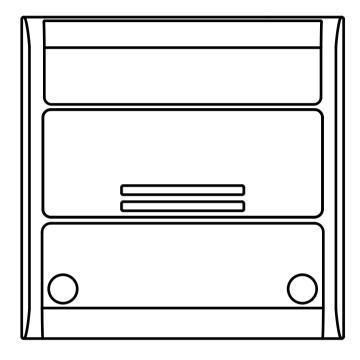
PLANO-ONE/4







note: voice control compatibility is only available where 4 synchronised outputs are set

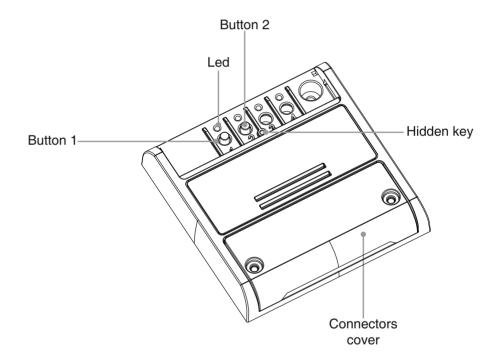
Universal control unit for single colour constant voltage LEDs 12-24Vdc, selectable software for outputs number. Power supply 12-24Vdc, Max 5A /output (max 10A total). Integrated 433.92 MHz radio receiver. WiFi connection for OneSmart App.

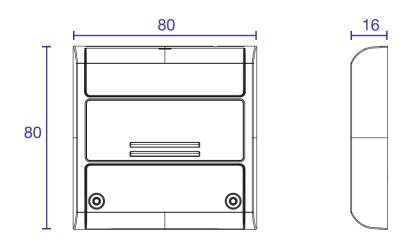
1 - PRODUCT FEATURES	
1.1 - TECHNICAL DATA	page 3
2 - CONNECTION DIAGRAMS	
2.1 - SINGLE-COLOR CONNECTION DIAGRAM	page 4
CONNECTING TWO LINES OF SINGLE-COLOUR STRIP LIGHTS	page 5
CONNECTING THREE LINES OF SINGLE-COLOUR STRIP LIGHTS	page 6
CONNECTING FOUR LINES OF SINGLE-COLOUR STRIP LIGHTS	page 7
3 - LED TYPE SETTING	
3.1 - TYPES OF SELECTABLE LEDs	page 8
3.2 - PROCEDURE FOR LED TYPE SETTING	page 9
4 - USE OF THE CONTROL UNIT	
4.1 - TYPICAL INSTALLATION	page 10
4.2 - USE VIA WIRE	page 11
4.3 - USE VIA RADIO	page 11
4.4 - USE WITH SMARTPHONE APPLICATION	page 11
4.5 - USE WITH VOICE CONTROL	page 11
5 - CONTROL BY RADIOTRANSMITTERS	
5.1 - RADIOTRANSMITTER SETTING	page 12
5.2 - DELETION OF RADIOTRANSMITTERS	page 13
6 - CONTROL WITH APP ONE SMART	
6.1 - APP ONE SMART CONNECTION	page 14
6.2 - USE OF THE APP ONE SMART	page 15
7 - CONTROL BY VOICE COMMANDS	
7.1 - CONNECTION TO THE APP "GOOGLE HOME"	page 16
7.2 - CONNECTION TO THE APP "AMAZON ALEXA"	page 18
8 - ADVANCED PROGRAMS	
8.1 - BUTTON FUNCTION OF THE "WIRELESS BUS" RADIOTRANSMITTER TYPE	page 19
8.2 - LOAD STATE WHEN THE CONTROL UNIT IS SWITCHED ON	page 22
8.3 - TIMED ON SETTING	page 23
8.4 - WIRED INPUT SETTING	page 24
8.5 - FACTORY SETTINGS, RESET CONTROL UNIT	page 25

1 - PRODUCT FEATURES

1.1 TECHNICAL DATA

Power supply (Input)	12 - 24 Vdc	
LED type (Output)	Constant tension single color LED	
Max power load (Output)	5A per output, max 10 A total (4 outputs)	
N° of programmable transmitters	30	
RF receiver frequency	433.920MHz	
WiFi frequency	2.4GHz	
Protection rating	IP20	
Working temperature	-20° +55°	
Box dimensions	80 X 80 h16 mm	





2 - CONNECTION DIAGRAMS

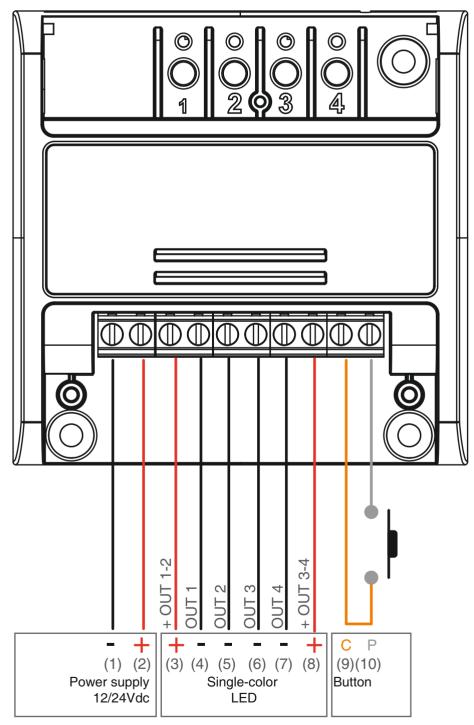
This control unit can manage 1, 2, 3 or 4 lines of single-colour LED strip lights. By default, operation is set to two single-colour strip lights. If a different strip type is used, follow the paragraph 3 procedure.

