Configuration manual – v2.1

Contents

Copyright

Important considerations

Some KNX / IP Routers – Gateways only allow one simultaneous active connection, preventing that more than one iPhone/iPad is connected at the same time. Besides, in situations with low WIFI coverage, it is possible that the application does not reconnect as it should, then it appears the error of maximum number of simultaneous connections. **In order not to have this limitation, we recommend using the IP communication module (IPS 100 REG) or the IP router (IPR 100 REG) from Jung.**
To activate 5 simultaneous connections, it is necessary to press the IPS or IPR programming button during 5 seconds.

For this application to work correctly, showing the current status of the different devices, it is necessary to activate the *reading flags* of the specified group directions (see the device section).

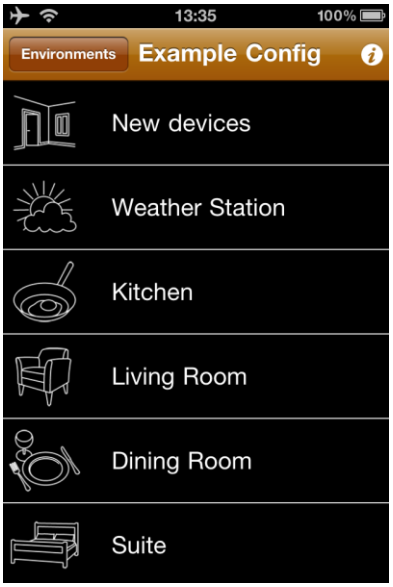
For connections over VPN, it is recommended using the manual IP option. This option can be found in the section of iPhone/iPad adjustments. For further information about VPN connections, consult the manual: *VPN remote access configuration.*

Introduction

iTunes File Sharing

If you have never used your iPad, iPhone or iPod before, first of all you must download and install iTunes and configure the device according to the instructions that will appear in your screen. Once linked the IPad/iPhone/iPod with your iTunes Store account, it is time of installing the application.
Download houseinhand® from App Store for free.

Now, the application will execute in demonstration mode. You can see a sample of the interface and navigate through the menus, but not controlling your house.



So that houseinhand® allows you to control your house, you must transfer two files:

- xxxxxxx.**cfg**: This file contains the necessary configuration information for the application to recognize your house.
- zzzzzzz.**hih**: This file is the license.

The configuration file can be shared by several people as long as they want to control the same house, with the same room and device structure.

In the case that not all of the family/company members need to be able to control the same rooms of the house/office, it will be necessary to create a configuration file for each one of them.

The license file is referenced to the UDID (unique identifier number of each device) in a way that it will not be able to be shared. The license file only works for the device it was created for.

In order to transfer the files to your device, the File Sharing method will be used.

1 Open iTunes.
2 Select the device you want to configure in the left side bar.

3 Select the Applications tab.

4 Get help from the scrolling bar in order to navigate towards the lower part of the window until you find 'File Sharing' and click in houseinhand®.

5 Click in the button 'add' and select the files.

That is all. Next time you start houseinhand® in your device, the application will recognize your house and it will be ready to control it (see multitask section).

Multitask

The application supports multitask in iOS 4 or superior. This will allow that when you exit the application and start it again, it will be just right where you left it.

However, whenever you make a change in the configuration files you will have to close the application completely so that they have effect.

To close the application completely:

- Press twice the Home button (physical button in the lower part of your device).

- Once the multitask bar is opened, keep the finger on any of the icons until they start to tremble.

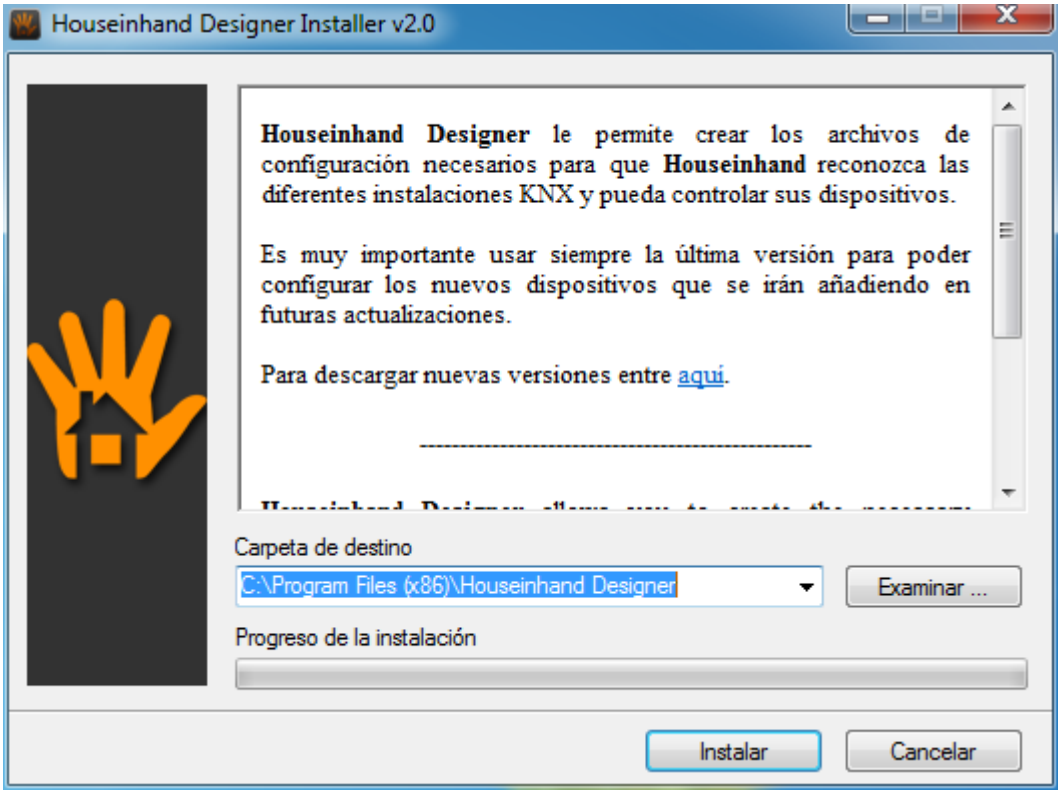
- Press on the red button that appears in the houseinhand® icon and the application will close completely.

Program installation

Installation

In order to be able to configure the house, it is necessary to download the program *Houseinhand Designer* from the download section of the web site *www.houseinhand.com/download*.

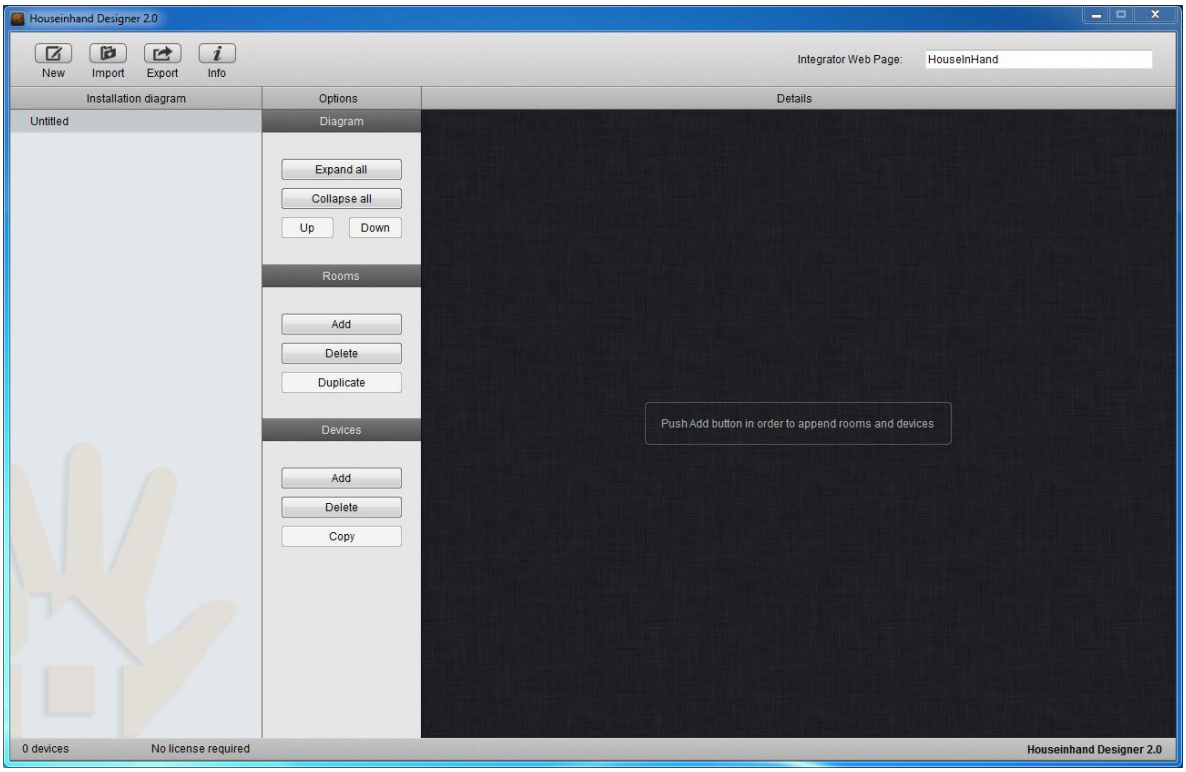
Once the program is downloaded, execute the installer. It will appear a window as the one below:



Once selected the directory where the program will be installed, press *"Install"* for the program to install.

First steps

General vision



Once the program is executed, the main window of the application will appear.

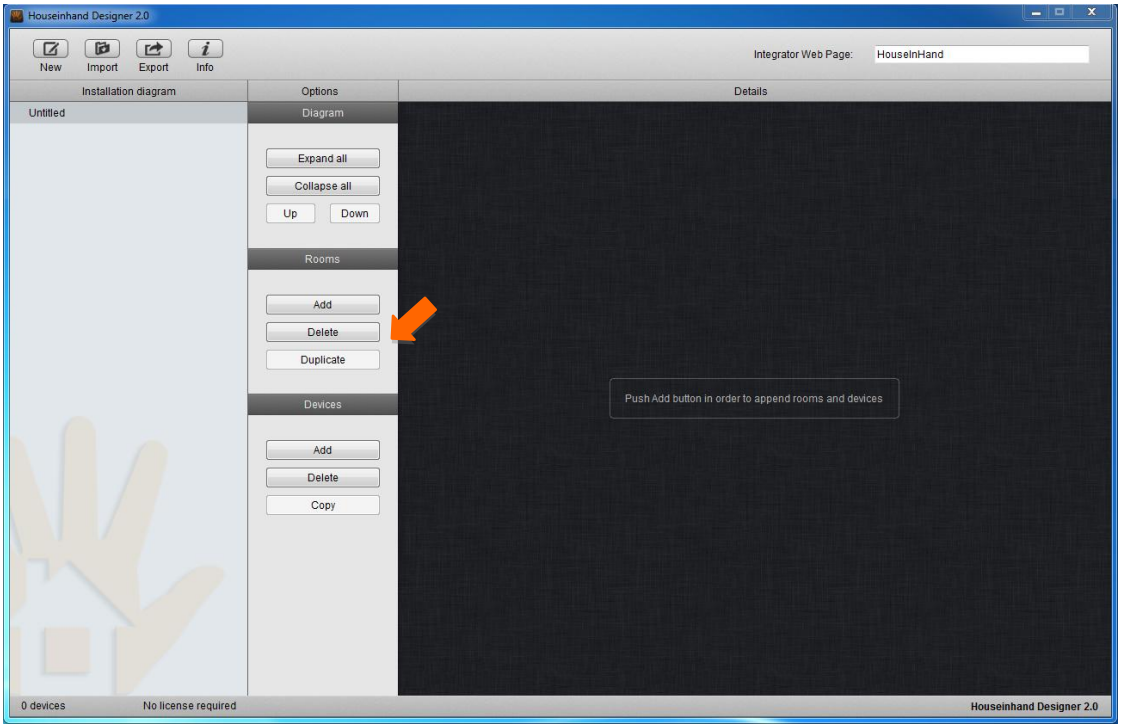
From there, you can create a new configuration, modify an existing one and consult the user's guide.

As we will see later, the structure of the configuration is carried out hierarchically, that is to say, it is necessary to create every room (that would be the top level) and, later, adding all those devices that this room should have. For such an effect, the buttons of Up/Down will allow to modify the order of the rooms / devices, modifying this way the order in which they will appear in the iPhone or iPad.

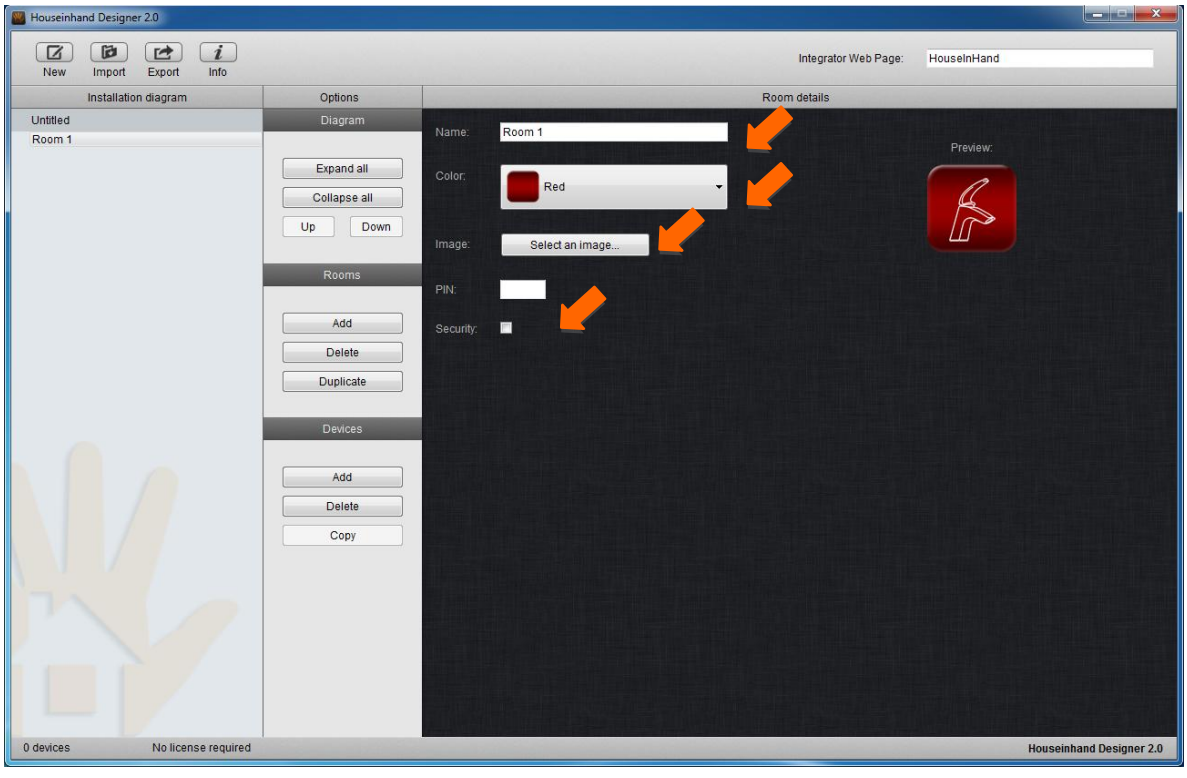
It is important to emphasize that the configuration and license files are totally independent; therefore the license file is not associated with any configuration file.

