimedia device (Device 2) component to "My components" area and then drag and drop it into this multimedia device dialogue box.

5.7.2 Multimedia device

This component configures the GUI protocol as a multimedia device. This component is automatically configured when creating a new remote control component. If users need to control multiple devices, they can drag and drop multiple multimedia device components.

Properties:



Title： Enter the device name.

Hide icon： Select box settings. After selection, hide the icon in the user interface.

Navigation pad： Select the navigation version component.

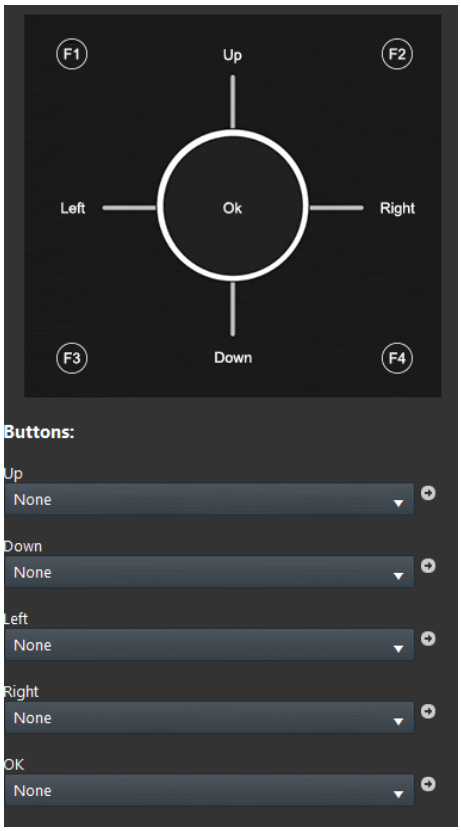
Key pad： Select the keyboard component. This component is automatically configured after dragging and dropping the multimedia device component.

More： Select other components.

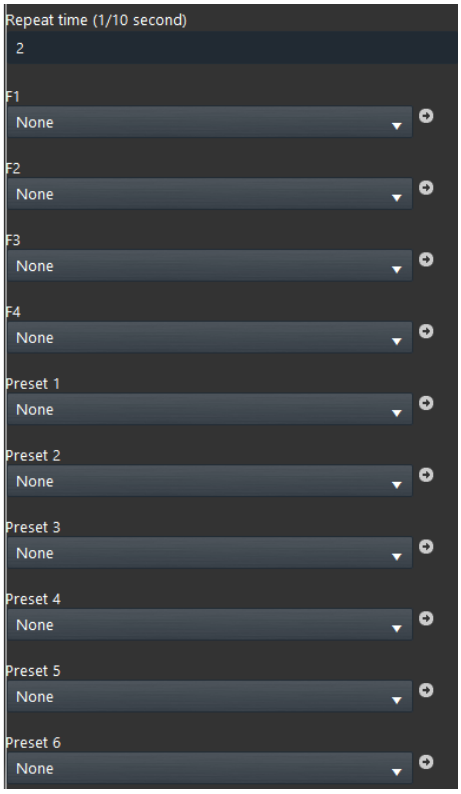
5.7.3 Navigation pad

 The navigation pad allow you to bind your remote controller functions.

Properties: Up/Down/Left/Right/OK/F1~4/Preset 1~6 are associated switches or scene components, among which Preset1~6 are reserved positions.

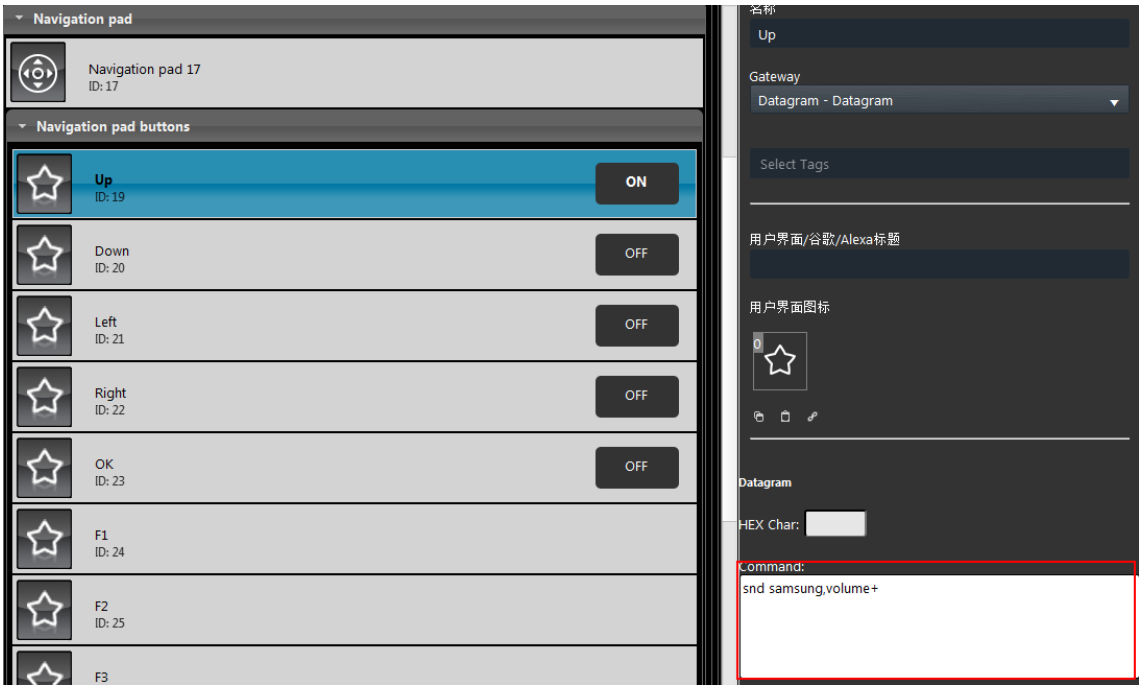


(connects to the picture on the left）



The user can bind the remote control button, for example, can directly use AirHome Remote Pro to control the TV. The following is an example of configuring scene components in the navigation version:

In this example, the scene component configuration is changed to the Datagram protocol gateway. Enter a Datagram command in the property interface [Command] to set a specific command.



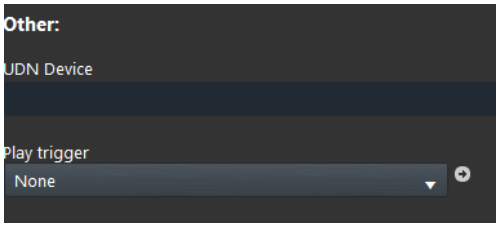
5.7.4 Multimedia controller

Component which allows to control any device with UPnP protocol.

Example:

- The user wants to connect the UPnP devices to the Air1 to be able to use change songs or control Upnp multimedia devices.
-

Properties:

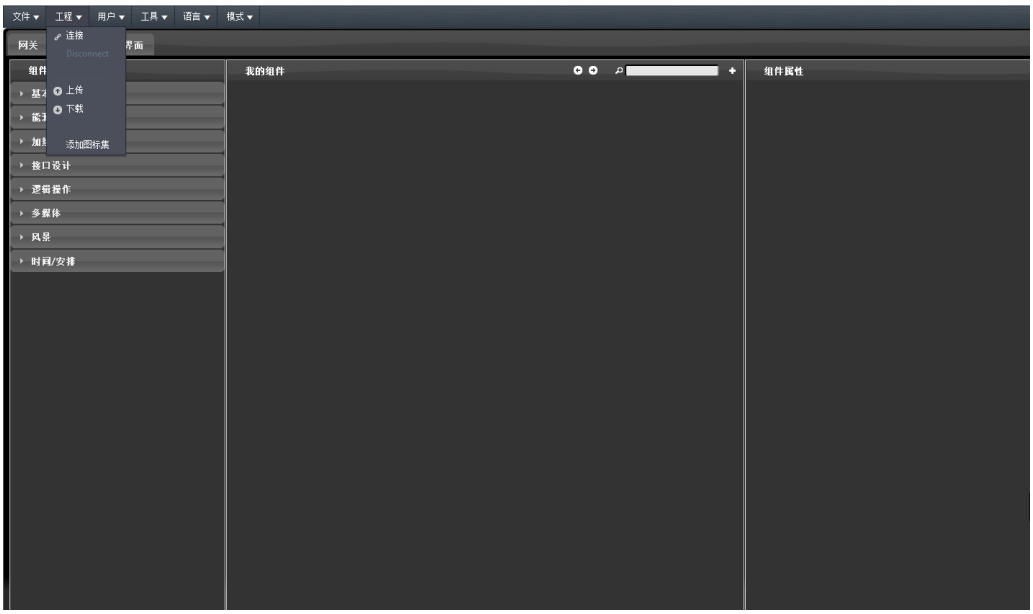


UDN Device: UPnP the unique ID of the playback device.

Play Trigger: The selection list display component contains a switch that can be used to start the created playlist in the AirHome Remote Pro user interface.

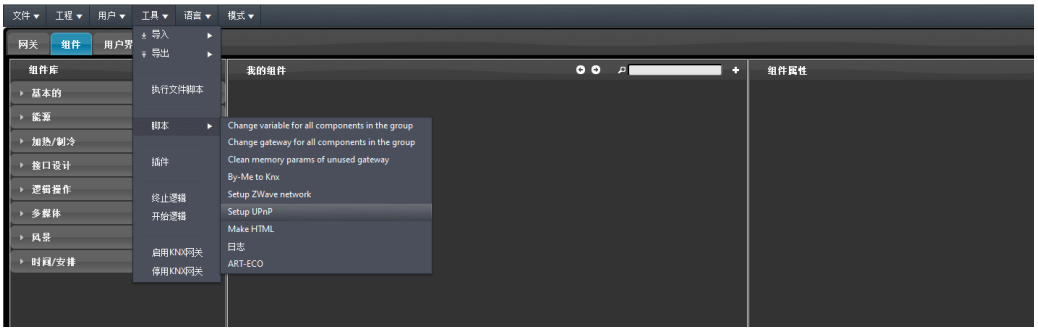
To automatically configure your UPnP playback device, please follow these steps:

1. Connect to the logic by selecting the top menu “Project”;



2. Select “Connect” and then enter the IP address of the server;

3. Select the top menu “Tools”, then “Setup UPnP”(This function will be updated in the next version) so the Wizard window will open;



4. Click on “Get Devices” to enable the drop-down menu with all UPnP playback devices present in the network;

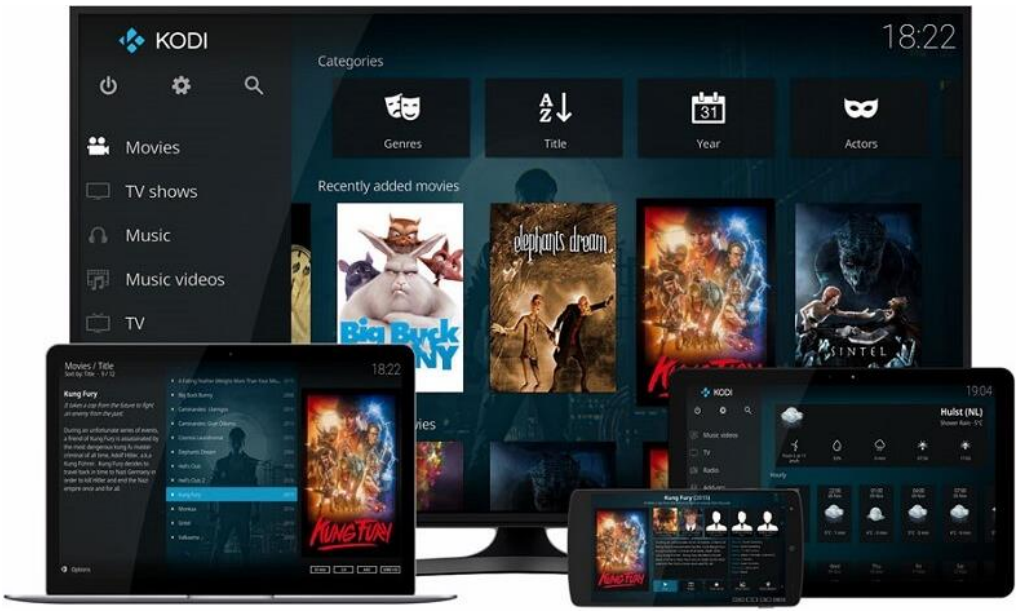
5. Select the device that you want to add and then click on “Create components”.