RECOMMENDATIONS

- Installation must be carried out only by professional technicians in accordance with the applicable electrical and safety regulations.
- All connections shall be operated without electrical voltage.
- Use proper cables.
- Don't cut the antenna
- Provide in the power line twith an appropriate disconnection device
- Dispose of waste materials in full compliance with local law.
- Do not exceed the specified load limits and use correctly protected power supplies.

2.1 SINGLE-COLOR CONNECTION DIAGRAM

The control unit is set by default to manage two lines of single-colour strip lights. To change the setting, follow the procedure in paragraph 3.



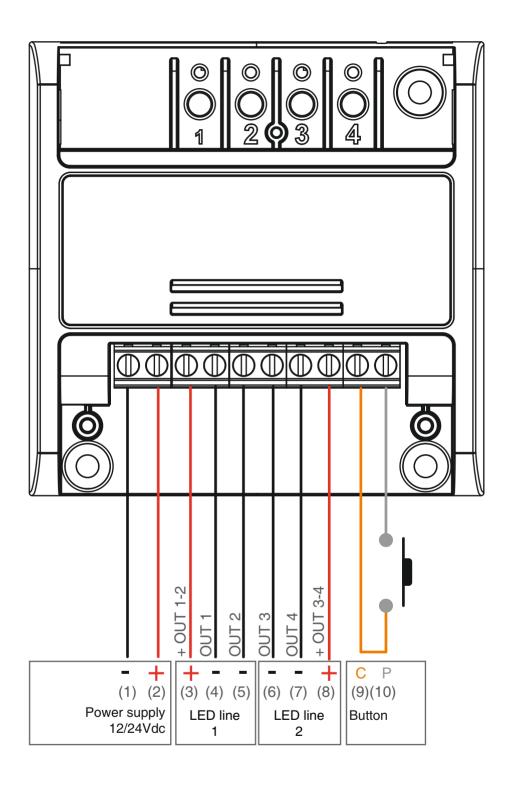
USE VIA WIRE

SHORT PRESS: On-Off for all lights LONG PRESS: Up/down dimmer for all lights

WARNING:

4

- Connect up to 5A per output and max total 10A
- The outputs are synchronized



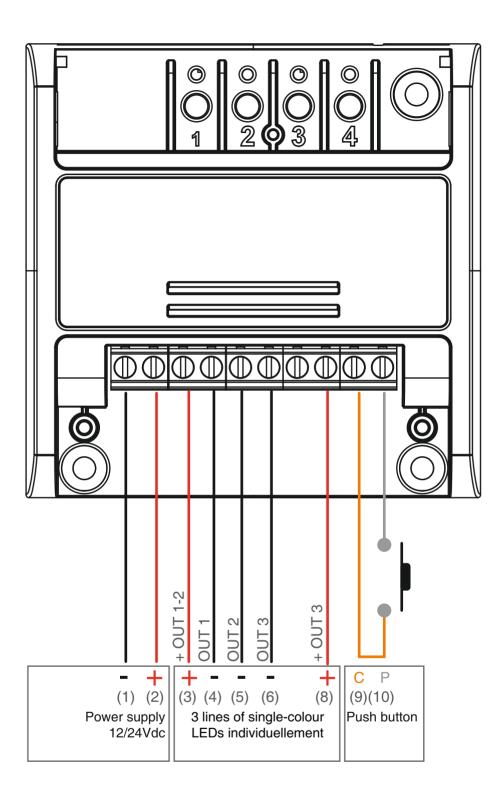
WARNING:

- Connect up to 5A per output and max total 10A
- The operation of outputs 1 and 2 (terminals 4 and 5) is synchronised.
- The operation of outputs 3 and 4 (terminals 6 and 7) is synchronised.

USE VIA WIRESHORT PRESS:On-Off for all lightsLONG PRESS:Up/down dimmer for all lights

2.3 CONNECTING THREE LINES OF SINGLE-COLOUR STRIP LIGHTS

The control unit is set by default to manage two lines of single-colour strip lights. To change the setting, follow the procedure in paragraph 3.



WARNING:

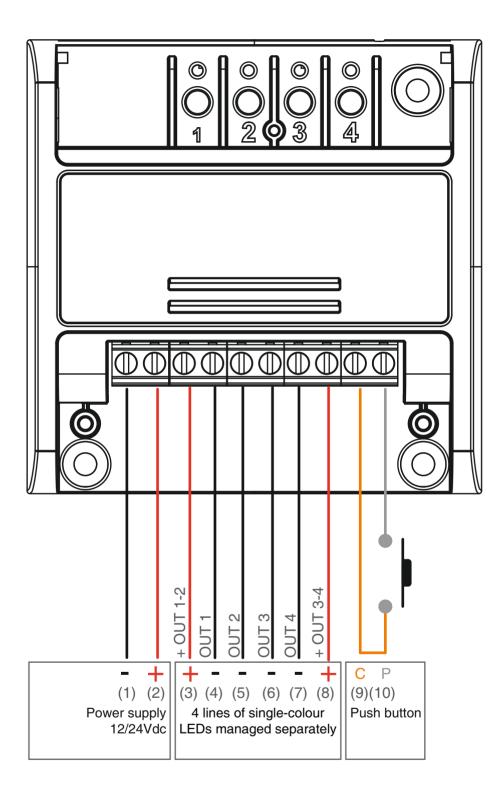
- Connect up to 5A per output and max total 10A
- The outputs operate separately.