This characteristic allows generating several files of configuration for the same house, assigning more or less functionalities to each of them. An example of this functionality would be to carry out a complete configuration for the client's iPhone; whereas to that of the iPad of the house, we could configure only lights and blinds to avoid unwished uses.

Room management

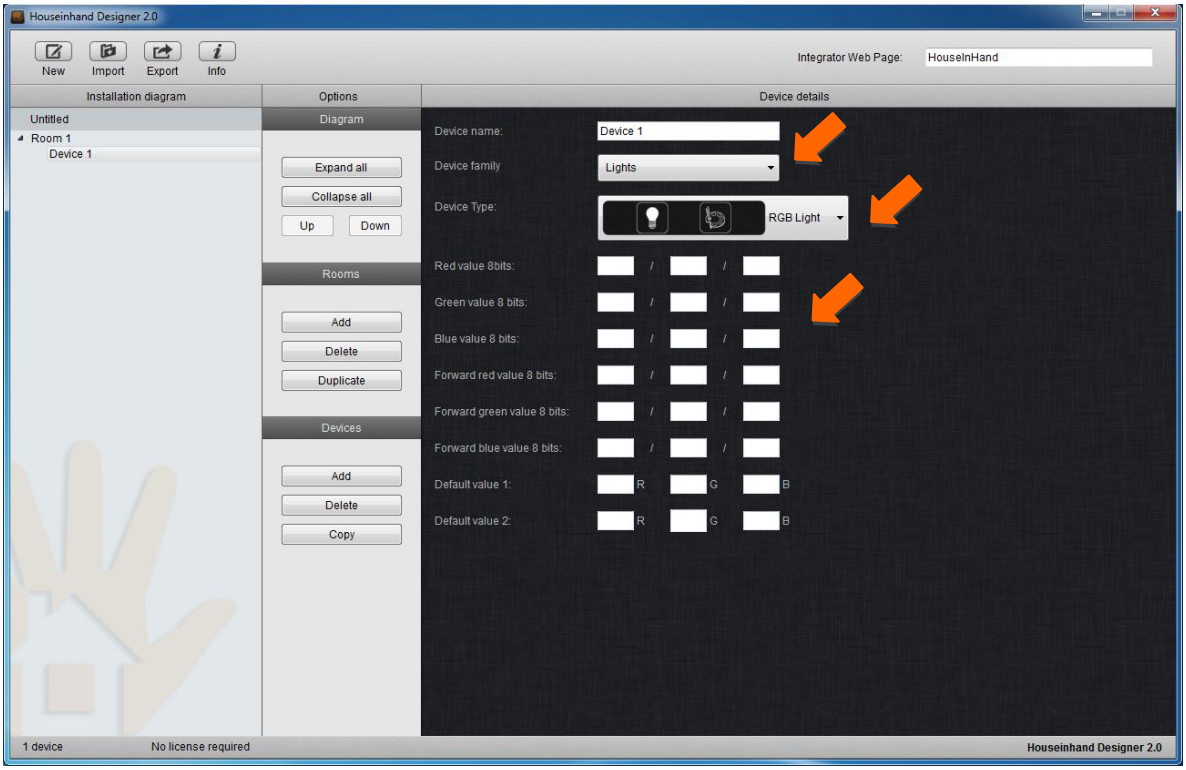


The management of the different rooms of the house is carried out by means of the buttons of add/delete/duplicate room.



When adding a room, there will appear the options of modifying the name, PIN, color (only for the iPad version) and image of the room created.

Device management



Same as previous case of adding a room, the buttons of Add/Delete devices allow the management of devices inside a room. To add a device press the button of adding a device.

Next, we will be asked the name, device familiy and the type of the device we want to control. Depending on the device type, more or less group directions will be needed.

In case of not having implemented some of the group directions, it is possible to leave the spaces blank.

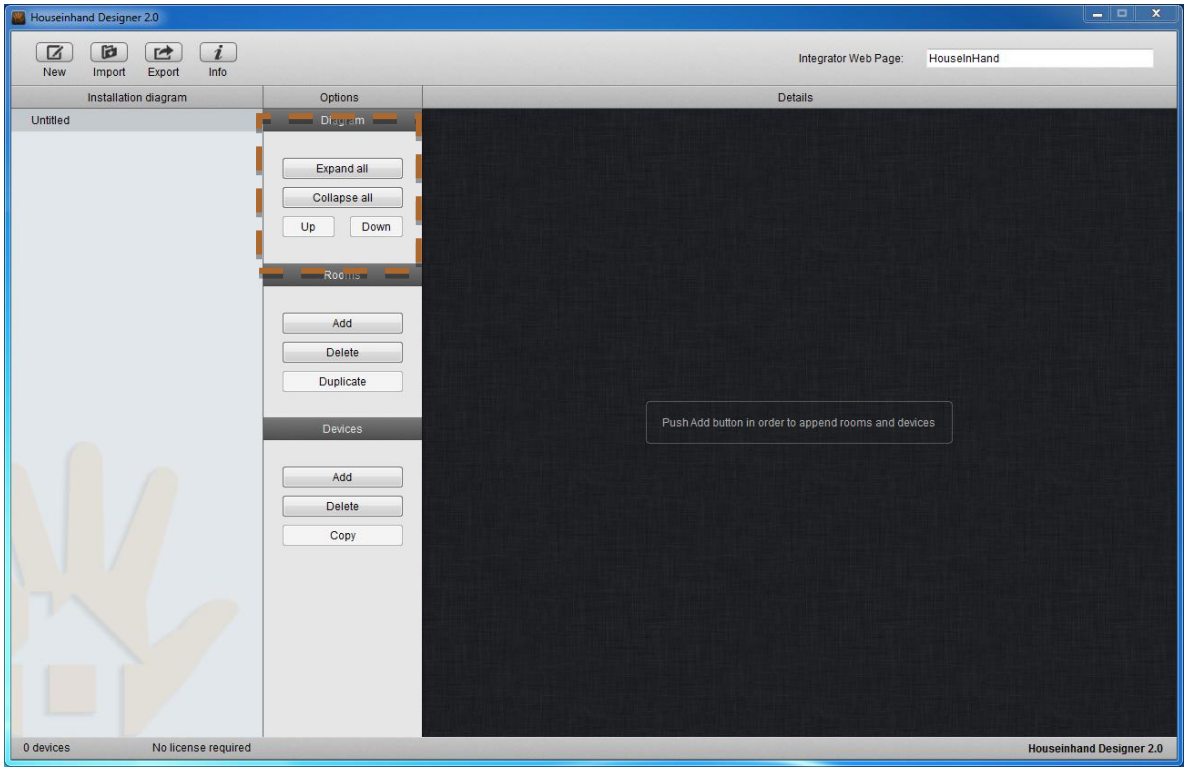
When selecting one or several devices and pressing the button for copying devices, it will appear a window where you can select the rooms in which the devices will be added.

For the correct functioning of the device it is important to verify that the reading flags have been activated in the ETS.

Additional functions

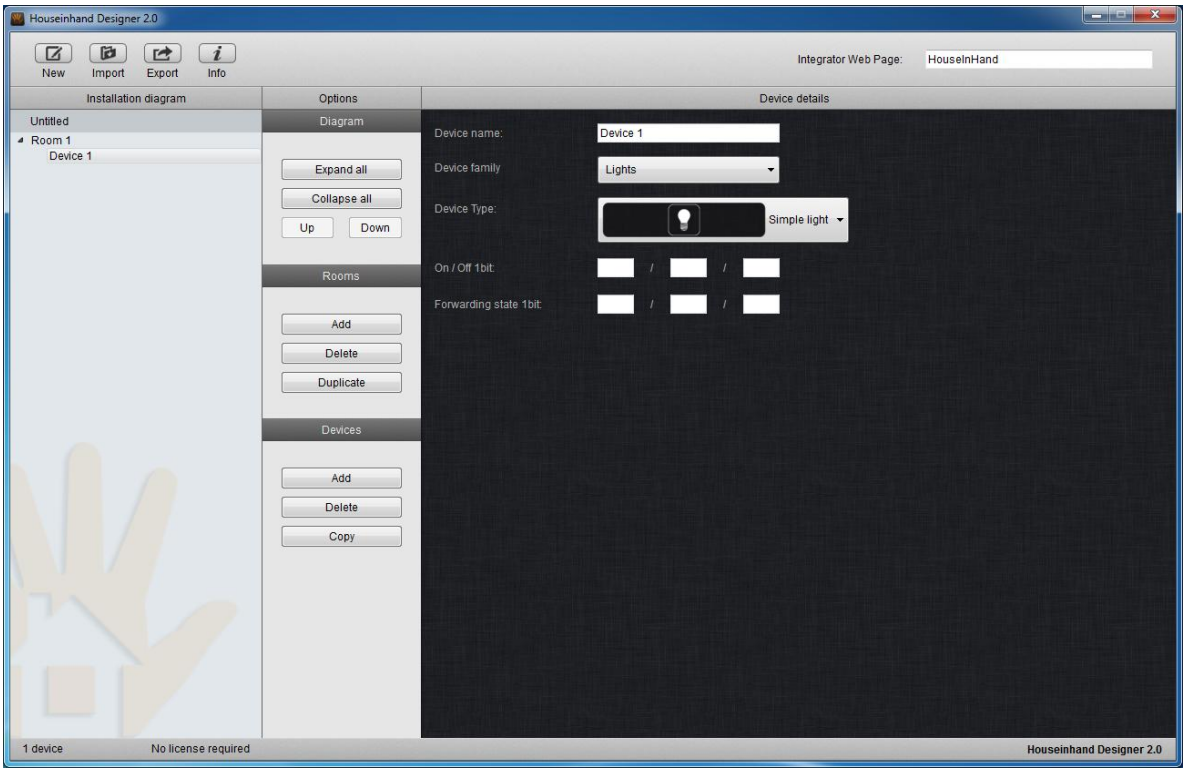
The buttons of additional functions allow to expand / collapse the room tree. This functionality is very useful to speed up the device management.

The up and down buttons allow the user to change the order of the devices and rooms. Houseinhand will display the devices and rooms in the same order as in Houseinhand Designer.



Devices

Simple light / 1 bit generic control



These two types of devices correspond to the Boolean control of lights or generic elements.

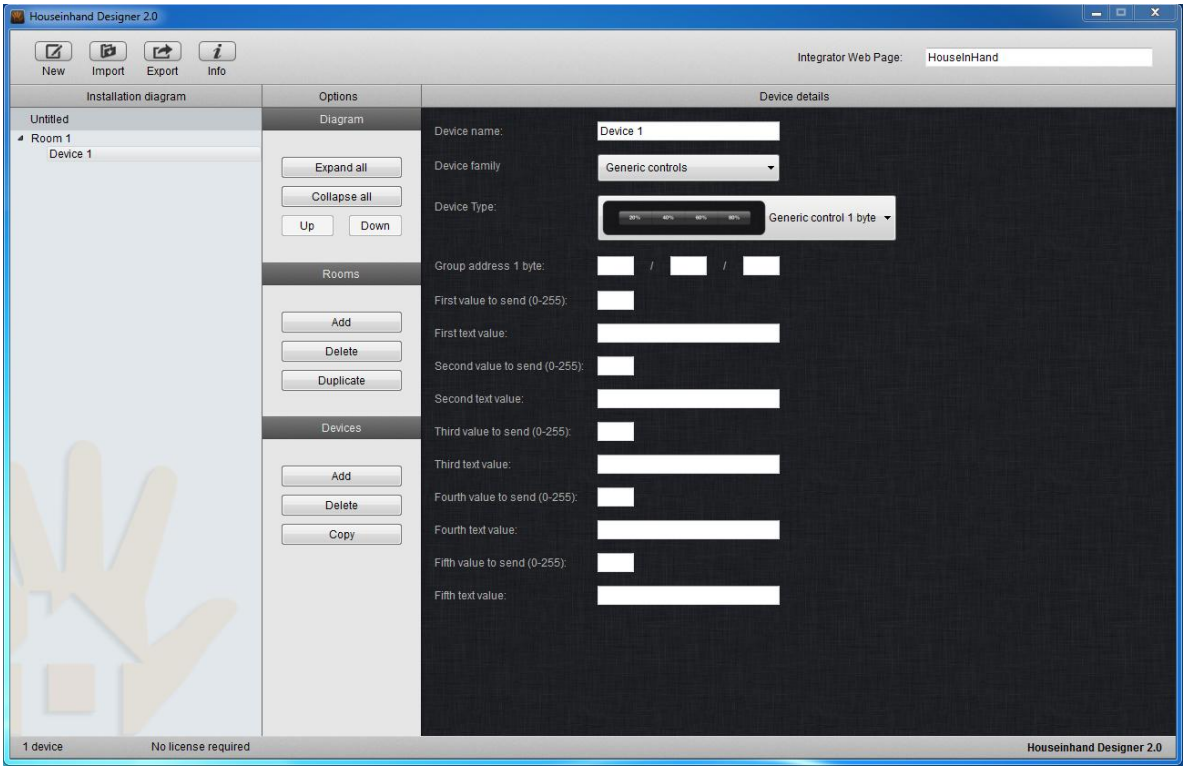
The group directions to configure in both cases are:

- **On/Off 1bit:** Group directions corresponding to the communication object for the 1 bit control (On/Off).

