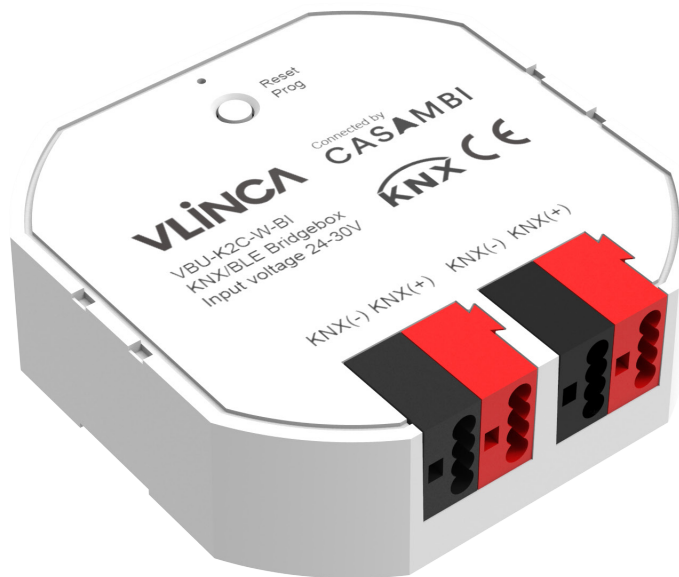


# VBU-K2C-W-BI



## Product introduction

VBU-K2C-W-BI is a bridge box between KNX and CASAMBI network, which realizes KNX system and CASAMBI network interconnection.



Total up to 32 KNX channels and 32 CASAMBI scenes can be registered in the gateway, which to implement-

- \* Unidirectional KNX -> CASAMBI, up to 16
- \* Unidirectional CASAMBI -> KNX, up to 16
- \* Bidirectional CASAMBI <-> KNX, up to 16
- It also can control scene on/off and dimming in KNX -> CASAMBI direction.

## Installation&Wiring:

It is installed in a 80 box (as Figure 1-1). To connect the KNX bus as Figure 1-2, press the Reset Key , the indicator light on then wiring and power is work.



Figure 1-1

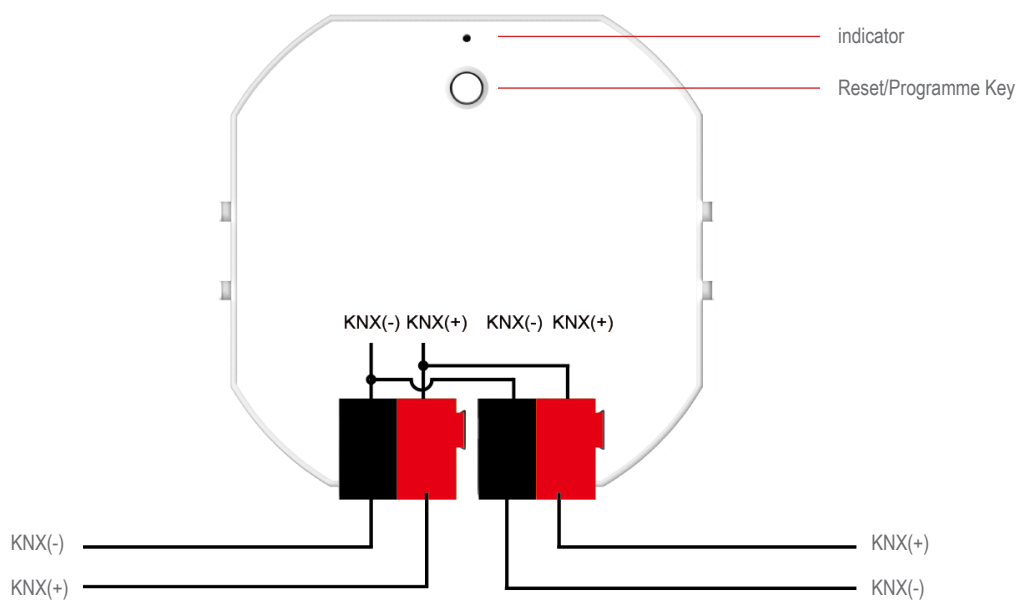
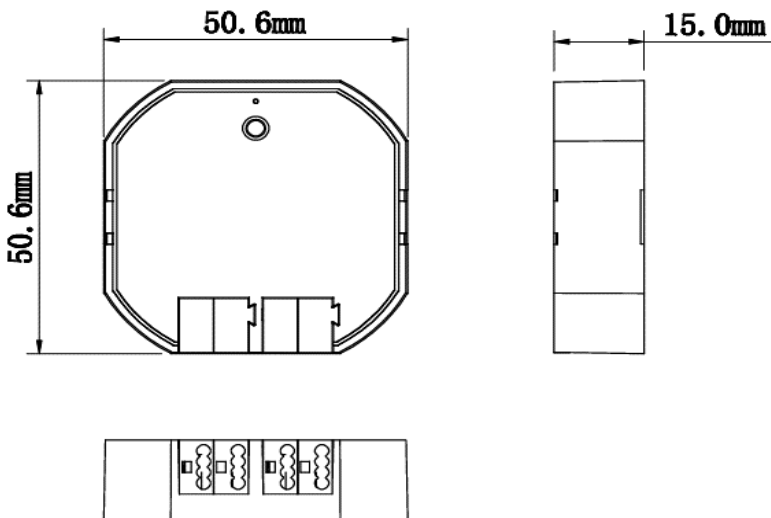


Figure 1-2

## Specification parameters

Control bus	<ul style="list-style-type: none"> <li>• KNX/EIB</li> </ul>
Life time	<ul style="list-style-type: none"> <li>• 5 years</li> </ul>
Input voltage	<ul style="list-style-type: none"> <li>• 24-30V</li> </ul>
Input signal port	<ul style="list-style-type: none"> <li>• Two channel dry contact signals/one 24V signal</li> </ul>
Output signal	<ul style="list-style-type: none"> <li>• Bluetooth</li> </ul>
Drain bus current	<ul style="list-style-type: none"> <li>• &lt; 15mA;</li> </ul>
Output range/distance	<ul style="list-style-type: none"> <li>• &gt;50m indoor</li> </ul>
Installation	<ul style="list-style-type: none"> <li>• Built-in 80/86mm junction box</li> </ul>
Temperature range	<ul style="list-style-type: none"> <li>• operation temperature: – 5 °C ... 45 °C</li> <li>• Storage temperature: – 25 °C ... 55 °C</li> <li>• Transportation temperature: – 25 °C ... 70 °C</li> </ul>
Max. relative humidity:	<ul style="list-style-type: none"> <li>• 0...80%, non-cond.</li> </ul>
Physical parameter	<ul style="list-style-type: none"> <li>• Dimensions: 50.6x50.6x15MM (L x W x H)</li> </ul>  <p>The technical drawing consists of three views of the device: a top view, a side view, and a bottom view. The top view is an octagonal shape with a width and height of 50.6mm. The side view shows a rectangular profile with a height of 15.0mm. The bottom view shows the internal wiring terminals. The device is white and has a degree of protection of IP20.</p> <ul style="list-style-type: none"> <li>• Degree of protection: IP20</li> <li>• Color: White</li> </ul>

## Pair VBU-K2C-W-BI into network

When the “VBU-K2C-W-BI” is wired into KNX bus, it will appear in “Nearby devices” in the app.

