

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

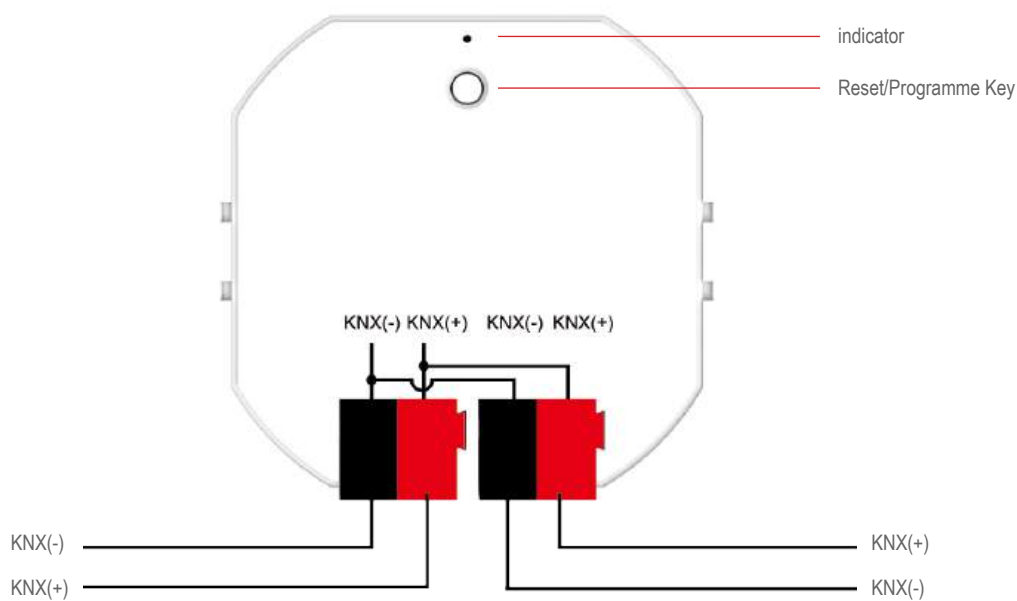
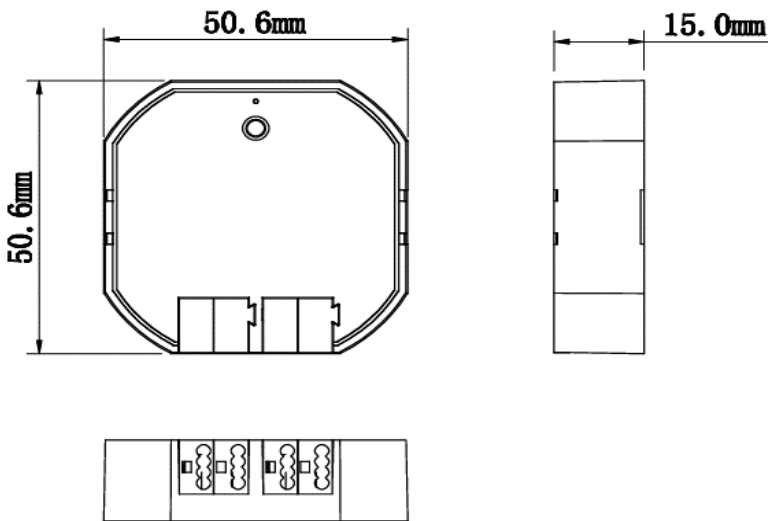


Figure 1-2

Specification parameters

Control bus	• KNX/EIB
Input voltage	• 24-30V
Input signal port	• Two channel dry contact signals/one 24V signal
Output signal	• Bluetooth
Drain bus current	• < 15mA;
Output range/distance	• >50m no barriers
Installation	• Built-in 80/86mm junction box
Temperature range	• operation temperature: – 5 °C ... 45 °C • Storage temperature: – 25 °C ... 55 °C • Transportation temperature: – 25 °C ... 70 °C
Max. relative humidity:	• 0...80%, non-cond.
Physical parameter	• Dimensions: 50.6x50.6x15MM (L x W x H)  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 the device's thickness, which is 15.0mm. The bottom view shows the internal components, including two sets of terminals and a central component. • Degree of protection: IP20 • Color: White

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**.