KODI UPnP——A MEDIA SERVER

If you’ve got a lot of movies, TV shows, and other videos on your computer’s hard drive, the Kodi media player is a great way to play them. But what if you don’t want to watch them on your PC? What if you’d rather see them on your television or mobile phone?

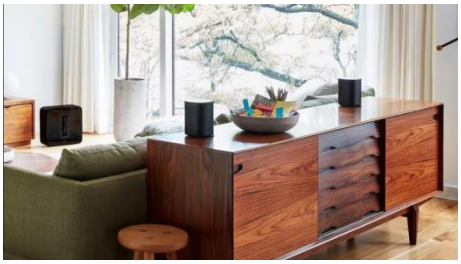
This where Kodi’s UPnP features come in. Setting your PC up as a Kodi UPnP server can give your entire home network access to the movies contained within it.

We recommend following this guide to get the best from Kodi.

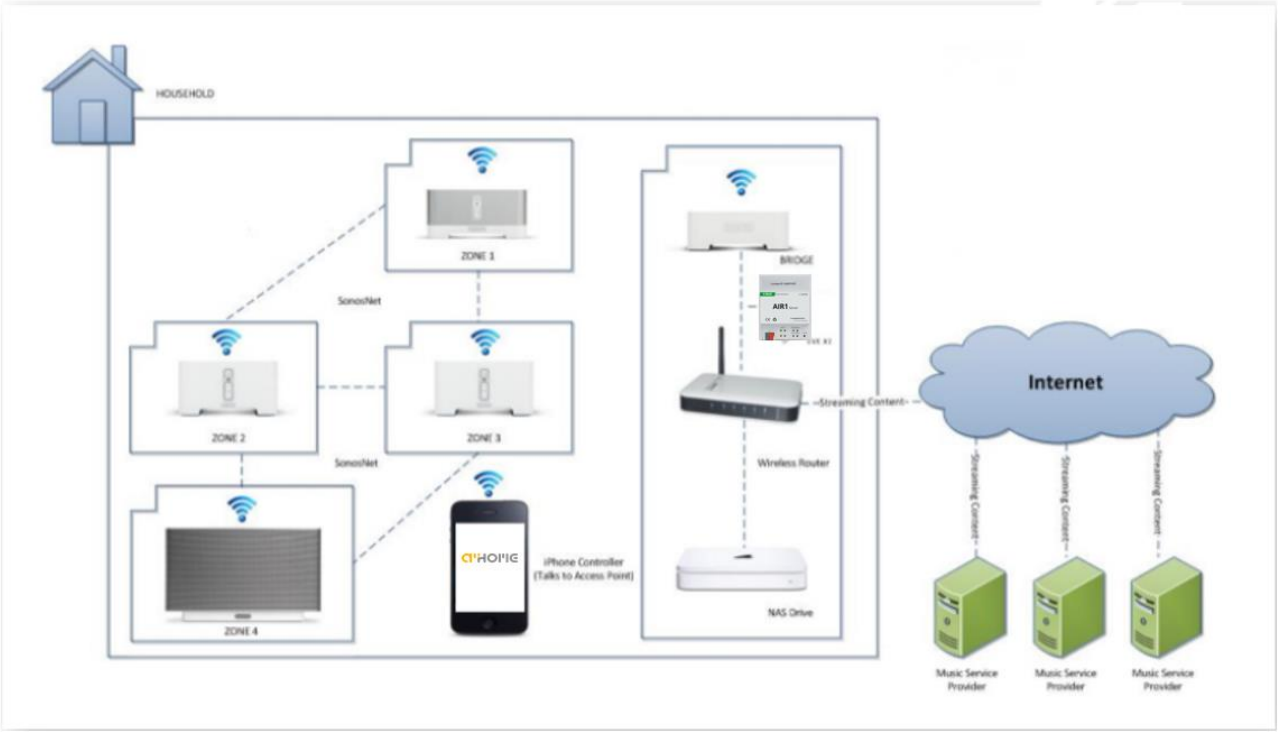


Sonos——WIRELESS SPEAKER & HOME SOUND SYSTEM:

The Sonos Wireless HiFi System plays all the music you want, all over your house, from the bedroom to the backyard, and lets you control it all from the palm of your hand. Sonos gives you instant access to millions of songs and stations including dozens of online music services, thousands of free Internet radio stations, and music libraries stored on acomputer or in the cloud.



The UPnP protocol inside the AirHome system:



View Mode

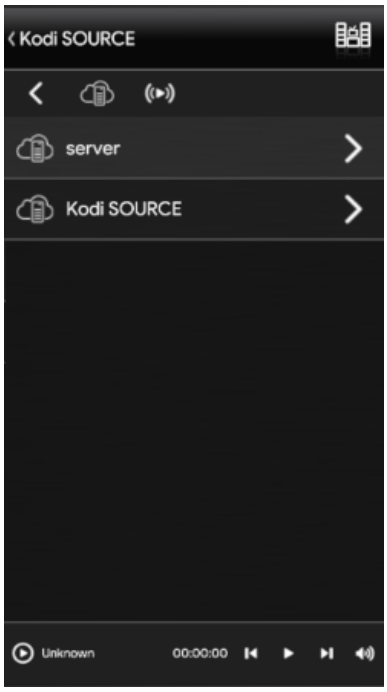
1. Map view mode

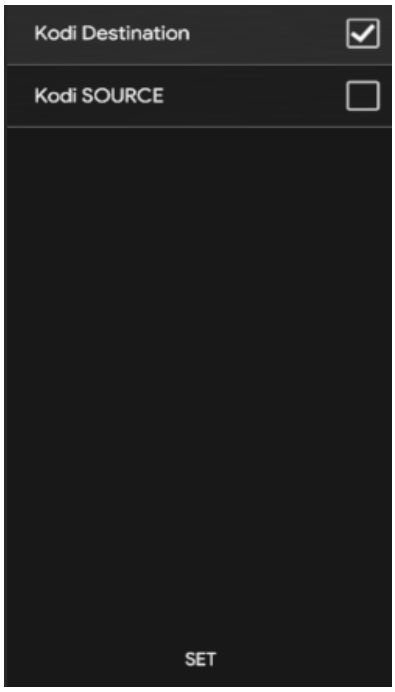
Icons can be customized depending on your necessities from symbol to color and dimension. This is one of the viewing modes on AirHome Remote. The default icon layout is as follows:

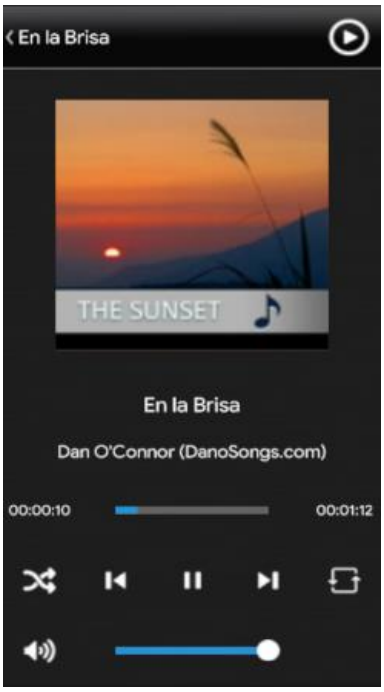
Media controller ⇒ Media controller icon

 Default icon (customization icon)

2. Classic view mode







The picture on the left shows the UPnP server on the network from where you can select files to be played. Clicking this icon  allows you to enter in the selection mode for the playback devices.

The second picture on the left shows the UPnP playback devices.

The three pictures on the left are the views that control the main functions of the main UPnP player.

5.8 Scenery

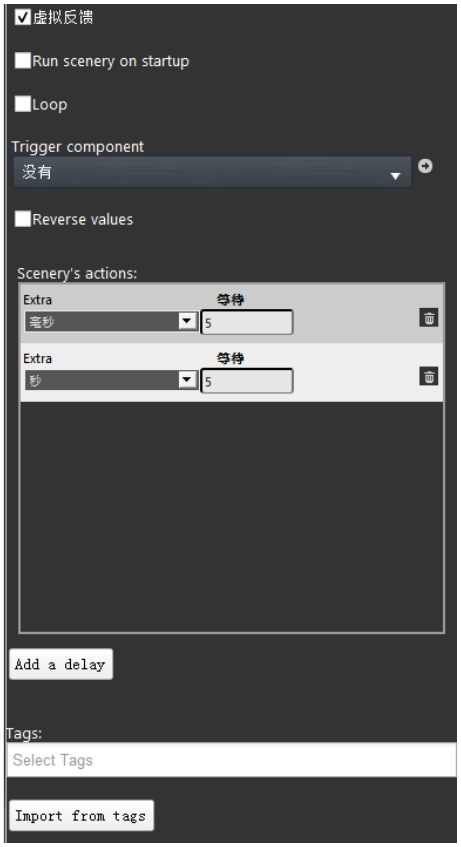
5.8.1 Scenario

 It allows you to create a sequence of actions timed operated by the user or any other event.

Example：

The User wants to create a series of events when he come back home such as turn on the living room lights and turn the thermostat temperature to 25 C°.