USE VIA WIRE SHORT PRESS: LONG PRESS: 6

On-Off for all lights Up/down dimmer for all lights

2.4 CONNECTING FOUR LINES OF SINGLE-COLOUR STRIP LIGHTS

The control unit is set by default to manage two lines of single-colour strip lights. To change the setting, follow the procedure in paragraph 3.



WARNING:

- Connect up to 5A per output and max total 10A
- The outputs operate separately.

USE VIA WIRE SHORT PRESS: LONG PRESS:

On-Off for all lights Up/down dimmer for all lights

3 - LOAD TYPE SETTING

Default: One line of single-colour LEDs. This procedure allows you to change the type of the connected LED.

WARNING:

- The procedure of connection with the OneSmart APP (see paragraph 6) must be repeated each time the load type is changed.

- The wired button always controls all LED lines in synchronised mode.

3.1 SELECTABLE LED TYPES

1. ONE LINE OF SINGLE-COLOUR LEDS

- The control unit is set to manage 4 lines of single-colour LED strip lights in synchronised mode

2. TWO LINES OF SINGLE-COLOUR LEDS

- La centrale viene impostata per gestire 2 linee di strip led: OUT 1 e 2 in parallelo e OUT3 e 4 in parallelo

3. THREE LINES OF SINGLE-COLOUR LEDS

- The control unit is set to manage 3 lines of LED strip lights: OUT 1, 2 and 3 singularly or in groups

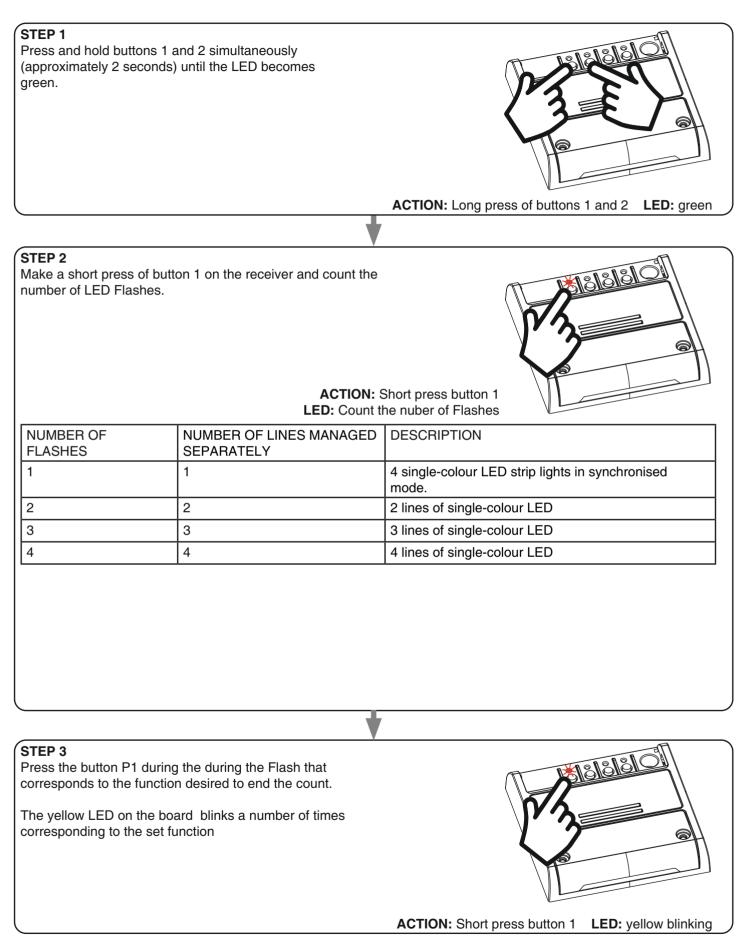
4. FOUR LINES OF SINGLE-COLOUR LEDS

- The control unit is set to manage 4 lines of LED strip lights: OUT 1, 2, 3 and 4 singularly or in groups

ATTENTION : en fonction de la configuration du type de charge, un dimensionnement différent de l'alimentateur peut être nécessaire