- if it is unpaired, or paired in your managed network, follow below steps **as in Figure 2 (pair)** and **Figure 3(unpair)**.

- If it was paired in other’s network, following below steps to unpair it firstly **as in Figure 4**.

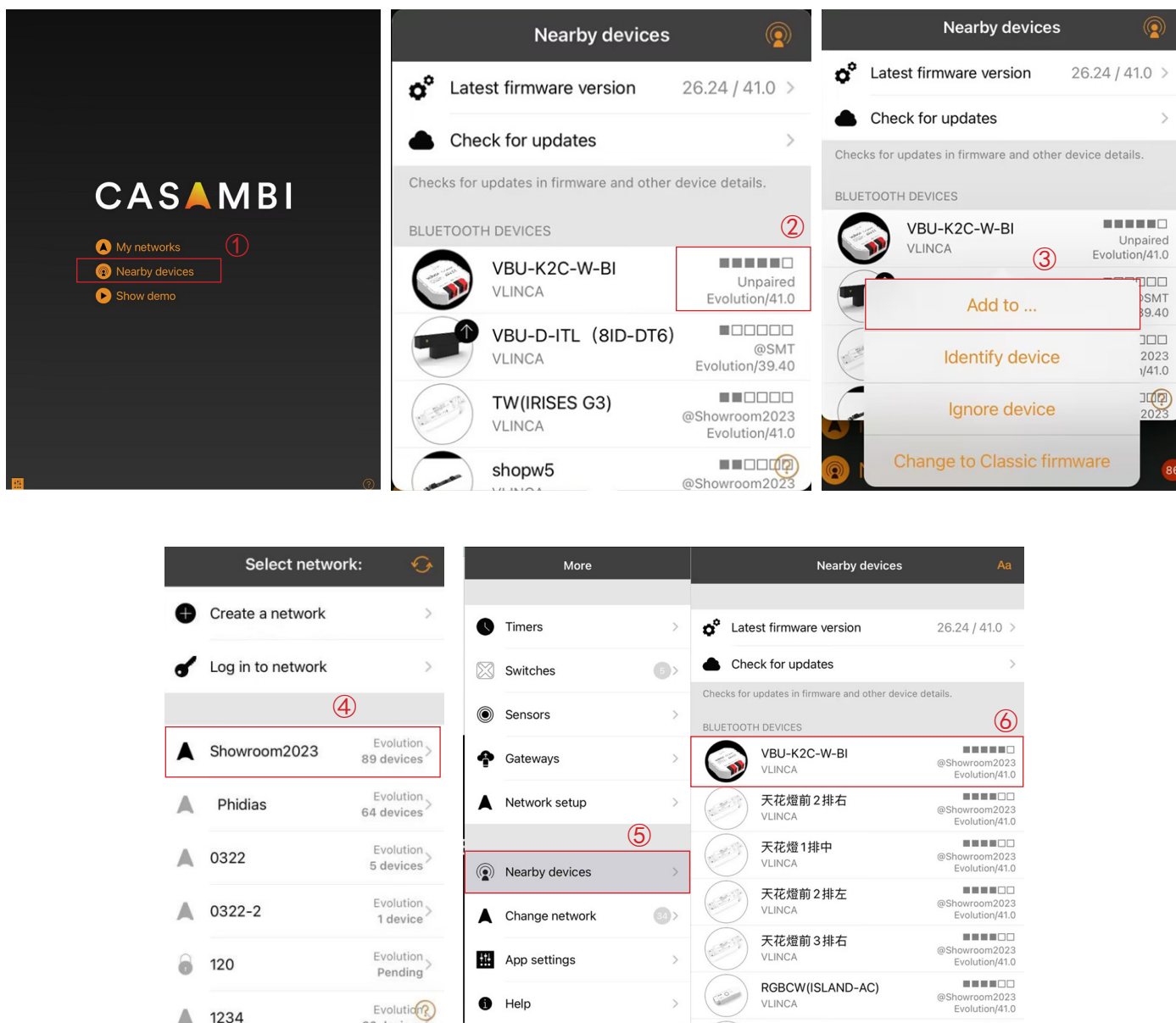


Figure 2

If it is paired in this APP but not target network,  
press the icon “VBU-K2C-W-BI” and click “Unpair device” in the app, then unpaired  
success (Figure 3).

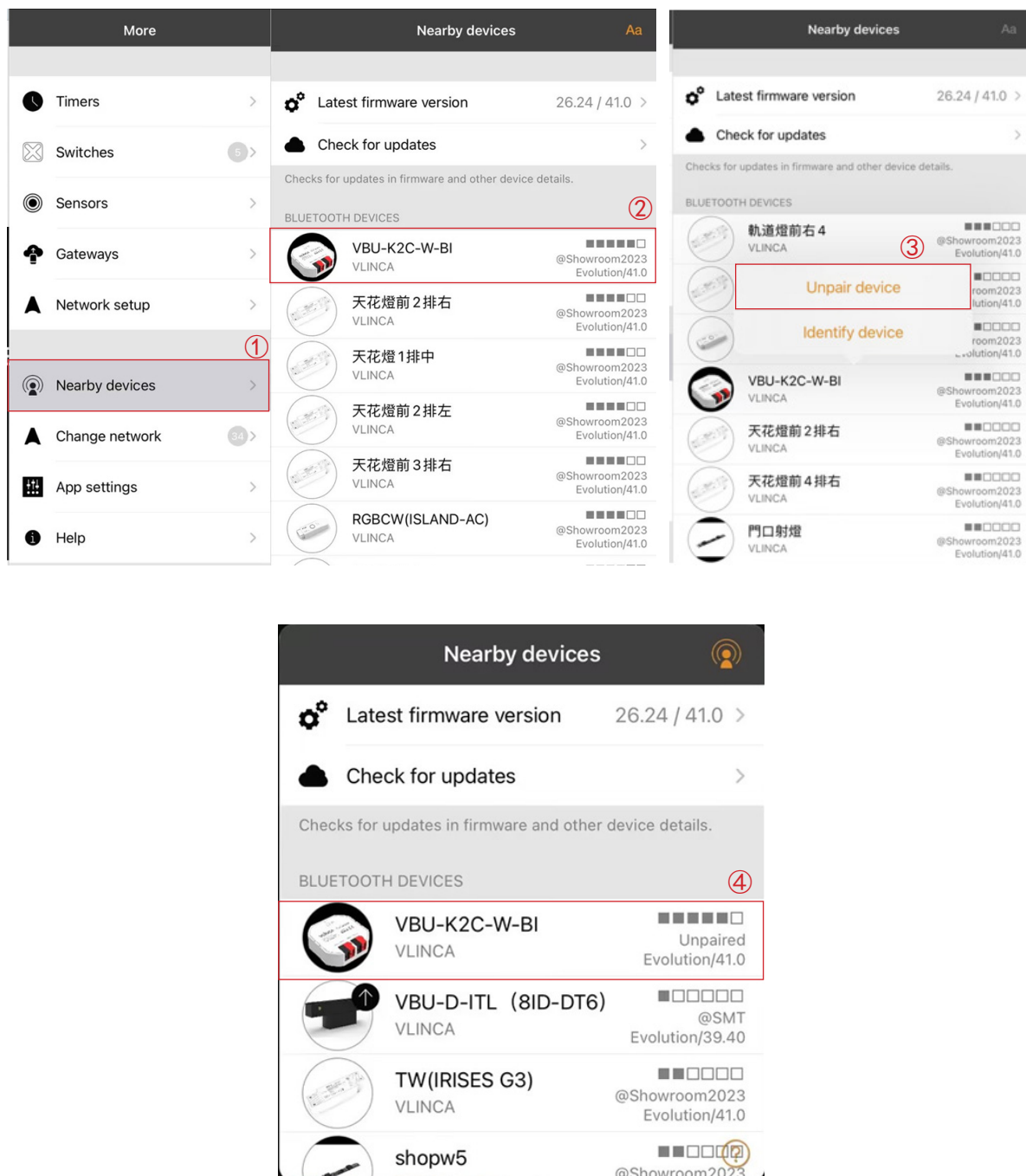


Figure 3

If it is paired by other APP device, In APP, press on the "VBU-K2C-W-BI" device icon select "Unpair device" "Start".