- **1bit status feedback:** Necessary group direction to know the light status, as for carrying out an initial reading as to modify the value from another element (for instance a switch of the KNX bus).

For the correct functioning of the device, it is important to check if the reading flag of the 1bit status feedback has been activated (in the ETS).

8 bits Generic control



This type of device allows the adjustment of until 5 values (each one of 0 to 255), in just one group direction of 1 byte. Moreover, it allows personalizing the text of each segment.

The group direction to configure is:

- **1byte group direction:** Group direction corresponding to the communication object for the value adjustment (from 0 to 255).

The fields to fill in are:

- **First value to send (0-255):** Value that will be sent when pressing this segment, through the 1 byte group direction.
- **Text first value:** Text that will appear in the corresponding segment.
- **Second value to send (0-255):** Value that will be sent when pressing this segment, through the 1 byte group direction.
- **Text second value:** Text that will appear in the corresponding segment.
- **Third value to send (0-255):** Value that will be sent when pressing this segment, through the 1 byte group direction.

- **Text third value:** Text that will appear in the corresponding segment.

- **Fourth value to send (0-255):** Value that will be sent when pressing this segment, through the 1 byte group direction.

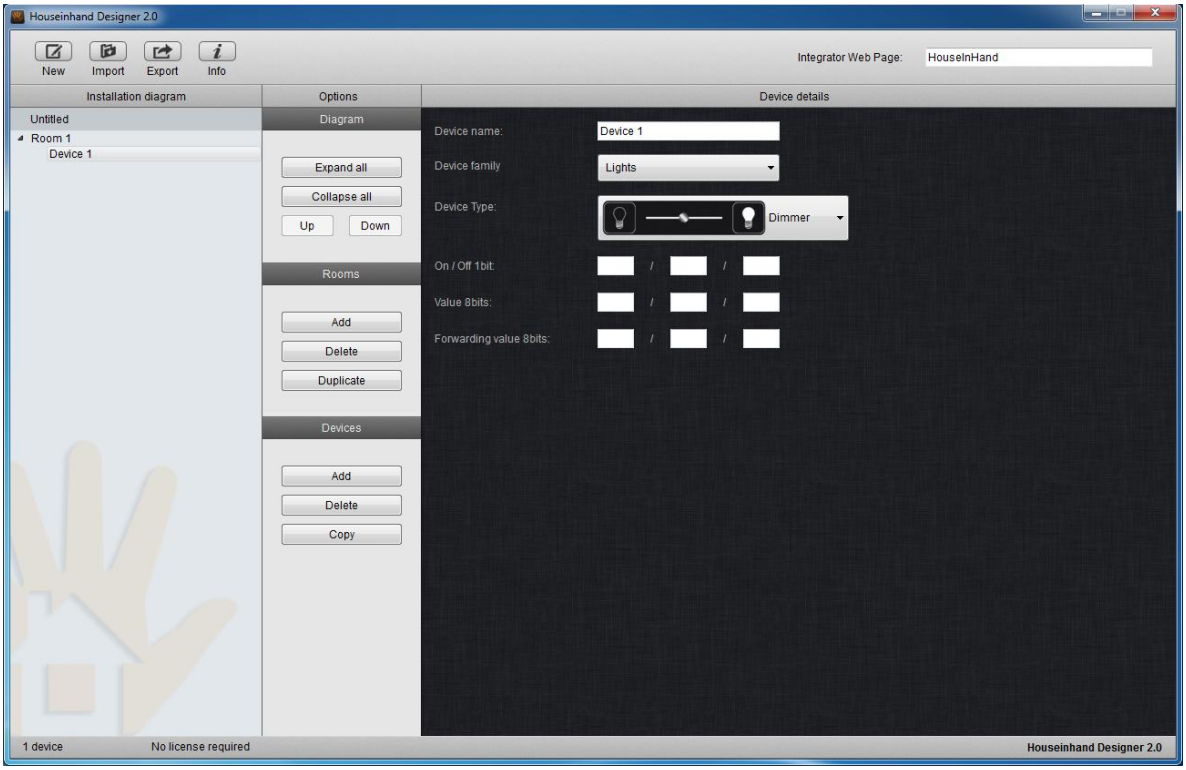
- **Text fourth value:** Text that will appear in the corresponding segment.

- **Fifth value to send (0-255):** Value that will be sent when pressing this segment, through the 1 byte group direction.

- **Text fifth value:** Text that will appear in the corresponding segment.

In case of needing less than 5 values, it is possible to leave them blank (in decreasing order, from fifth to first).

Adjustable light (dimmer)



This type of device corresponds to the adjustable control of lights.

The group directions to configure are:

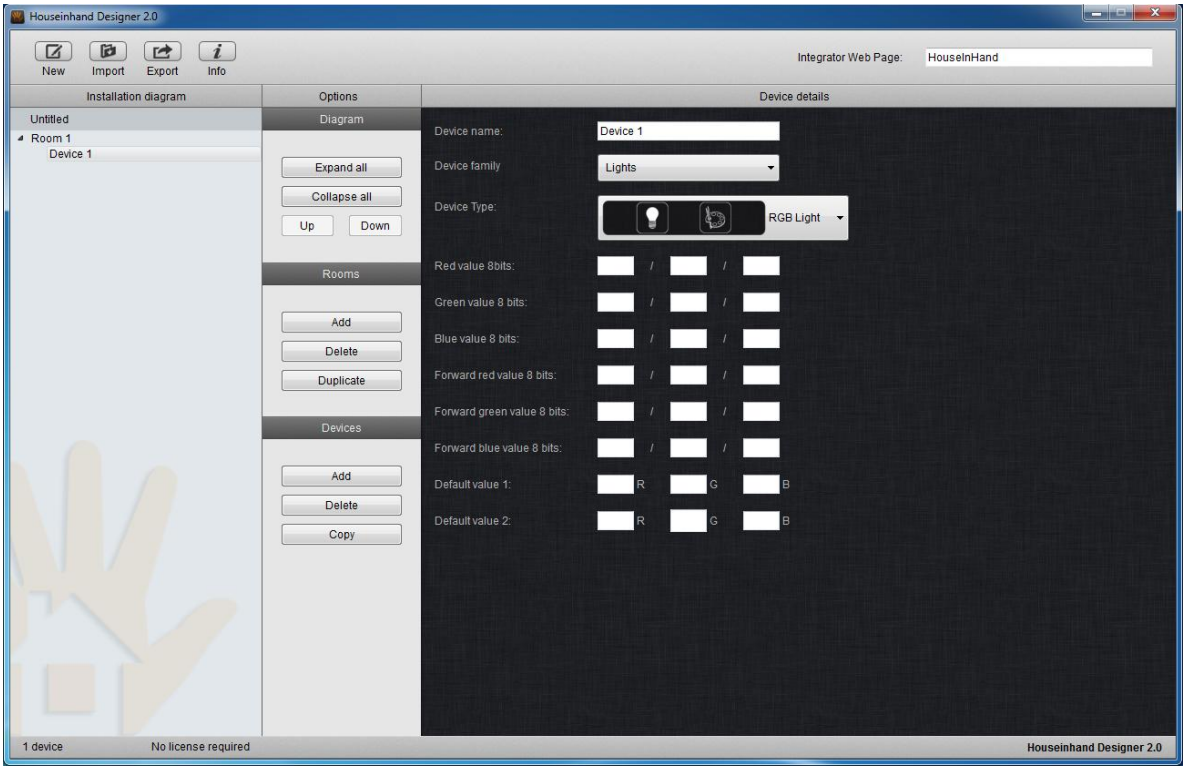
- **On/Off 1bit:** Group direction corresponding to the communication object for the 1 bit control (On/Off).

- **Valor 8bits:** Group direction corresponding to the communication object for the 8 bits control. It allows the exact positioning (between 0 and 255) by means of a slider.

- **8bits status Feedback:** Necessary group direction to know the light status, as for carrying out an initial reading as to modify the value from another element (for instance a switch). In this case, the reading is only carried out with the 8 bits status feedback.

For the correct functioning of the device, it is important to check that the reading flag for the 8bits status feedback has been activated (in the ETS).

RGB Light



This type of device corresponds to the RGB light control.

The group directions to configure are:

- **8bits Red Value:** Group direction corresponding to the communication object for the red color control.
- **8bits Green Value:** Group direction corresponding to the communication object for the green color control.
- **8bits Blue Value:** Group direction corresponding to the communication object for the blue color control.
- **8bits Red Value Feedback:** Group direction corresponding to the communication object for the red color feedback.
- **8bits Green Value Feedback:** Group direction corresponding to the communication object for the green color feedback.
- **8bits Blue Value Feedback:** Group direction corresponding to the communication object for the blue color feedback.

In case of not having the feedback directions, we recommend to fill it in with the group direction of the corresponding color.

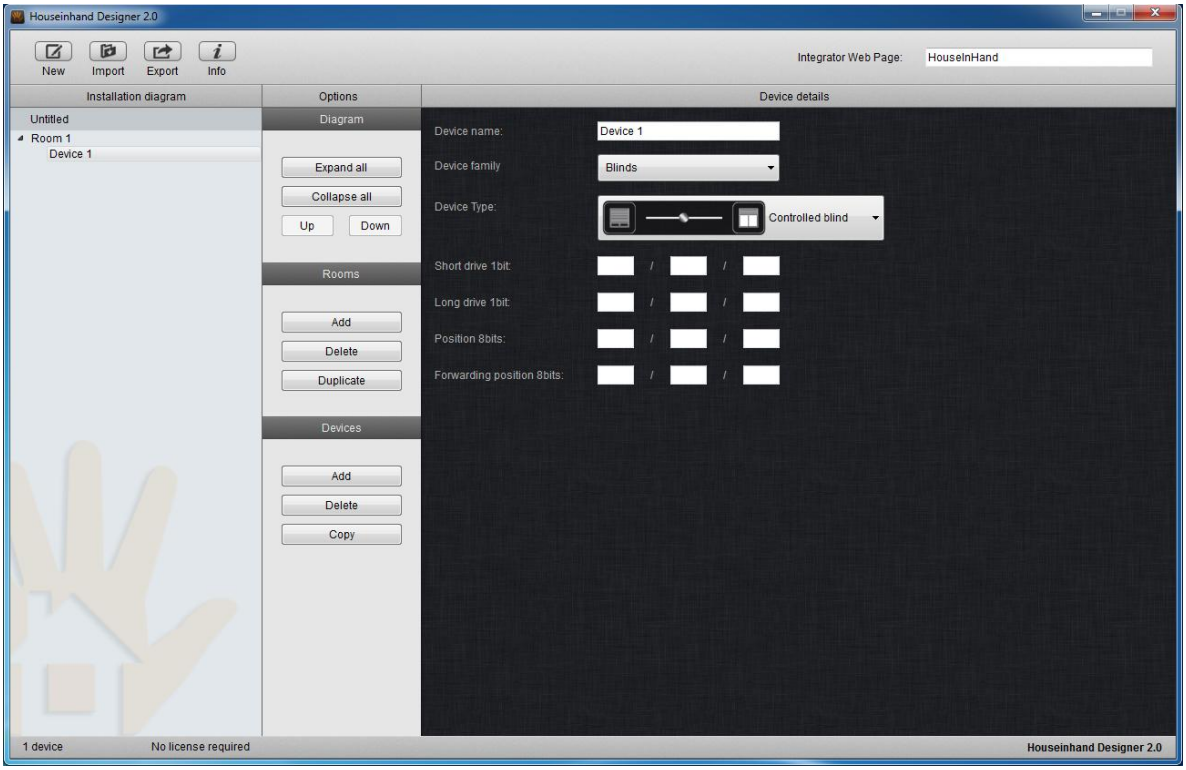
Moreover, it is possible to predefine the color values for each device:

- **Predefined value 1:** RGB adjustable value (from 0 to 255) that will appear as a predefined color which the user can select.

- **Predefined value 2:** RGB adjustable value (from 0 to 255) that will appear as a predefined color which the user can select.

For the correct functioning of the device it is important to check that the 8bits position feedback reading flag has been activated (in the ETS).

Controlled blind



This type of device corresponds to the controlled blind control with the possibility of position adjustment.

The group directions to configure are:

- **1bit short operation:** Also designated as the stop-movement object, it allows to lift up/down the blind slightly, or in case it is moving, stop it.

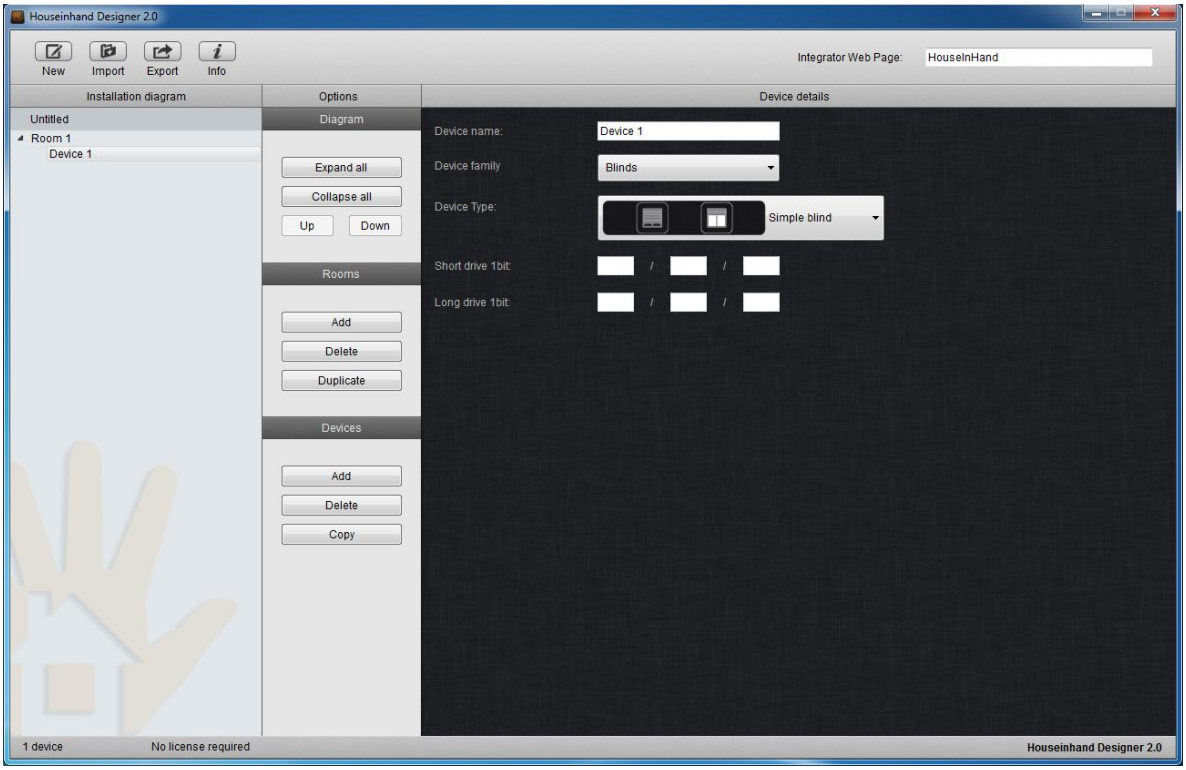
- **1bit long operation:** Also designated as the up/down object, it allows to lift up/down the blind continually, or in case it is moving, stop it. This communication object activates with a long pulse (more than 0.5 seconds).