Properties：



Virtual Feedback: refer to the “KNX protocol” guide;

Run Scenery on startup: When the project is uploaded to the server and when AirHome is run;

Loop: It allows to keep the scenario’s actions going on loop when running;

Trigger component： This is the trigger component (not mandatory) of the scenario (Switch or Timer)

Reverse values：(checkbox) reverse the value of the triggered component;

Scenery’s actions： This is the list of actions that the scenario will execute when activated:

Category： component’s category

Name： component’s title

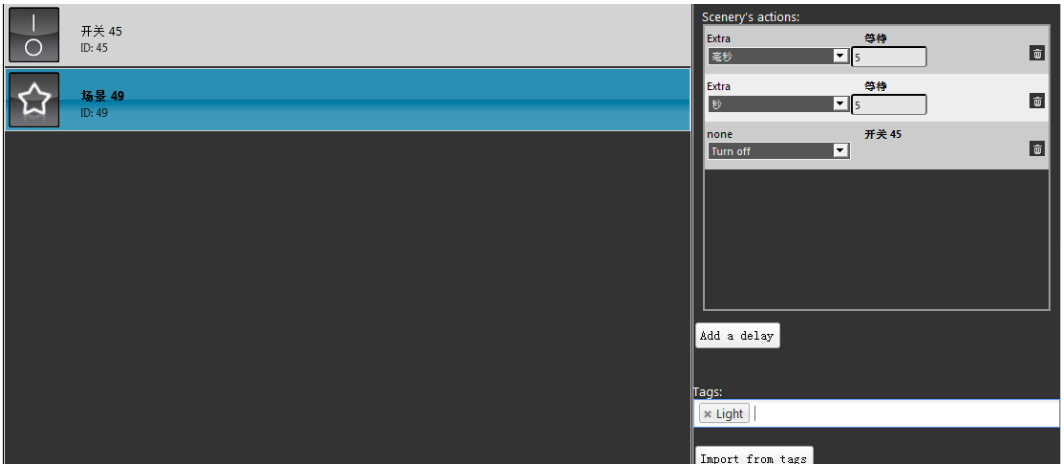
Drop down： select the command choice

Delete： select bin to remove the component from scenario

Add a delay： It allows to add delay timers on the scenario’s actions list.

Select tags: Select tags.

Import from tags： Import component from tags.

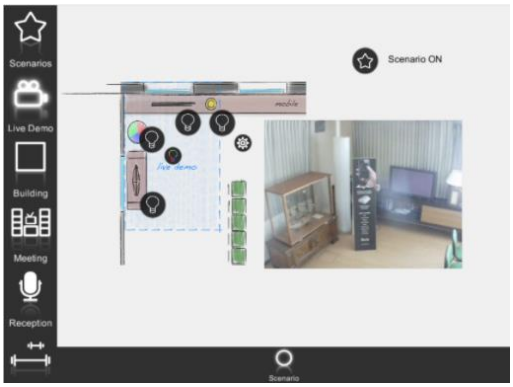


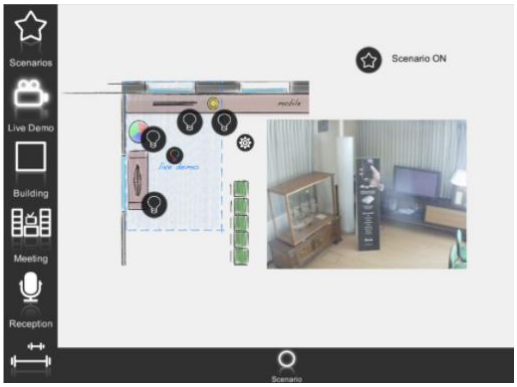
You can also configure scenario on ETS software and simply enter its Write address on Scenario component's properties. This is the case of a Scenario component configured with KNX gateway.

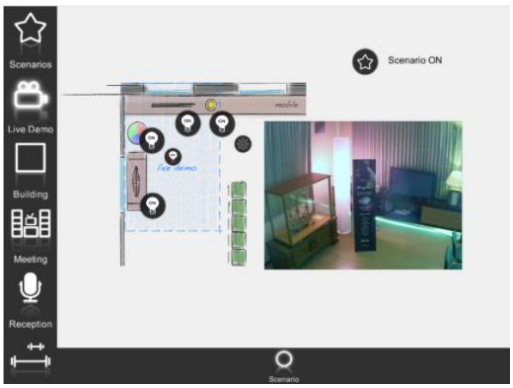
Details please refer to Chapter 5.2.1。

View mode

1. Map view mode







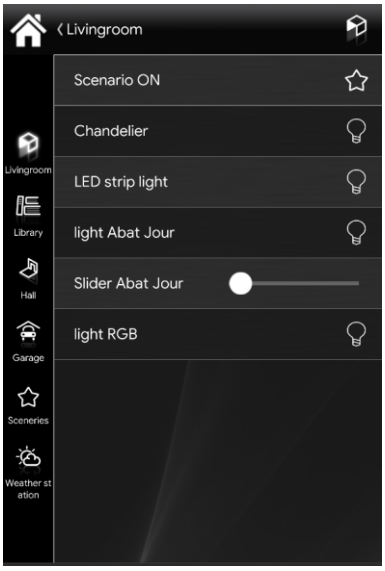
This is just one of the visual result possibilities of the component on the AirHome Remote (Map Style). Icons can be customized depending on your necessities from symbol to color and dimension. In this case, we can see the

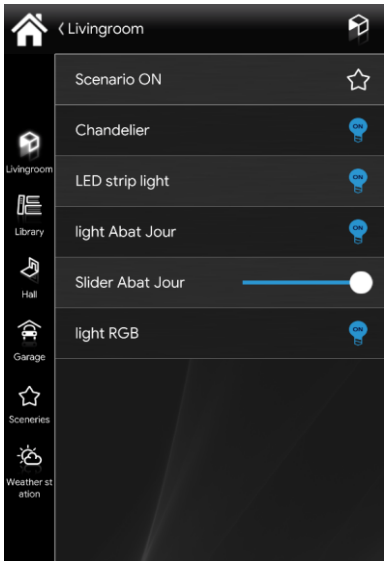
default icon layout:

Any Scenario ⇒ Scenario icon

 Scenario “All lights On” (customizable icon)

2. Classic view mode





Here is the visual result of the component on AirHome Remote (Classic Style). Scenario is displayed with an icon which does not change when started.

Any Scenario ⇒ Scenario mask

 Scenario “All lights On” (scenario mask)

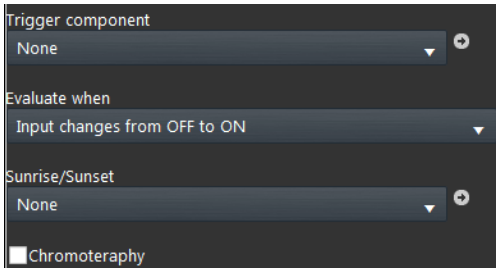
5.8.2 User Scenario

 This component allows the end user to define its own custom scenario using its own device. This allows the user not having to call system integrator for the configuration of a specific scenario which will be automatically saved on AirHome system.

Example:

- The user wants several scenarios at disposal in order to customize and edit them as the best prefer;
- The user wants his scenario to be raised anytime a specific physical switch is turned On and/or Off;
- The user wants his scenario to be raised anytime a specific event occurs on the system.

Properties:



Trigger component: Switch/Pulse component that triggers the recorded scene;

Evaluate when：

Trigger OFF—>ON：User Scenario is triggered only when the trigger component goes to ON;

Trigger ON—>OFF：User Scenario is triggered only when the trigger component goes to Off;

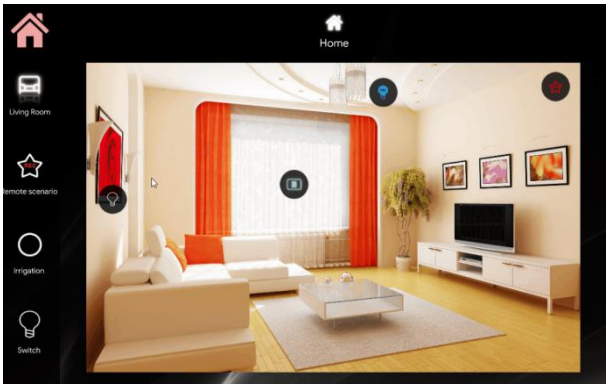
Any change on the trigger：User Scenario is triggered anytime trigger component goes to On or Off;

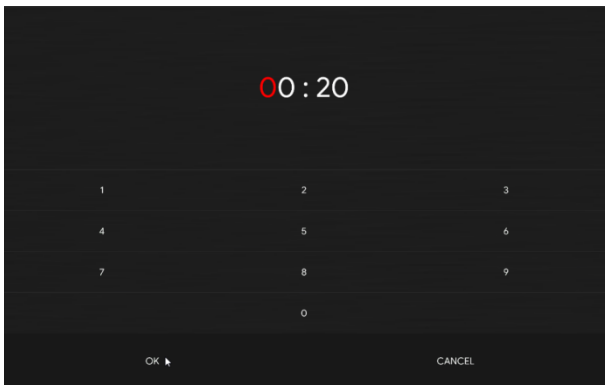
Sunrise/Sunset： You can choose to activate the scenario during the Sunrise or the Sunset, for this type of dropdown you can only use the Sunrise/Sunset component:

Chromatography：Checkbox setting, chromatographic analysis after checking.

View mode

1. Scenario record under map view mode





1) In order to start recording, hold down on “User Scenario” command icon for longer than a second and click the red circle on the top right of the window.

2) You know you are in recording mode due to the fact that “Home” icon will become completely red and

start blinking indicating that recording mode is active.

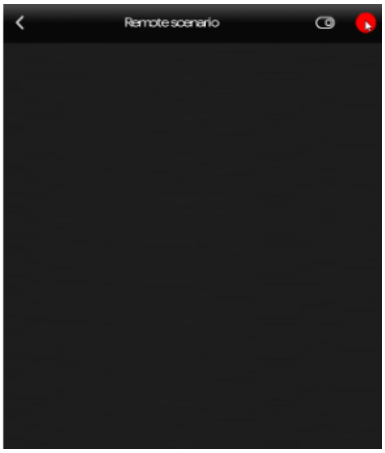
3) From now on, any command subjected to state changes that depend on the user's will be registered. It is possible to move within the app interface and select any change: lights, dimmers, temperature, etc.

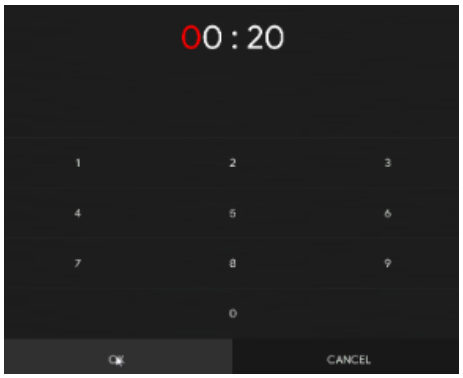
4) You can save the registration at any time by clicking longer than a second on the "User Scenario" icon.