3.2 - PROCEDURE FOR SETTING THE LED TYPE

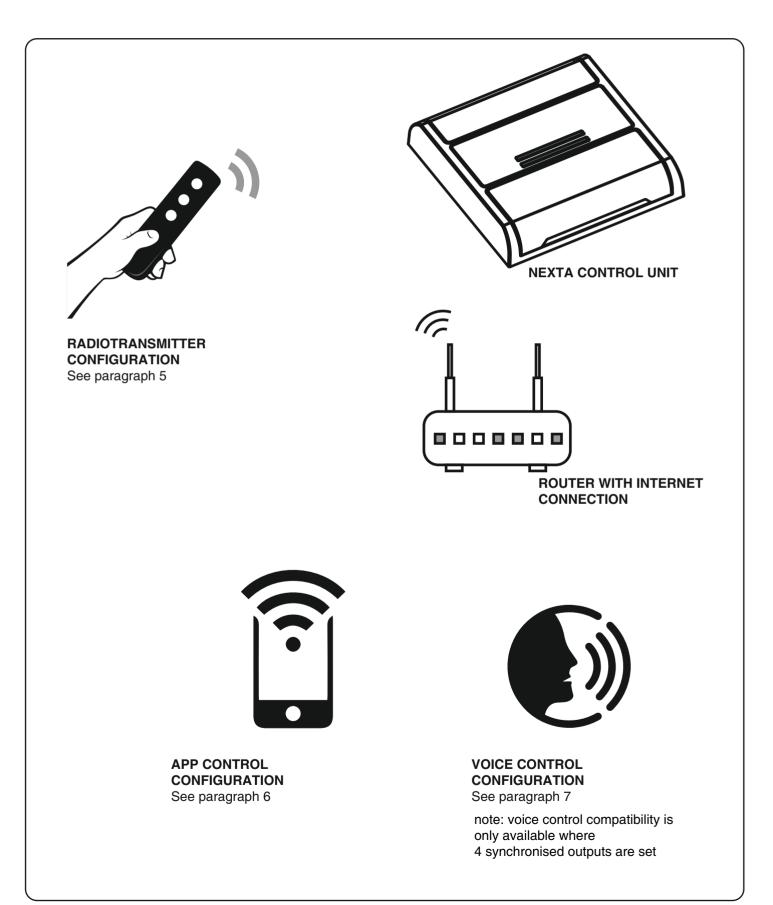
PROCEDURE



4 - USE OF THE CONTROL UNIT

4.1 TYPICAL INSTALLATION

The system can be controlled by a wired push button, radio commands, smartphone App OneSmart or voice commands. The installation can operate with only radio controls or application only. Instead, to use voice commands, at least the App configuration must be completed.



4.2 USE VIA WIRE

The wired button always controls all connected LED lines for the On/Off function (press and release) and the Up/Down dimmer (press and hold).

4.3 USE VIA RADIO

To control the loads via radio you must have compatible transmitters and therefore must carry out the association procedure, see paragraph 5.

4.4 USE VIA SMARTPHONE APP ONESMART

The configuration procedures described in paragraph 6 above must be followed to control the lights by smartphone App.

4.5 USE WITH VOICE CONTROL

The configuration procedures described in paragraph 7 above must be followed to control the lights by voice commands. note: voice control compatibility is only available where 4 synchronised outputs are set

5 - MANAGEMENT WITH REMOTE CONTROL

This procedure lets you programme/delete compatible multifunctional or generic (Wireless bus) transmitters.

Multifunctional transmitters:

With multifunctional transmitters the transmitter control modes depend on the model used. Refer to the transmitter manual, to the paragraph entitled "commands sent by the transmitter", bearing in mind that: this is a dimmer device.

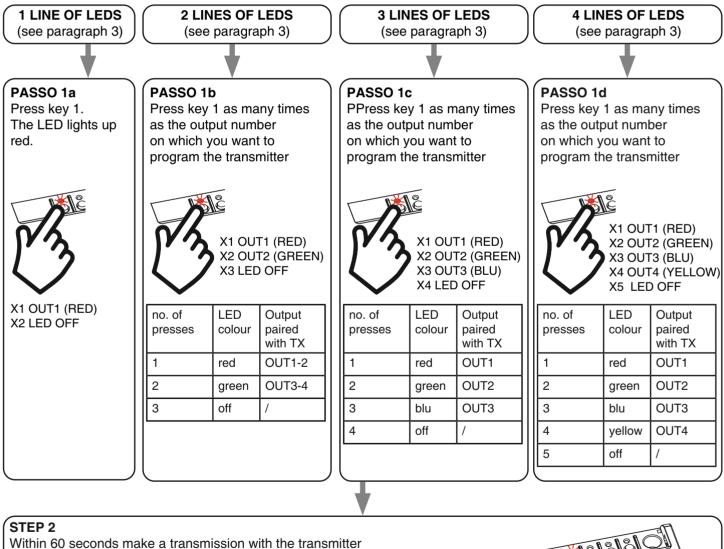
Generic (wireless bus) transmitters:

With generic transmitters, the function of the button is: SHORT PRESS: On/Off LONG PRESS: dimmer Up/Down The functions of the generic transmitters can be customized using the procedure in paragraph 8.1.

5.1 - RADIO PROGRAMMING

This procedure lets you programme compatible multifunctional or generic transmitters.

Depending on the number of lines of LED strip lights set with the procedure in paragraph 3, the remote control can be programmed for the active outputs.



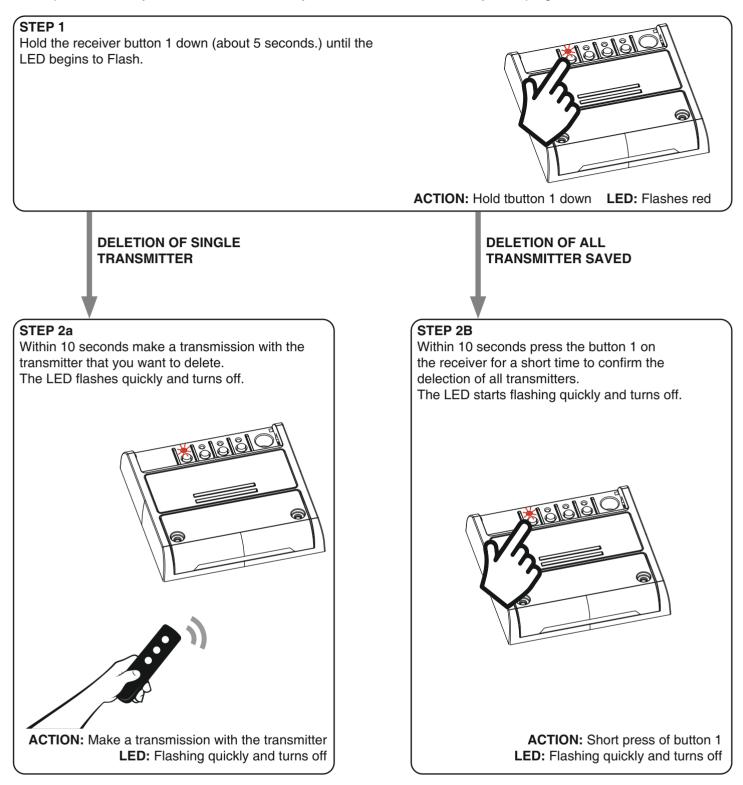
to be saved. See transmitter manual, the paragraph entitled "transmitter programming" for specify information. The led makes 3 Flashes and turns off.