- **8bits position:** Group direction corresponding to the communication object for the 8 bits control. It allows the exact positioning of the blind (between 0 and 255) by means of a slider.

- **8bits position feedback:** Necessary group direction to know the blind status, as for carrying out an initial reading, as to modify the value from another element (a switch for instance). In this case, the reading will only be carried out with the 8bits status feedback.

For the correct functioning of the device, it is important to check if the 8bits position feedback reading flag has been activated (in the ETS).

Simple blind



This type of device corresponds to the simple blind control.

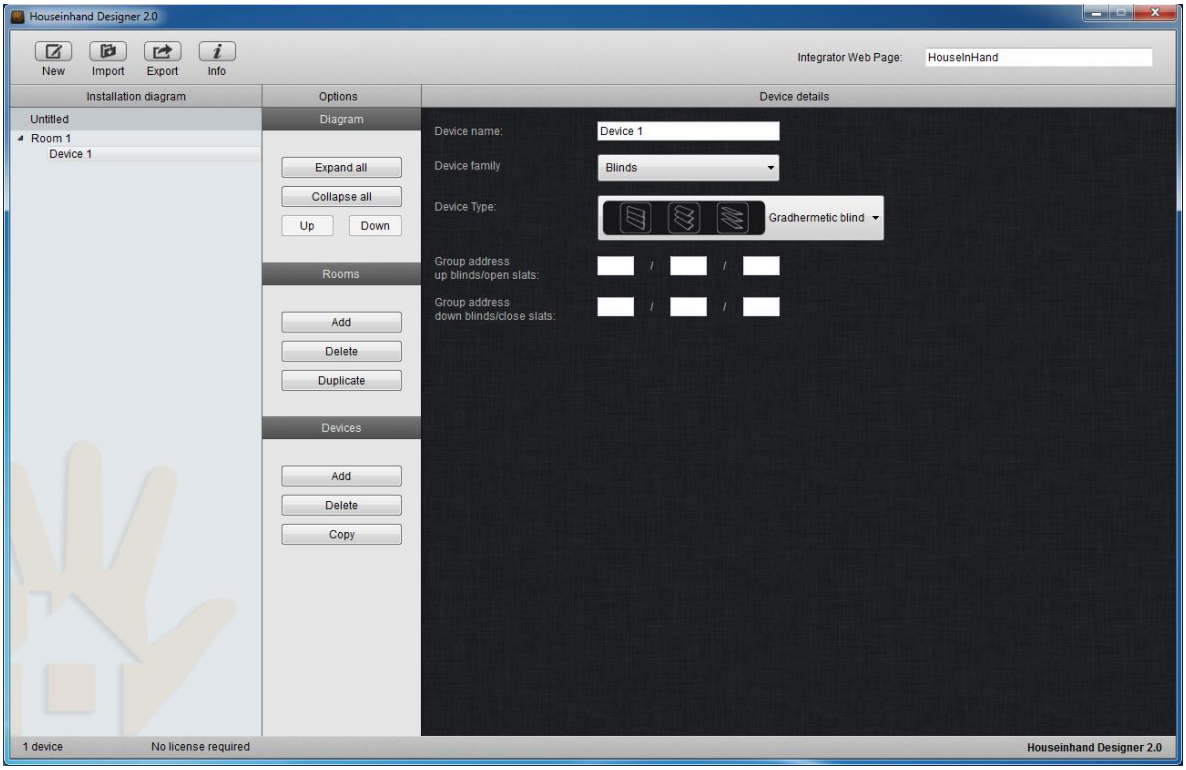
Due to the simple blind not having a status feedback, we recommend using the type of adjustable blind as long as it is possible.

The group directions to configure are:

- **1bit short operation:** Also designated as the stop-movement object, it allows to slightly lift up/down the blind or, in case it is moving, stop it.

- **1bit long operation:** Also designated as the up/down object, it allows to lift up/down the blind continually, or in case it is moving, stop it. This communication object activates with a long pulse (more than 0.5 seconds).

Gradhermetic blind



This kind of device corresponds to the Gradhermetic blind control.

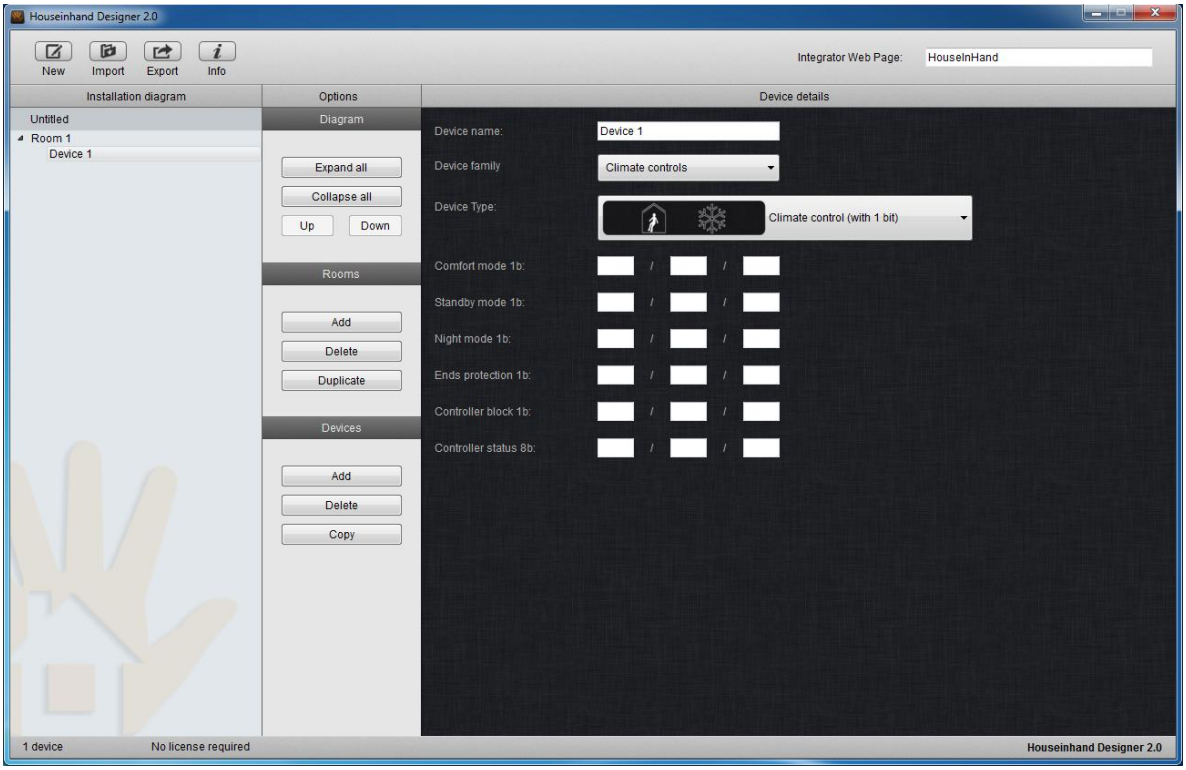
The group directions to configure are:

- **Lifting up blind group direction/ open slats:** Group direction of the channel corresponding to the actuator used to control the blind.

- **Lifting down blind group direction / close slats:** Group direction of the channel corresponding to the actuator used to control the blind.

It is not required to use the central function to control the two actuator channels at the same time.

Climate control (1 bit)



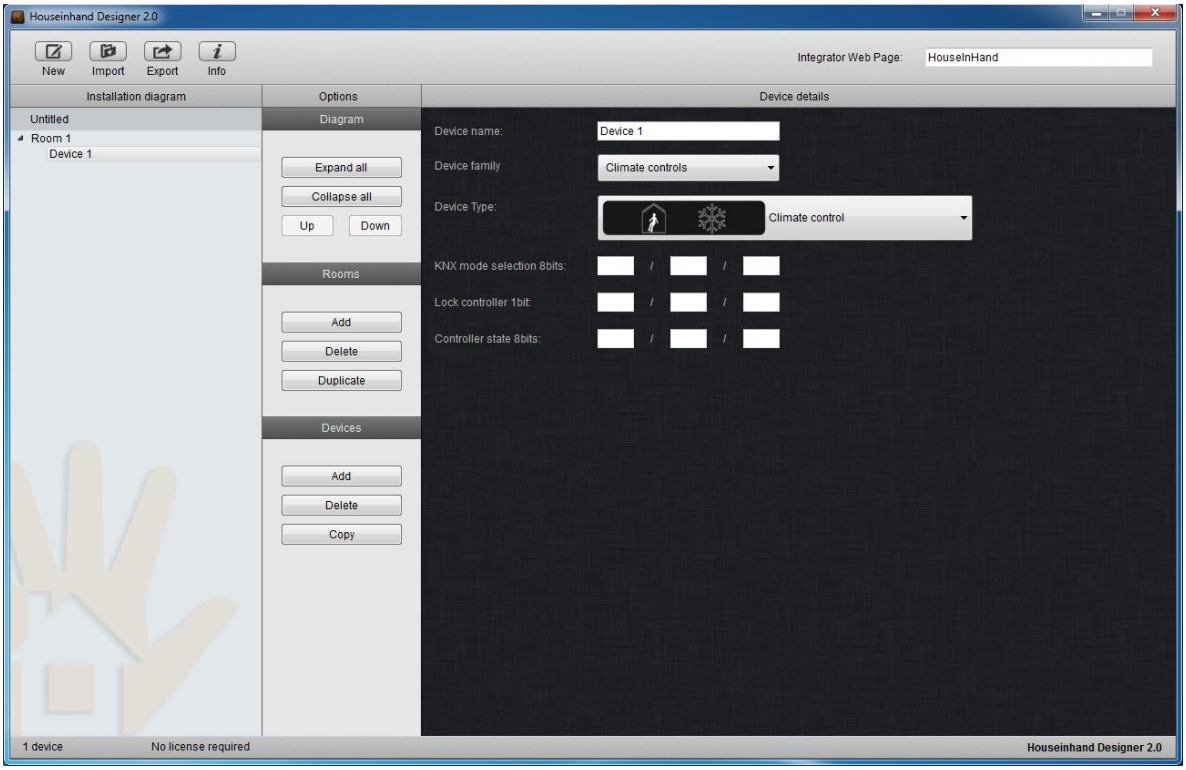
This kind of device corresponds to the climate mode control with 1 bit group directions.

The group directions to configure are:

- **1bit Comfort mode:** Group direction corresponding to the comfort mode.
- **1bit standby mode:** Group direction corresponding to the standby mode.
- **1bit extremes protection:** Group direction corresponding to the extremes protection mode.
- **1bit controller blocking:** Group direction corresponding to the thermostat's controller blocking. Leave it blank does not limit any functionality.
- **8bits controller status:** Group direction corresponding to the communication object of the 1byte thermostat status controller. It provides information about the current temperature mode, about whether the controller is cooling down or heating, etc… The readings are only carried out by this communication object.

For the correct functioning of the device, it is important to check that the 8bits controller status reading flag has been activated (in the ETS).

Climate control (8 bits)



This kind of device corresponds to the climate mode:

The group directions to configure are:

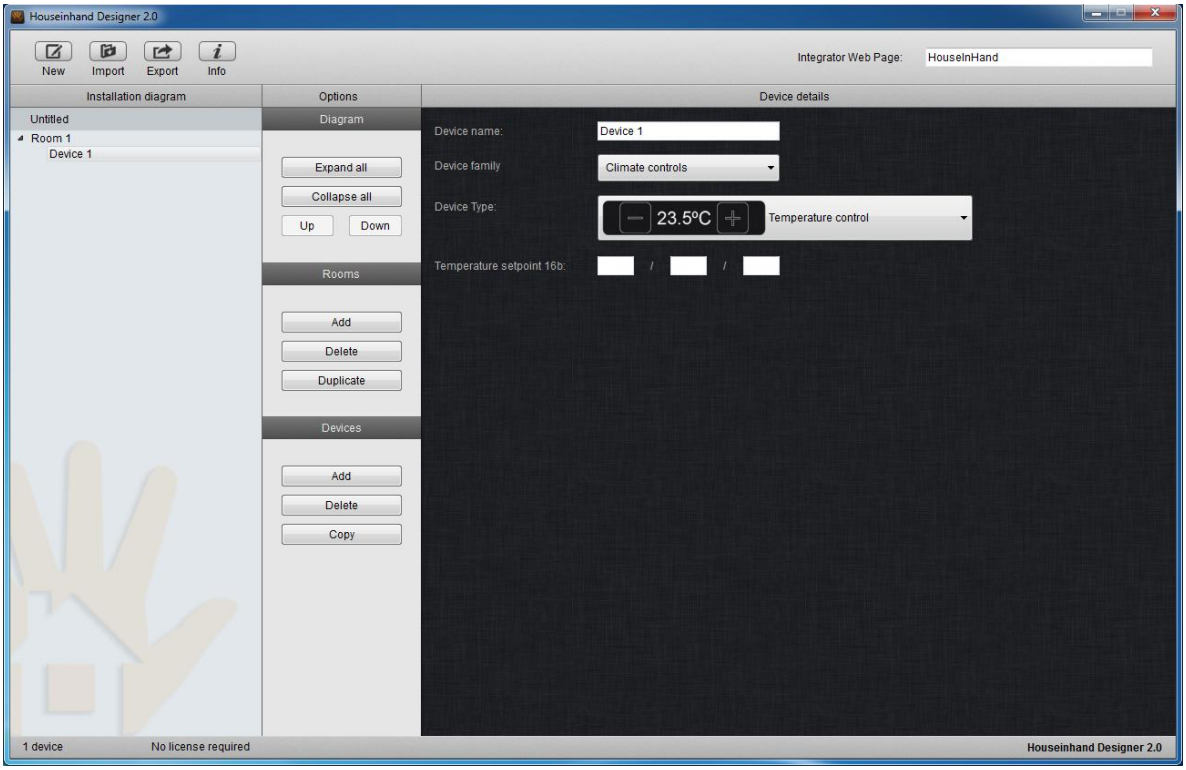
- **Select KNX mode 8 bits:** Group direction corresponding to the selection of the temperature mode (comfort, standby, night and protection against extremes).