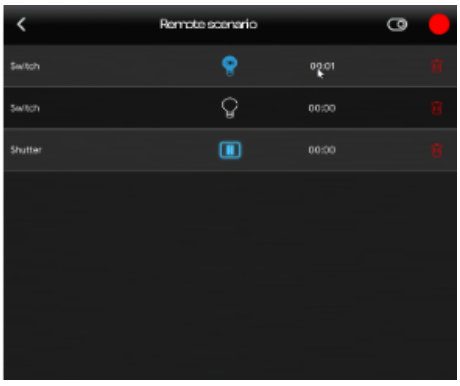
5) "User Scenario"command icon will return back to the original color and the Home menu  icon will stop flashing to indicate that the registration status has been finished.

From now on, with a simple click on the "User Scenario" icon all the changes previously recorded will be played on the system. Holding down the "User Scenario" icon you will able to customize the starting time of your components, remember that the time format is mm:ss (minutes:seconds).

2. Scenario record under classic view mode







Same as that of under map view mode, so please refer to the above description.

5.9 Timing/Scheduling

5.9.1 Irrigation

 This component allows you to control your entire irrigation system with one solution.

Example:

The user wants to centralize the whole irrigation of its own house, making possible to schedule the irrigation of specific section of the garden even individually.

YOU CAN MANAGE:

Main pump management;

Exhaust actuator management;

Possibility to exclude sprinklers from the cycle;

The possibility of using the same area several times in the cycle;

Disabling in case of rain;

THE USER CAN AUTONOMY CONFIGURE:

Number of cycles programmable by the user;

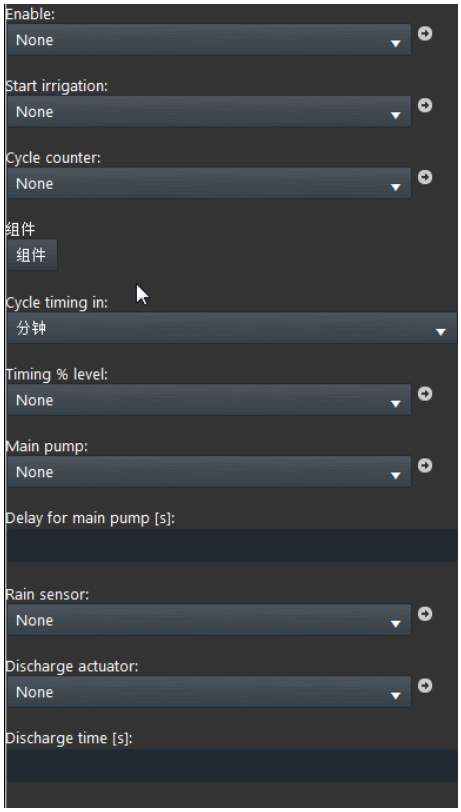
Cycles timings definable by the user;

The possibility of the user to activate the cycle;

The possibility of activating/deactivating a specific sprinkler at any time;

Possibility to schedule the start of the cycle using the weekly timers

Properties:



Enable: (dropdown) that let you choose to turn on/off or lock components to enable irrigating components.

Start irrigation： (dropdown) that let you choose to turn on/off the irrigation utilizing, for example, a "Switch";

Cycle counter： (dropdown) we recommend using the component "Tuner" in order to increase or decrease the cycles of the irrigation;

Components： (button) once clicked and opened the window "Components" button you can drag & drop the component "Switch" in order to control, for example, an electric valve. To simplify the operation we already added 3 "Zones";

Cycle timing in： (dropdown) you can choose between seconds or minutes for the "Cycle counter" component;

Timing & level： Use the slider component to adjust the timing.

Main pump： (dropdown) that let you choose to turn on/off the main pump, "Switch" component is recommended. You can remove this component from "My components" window if you don't need it;

Delay for main pump[s]： This parameter allows you to start the irrigation with some delay second(s);

Rain sensor： (dropdown) for this type of component we suggest to use "Color Info" that can read the values of the sensor in case of rain (0/1);

Discharge actuator： (dropdown) that let you choose to turn on/off the discharge actuator utilized during cold periods of the year to empty water pipes;

Discharge time [s]： (value) discharge time in seconds;

View mode

1. Map view mode

This is just one of the visual result possibilities of the component on AirHome Remote (Map Style). Icons can

be customized depending on your necessities from symbol to color and dimension. In this case we can see three switches with different layout:

Cycles：

 Click this icon to enter into the scheduling mode for the cycles. (this is the Irrigation Component icon customized for the project)

 You can add or remove cycles.

Discharge Pump ⇒ Tap icon

 State On (dripping tap).

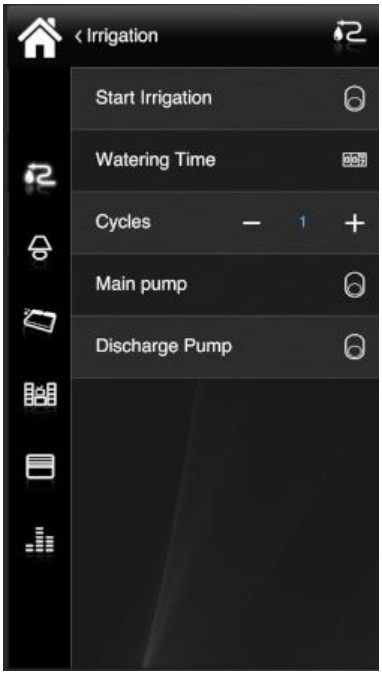
 State Off (empty tap).

Main Pump ⇒ Lever icon

 Start irrigation (lever up).

 Stop irrigation (lever down).

2. Classic view mode



This is the visual result of the component on the AirHome Remote (Classic Style). Levers and Switches are displayed as an empty button which lights up when selected.

Levers ⇒ On/Off

 State On (lever up).

 State Off (lever down).

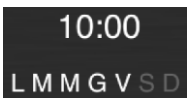
Cycles

 You can add or remove cycles.

Watering Time

 Click this icon to enter into the scheduling mode for the cycles (this is the Irrigation Component icon customized for the project).

 Drop-down that let you select which zone you'd like to irrigate.

 Selected days and the relative duration of the irrigation cycle

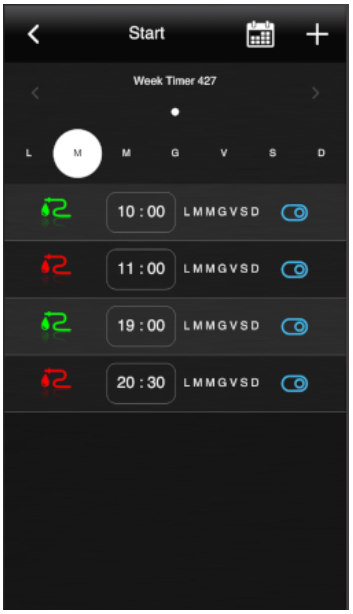
Note: (you can choose between minutes or seconds, in this case, we are using seconds 10:00 which mean 10 min and 00 seconds). If you are using "Minutes" remember that 10:00 mean hh:mm.

 You can click this circle to enable (blue) or disable(white) manually the electro-valve.

 Enable the relative cycle.

 Disable the relative cycle.

It's important to understand how timers work and how to enable it. Once you have entered into the programming mode holding the Home  icon, remember to click/tap your component icon to enable or disable the irrigation. We have prepared an example to better understand it, the green icon will activate the irrigation system while red will deactivate it.



5.9.2 Timed Switch

 It can automatically turn off a Switch component after a desired amount of time.

Example:

The Use has a motions sensor light and want that the light will turn off after one minute since the motion sensor has detected turned on the light.

Properties:

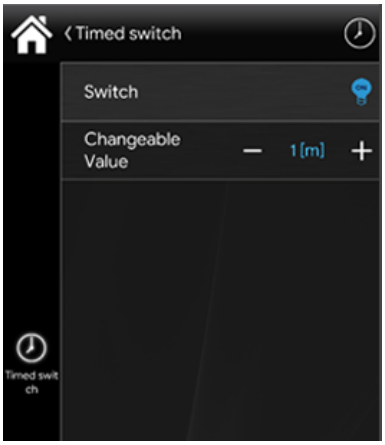
Component to control: (drop-down): It allows to select the desired switch to turn off;

Turn off after [m]: (empty text box): the number of minutes after the switch will turn off;

Component time [m]: (drop-down): we recommend using a "Tuner"

component to select the desired time after the switch will turn off;

Classic view mode



Here is the visual result of the component on AirHome Remote (Classic Style). Switches are displayed as an empty button which lights up when selected.

Timed Switch

 Switch On (blue bulb).

 Switch Off (empty bulb).

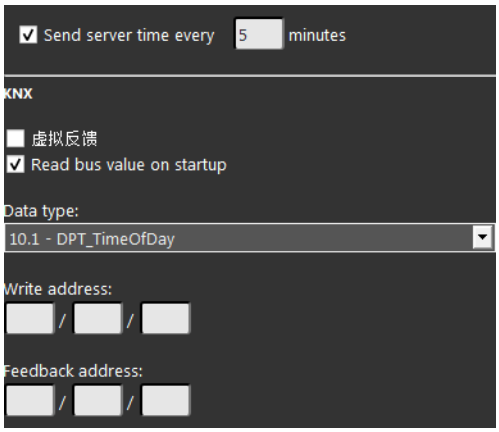
 Select the number of minutes which will disable the switch automatically.

5.9.3 Date/Time on BUS

 It sends date and time to the KNX Bus.

Example:

The user has the necessity to send a info with date and time inside the Bus because of the Timed thermostat.



Properties:

Send server time(Checkbox): if ticked sends a message to the bus with date and time info;

Every (...) minutes (number): it defines how long it would take to send a new updated message to the bus.

Please refer to 5.2.1 guide in order to get further info.

DPT Type: You can use 2 different "Date / Time on Bus" components with different DPT Type:

DPT_TimeOfDay：It sends to the bus the time info;

DPT_Date：It sends to the bus the data info;

DPT_DateTime：It sends to the bus both date and time info;

For KNX protocol setting please refer to Chapter 5.2.1, what to be in your mind is that you can set two different components with two different DPT together:

DPT_TimeOfDay：It sends to the bus the time info;

DPT_Date：It sends to the bus the data info;

DPT_DateTime：It sends to the bus both date and time info;

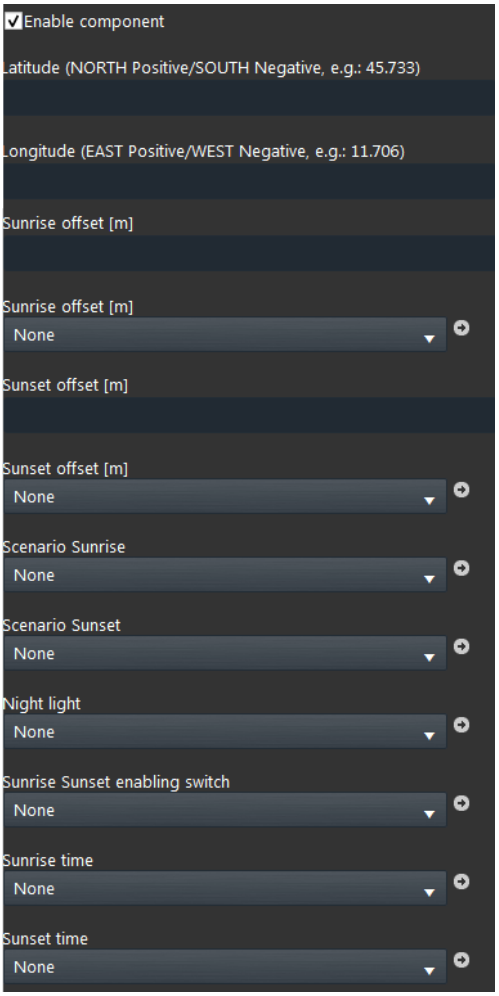
5.9.4 Sunrise Sunset

 Typically, it is used a light sensor with a threshold level to activate scenes on sunrise and sunset. You can replace the light sensor with this component that allows you to run scenes on sunrise and sunset defining the customer geographical location.