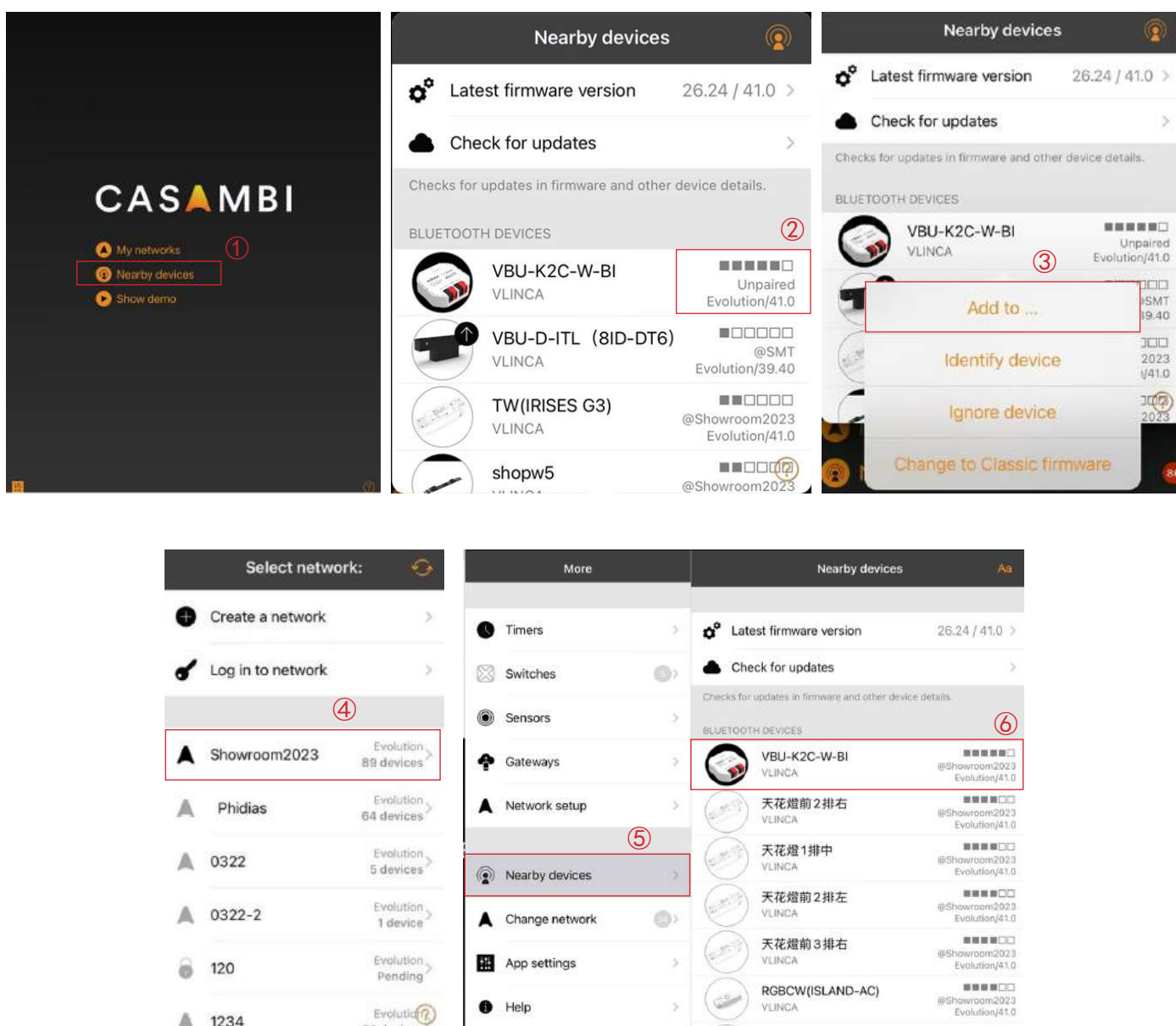


Figure 2

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).

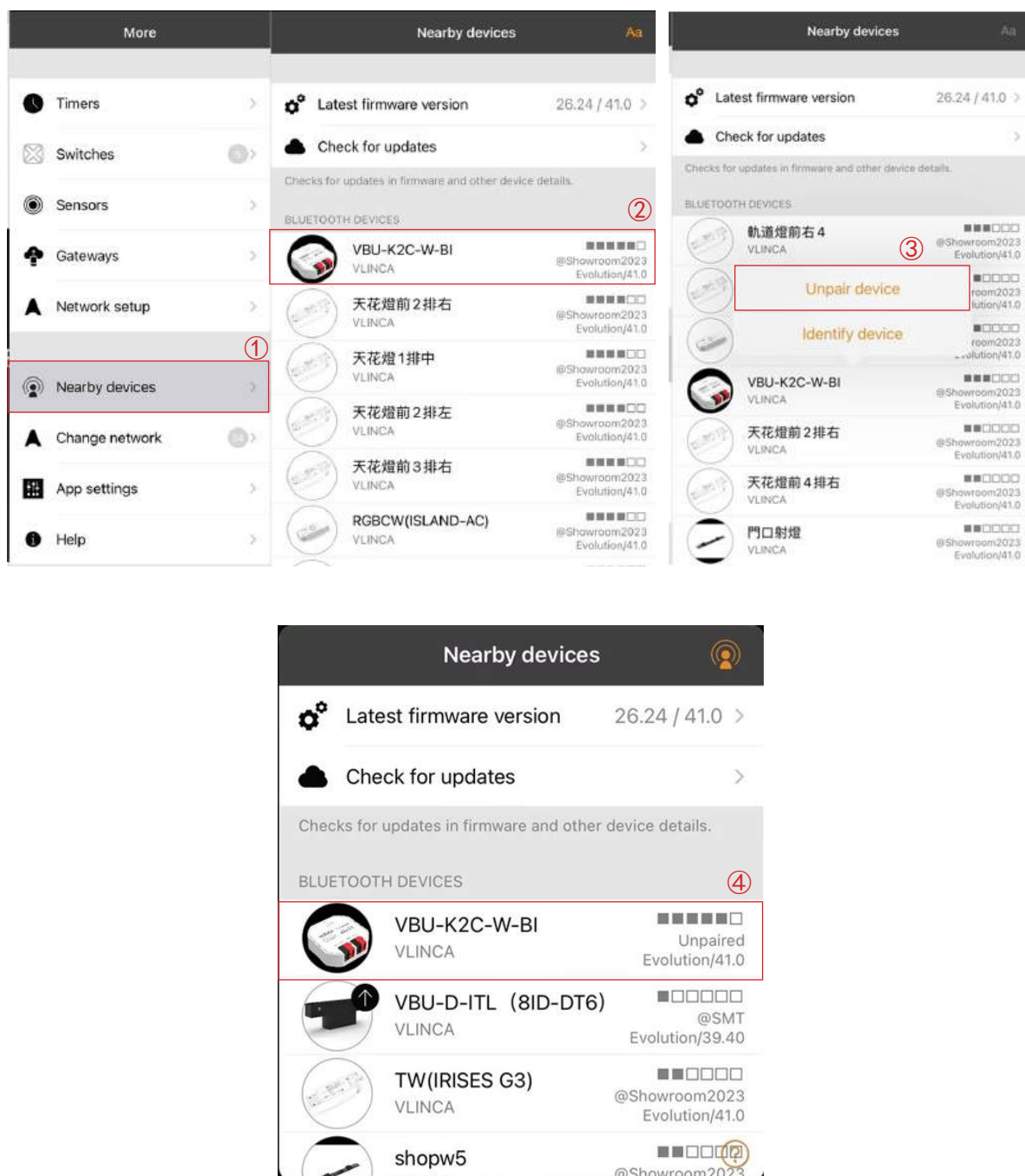


Figure 3

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.