- **1bit controller blocking:** Group direction corresponding to the blocking of the thermostat's controller. Leave it blank does not limit any functionality.

- **8bits controller status:** Group direction corresponding to the 1byte communication object of the thermostat's controller status. It provides information about the current mode of the temperature, about whether the controller is cooling down or heating, etc… The readings are only carried out by this communication object.

For the correct functioning of the device, it is important to check that the 8bits controller status reading flag has been activated (in the ETS).

Temperature control

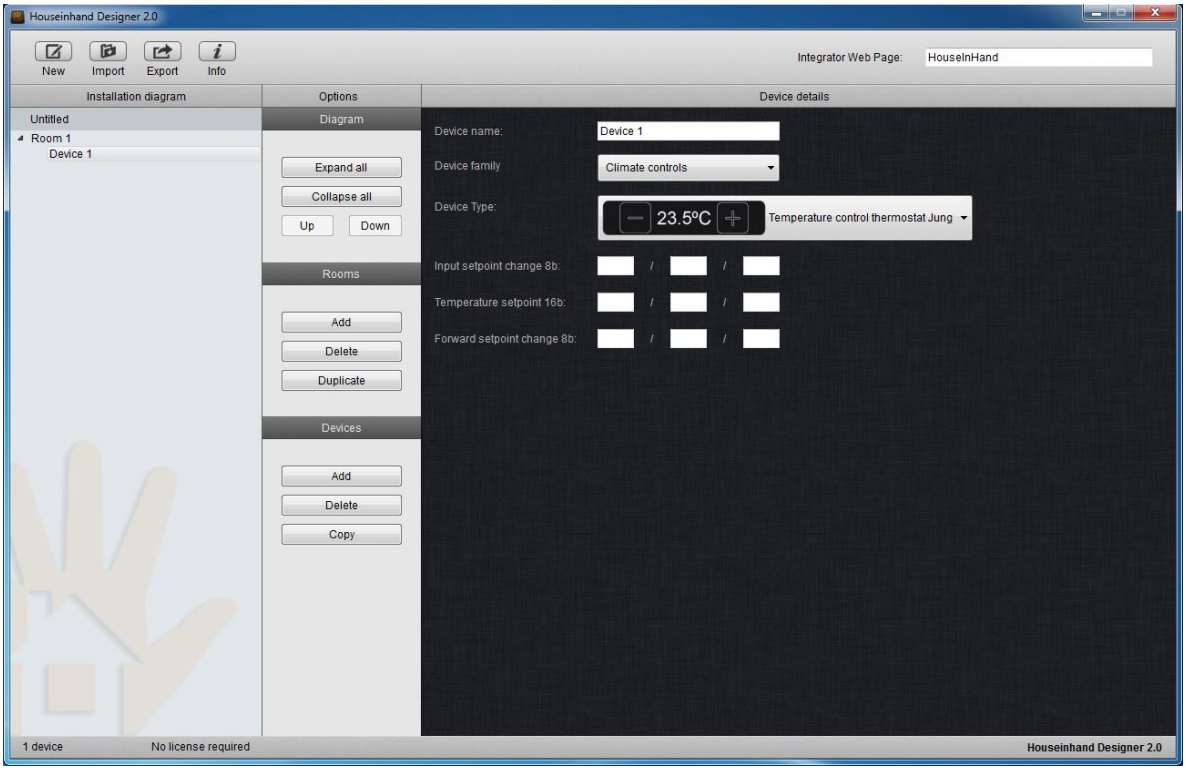


The group direction to configure, in the case of the direct control of the temperature, is:

- **16bits setpoint temperature:** Group direction corresponding to the temperature control.

For the correct functioning of the device, it is important to check that the reading flag in the ETS has been activated.

Jung thermostats temperature control



This type of device is used for the Jung thermostats' control, where it is not allowed to modify the set-point temperature through the 2 bytes group direction. By the means of the 8 bits group direction used, we get the same behavior than the thermostat's adjustment wheel.

The group directions to configure are:

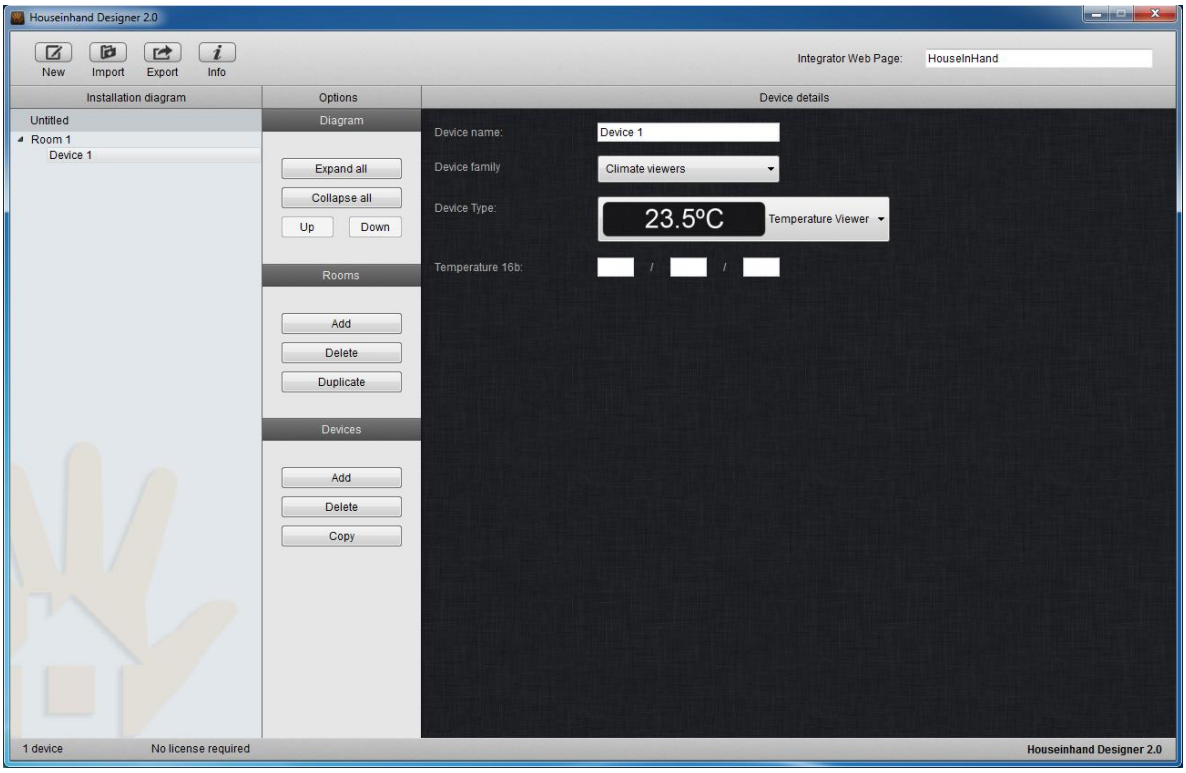
- **Modification entrance 8bits set-point:** Group direction corresponding to the temperature's base value.

- **16bits set-point temperature:** Group direction corresponding to the visualization of temperatures.

- **Modification feedback 8bits set-point:** Group direction corresponding to the feedback of the temperature's base value.

For the correct functioning of the device, it is important to check that the reading flag of the feedback in the ETS has been activated.

Viewers (temperature, luminosity, wind, rain, twilight)

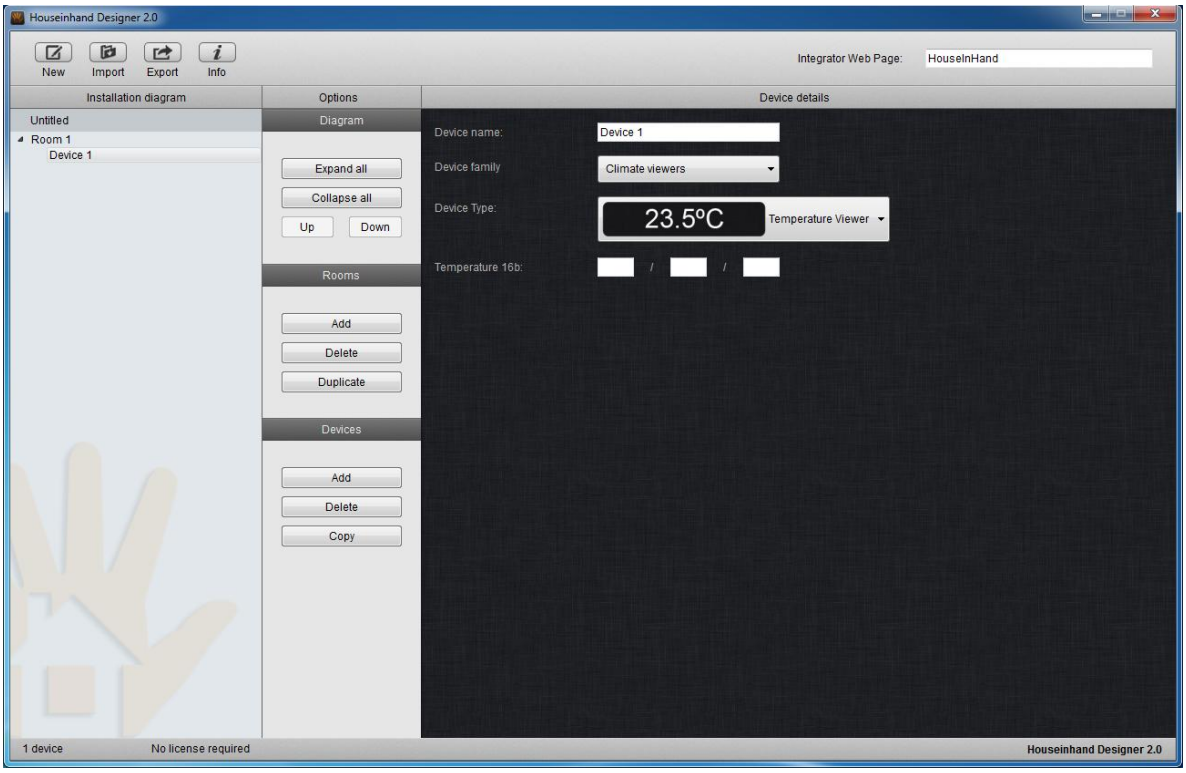


The group direction to configure, in the case of the temperature viewer is:

- **16bits temperature:** Group direction corresponding to the visualization of temperatures (or otherwise rain, luminosity, wind and twilight).

For the correct functioning of the device, it is important to check that the reading flag in the ETS has been activated.

Central functions (general turn off, lower blinds, presence simulator)



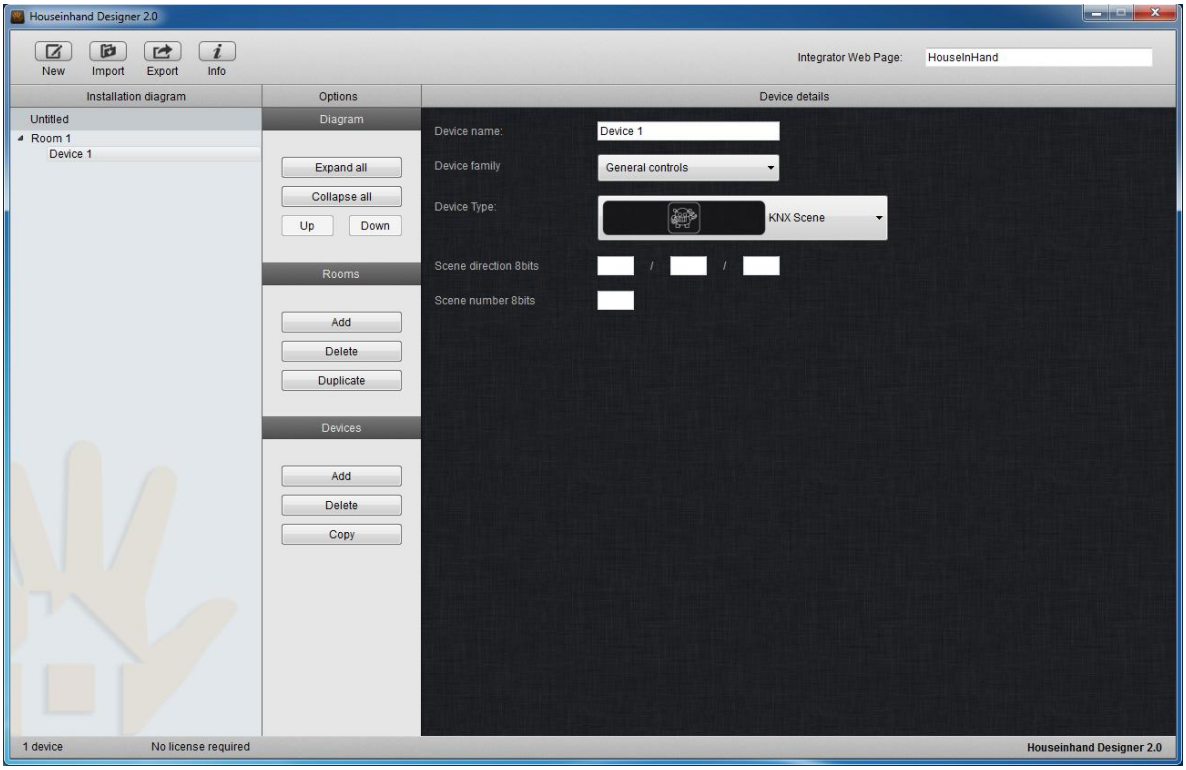
The group direction to configure is:

- **1bit central function:** Group direction corresponding to the programmed central function.