during the bar progress, press and hold the box "Reset button" (as Figure 1-2) until it flash red, then release the button, the unpair complete (as Figure 4).

If it report fail, try again.

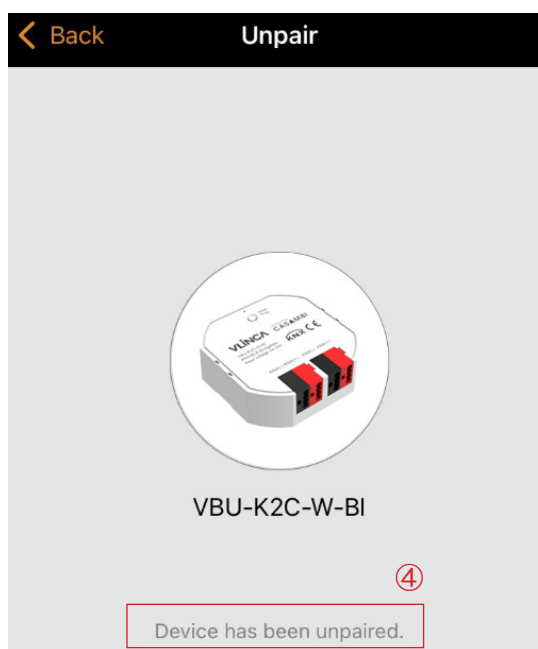
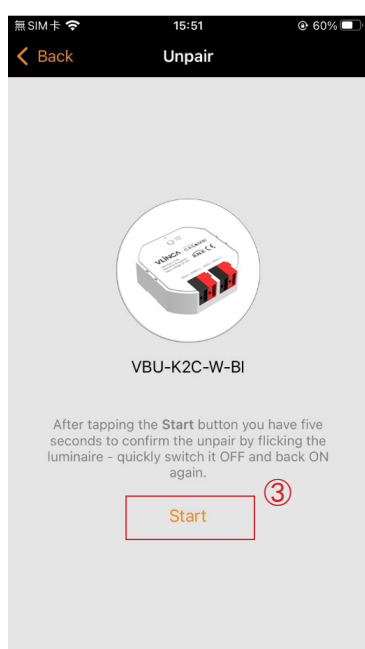
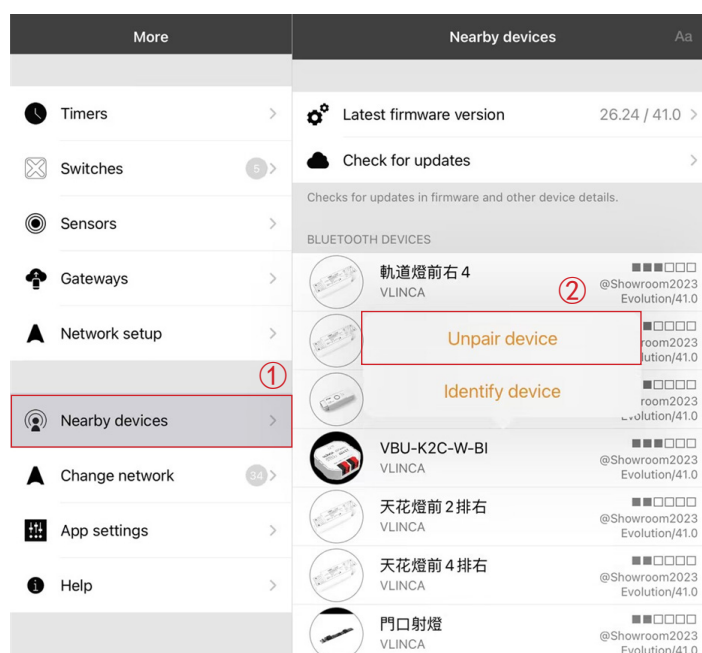


Figure 4

Add the "VBU-K2C-W-BI" device to the desired network (Evolution Only).  
The "VBU-K2C-W-BI" device will now be visible in the 'Luminaires' tab (Figure 5).