Example:

The user wants to trigger certain scenarios at the sunrise or at the sunset time.

Properties:



Enable component： checkbox which defines whether the function is enabled or disabled on the system.

Latitude and Longitude： Parameters are necessary to define sunrise and sunset times on the system. This is a useful website where you can easily find your latitude and longitude:http://www.latlong.net/。

Latitude： (NORTH Positive, SOUTH Negative) e.g.: 45,733 ;
Longitude：（(EAST Positive, WEST Negative) e.g.: 11,706 ;

Note：Latitude and longitude values must be digited using commas (no dots).

Sunrise offset [m]： value used to anticipate or postpone the sunrise time on the system;

Sunrise offset [m]：(drop down) using a “Tuner” component allows you to control the time of the offset in minutes;

Note：These values must be negatives to anticipate and positives to postpone sunrise/sunset times.

Sunset offset [m]： value used to anticipate or postpone the sunset time on the system;

Sunset offset [m]：(drop down) using a “Tuner” component allows you to control the time of the offset in minutes;

Scenario sunrise： Scenario component that must be triggered at sunrise (optional);

Scenario sunset： Scenario component that must be triggered at sunset (optional);

Night light： Switch component that is always ON during the night hours (optional);

Sunrise Sunset enabling switch： Switch component that defines if the function is enabled or disabled;

This switch can be added to the user interface to let users enabling/disabling the Sunrise Sunset function.

Sunrise time(drop down): using an “Info” component allows you to see the exact time of the sunrise for your specific location.

Sunset time(drop down): using an “Info” component allows you to see the exact time of the sunset for your specific location.

Note: text field available for additional information on the component from the admin side.

5.9.5 Week Timer and Week Timer Calendar

In the AirHome system you can create scheduled events through the week timer and the week timer calendar components. This two component allow you to set any kind of scenario inside your home, for example turning on a light every day at specific time or set the temperature of your heating system during your working day at specific time.

When you insert in the project one week timer and one week timer calendar, the user will be able to setup a week scheduling of any component in the user interface, with one week scheduling.

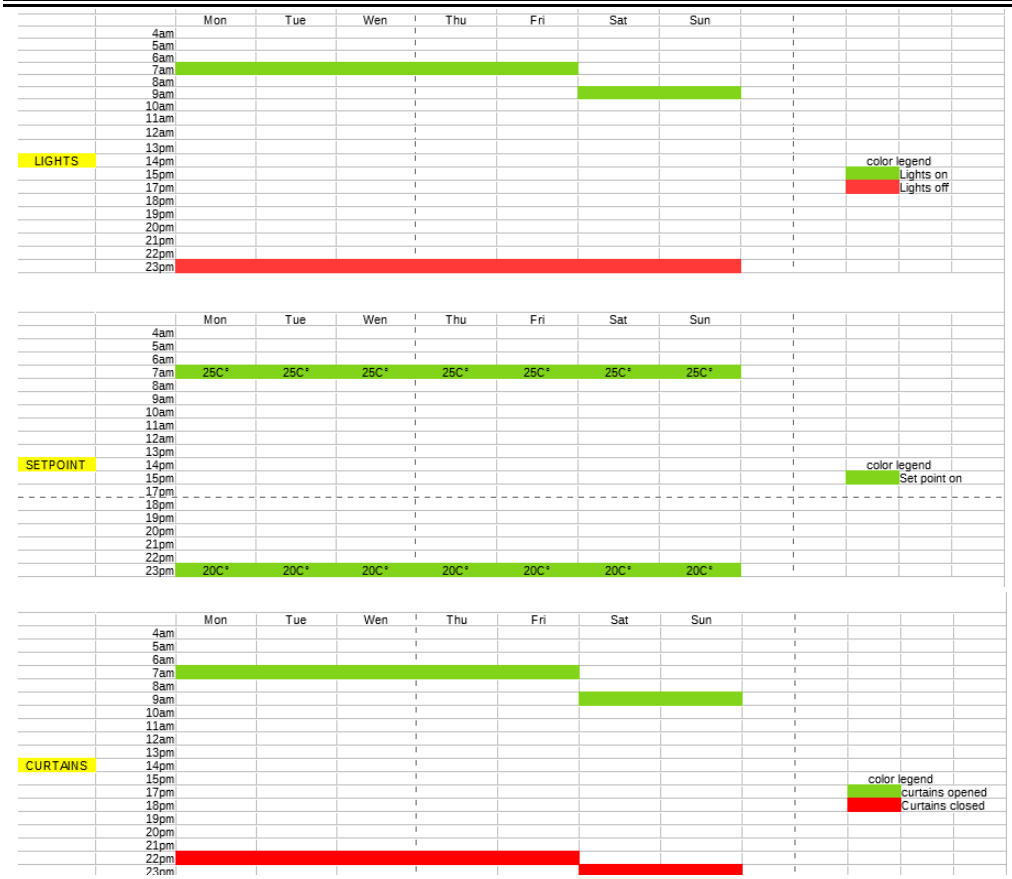
Sometime this is enough to let the user to schedule his devices but sometime we require more than one type of week, like work week and travel week to let the user to set different behavior of his house based on his preferences.

To do more complex scheduling you can add a new week timer calendar, add any number of weeks scheduling and create a drop-down component to select which week to activate. For the new calendar you have to define also to which component it is referred to, for example you can have a swimming pool with it's own weeks type based on the season or based on the external temperature and control only the set-point of the water with a specific scheduling. The user will select the active scheduling week using a drop down on the user interface or it can be change based on a logic for example when the outside temperature goes under a specific level the system can set the week "winter" to activate the expected behavior.

 **Week Time:** The Week Timer is a component that allows you to set scheduling events. You can add as much week timers as you want for example to define the behaviour of your house during your working days or when you are on traveling, but this component can't work alone, the Week Timer needs the component Week timer calendar to define which week to apply for a specific day.

We can explain this kind of component with an example like this: Pretend to have two different type of weeks, the working week that rappresent your tipical week, and the Traveling week when you are absent from your house. As you can see the week timer called Working has some differences from the week timer Traveling.

In the following example in the WORKING week we set the behaviour of 3 devices: lights, set-point, curtains:

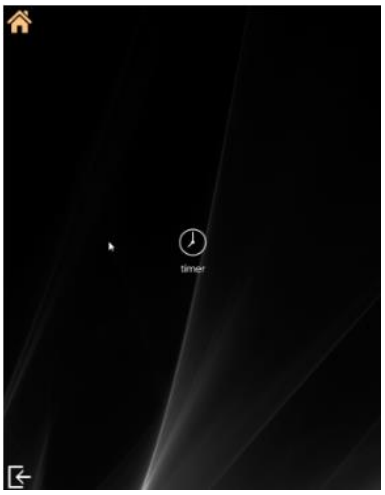


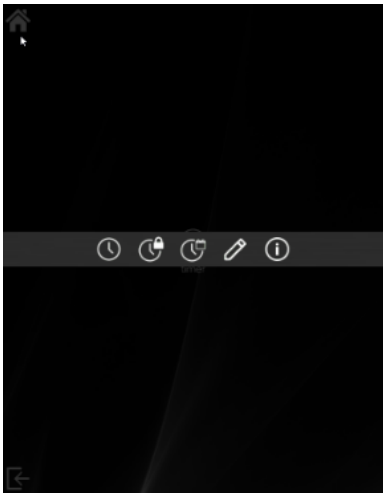
In the following example in the TRAVELING week we set the behavior of 3 devices: lights, setpoint, curtains:

 **Week Timer Calendar:** The week timer calendar is a component that allows the user to choose which week Timer to use from the app AirHome Remote Pro.

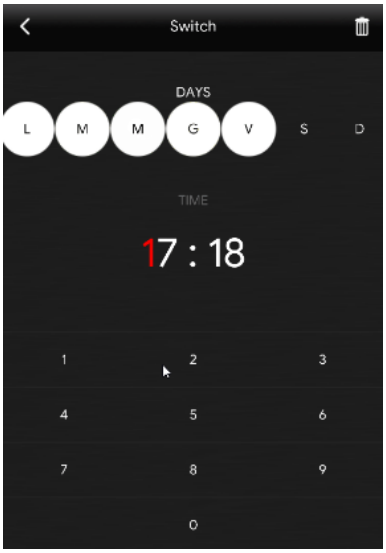
Under classic view mode, AirHome timer is set as follows:

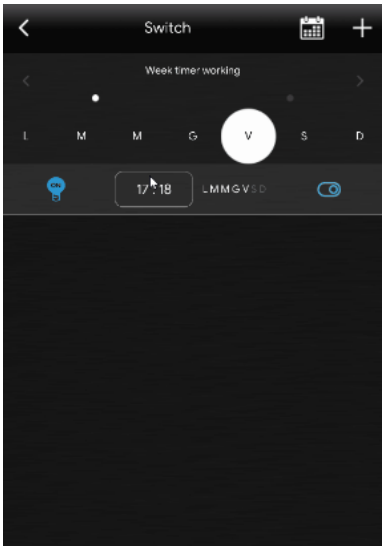
1. Long press the **home icon**  until a menu pops out, then click **clock icon**  on the left side.





2. Click the desired function and click the "+" icon on the top right corner, then set day/time where this Week Timer will have trigger event, after that click on the back arrow on the top left to confirm the settings for the function, after that the scheduling will require a specific component's state, in our case the light turning on, so click on the component icon and choose the desired component value that will be set to the device once the scheduling triggers.