Besides, in this case, it is necessary to configure the following parameter:

- **Sending value 1:** If it activates, the value to send by the group direction previously indicated will be 1. On the contrary, a 0 will be sent.

KNX Scenes



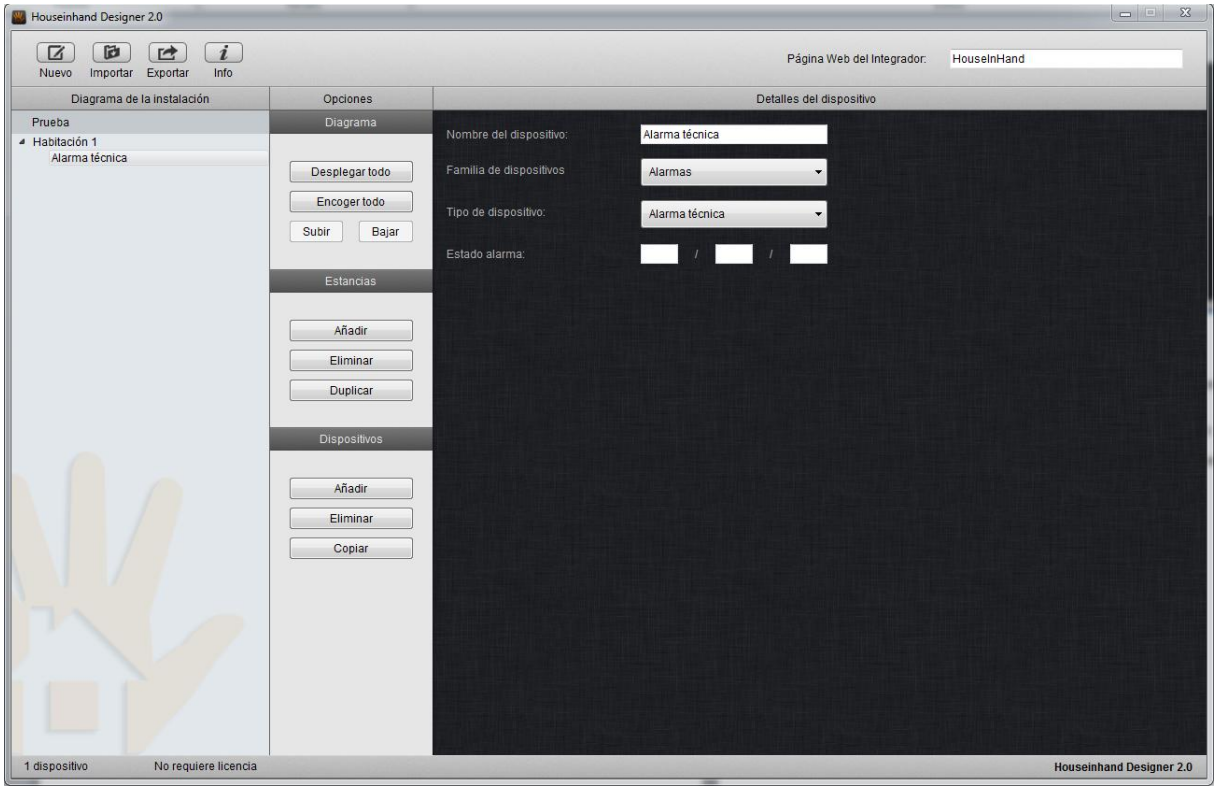
The group direction to configure is:

- **8bits scene direction:** Group direction corresponding to the programmed KNX scene.

Besides, in this case, it is necessary to configure the following parameter:

- **8 bits scene number:** Scene number to activate (between 1 and 256).

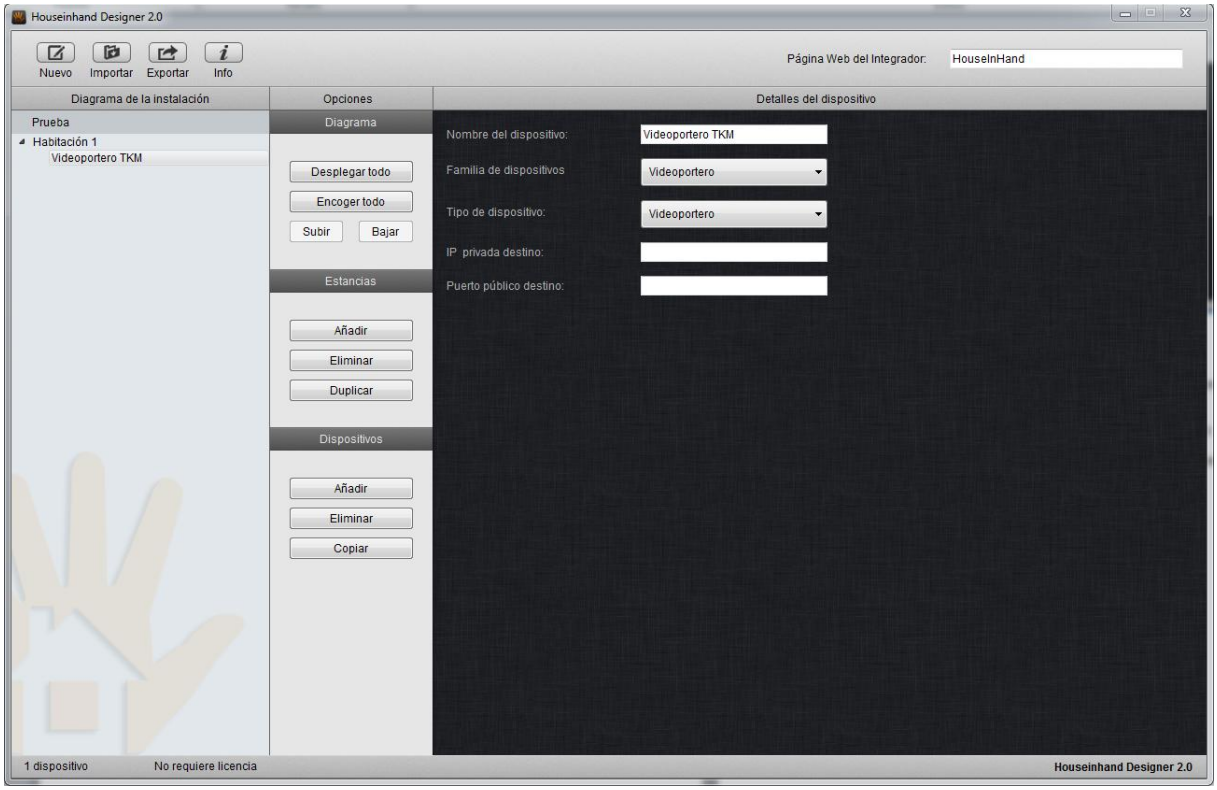
Technical alarms



The group direction to set up is:

- **Alarm state 14 bytes:** Group address referred to the text configured in the case of alarm.

Door Communication System (JUNG DCS/TKM)



The fields to set up are:

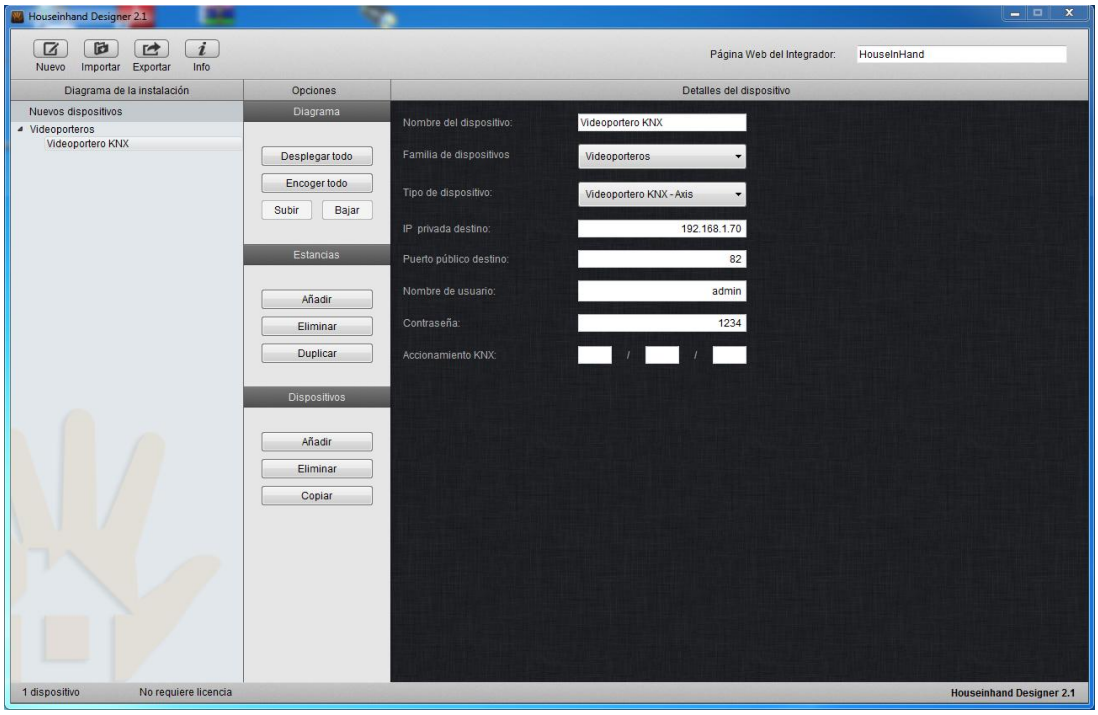
- **Private IP destination:** IP address corresponding to the private IP of the video-streamer.

- **Public port destination:** Port used by the application to connect from outside without VPN (NAT). For further information about remote connections please refer to the manual “Remote setup without VPN”

The public IP address is known by the application when connecting to a public IP to remotely control KNX installation The private port of the video streamer is port 80.

For further information about the DCS configuration please refer to the manual “DCS setup”

Door Communication System - KNX (with Axis & Mobotix IP Camera)



The fields to set up are:

- **Type of device:** Select if the image source is from Axis or Mobotix IP camera.

- **Private IP destination:** IP address corresponding to the private IP of the IP Camera. The application adjusts the bandwidth and quality.

- **Public port destination:** Port used by the application to connect from outside without VPN (NAT). For further information about remote connections please refer to the manual “Remote setup without VPN”

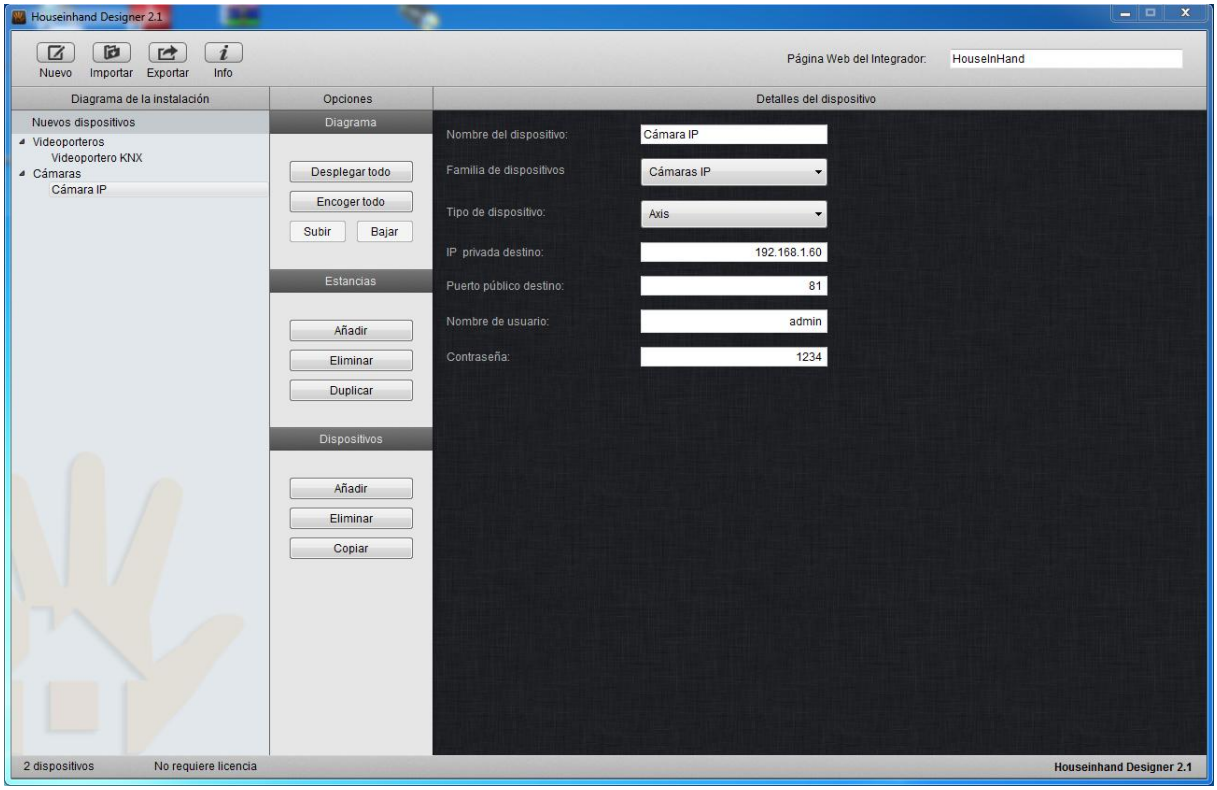
- **Username:** Username of the IP camera

- **Password:** Password of the IP camera.

- **Open door - KNX:** Group direction corresponding to the communication object for the 1 bit control (On/Off). The application sends “1” when the user touches down the open door button, and a “0” two seconds after the user touches up the button.

The public IP address is known by the application when connecting to a public IP to remotely control KNX installation The private port of the IP camera is port 80.