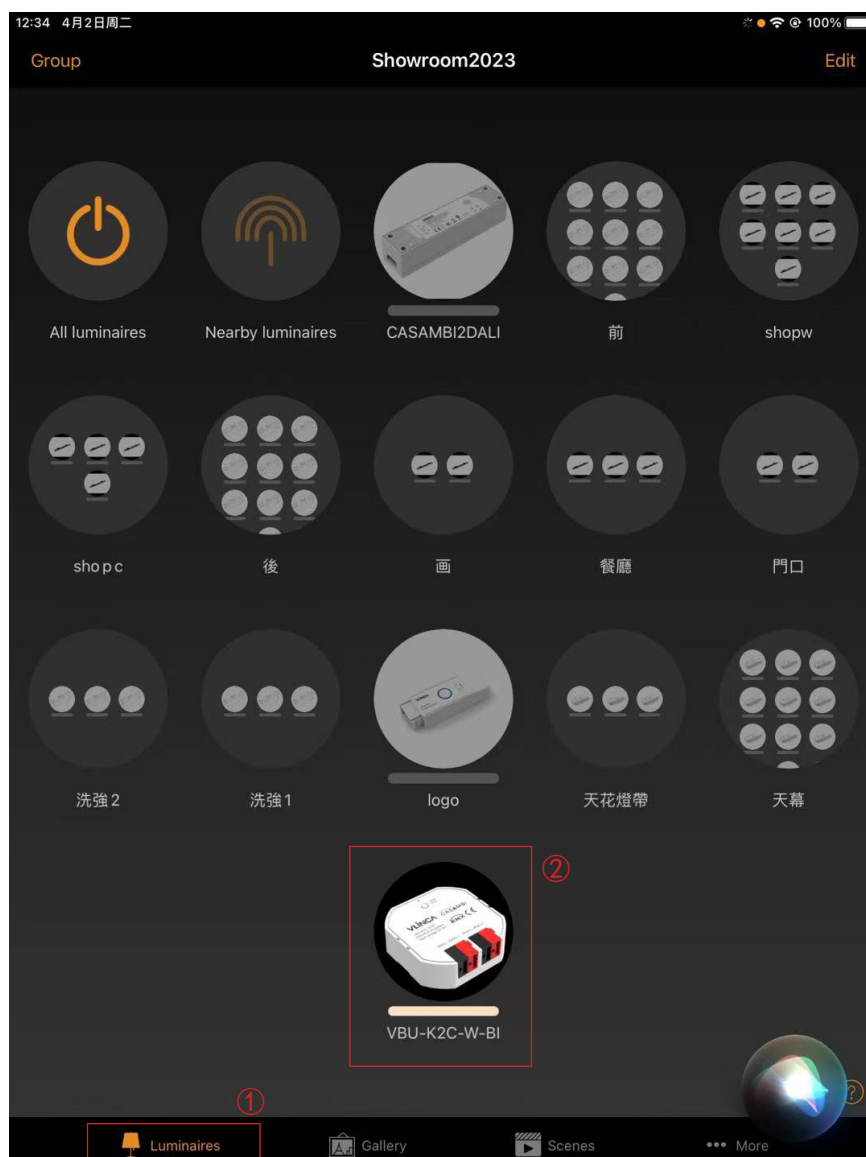


Figure 5



## Configure device in ETS5

In ETS project, add "VBU-K2C-W-BI" device to the project. Click add device, jump to the product application market, input "CASAMBI\_Gateway" in the search box, download the application software needed for configuration.

**1 Add "VBU-K2C-W-BI" device to the project (as Figure 6 ) and assign physical address for it (as Figure 7)**

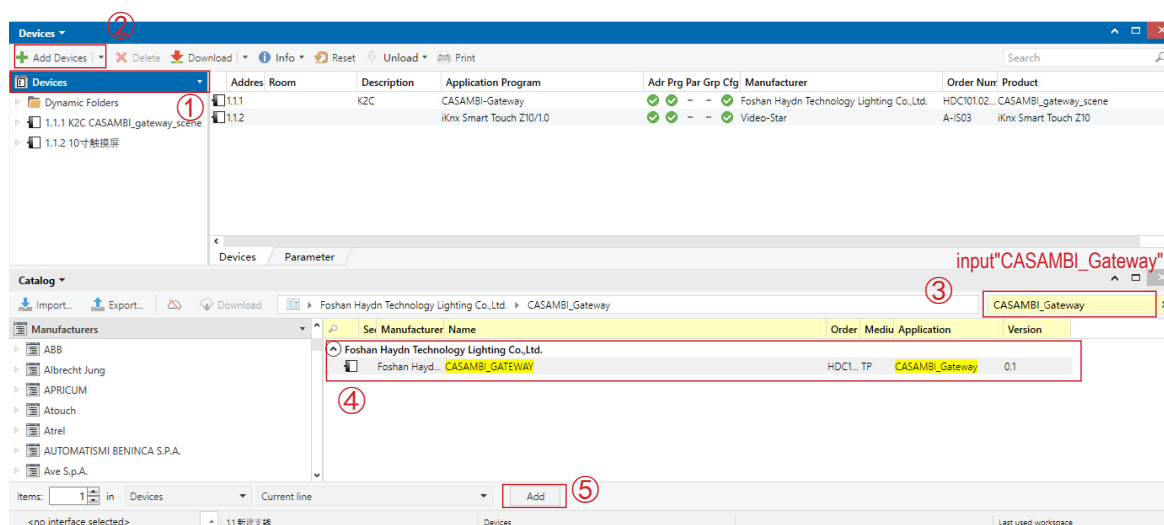


Figure 6

After add "VBU-K2C-W-BI" device to the project, ETS will assign individual address for it automatically. If you want to change it's individual address, set individual address for it as Figure 7.

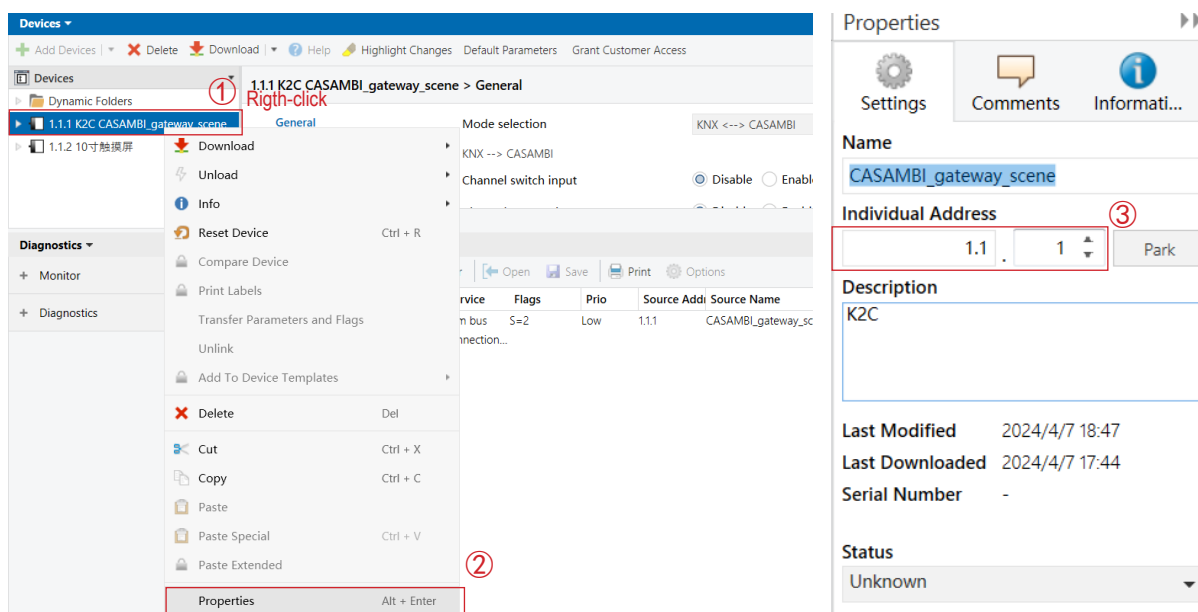


Figure 7

## 2 configure application software

- Select Mode “KNX <-->CASAMBI”.Configure “Channel switch input” and “Channel percent input[%]” in General part :

If only to activate CASAMBI scene,disable “Channel switch input” and “Chanel percent input[%]”, as in Figure 8.

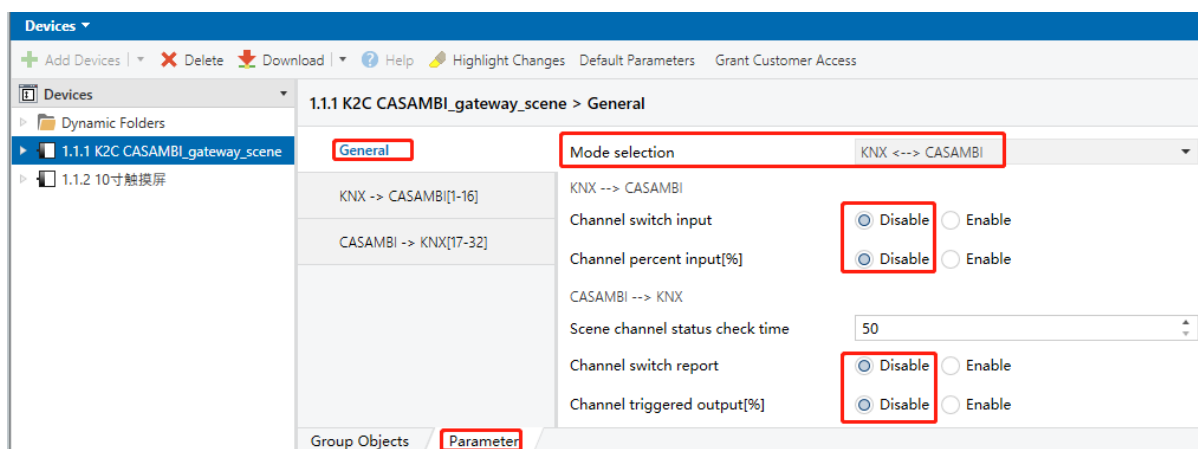


Figure 8

If to implement CASAMBI scene ON/OFF, enable “Channel switch input”, as in Figure 9.