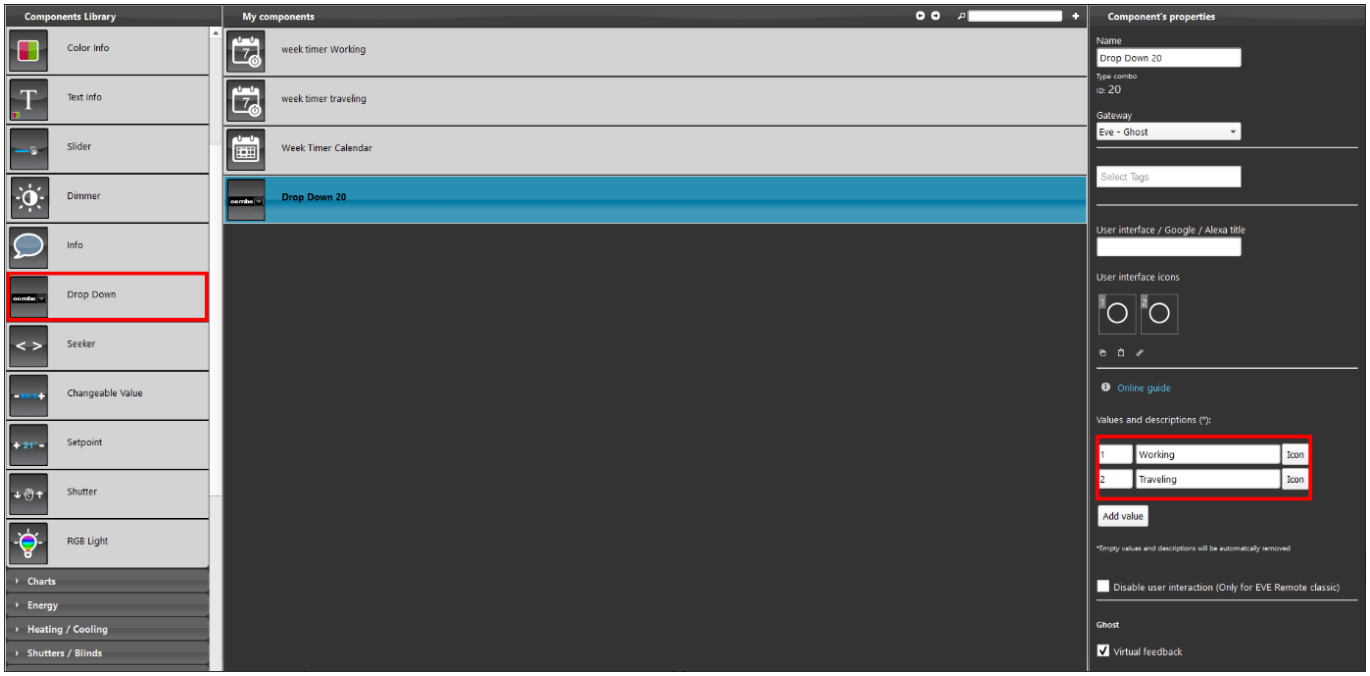




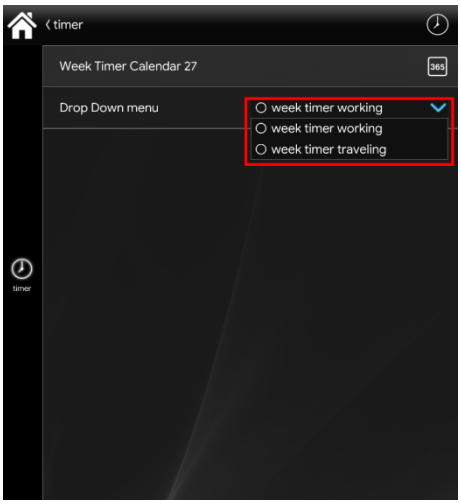
The operation of selecting the week scheduling

This operation needs to prepare a drop-down list of week. This component must be on the user interface so that the user can choose to change the week scheduling.

1. Add a drop-down menu to the week timer calendar. And add a drop-down component to the project, In the component need to add values for the two types of week timer previously.



Drop-down menu inside app:

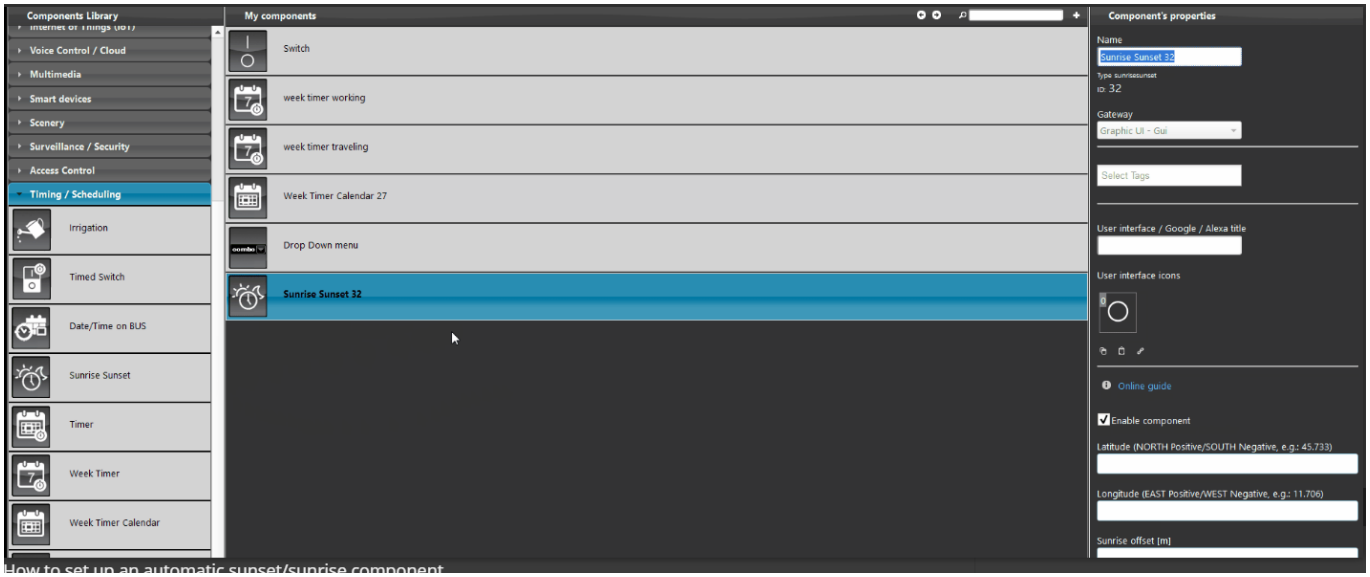


2. Add a switch components into the project, then can use the week timer calendar with the component. Finally upload the project to AirHome server gateway.

Note: In case of having two different Week timer calendars within the same project, you must import the components and the week timers you want to control with the second Week timer calendar inside the right import menu, as shown in the picture below.

Sunset sunrise with the week timer calendar: by adding a sunset/sunrise component into the project, it will allow you to postpone or anticipate the execution of an event:

1. Add the sunset/sunrise component into the project.



2. Set the latitude and longitude in the component, you can easily find those information online.

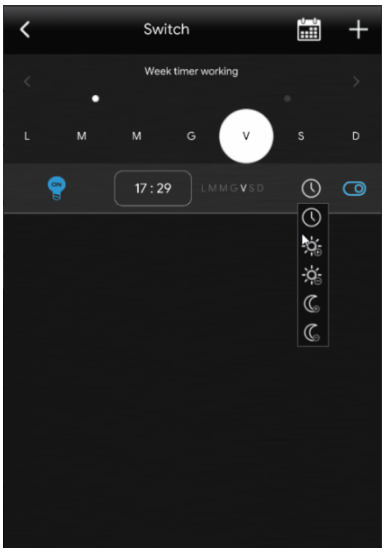
3. Upload the project into your serve and open the application AirHome remote pro

4. Inside your AirHome remote pro account hold for a few seconds the house icon on the top left corner.Then click the first timer icon, now you are in set mode.

5. Click on the desired object and press the plus icon on the top right.

   Set the days and hour and then click on the back arrow on the top left.

   Click on the clock icon on the right after the day you have selected.




This is the sunrise icon that will add time to the sunrise event


This is the sunrise icon that will anticipate the sunrise event

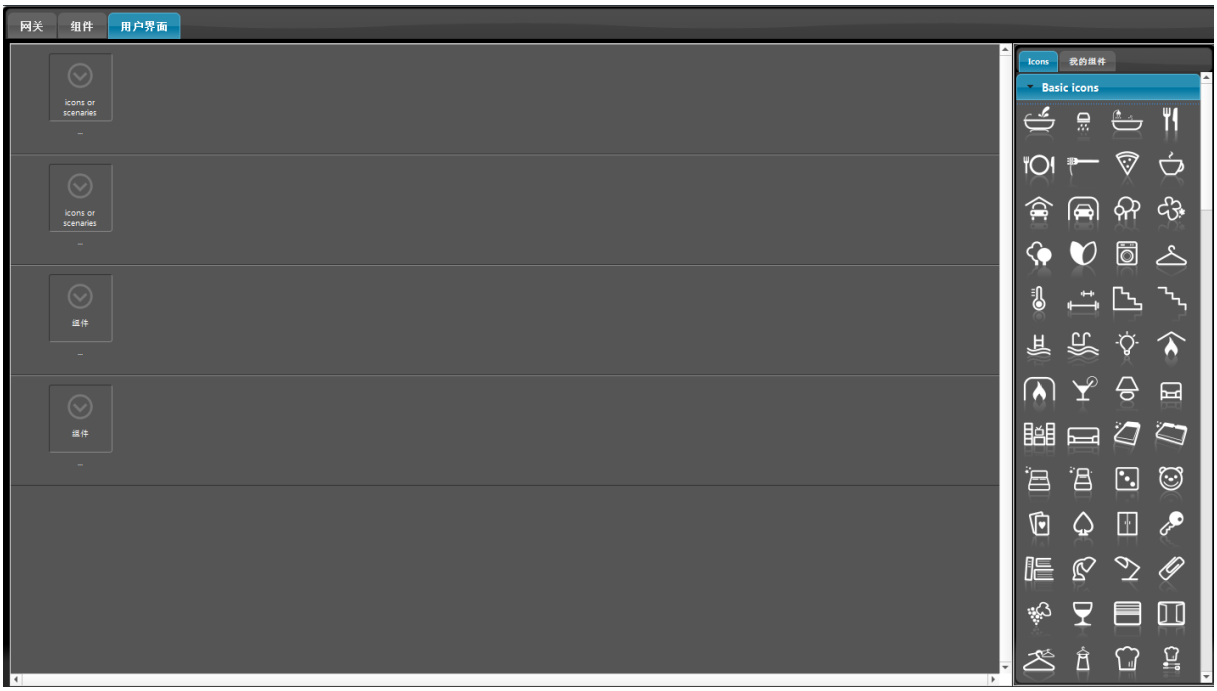

This is the sunset icon that will add time to the sunset event


This is the sunset icon that will anticipate the sunset event

Chapter 6 User Interface

AirHome provides two different user interfaces: Classic view mode and Map view mode, with the Classic as the default interface – see picture 6(1). However, it is possible to easily edit the settings from **Menu – Users.** If two different interfaces are needed, then two separate users need to be created and set differently, details please refer to Chapter 3.3.