Axis & Mobotix IP Cameras

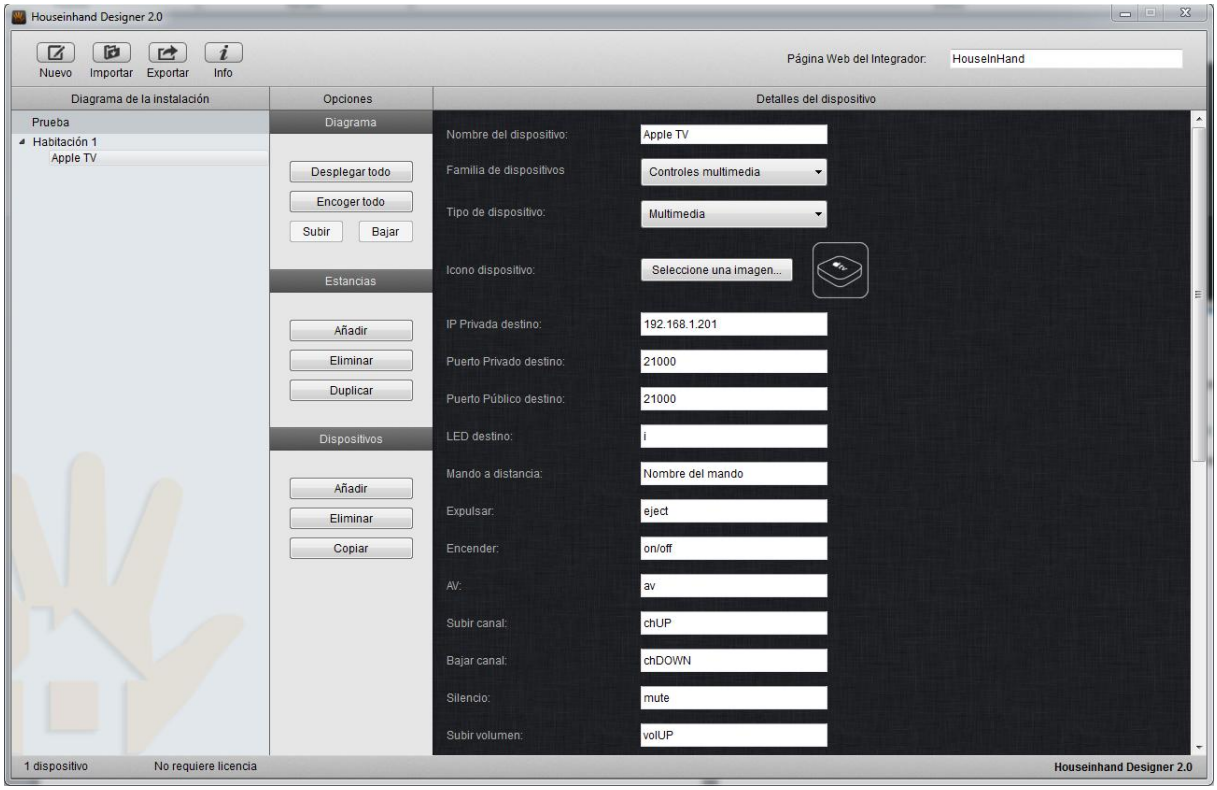


The fields to set up are:

- **Type of device:** Select if the image source is from Axis or Mobotix IP camera.
- **Private IP destination:** IP address corresponding to the private IP of the IP Camera. The application adjusts the bandwidth and quality.
- **Public port destination:** Port used by the application to connect from outside without VPN (NAT). For further information about remote connections please refer to the manual “Remote setup without VPN”
- **Username:** Username of the IP camera
- **Password:** Password of the IP camera.

The public IP address is known by the application when connecting to a public IP to remotely control KNX installation The private port of the ip camera is port 80

AV Control (IRTrans)



The fields that need to be configured are:

- **Private IP destination:** Private IP address of the IRTrans module.
- **Private port destination:** Private port used by the application to connect to the IRTrans module from inside. The default value is 21000.
- **Public port destination:** Port used by the application to connect to the IRTrans module from outside. For further information about remote connections please refer to the manual “Remote setup without VPN”.
- **Destination LED:** Indicator used by the IRTrans module to know to which LED has to send the commands. (In these devices that has more than one LED)

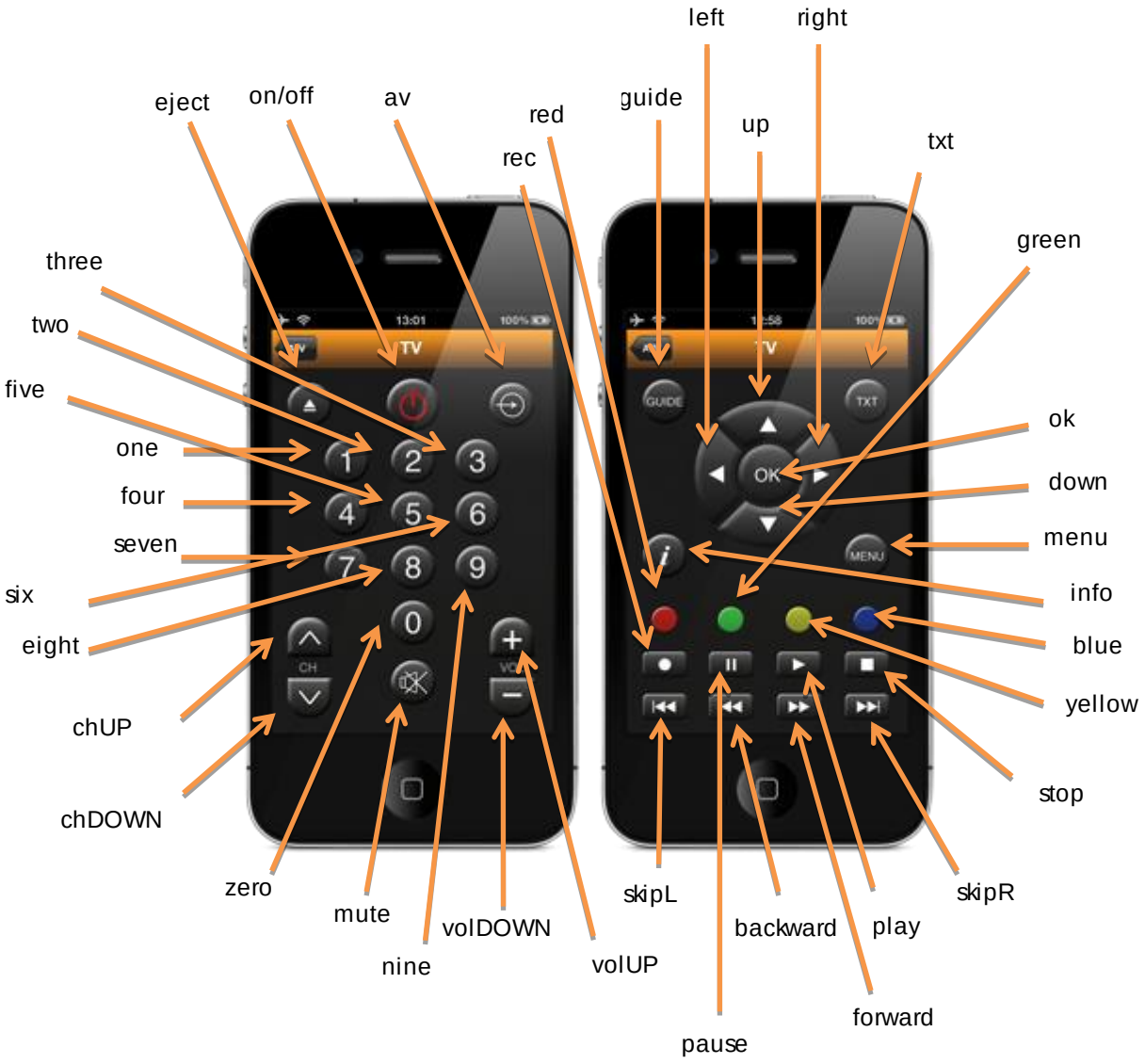
  The possible values are:

  - **i:** Refers to the internal LED. It is de default value, and the most common.
  - **e:** Refers to the external LED. Use this in the case you have another LED by cable connected to the Jack port of IRTrans.
  - **1-6:** Other devices and usages.

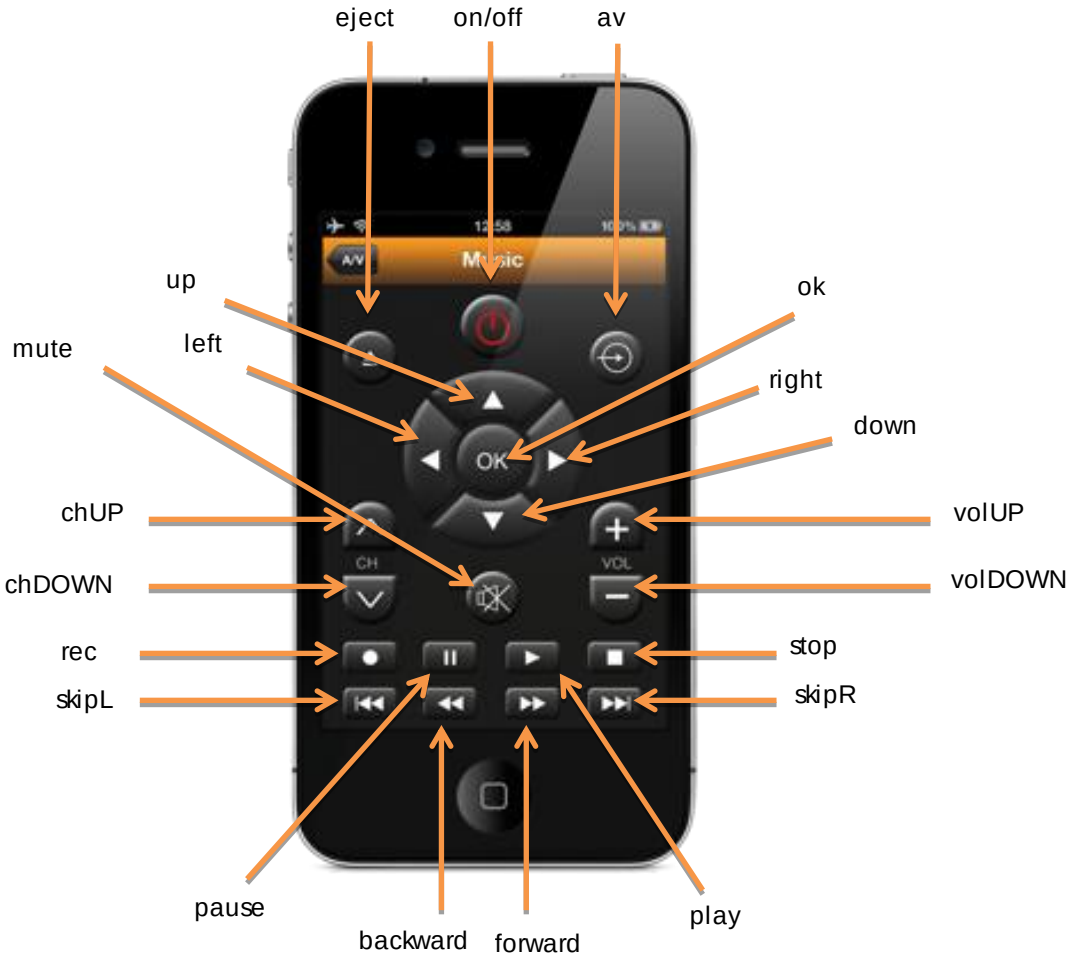
- **Remote control:** Label assigned to the name of the remote we are controlling. For further information please refer to he "IRTrans setup manual" or check their official manual: *http://www.irtrans.de/en/download/*

The rest of fields are about the labels assigned to the IRTrans module to control each function. To make the process even more straight-forward, Houseinhand Designer assigns this labels as default labels. If you setup the IRTrans following this, no more configurations will be needed. If you want to use custom labels, just edit the fields.

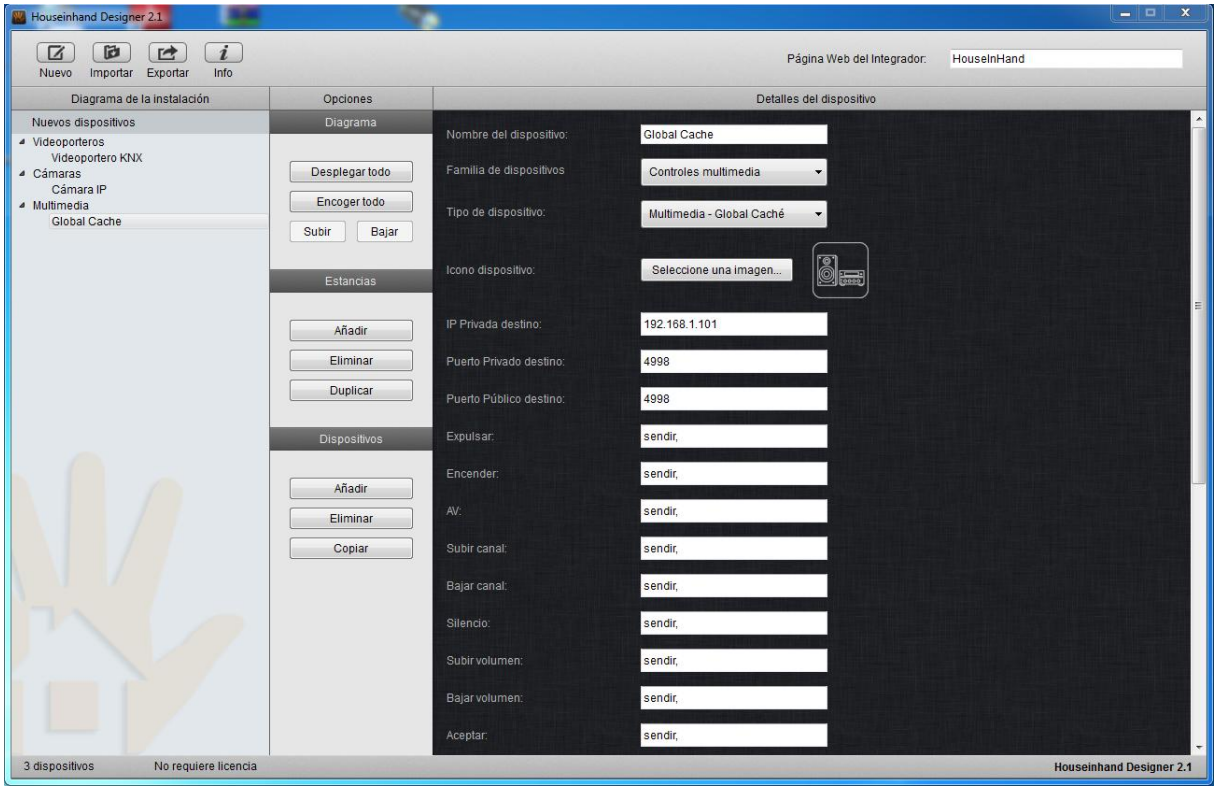
Full TV remote



Multipurpose multimedia remote



AV Control (Global Cache)



The fields that need to be configured are:

- **Private IP destination:** Private IP address of the Global Cache module.
- **Private port destination:** Private port used by the application to connect to the Global Cache module from inside. The default value is 4998.
- **Public port destination:** Port used by the application to connect to the Global Cache module from outside. For further information about remote connections please refer to the manual “Remote setup without VPN”.