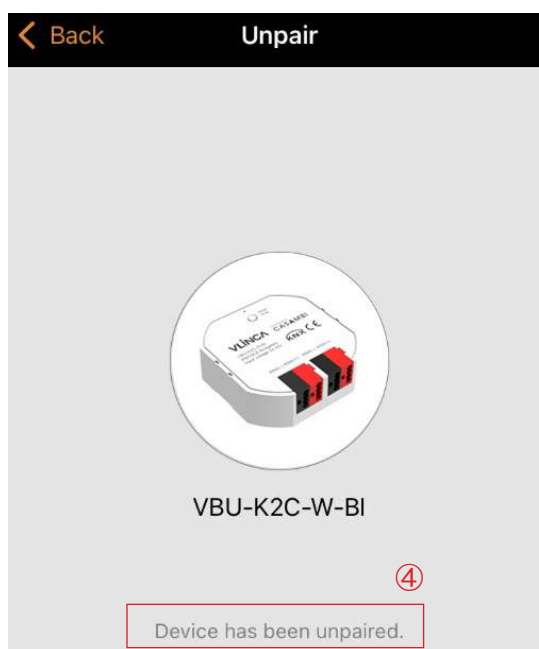
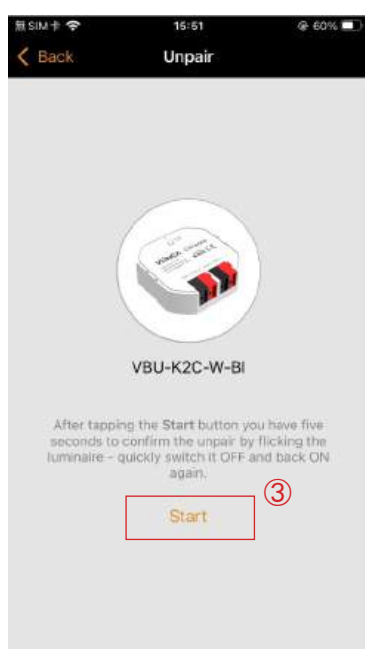
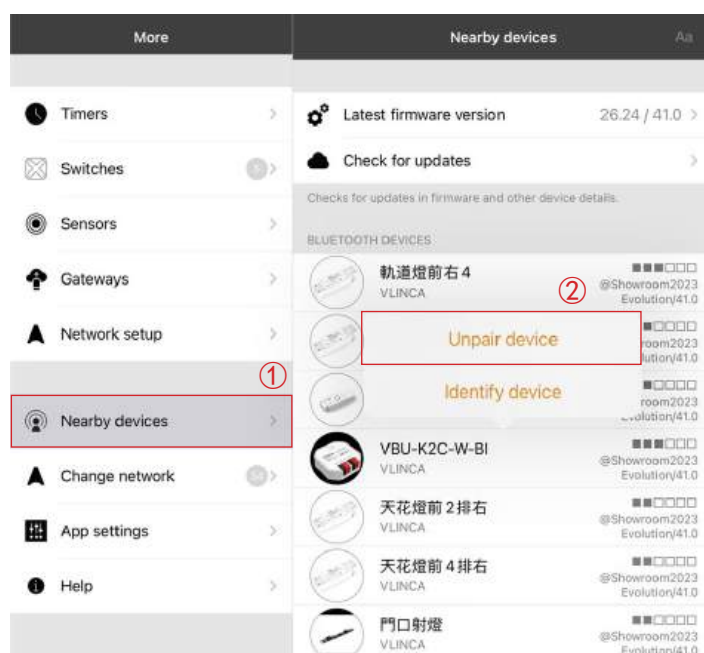


Figure 4

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).