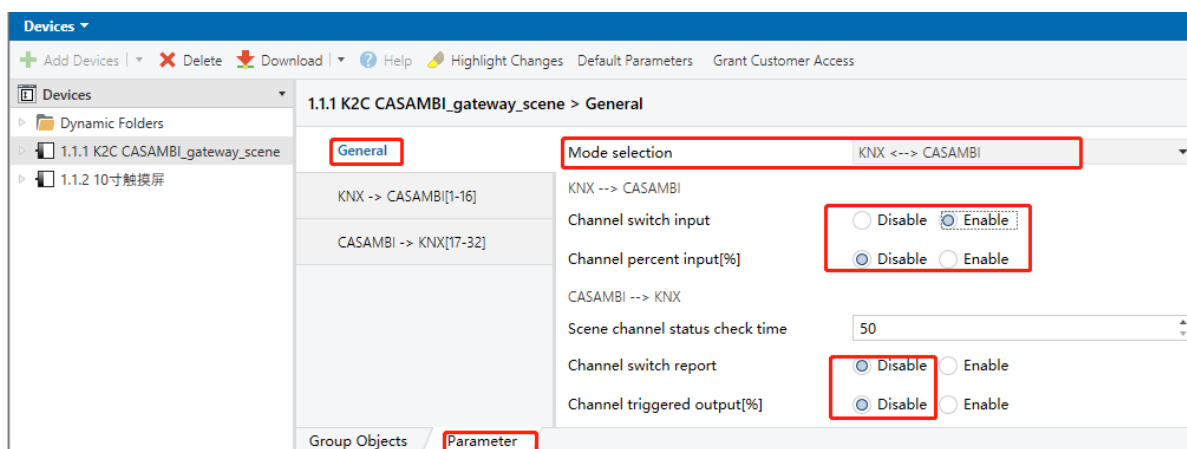


Figure 9

If to implement CASAMBI scene dimming, enable “Chanel percent input[%]”, as in Figure 10.

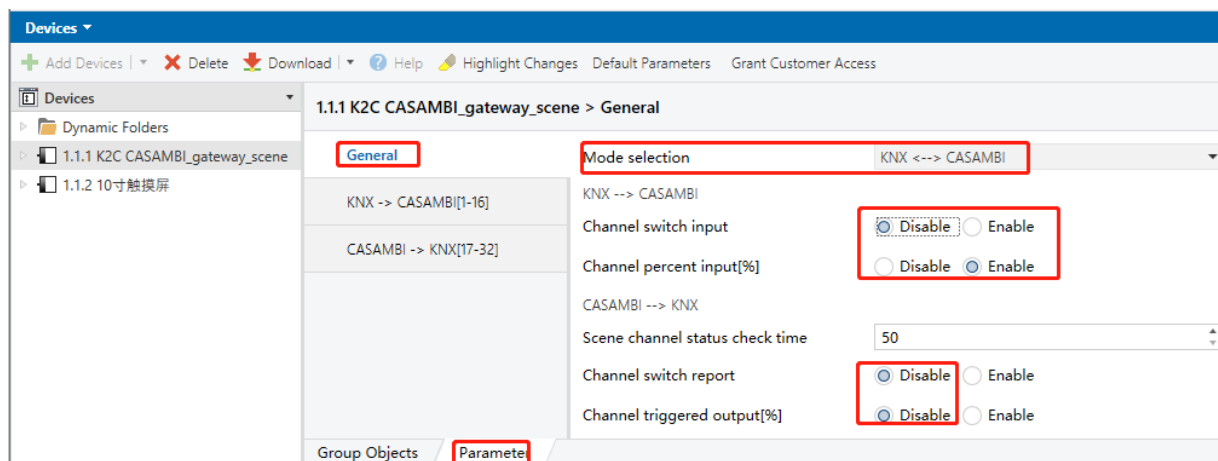


Figure 10

- For bi-directional scene activation function, Assign group addresses for Group objects ( “Global scene input”, “Global scene output”, as below in Figure 11 ).

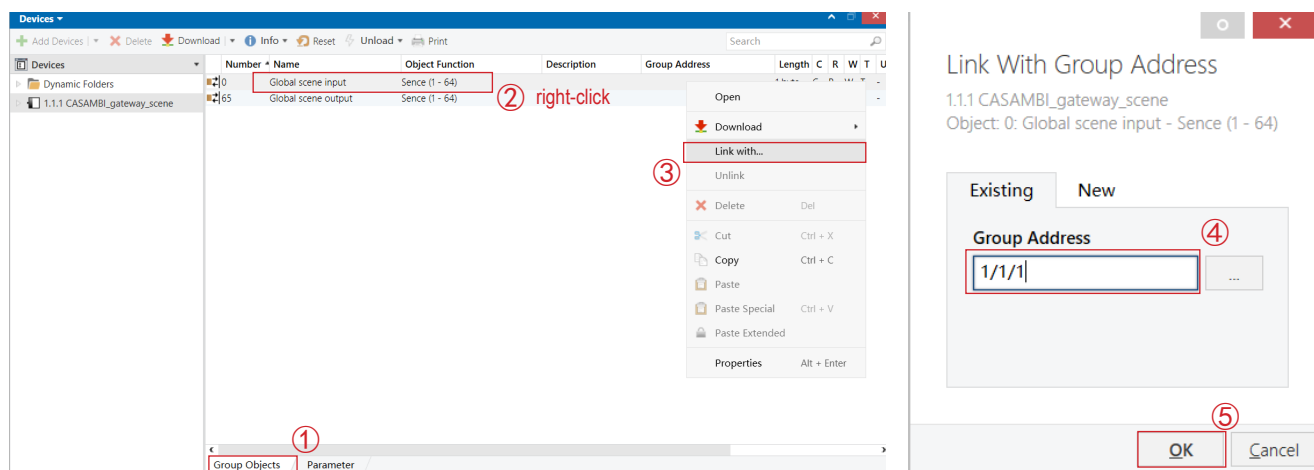


Figure 11

- For KNX -->CASAMBI scene on/off function: Assign group addresses for Group objects (“ knx->casambi channel x”, “switch(on/off)”), as in Figure 12.