ACTION: Make a transmission with the transmitter LED: Flashes 3 times

5.2 - DELETION OF REMOTE CONTROL

These procedures let you delete from the memory transmitters that have already been programmed.



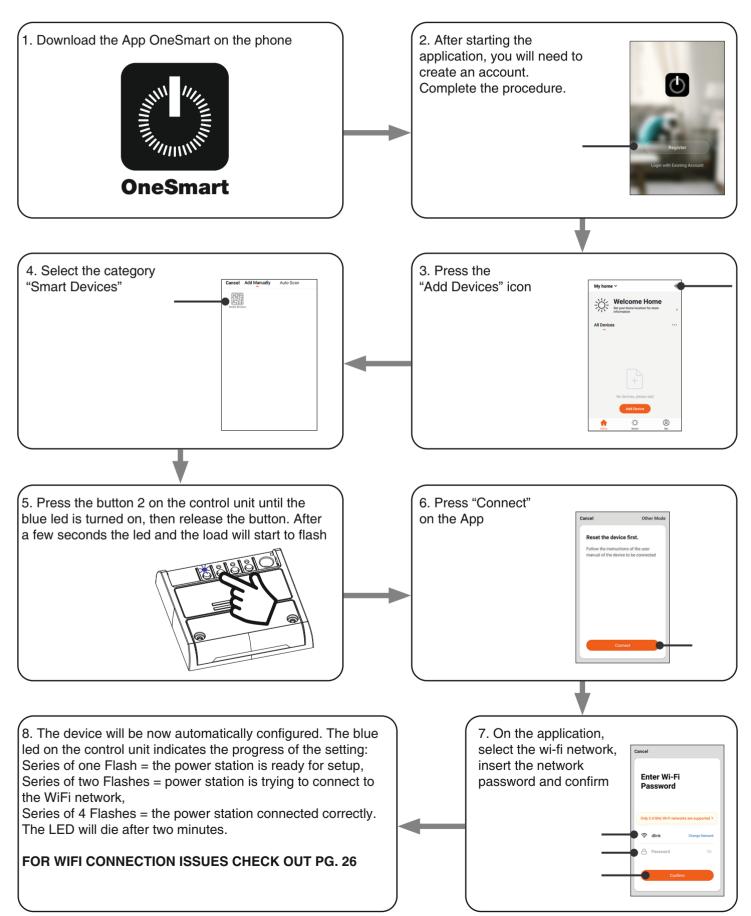
6 - CONTROL WITH APP ONE SMART

These procedures allow you to manage the light from your device (example: mobile phone) through the application and to control the system remotely.

6.1 - APP CONNECTION

This procedure connects the control unit Plano-One to the application. It shall be repeated for each control unit on the installation.

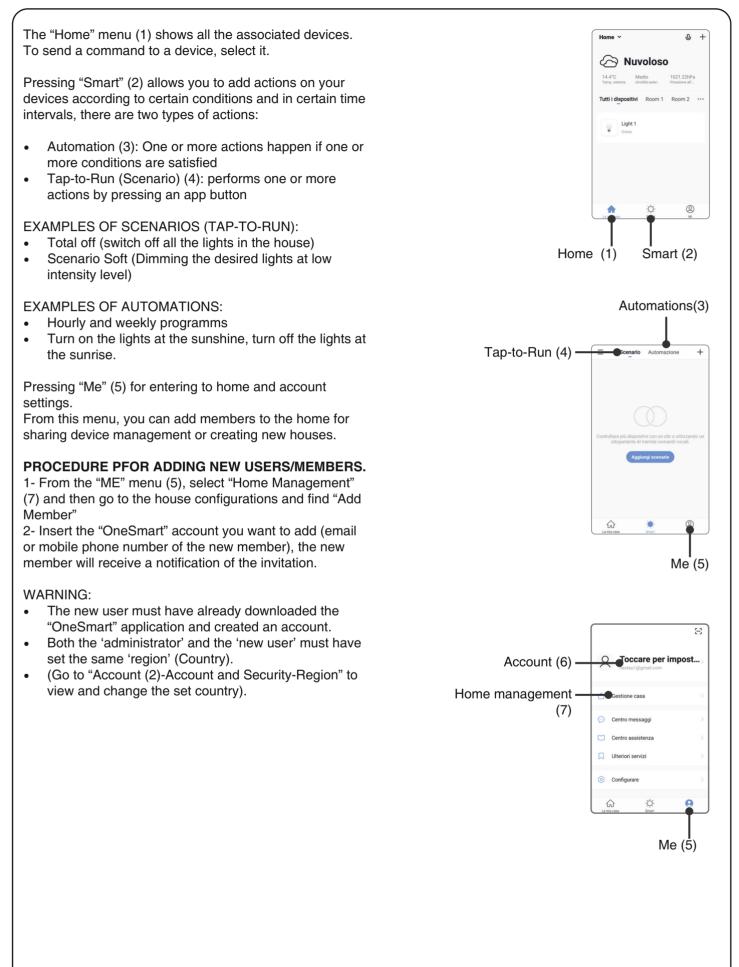
ATTENTION: an internet-based wi-fi network is required for te operation.