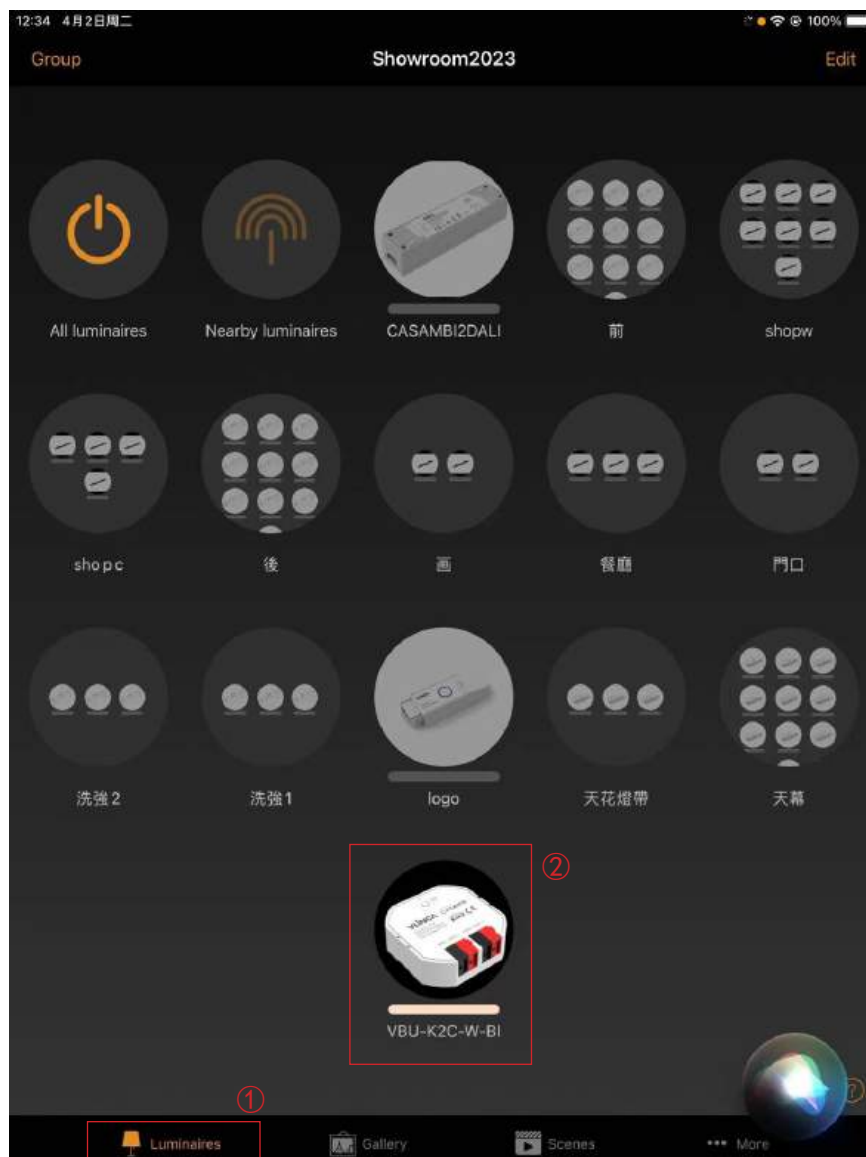


Figure 5

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)

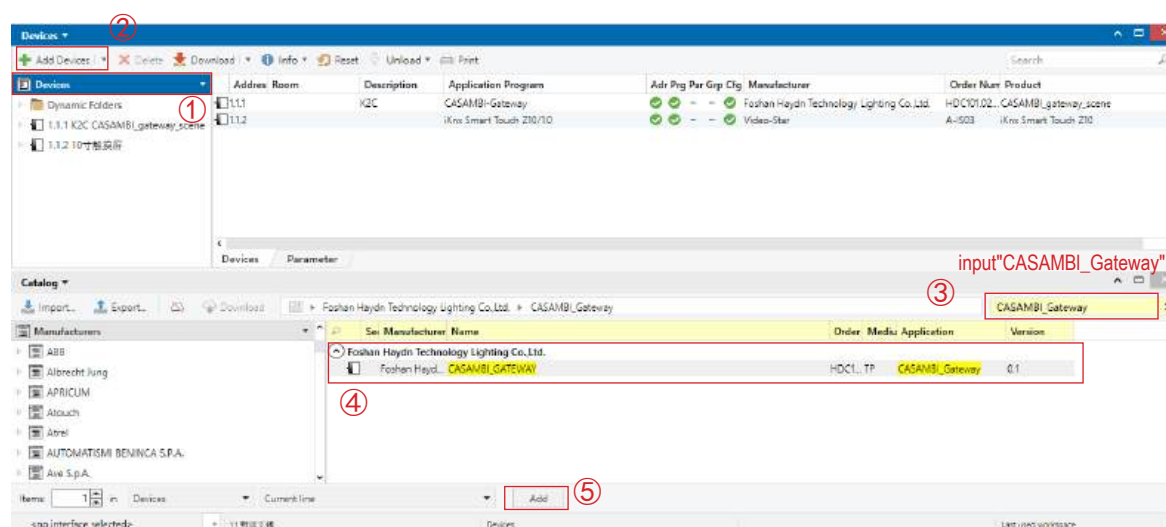


Figure 6

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.

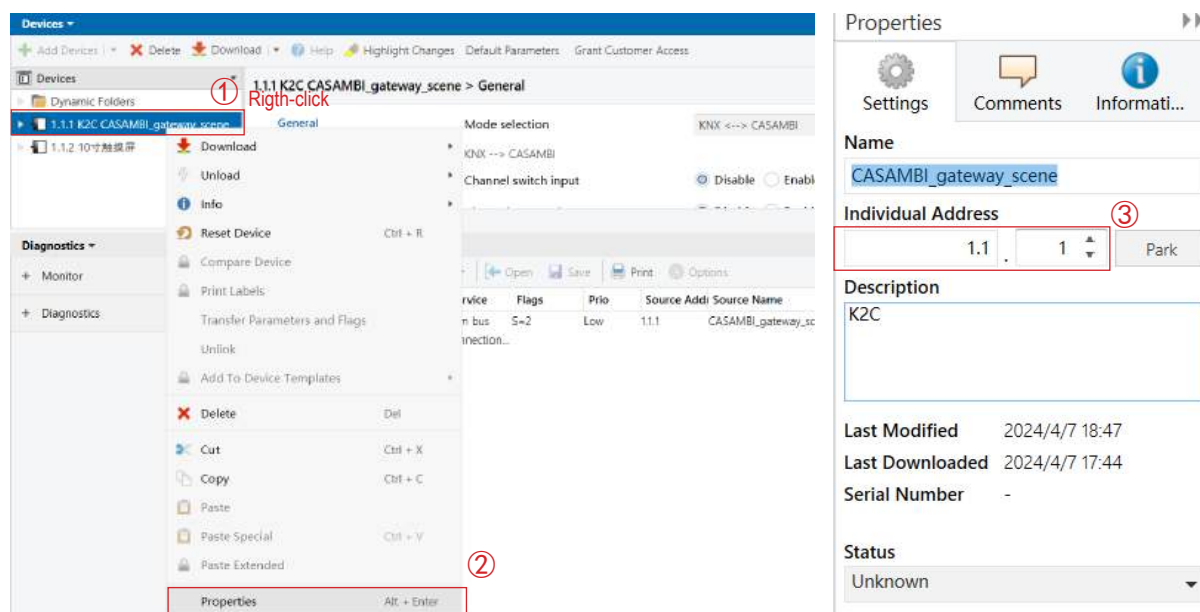


Figure 7

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.