The rest of fields are about the Global Cache module to control each function. To fill all the fields, it’s necessary to learn the IR commands with *iLearn* program (available in Global Cache webpage).

Finishing configuration

Web site and integrator image

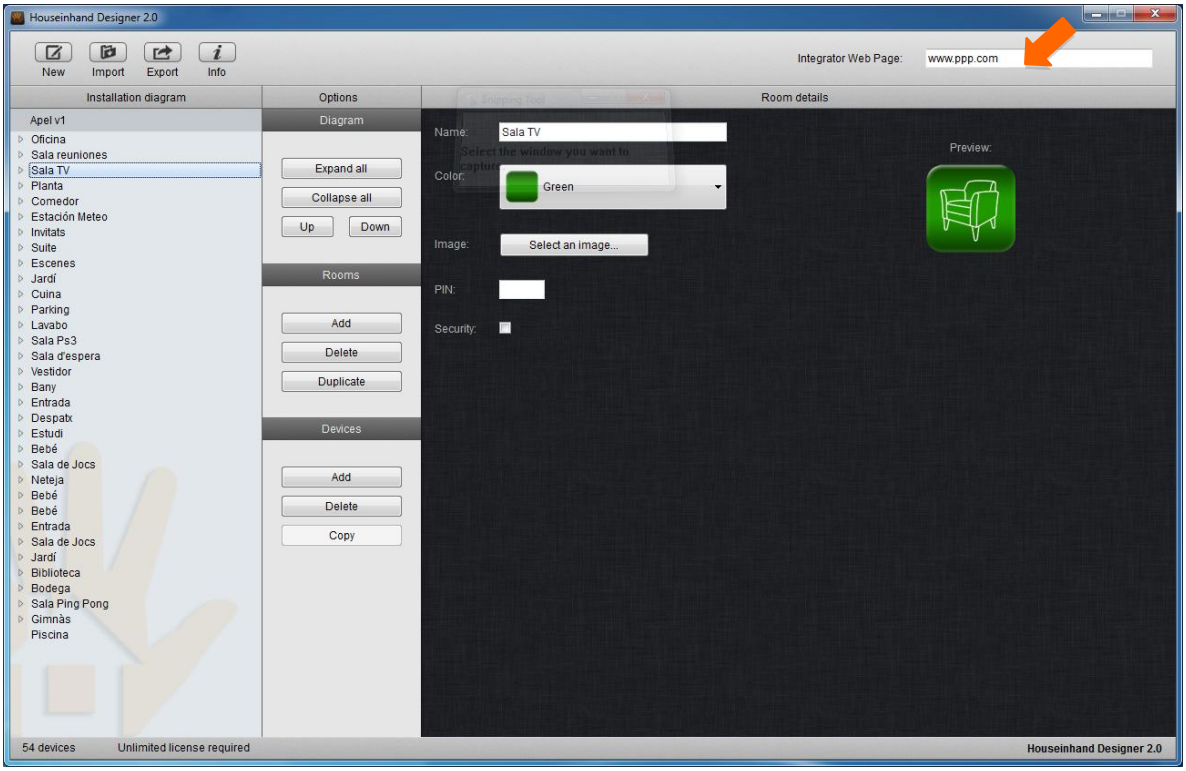
Houseinhand allows personalizing the application in order that a link shows up (and takes you to the web site of the integrator), as well as an image or logotype.

To introduce the image, it is necessary to attach to the application (by means of the method iTunes File Sharing, see corresponding section) the logotype or image that you want with the following requirements:

- Name of the logotype/image**: hih_integrador**
- Size (wide x high): **115 x 65 (in pixels)**
- Format: **PNG**

In case of not respecting these requirements, the result may not be the expected.

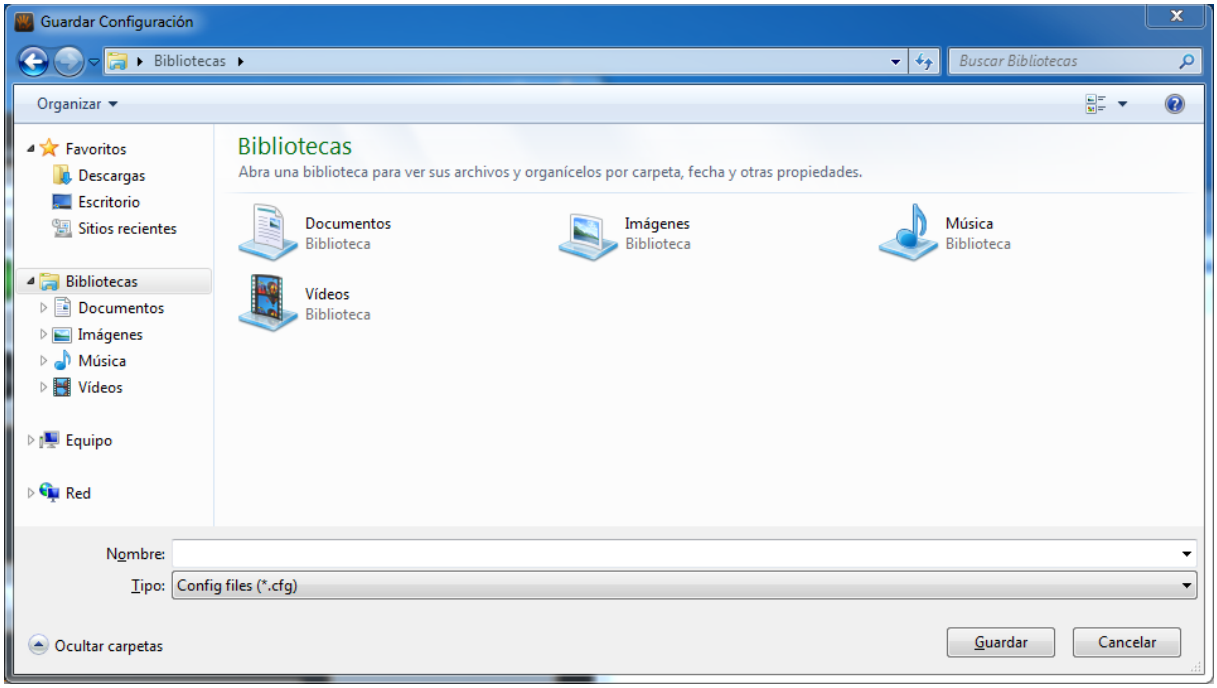
For the link with the web site to appear, it is necessary to introduce it in the field “Integrator’s web site”, in the lower part of the application.



Export configuration file

Once finished the configuration, the last step consists of exporting the file in order to introduce it in the final device.

For that purpose, it will be necessary to select the button “Export Config”, appearing a window as the one below:



Once the name and destination are introduced (it can be any name, as long as it has the extension .cfg), you will press the button ‘save’.

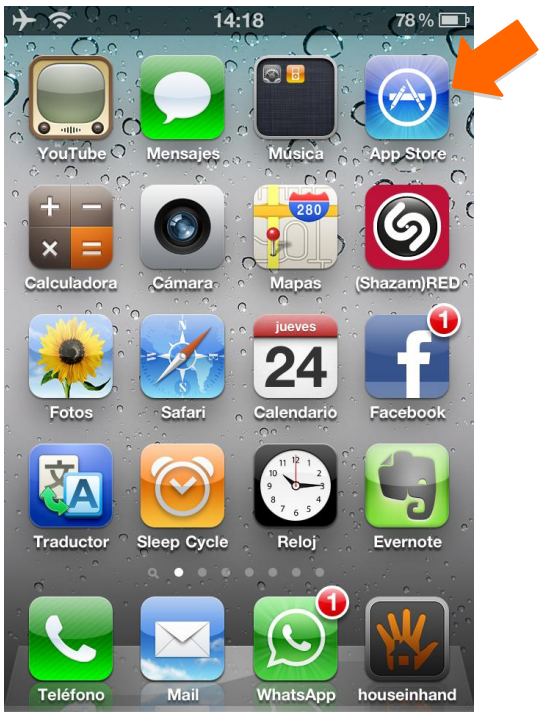
This way, two files will be generated: the cfg. and one of configuration preview (in plain text format), which is useful to check that the whole structure has been correctly carried out.

Obtaining a license

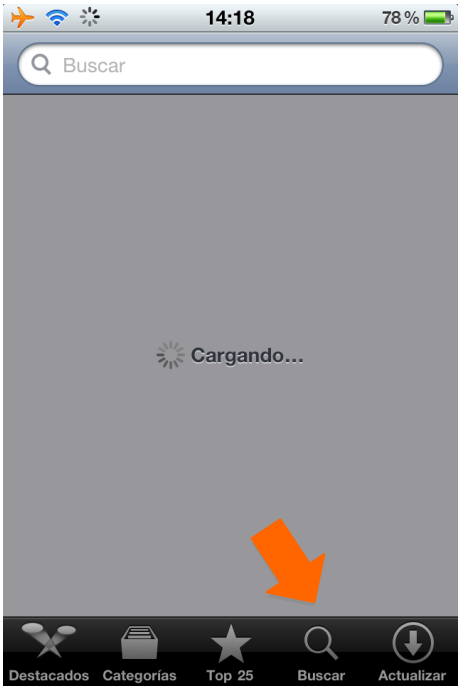
The license file is necessary to associate a device (iPhone/iPod/iPad) with the license number obtained. This file is totally independent from that of the configuration, and it is only necessary to request one for every new device.

The steps to follow must be carried out from the final device, that is to say the device for which one requests the license. Though the captures that appear later are that of the iPhone, the procedure in case of being an iPad is the same.

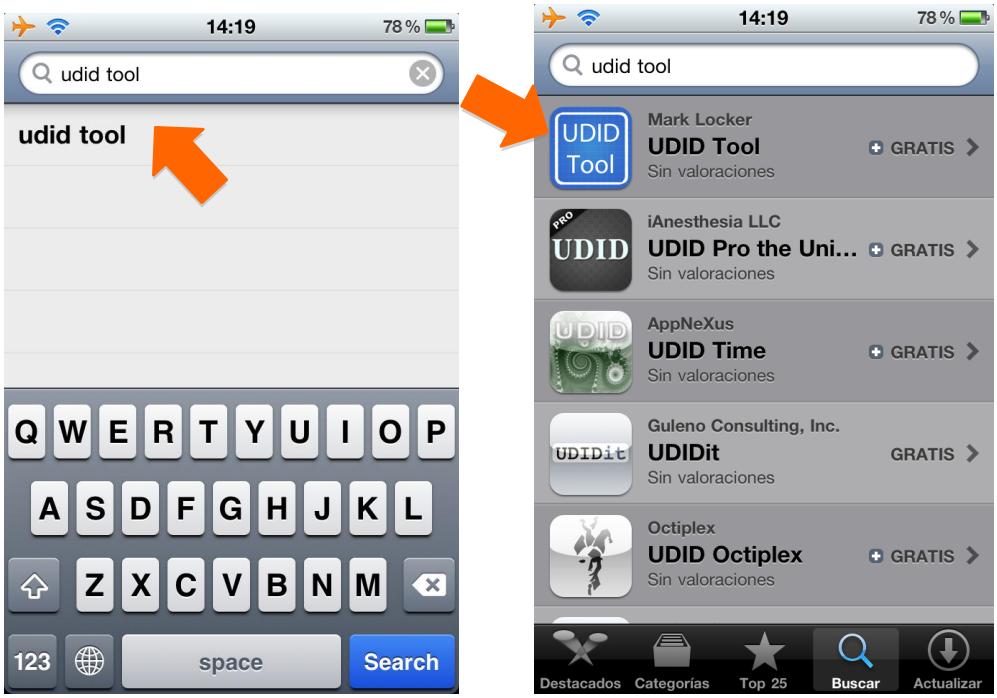
1. From the start window, Access the "*App Store"* application.



2. Once the application is launched, select the option: "*Search*". Next, type **"UIDID Tool"**.



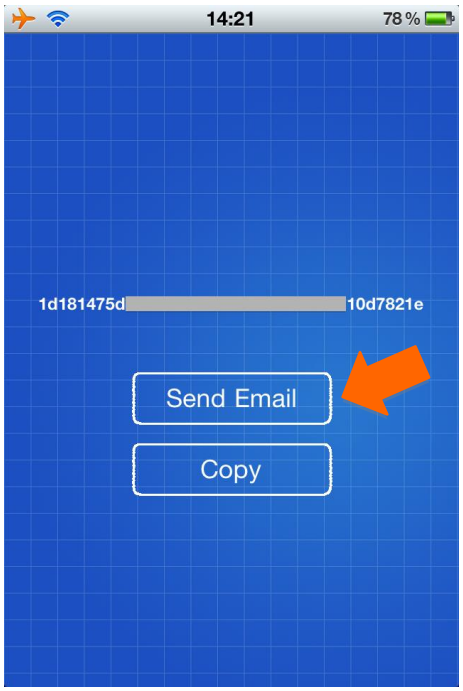
3. Access the application **"UIDID Tool"**.



4. Click in the blue box *"Free"*. Next, click again in the box, now in green, *"Download"*.

5. Introduce the password so that the application is downloaded in your device.

6. Access the application and press *"Send Email"*.



7. Automatically, it will generate an e-mail with the device's UDID.

This e-mail must be sent to the wholesaler, indicating the reference of the order in the concept and the type of license to assign to each device.

The references for each license are the following:

LICENSE TYPE / DEVICE	REFERENCE
iPhone limited to 20 devices	HIH_IPHONE_20
iPhone unlimited	HIH_IPHONE
iPad limited to 20 devices	HIH_IPAD_20
iPad unlimited	HIH_IPAD

For instance, in case of requesting two licenses, a limited one for iPhone/iPod and an unlimited one for iPad, you must indicate it as follows:

1. iPhone/iPod's UDID – HIH_IPHONE_20
2. iPad's UDID– HIH_IPAD