6.2 - USE OF THE APP ONE SMART

After all the control units have been set up, the installation can be managed by the application.

USE



7 - CONTROL BY VOICE COMMANDS

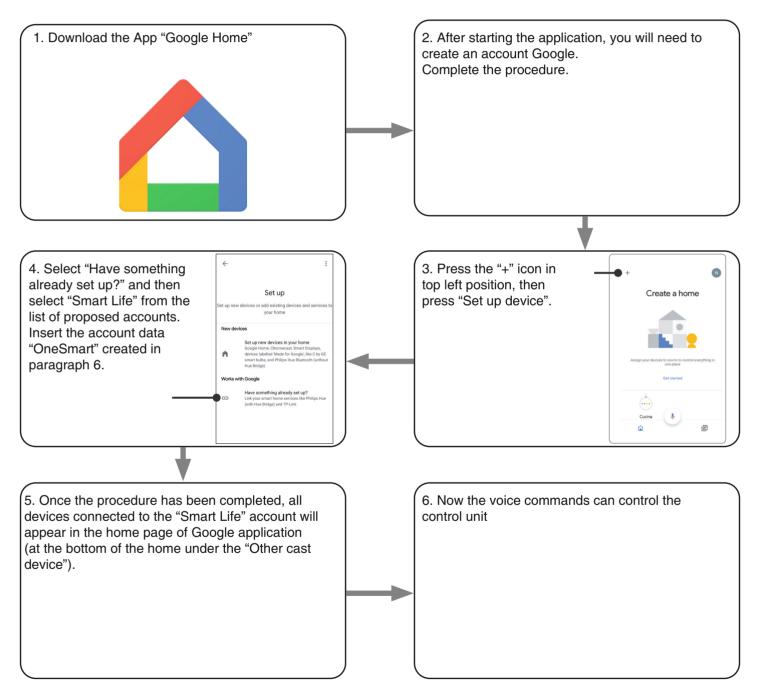
You can use this procedure to associate a "OneSmart" account with a Google or Alexa account to enable the voice commands.

NOTE: voice control compatibility is only available where 4 synchronised outputs are set

7.1 - CONNECTION TO "GOOGLE HOME"

PROCEDURE

WARNING: before proceeding with this procedure, you must have set up the "OneSmart" account, see paragraph 6.



NOTES:

If you add other devices to your OneSmart application, they will automatically be added to the Google Home page. To use them with voice control, you need to add them to a room in the Google Home application, see step 6 of the procedure.

If devices are not added automatically, disconnect and reconnect your account from step 3 of this procedure from Google Home.

USE OF "GOOGLE HOME"

SENDING VOICE COMMANDS

Using your Android mobile phone (or tablet), voice commands can already be sent via the native assistant. By using an Apple device, you can use the microphone within the Google Home application. If you want to add a voice recognition device such as "Google Home Mini" or "Google Home", follow the procedures to match it to the house you created and then they will be associated with the lights.

VOICE COMMAND LIST

Here below there are some examples of dedicated voice commands for lights:

DIMMER / RGB(W) / CCT TUNABLE WHITE

OK Google, Turn on / Turn Off *name of the device* or *name of the room* OK Google, Turn on / Turn Off the lights OK Google, set the light to 50% OK Google, reduce the light OK Google, turn off all the lights

RGB(W)

OK Google, transforms the light *light name* or *room name* green. OK Google, set the *light name* or *room name* red

CCT TUNABLE WHITE

OK Google, Hot White OK Google, Cold White OK Google, Ancient White OK Google, Smoke White OK Google, Phantom White

USE OF ROUTINES

The Boogle Home application allows you to create some vocal commands to be associated with one action or sequence of actions.

This allows you to create scenarios, but also allows you to customize the command to get a certain action.

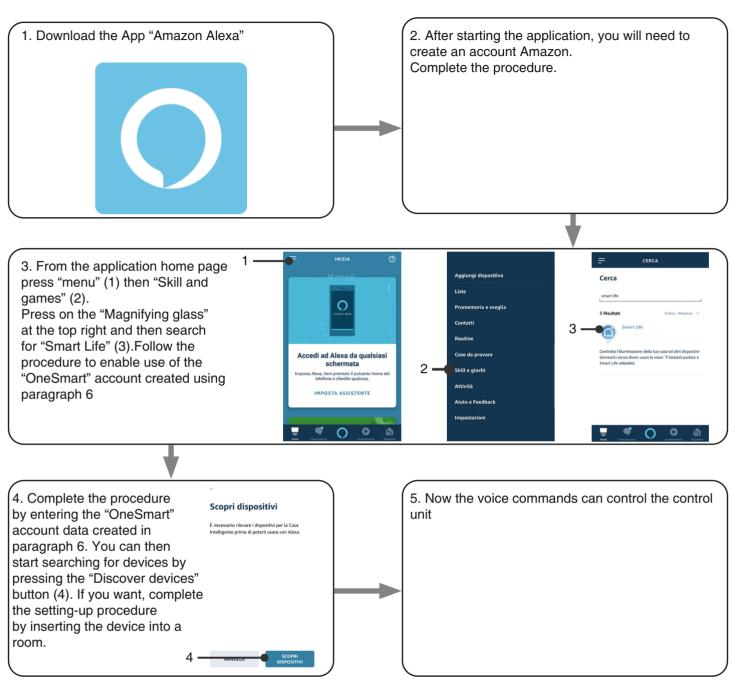
EXAMPLES OD SCENARIOSOK Google, Dark!Turn off all the lightsOK Google, Movie!Turn off some lights and soft dimming of other lights

EXAMPLES OF CUSTOMIZED COMMANDS OK Google, Dark! Turn off the light (corresponds to the native "Turn off *light name*" command)

7.2 - COONECTION TO "AMAZON ALEXA"

PROCEDURE

WARNING: before proceeding with this procedure, you must have set up the "OneSmart" account, see paragraph 6.