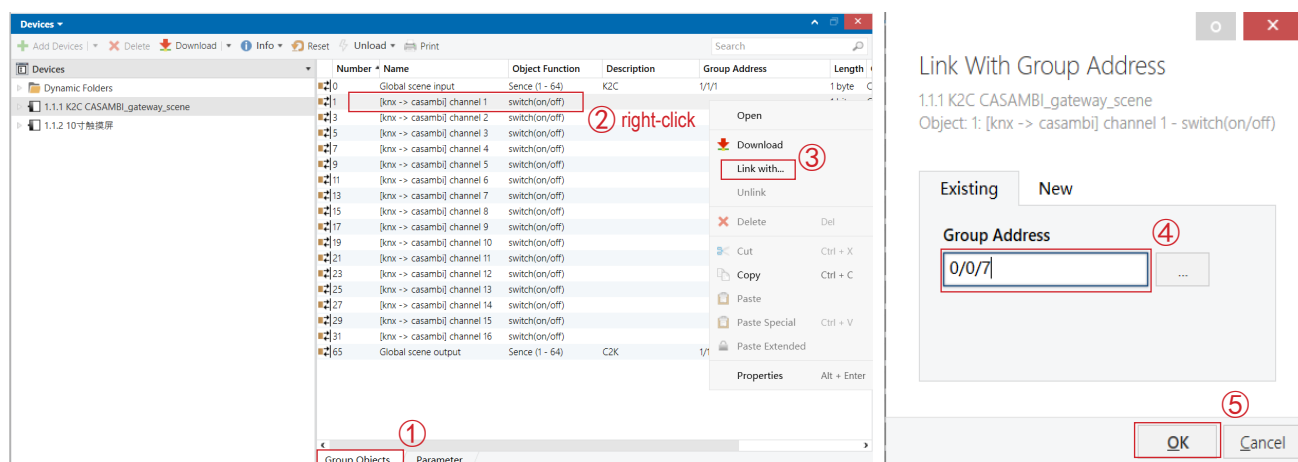


Figure 12

- For KNX -->CASAMBI scene dimming function: Assign group addresses for Group objects (“knx-->casambi channel x”, “percentage(0-100%)”), as in Figure 13.

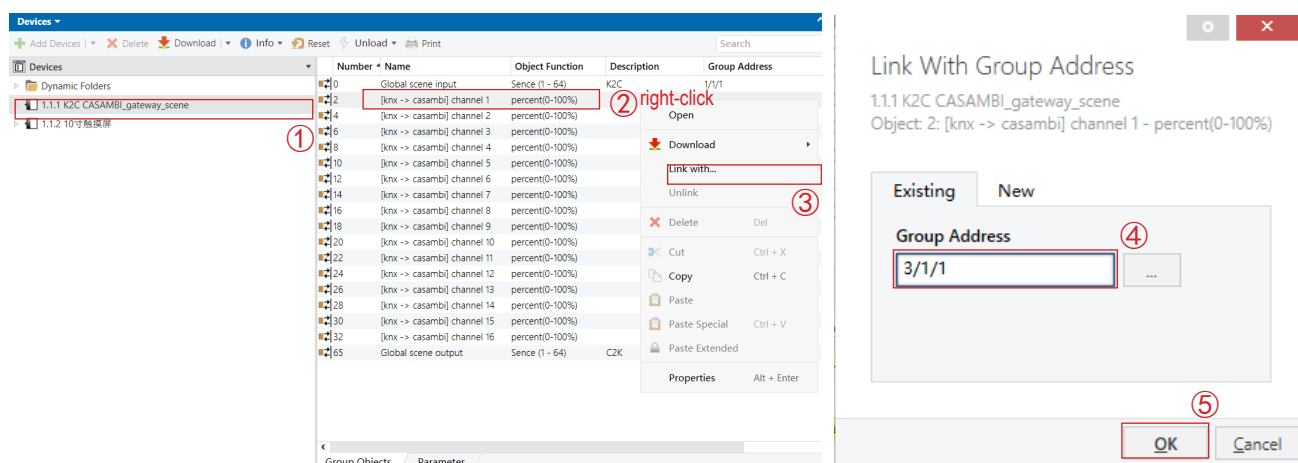


Figure 13

## KNX channel and CASAMBI Scene Mapping configuration: Example

Below example in **figure 14** configures:

- 8 bi-directional KNX Channels<-->CASAMBI Scenes mapping, in RED box.
- 5 uni-directional KNX Channels-->CASAMBI Scenes mapping, in BLUE box.
- 2 uni-directional CASAMBI Scenes -->KNX Channels mapping, in GREEN box.

The screenshot displays the Vlinca configuration interface for mapping KNX channels to CASAMBI scenes. The interface is divided into two main sections: 'KNX -> CASAMBI(1-16)' and 'CASAMBI -> KNX(17-32)'. Both sections show a list of channels/scenes with their corresponding scene numbers and names. The mapping is configured as follows:

- Red Box (Bi-directional):** Channels 1-8 map to scenes 1-8 (welcoming, Chat, Product display, Training, shop cool, Party, dining, Leaving).
- Blue Box (Uni-directional):** Channels 11-15 map to scenes 11-15 (shop warm, party1-1, party1-2, party1-3, party1-4).
- Green Box (Uni-directional):** Channels 31-32 map to scenes 31-32 (Party1-9, Party1-10).

Importantly : the configured C2K scenes should include same luminaires.

Figure 14

## Download application software to VBU-K2C-W-BI

After assigning individual address and modifying application program for "VBU-K2C-W-BI" device, do a full download (choose "Download all", press the "Programme Key" once) as **Figure 15**. Then the other KNX devices link with "VBU-K2C-W-BI" device by it's group addresses.