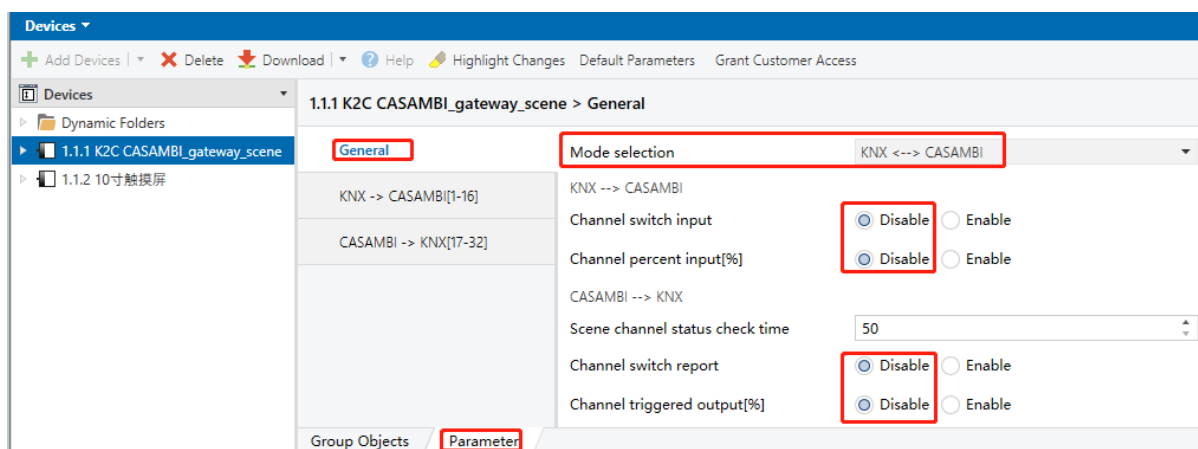


Figure 8

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

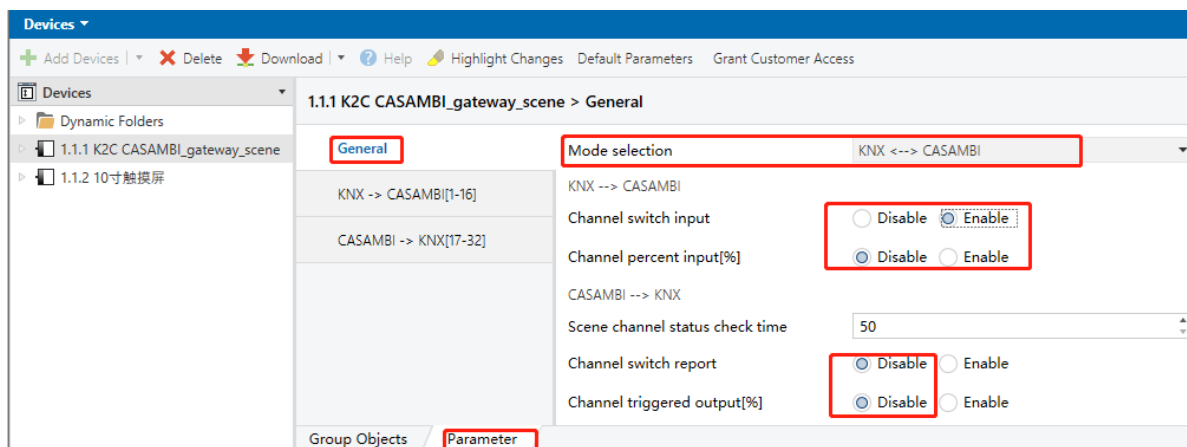


Figure 9

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

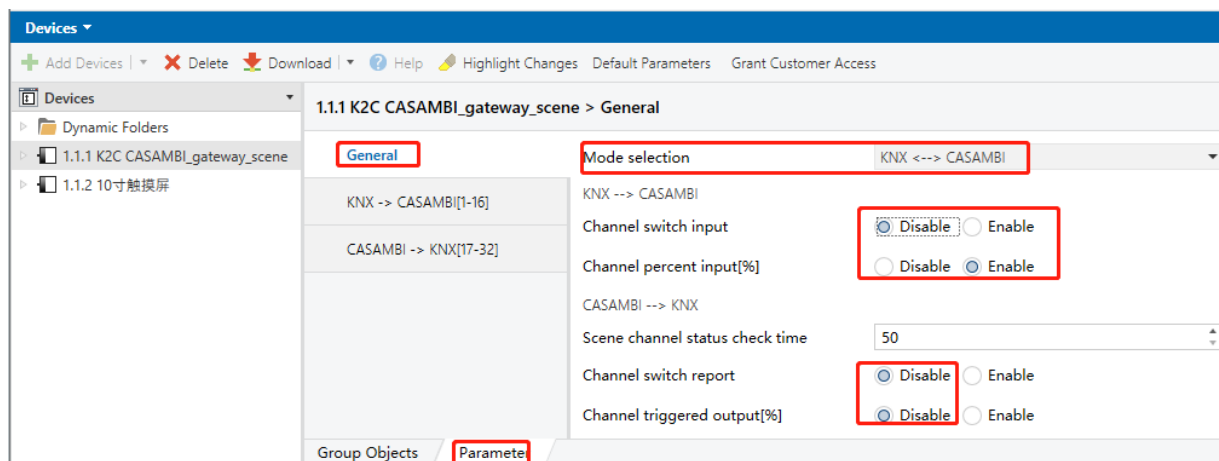


Figure 10

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