USE OF "AMAZON ALEXA"

SENDING VOICE COMMANDS

Using your Android mobile phone (or tablet), voice commands can already be sent via the Amazon Alexa application. Using an Apple device, you can use the microphone inside the Amazon Alexa application. If you want to add a voice-control device like "Echo Dot" or "Echo Plus", follow the procedures to match it to the house you created, and then they will be associated with the lights.

EVOICE COMMAND LIST

Here below there are some examples of dedicated voice commands for lights:

DIMMER / RGB(W) / CCT TUNABLE WHITE

Alexa, Turn on / Turn Off *name of the device* or *name of the room* Alexa, Turn on / Turn Off the lights Alexa, set the light to 50% Alexa, reduce the light Alexa, turn off all the lights

RGB(W)

Alexa, transforms the light *light name* or *room name* green. Alexa, set the *light name* or *room name* red

8 - ADVANCED PROGRAMS

8.1 FUNCTION CUSTOMIZATION OF THE "WIRELESS BUS" GENERIC TRANSMITTER BUTTONS The following procedure allows you to set a custom function to the "wireless bus" family transmitter button.

Details on selectable functions.

Function 5 - Memo

Each time the button is pressed, the load will Flash to indicate that the current state of the light is stored. If the button is pressed from state "light off", the storage is switched off and the light will be turned back on to the last set value, as it is by default.

PROCEDURE

STEP 1

Press key 1 as many times as the output number on which you want to program the transmitter

no. of presses	LED colour	Output paired with TX
1	red	OUT1
2	green	OUT2
3	blu	OUT3
4	yellow	OUT4
5	off	/

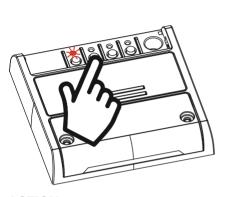


ACTION: Short press of button 1 LED: Turns on red

STEP 2

Press the button 2 on the receiver for a short time and count the number of Flashes emitted by the LED:

NUMBER OF FLASHES	FUNCTION
1	Off
2	On
3	Short press: On Long press: Dimmer Up
4	Short press: Off Long press: Dimmer Down
5	Memo



ACTION: Short press of button 2 LED: Count the number of Flashes

STEP 3

Press the button for a short time during the Flash that corresponds to the function desired to end the count. The led stop Flashes



ACTION: Short pressure of button 2 during the Flash LED: Stop Flashes

STEP 4

Make a transmission with the transmitter to be saved (see transmitter manual, paragraph entitled "transmitter programming"). The LED on the receiver Flashes 3.times and turns off.



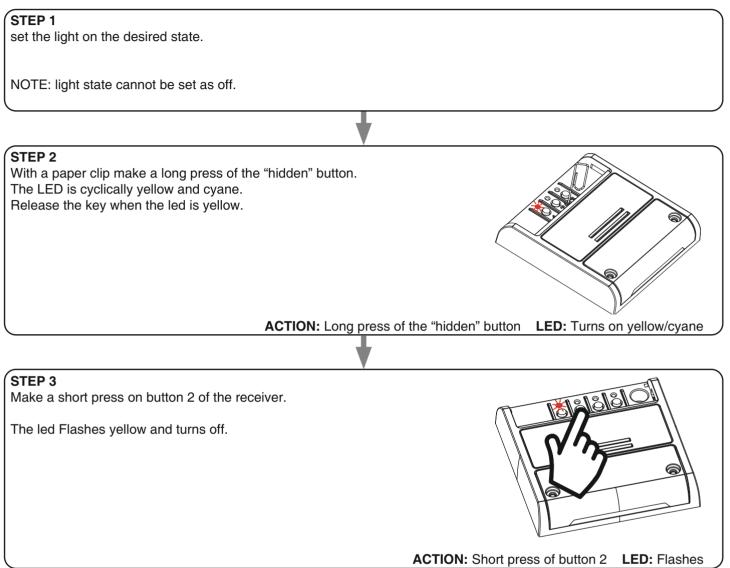
ACTION: Make a transmission with the transmitter LED: Flashes 3 times

8.2 - LOAD STATE WHEN THE CONTROL UNIT IS SWITCHED ON

Default: Last value before the black out

This process is used to set the state of Leds when the control unit is switched on (for example when the power supply is provided by a general switch or timer).

PROCEDURE:



8.3 - SETTING THE TIMED ON

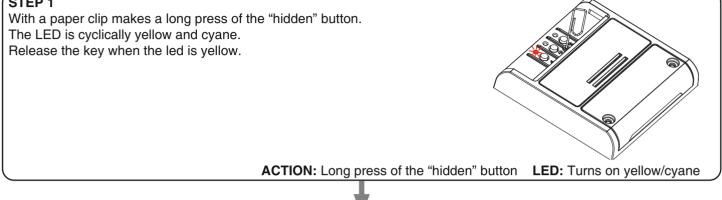
Default: 24 hours

This procedure is used to set the time for which the Leds stays on before an automatic switch off. All commands reset the time count to zero, excluding the following commands that will immediately turn off the light: short

press by wired push button, command OFF by radiotransmitter, comand by App or voice.