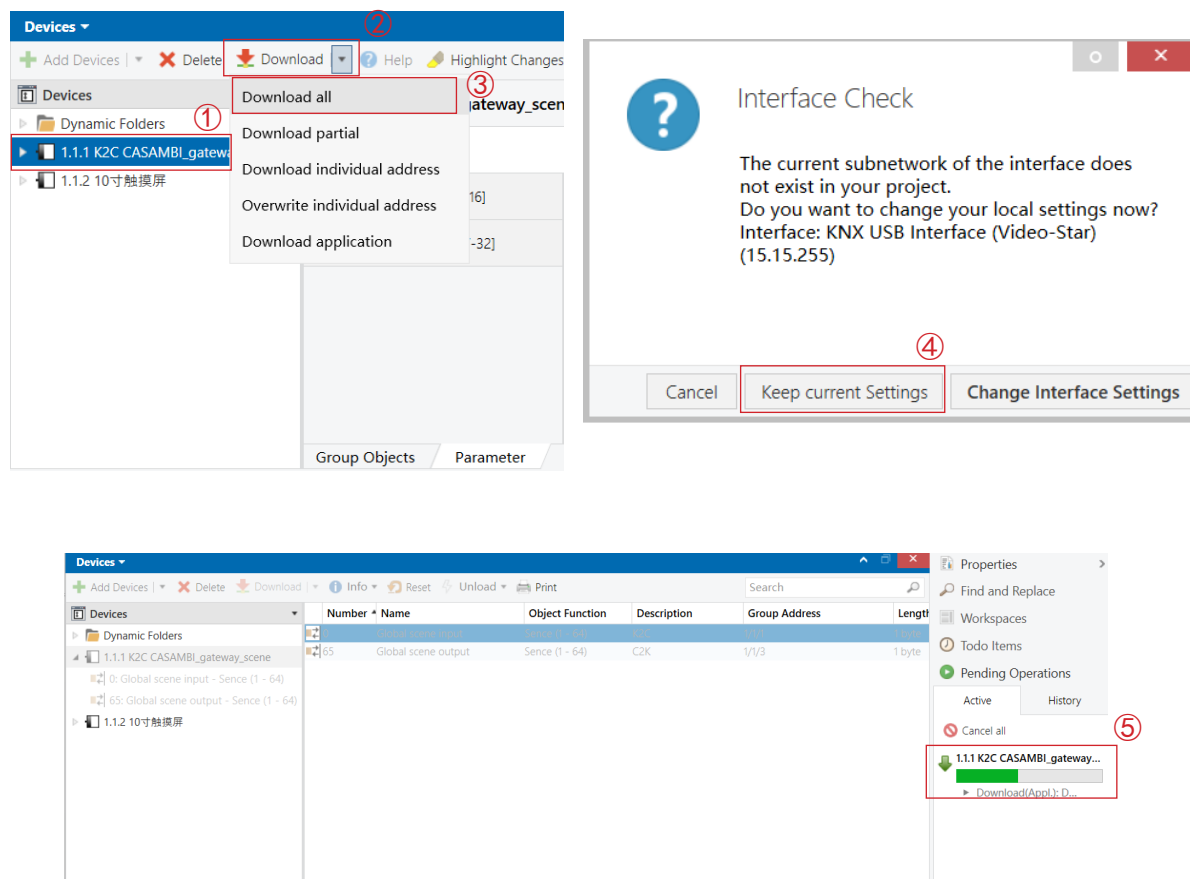
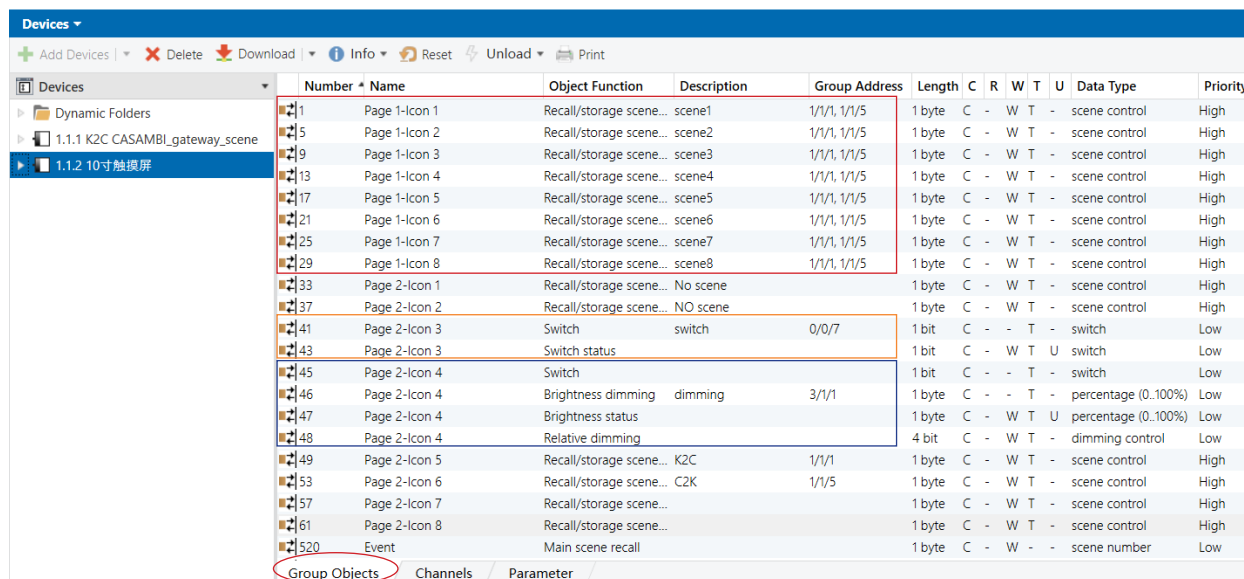


Figure 15

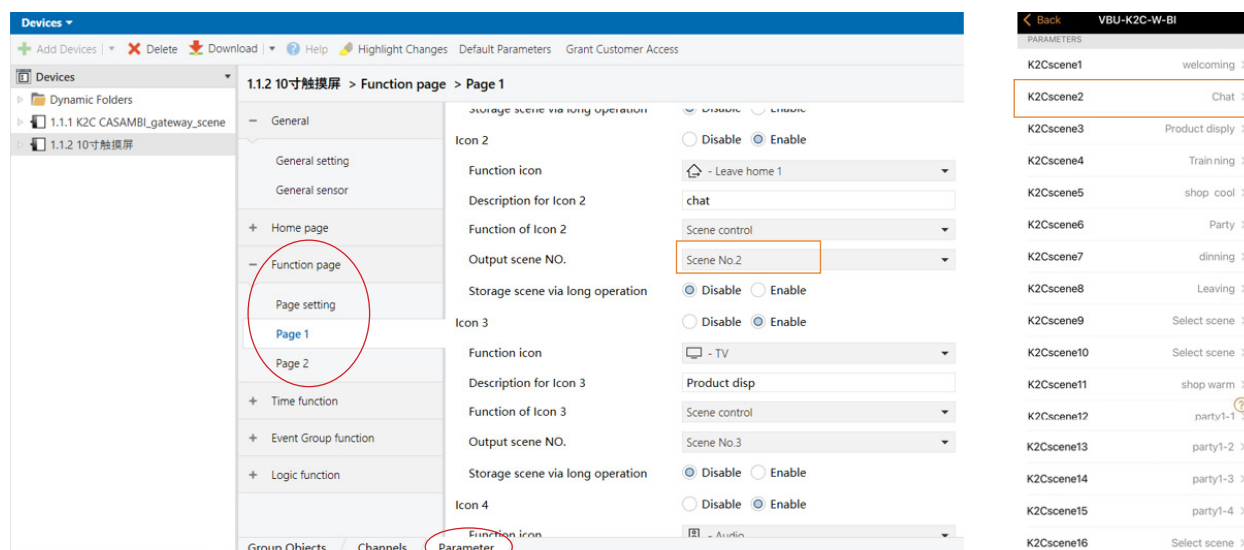
## KNX devices configure: Example

- The KNX device binds the group address of the group object in the K2C\_CASAMBI\_gateway\_scene application through it's group object (as Figure 16).
- The function page Icon of KNX device binds Scene by "Output scene NO" (as Figure 17).