User interface can be divided to two areas: on the left side is the interface show directly the arrangement, on the right side are the icon collection and component collection, see picture 6.

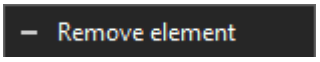


Picture 6

6.1 Add icons/components

There are two collections on the right side of the interface: the Icons and Components. Both Classic view mode and map mode are created easily by drag-and-drop on icons and components to certain areas.

6.1.1 Icons

The icons collection has included all possible AirHome icons for user to create a personalized interface. There are 3 smaller divided groups: Basic icons, Icons, Icons 2, and a possible customized group of user-added icons, for operation please refer to Chapter 3.2. Right click mouse 

to delete added icons.

Picture 6.1.1

6.1.2 My components

My Components collection contains all the added components of your project, as shown in Picture 6.1(2). Right click mouse get menu in Picture 6.1(3) to add, remove, copy, import/export groups. For details please refer to Chapter 5.

Picture 6.1.2

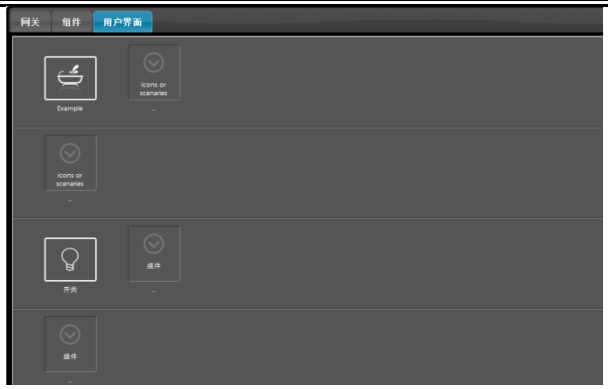
Picture 6.1.2(2)

6.2 User Interface Setting

The left area of the user interface displays the interface style (classic view and map view), and the user interface is displayed intuitively.

6.2.1 Classic view mode

Under Classical view mode (picture 6.2.1(1)), users can create and move icons quickly and easily. There are four sections, first two rows are for menu setting, last two rows are for functional component setting. Below are a few steps of guidance:

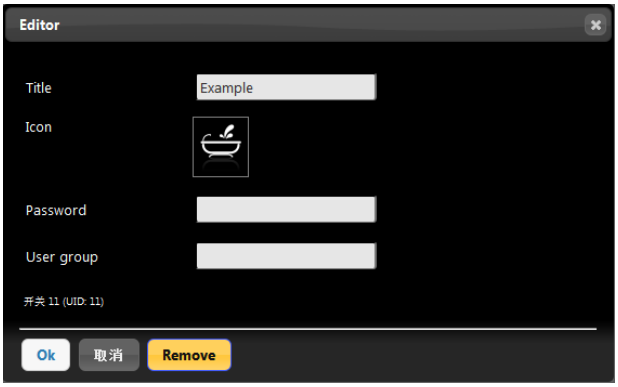


Picture 6.2.1(1)

(1) Menu setting area, the first row is for main menu and second sub-menu. Drag icons from icon collection and drop in this area to create menu. Below is an example:

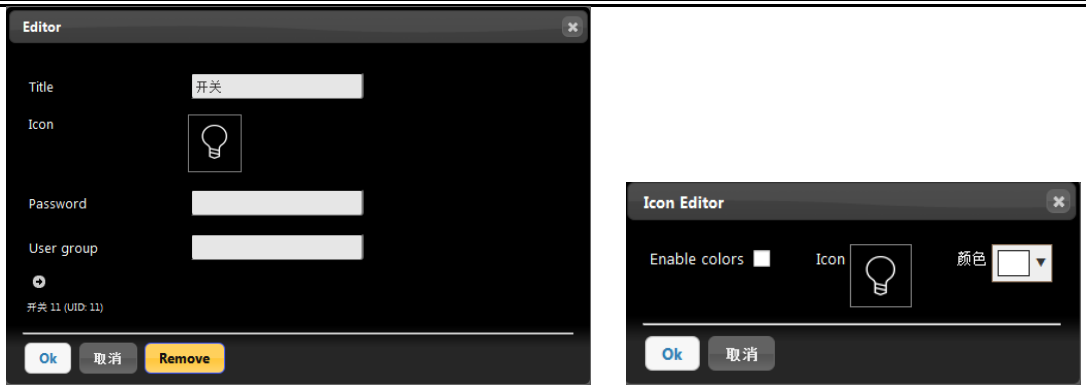
Double-click the icon to see a pop-up editing window - picture 6.2.1(2), detailed information like title, icon style, password, and user group name etc. can be set; click icon  to enter another pop-up window to edit the icon color/style and **Enable colors** to confirm the change, click **Remove** to rid the icon.

Note: if the icon removed is from main menu, then sub-menu under will also be deleted.



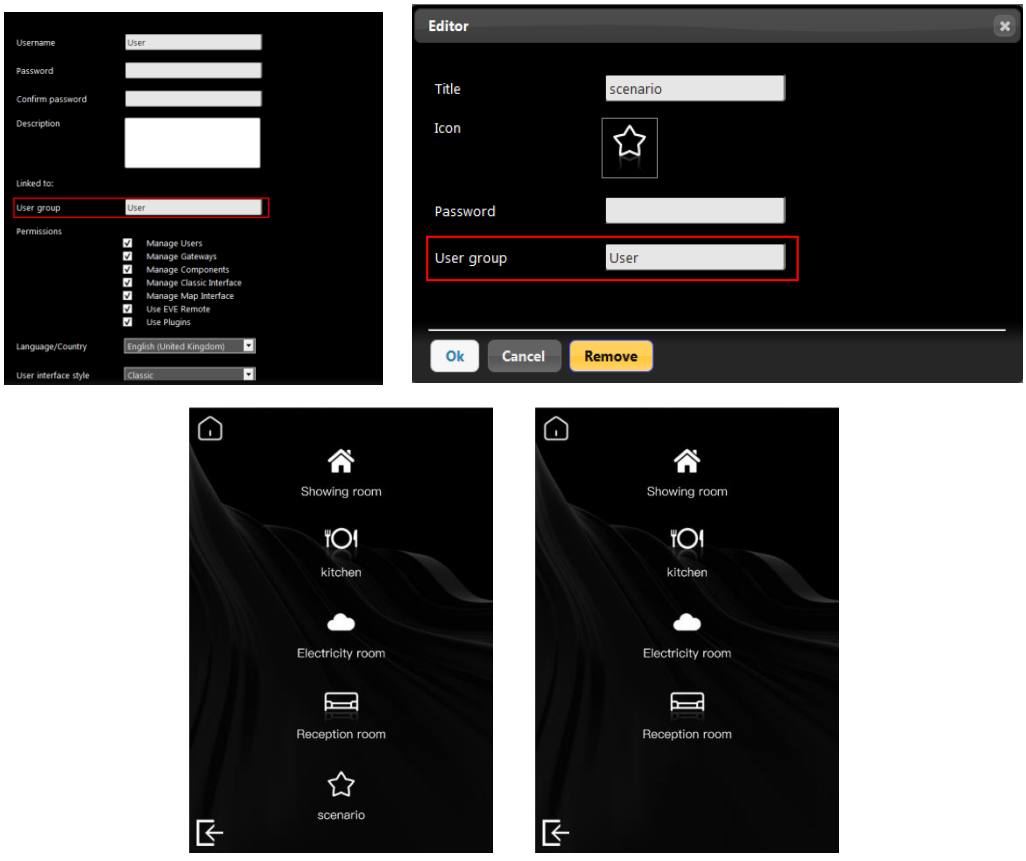
Picture 6.2.1(2)

(2) Component setting area: The first row is the main function, and the second row the secondary function, which is also the condition triggering main function. Drag and drop icons as of the main menu area, working principles are the same, see picture 6.2.1 (3).



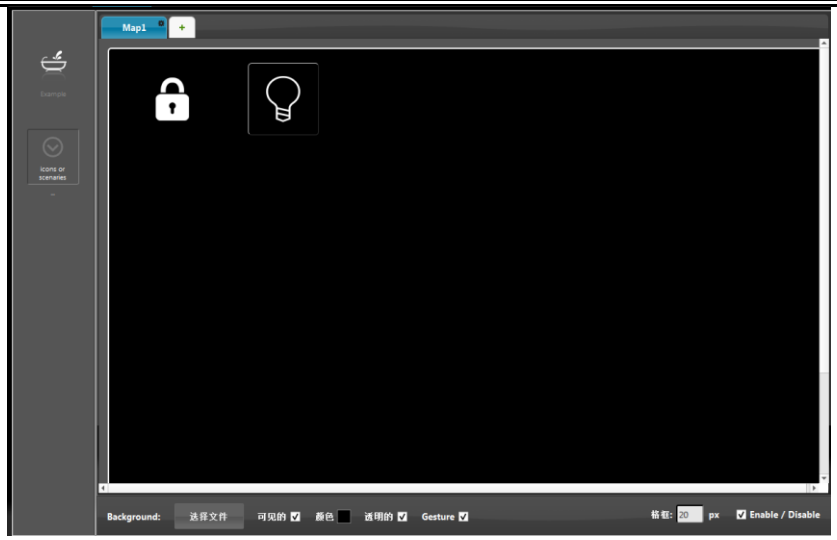
Picture 6.2.1(3)

Note: Input the user group name, then the component will belong to certain user group and only visible to that group.



6.2.2 Map mode

Map mode, as show in picture 6.2.2(1), is a customized interface. Two areas are in the interface, left side – menu setting area, and right side- component setting area, see picture 6.2.2(1).



Picture 6.2.2(1)

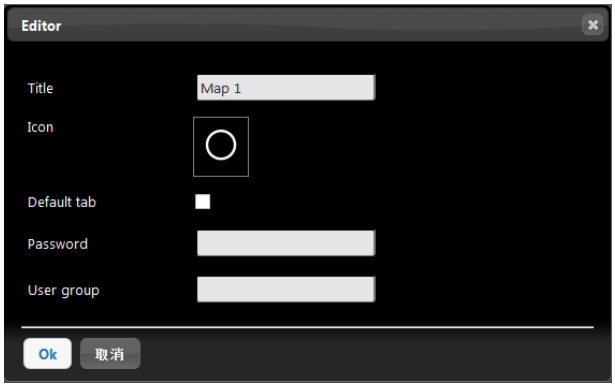
(1) Menu setting area: drag and drop icons to this area to create a new menu, basic steps are the same as in classic mode.