PROCEDURE

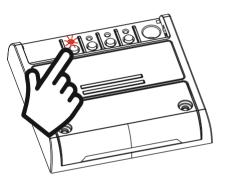
STEP 1



STEP 2

Press the button 1 on the receiver for a short time and count the number of Flashes emitted by the LED:

FLASHES NUMBER	FUNCTION	
1	No timed on	
2	30 seconds	
3	1 minute	
4	2 minutes	
5	5 minutes	
6	15 minutes	
7	30 minutes	
8	1 hour	
9	2 hours	
10	3 hours	
11	8 hours	
12	12 hours	
13	18 hours	



ACTION: Short press of button 1 **LED:** Count the number of Flashes

STEP 3

Press the button for a short time during the Flash that corresponds to the function desired to end the count. The led turns off



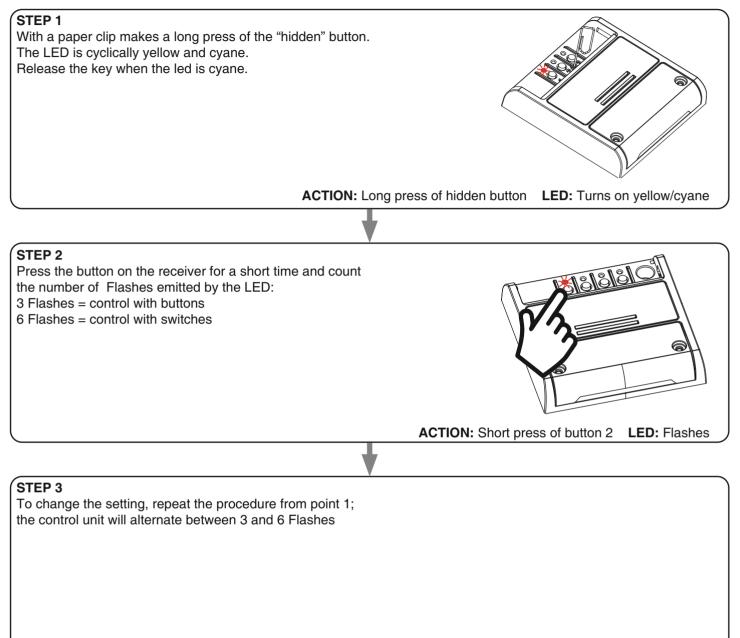
ACTION: Short press of button 1 during the Flashes LED: Turns off

8.4 - SETTING TYPE OF INPUTS VIA WIRE

Default: Button function

This procedure lets you choose the type of wired devices to command load (connected on terminals 9 and 10). The devices can be set as buttons or switches.

PROCEDURE

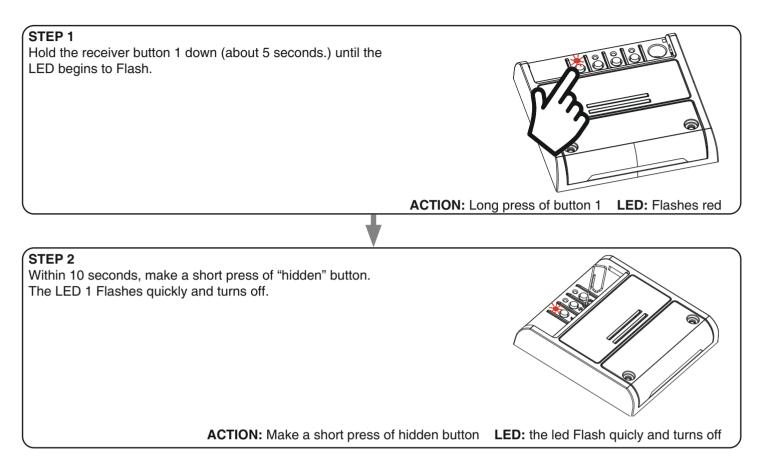


8.4 - RESET OF THE CONTROL UNIT

This procedure let you take the control unit back to factory settings.

ATTENTION: the only parameter that will not be removed will be the association with the ONESMART application (see paragraph 6). To edit or delete also this parameter, reed the procedure.

PROCEDURE



9 - INSIGHTS

9.1 – ISSUES WHEN CONNECTING THE CONTROL UNIT WITH WIFI

If you're having problems connecting the control unit to the router, we suggest to:

FIRST CHECKS:

- check if the network used to connect the control unit is running at 2.4GHz (not 5GHz)
- the smartphone you use must be connected to the same WiFi on which you want to connect the device
- please check if the entered password is correct

STEPS TO DO:

- close the app and try again to connect the device
- if possible try with another smartphone to check if it works

If the problem is not fix, there may be some settings in your router that make the network incompatible with the device. To check and change these settings it's necessary to access the router settings.

As soon as you access the router settings (it depends on the model of router you have) try to check and set these parameters:

WIFI FREQUENCY BAND

some routers generate a network that is set automatically at a frequency of 2.4GHz or 5GHz, depending on the device you are connecting with. When you are trying to connect the device through your OneSmart account, your smartphone may be connected automatically at the frequency band of 5GHz, failing the connection with your device. It's therefore necessary to access the router settings and set the 2.4GHz as the main network frequency to use. Otherwise it's possible to create two different WiFi networks, one for the 2.4GHz and one for the 5GHz band, and during the pairing phase make sure your smartphone is connected to the 2.4GHz network.

WIFI SECURITY SETTINGS

some routers could have default security settings not compatible with the device.

Please find out which security protocol type your Wi-Fi router is and change it to:

WI-FI SECURITY: SECURITY TYPE: WPA2 ENCRYPTION TYPE: AES