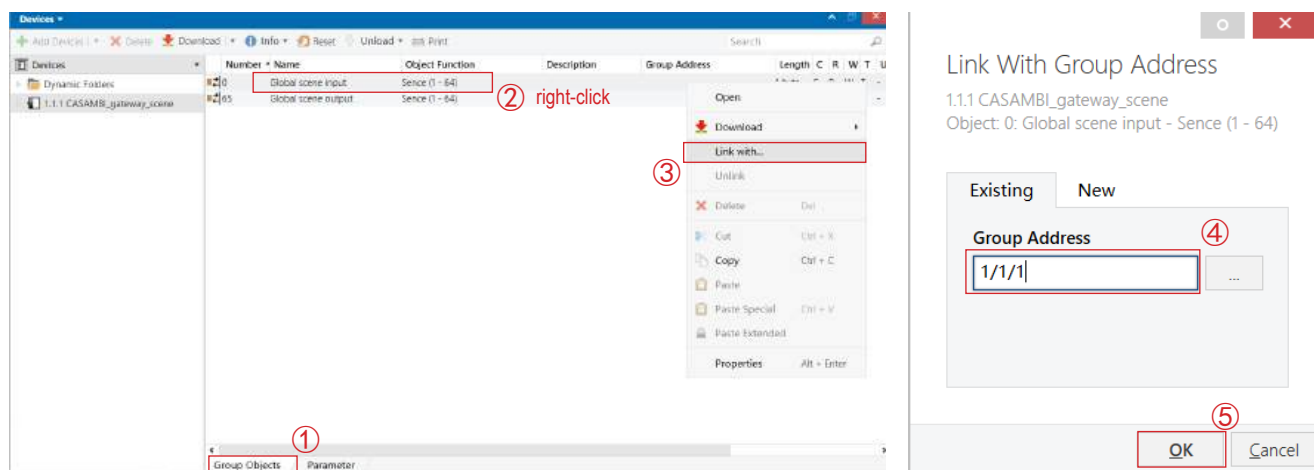


Figure 11

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

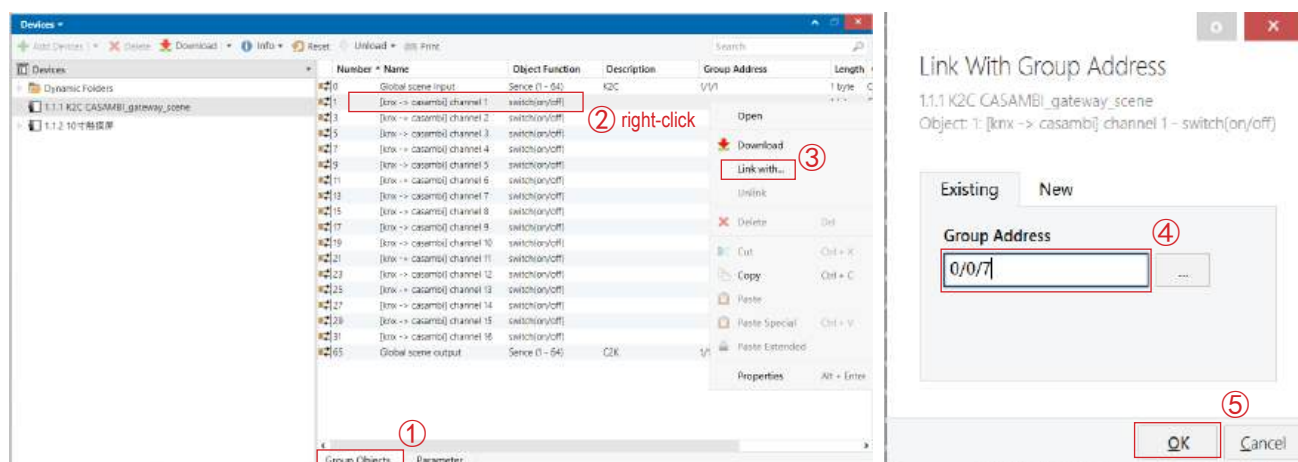


Figure 12

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

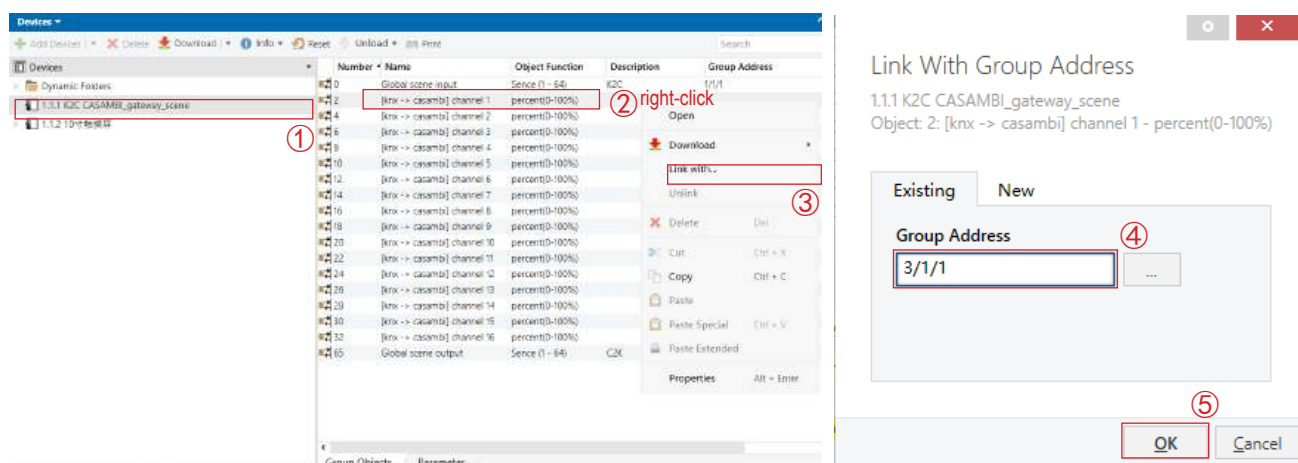


Figure 13

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.