(2) Component setting area: create a new page, then drag and drop components from component collection to this area to create new functions. Below is an example:

In map mode we can create different pages for different spaces, steps to create are as follows:

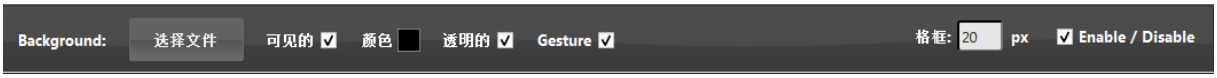
1) Create a new page. Drag and drop a new icon to create, click  to add more.

2) Edit page. Click  to edit in the pop-up window as in 6.2.2(2). Basic setting and operation are the same as of classic mode. Besides, if  **Default tab** is chosen then the page will be sets default page.

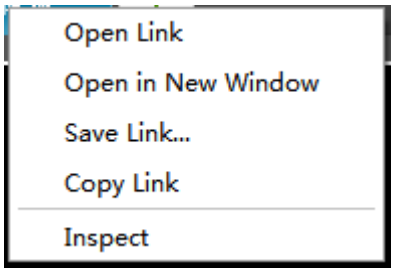


Picture 6.2.2(2)

3) Add background. Under the page, background can be chosen and added, customized background picture can be added and color, transparency, frame etc. can be set for the background.



4) Other operations. Right click mouse in the page to choose.



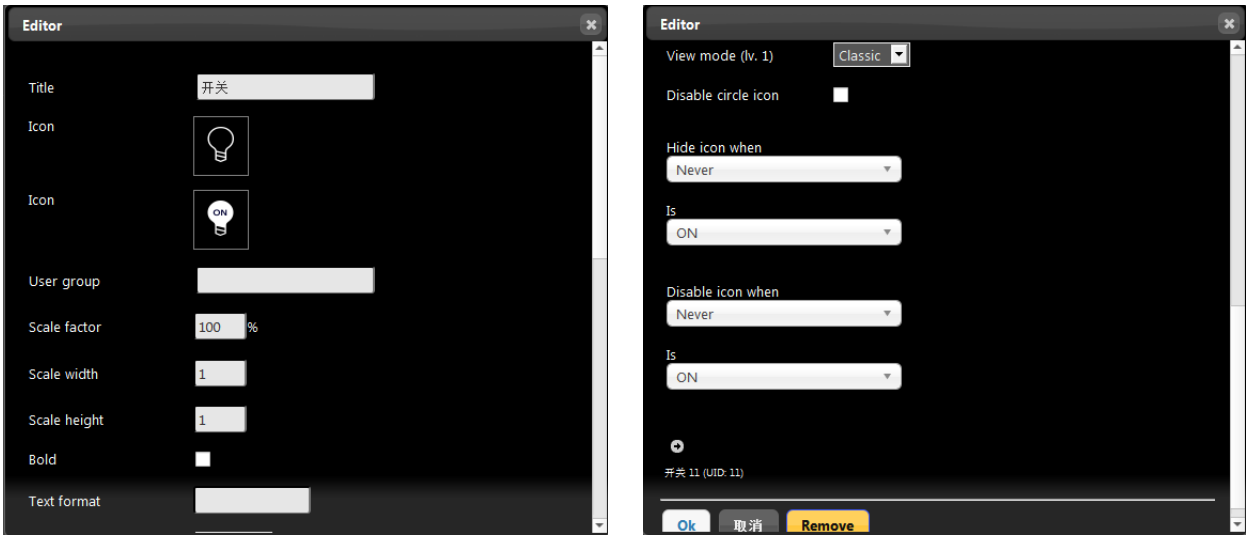
Open/Save/Copy Link

Open in New Window

Inspect: refer to Chapter 3.7.

Operations for components:

Double click a component and edit in the pop-up window – picture 6.2(6), details are same as classic mode. Except from that, users can also set the icon size, letter format etc.



Picture 6.2(6)

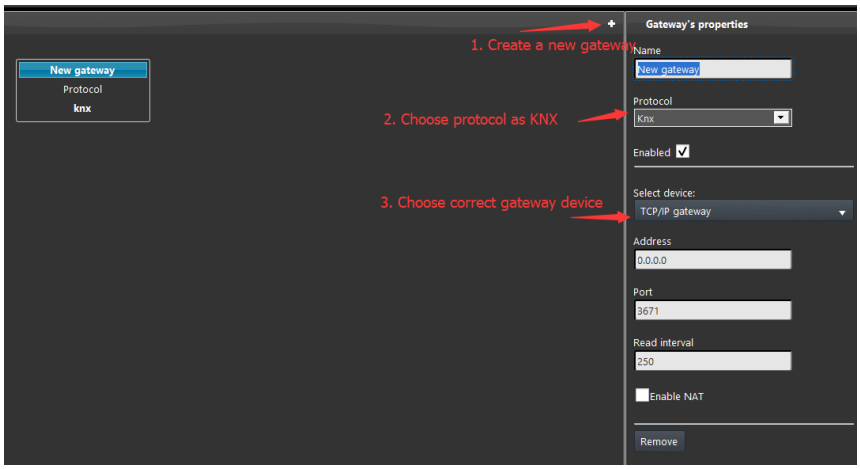
Chapter 7 AirHome Manager Programming Example

This chapter will give an actual programming example of AirHome Manager software.

7.1 Basic Programming

1. Connect gateway. First make sure that Air1 Server gateway is correctly connected to net cable, KNX bus terminals and 5V DC auxiliary power. **The gateway, by default, is with its IP setting as DHCP status, if a fixed IP address is needed to be set, please switched to IP address setting page.** Click "**Project**" in menu → "**Connect**" → "**Search**" in pop-up window to search for devices within the same LAN. If device information is known beforehand, then you can also type in directly the IP address, user name and password.

2. Create a new gateway.



1) Create a new gateway

2) Choose protocol as KNX

3) Choose correct device

3. Project configuration. Please refer to Chapter5, Chapter6 for details of component adding and editing to add correct components to user interface.

1) Add component

2) Edit component

3) Add main functional addresses

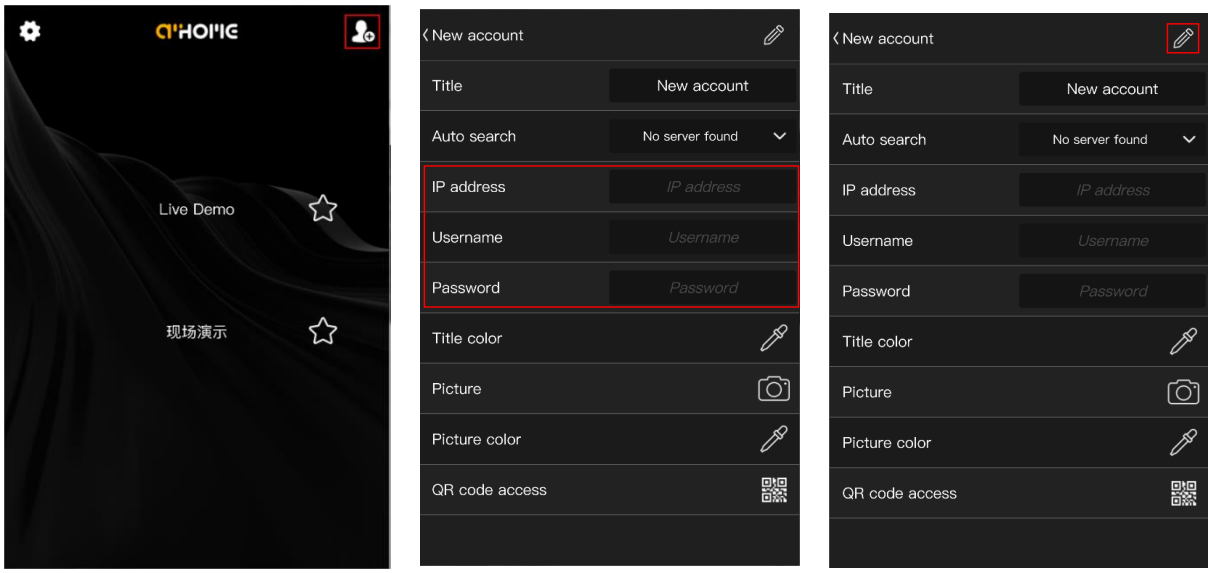
4) Set menu icons and connections

5) Add components to functional page

6) Make sure Air1 Server Gateway is connected to the same network

4. Upload configured project. Click "**Project**" in menu → "**Upload**" to update the programmed project to Air1 Server Gateway.

5. Connect AirHome Remote Pro APP with Air1 Server Gateway. When project uploaded, run AirHome Remote Pro on mobile/tablet/PC to connect it to the ready Air1 Server.



Steps to connect AirHome Remote Pro to Air1 Server Gateway:

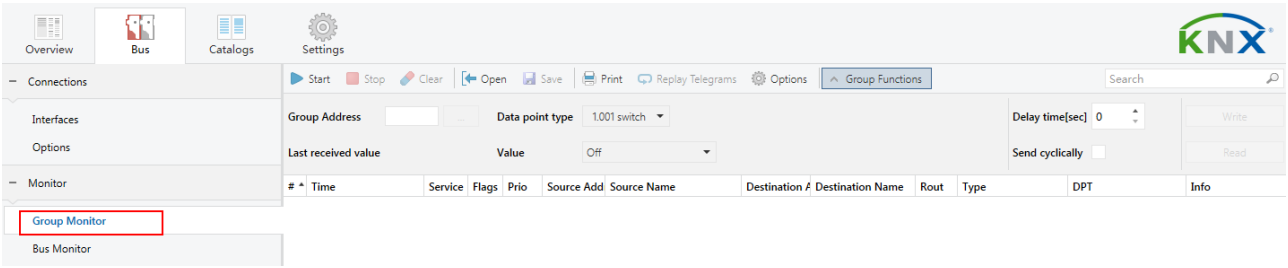
1) Click  to add a new user.

2) Type in IP address, user name and password.

Note: Default user name is "admin", password is"password", when the project is modified already the user information, type according to the changed information.

3) Click  to save account information.

6. After above steps, run monitoring software to monitor if the system functions well when it's controlled from AirHome Remote Pro APP. For example, open ETS Group Monitor to check if KNX bus is reacting to the telegrams received responding correctly.



7.2 Check/Change IP address

If the programmer needs to check or change IP address, follow the steps below:

1) Check Air1 Server Gateway IP address. When the device is connected correctly, visit the router website to find all necessary information about the router and the gateway it's connected to.

2) Change IP address. Create a .txt file and rename as **"eve.settings"**, and set Dynamic IP/Static IP address:

Set Dynamic IP Address:

NETWORK_MODE=DHCP

Set Static IP Address: (the following addresses are only for reference)

NETWORK_MODE=STATIC

NETWORK_IP=192.168.1.100

NETWORK_MASK=255.255.255.0

NETWORK_GATEWAY=192.168.1.1

NETWORK_DNS1=192.168.1.1

NETWORK_DNS2=8.8.8.8

Copy the ready .txt file to USB, then insert it to the USB port of Air1 Server Gateway, disconnect power to restart the device, then the IP address will be changed.