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	Page 1-Icon 1	Recall/storage scene...	scene1	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
5	Page 1-Icon 2	Recall/storage scene...	scene2	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
9	Page 1-Icon 3	Recall/storage scene...	scene3	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
13	Page 1-Icon 4	Recall/storage scene...	scene4	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
17	Page 1-Icon 5	Recall/storage scene...	scene5	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
21	Page 1-Icon 6	Recall/storage scene...	scene6	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
25	Page 1-Icon 7	Recall/storage scene...	scene7	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
29	Page 1-Icon 8	Recall/storage scene...	scene8	1/1/1, 1/1/5	1 byte	C	-	W	T	-	scene control	High
33	Page 2-Icon 1	Recall/storage scene...	No scene		1 byte	C	-	W	T	-	scene control	High
37	Page 2-Icon 2	Recall/storage scene...	NO scene		1 byte	C	-	W	T	-	scene control	High
41	Page 2-Icon 3	Switch	switch	0/0/7	1 bit	C	-	-	T	-	switch	Low
43	Page 2-Icon 3	Switch status			1 bit	C	-	W	T	U	switch	Low
45	Page 2-Icon 4	Switch			1 bit	C	-	-	T	-	switch	Low
46	Page 2-Icon 4	Brightness dimming	dimming	3/1/1	1 byte	C	-	-	T	-	percentage (0..100%)	Low
47	Page 2-Icon 4	Brightness status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
48	Page 2-Icon 4	Relative dimming			4 bit	C	-	W	T	-	dimming control	Low
49	Page 2-Icon 5	Recall/storage scene...	K2C	1/1/1	1 byte	C	-	W	T	-	scene control	High
53	Page 2-Icon 6	Recall/storage scene...	C2K	1/1/5	1 byte	C	-	W	T	-	scene control	High
57	Page 2-Icon 7	Recall/storage scene...			1 byte	C	-	W	T	-	scene control	High
61	Page 2-Icon 8	Recall/storage scene...			1 byte	C	-	W	T	-	scene control	High
520	Event	Main scene recall			1 byte	C	-	W	-	-	scene number	Low

Figure 16



1.1.2 10寸触摸屏 > Function page > Page 1

- General
- General setting
- General sensor
- Home page
- Function page
- Page setting
- Page 1
- Page 2
- Time function
- Event Group function
- Logic function

storage scene via long operation

Icon 2

Function icon

Description for Icon 2

Function of Icon 2

Output scene NO.

Storage scene via long operation

Icon 3

Function icon

Description for Icon 3

Function of Icon 3

Output scene NO.

Storage scene via long operation

Icon 4

Function icon

Disable Enable

Leave home 1

chat

Scene control

Scene No.2

Disable Enable

TV

Product disp

Scene control

Scene No.3

Disable Enable

Disable Enable

Back VBU-K2C-W-BI

PARAMETERS

K2Cscene1 welcoming >

K2Cscene2 Chat >

K2Cscene3 Product disp >

K2Cscene4 Training >

K2Cscene5 shop cool >

K2Cscene6 Party >

K2Cscene7 dining >

K2Cscene8 Leaving >

K2Cscene9 Select scene >

K2Cscene10 Select scene >

K2Cscene11 shop warm >

K2Cscene12 party1-1 >

K2Cscene13 party1-2 >

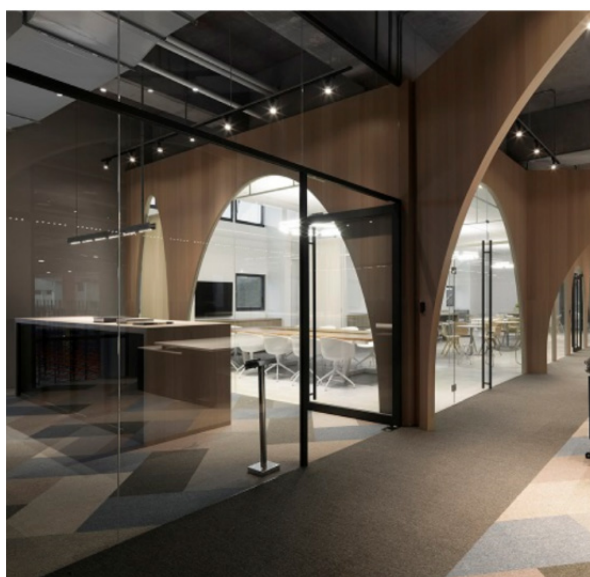
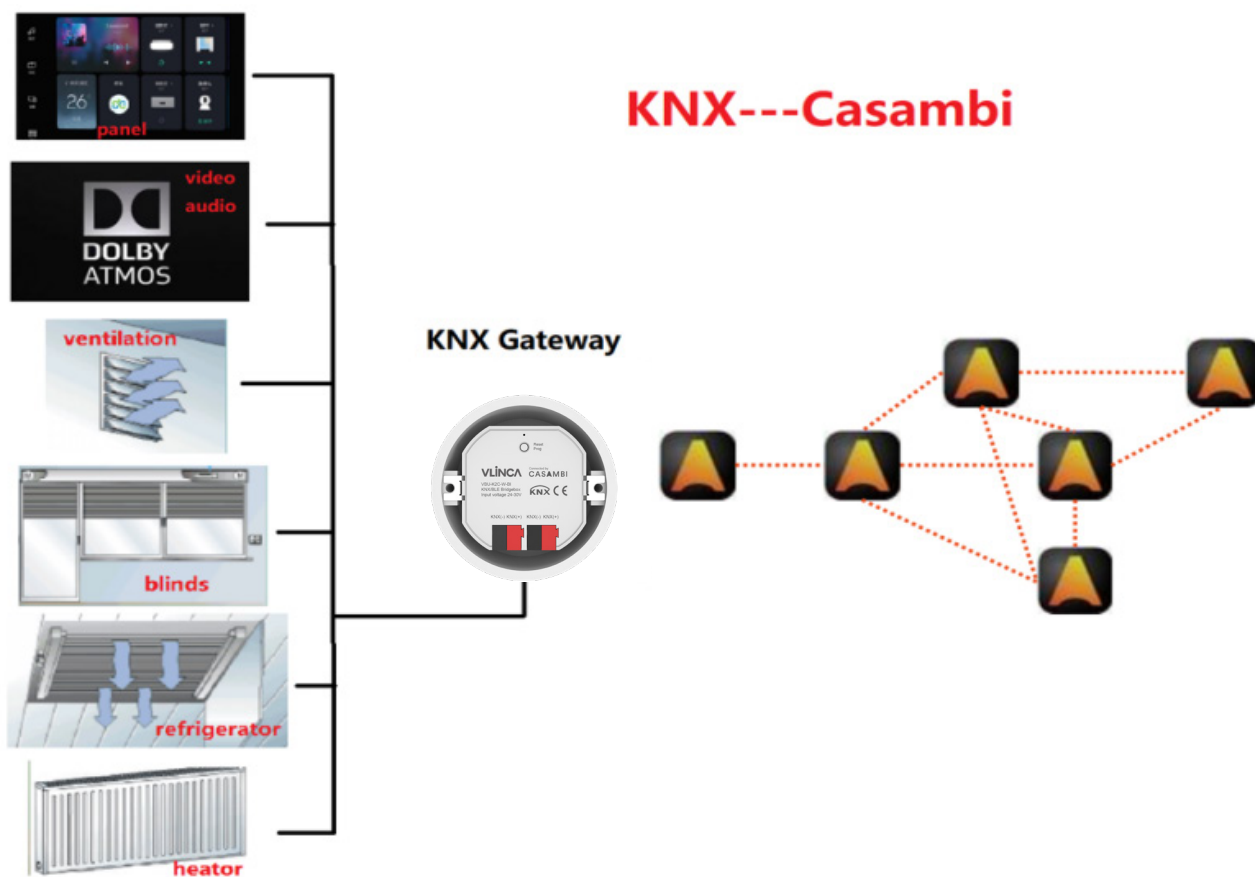
K2Cscene14 party1-3 >

K2Cscene15 party1-4 >

K2Cscene16 Select scene >

Figure 17

## Typical applications





## **DISPOSAL Instructions in line with EU**

Directive 2012/19/EU for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste. Please dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling.

## **Compliance Statement**

CASAMBI declares that the CYPRESS-BPS-W-6K fully complies with Directive 2014/53/EU.