KNX Channel	Scene Number	Scene Name	CASAMBI Scene	Scene Number	Scene Name
K2Cscene1	1	welcoming	C2Kscene1	1	welcoming
K2Cscene2	2	Chat	C2Kscene2	2	Chat
K2Cscene3	3	Product display	C2Kscene3	3	Product display
K2Cscene4	4	Training	C2Kscene4	4	Training
K2Cscene5	5	shop cool	C2Kscene5	5	shop cool
K2Cscene6	6	Party	C2Kscene6	6	Party
K2Cscene7	7	dining	C2Kscene7	7	dining
K2Cscene8	8	Leaving	C2Kscene8	8	Leaving
K2Cscene9	9	Select scene	C2Kscene9	9	Select scene
K2Cscene10	10	Select scene	C2Kscene10	10	Select scene
K2Cscene11	11	shop warm	C2Kscene11	11	Select scene
K2Cscene12	12	party1-1	C2Kscene12	12	Select scene
K2Cscene13	13	party1-2	C2Kscene13	13	Select scene
K2Cscene14	14	party1-3	C2Kscene14	14	Select scene
K2Cscene15	15	party1-4	C2Kscene15	15	Party1-9
K2Cscene16	16	Select scene	C2Kscene16	16	Party1-10

Figure 14

Importantly : the configured C2K scenes should include same luminaires.

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.

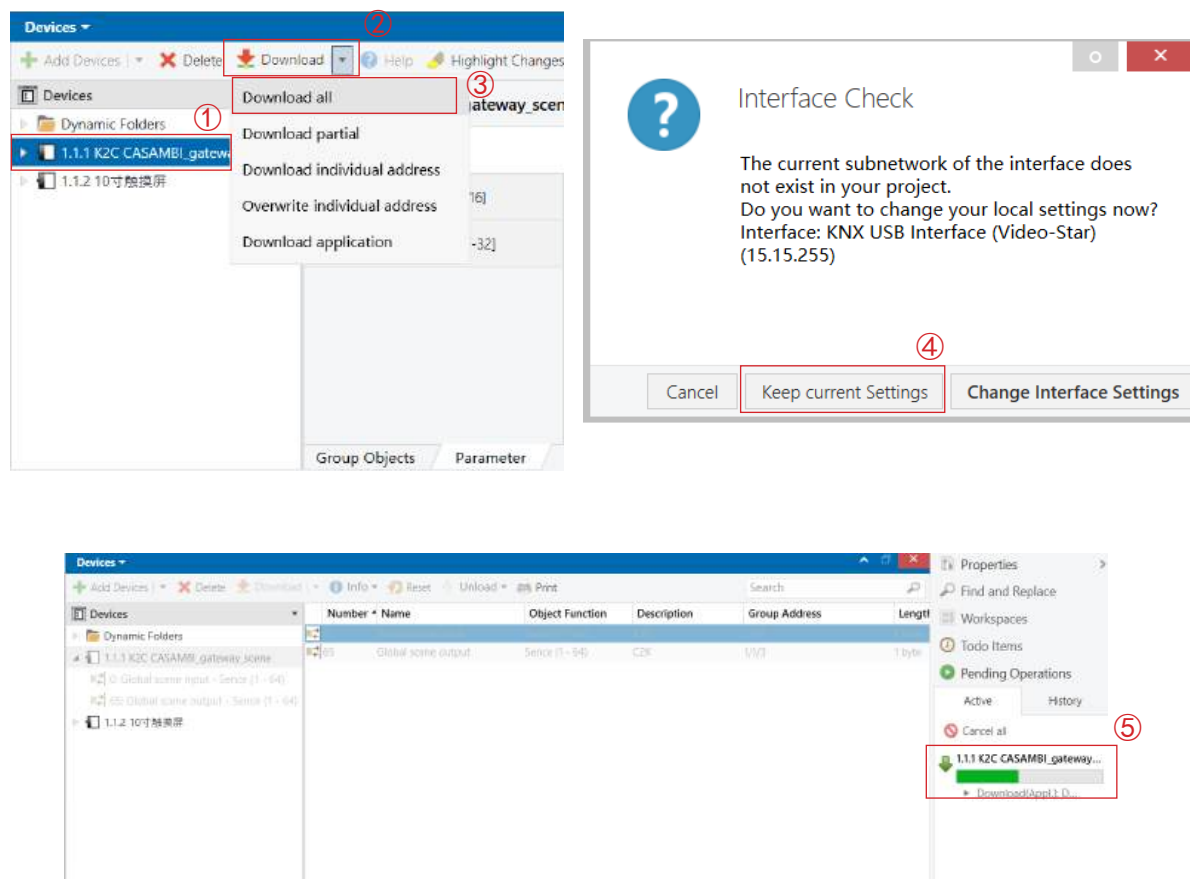


Figure 15

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

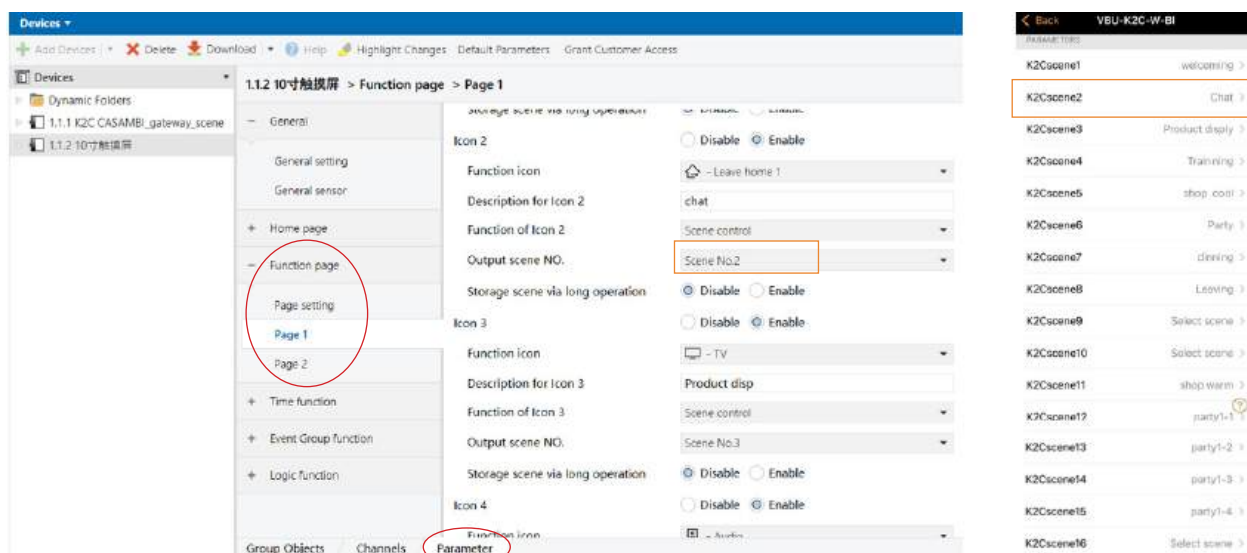
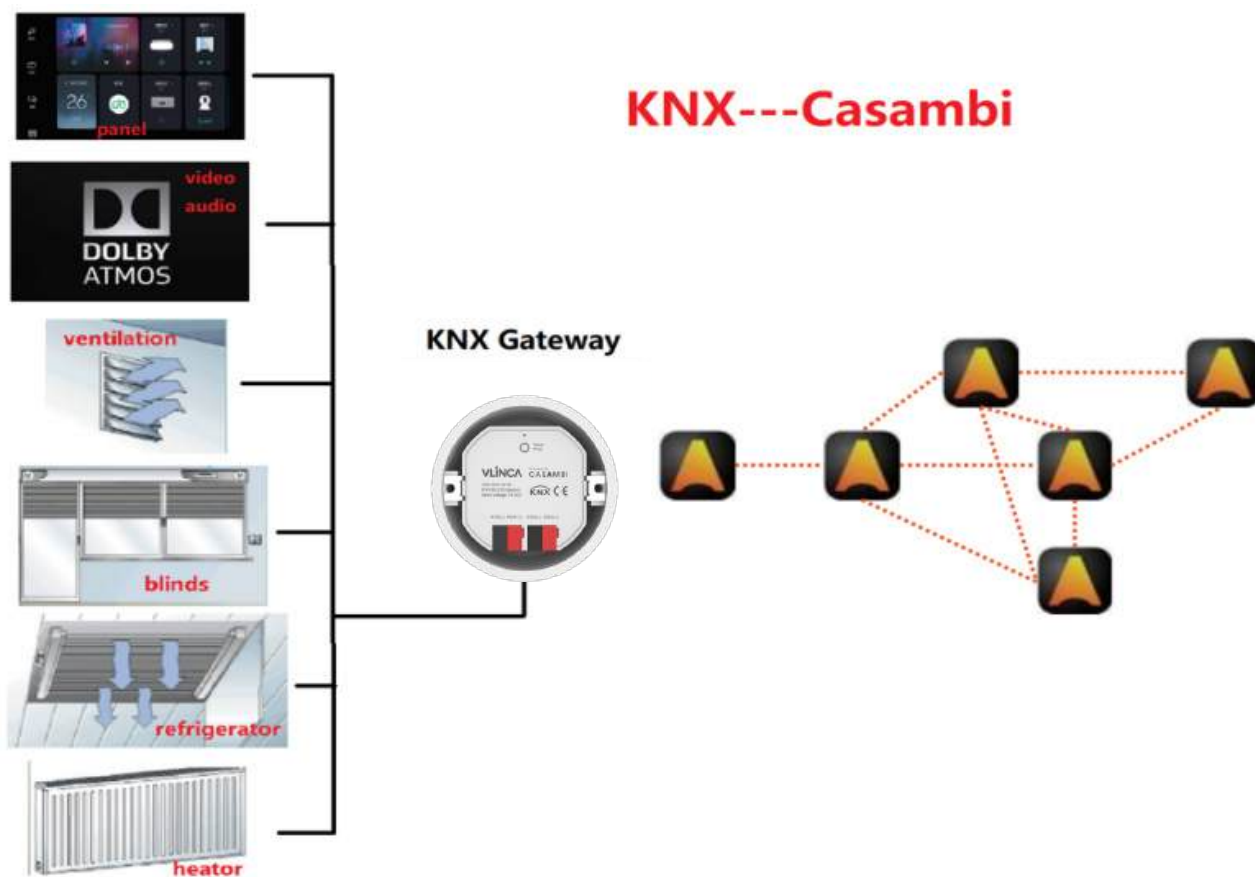


Figure 17

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

VLINCA declares that the VBU-K2C-W-BI fully complies with Directive 2014/53/EU.