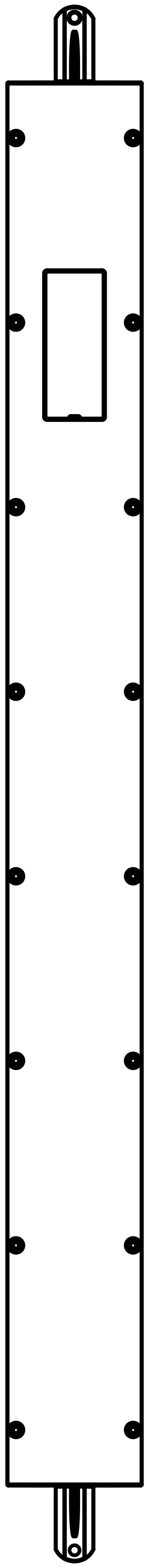
TKL RGBW custom

NEXTA TECH



OneSmart

Control unit with integrated power supply for the management of one single-color LED strips and one RGB LED strip.
230Vac power supply.
Outputs: n°2 24V Leds lines.
Radio receiver for transmitters and integrated WiFi module for the management with the App OneSmart.

INDEX

1 - PRODUCT FEATURES

1.1 TECHNICAL DATA

FEATURES COMMON TO ALL MODELS	
Power supply (Input)	230Vac
Power voltage LED (Output)	24Vdc
N° of programmable transmitters	30
Working temperature	-10° +55°
TKL Dimensions (box only)	613 X 53 h 26 mm
TKL-S Dimensions (box only)	287 X 53 h 26 mm

TKL 100 W4 / RGBW W P i

PRODUCT SERIES (TKL)

INTEGRATED POWER SUPPLY POWER (100)

Code	Power supply power	Maximum power per output*	Maximum power in total
60	60W (24V)	60W (2,5A)	60W (2,5A)
100	100W (24V)	100W (4A)	100W (4A)
250	250W (24V)	120W (5A)	240W (10A)

TYPE OF WIRELESS COMMUNICATION (W4 /)

Code	Radio transmitter frequency	WiFi App 2,4GHz
W4/	433MHz	OneSmart
W8/	868MHz	OneSmart
R4/	433MHz	/
R8/	868MHz	/

PRODUCT SERIES (RGBW)

TYPE OF LED CONNECTORS (W)

Code	Maximum current
W	6-pole cable
C	EP55 connector*


W

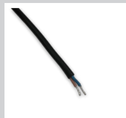

C

* this connector requires the use of an accessory distributor, Nexta code “CON-EP55/RGB+W”

WIRING DIET (P)

Code	Type
/P	Plug
/F	Cable


/ P


/ F

INPUTS FOR WIRED CONTROL BUTTONS (i)

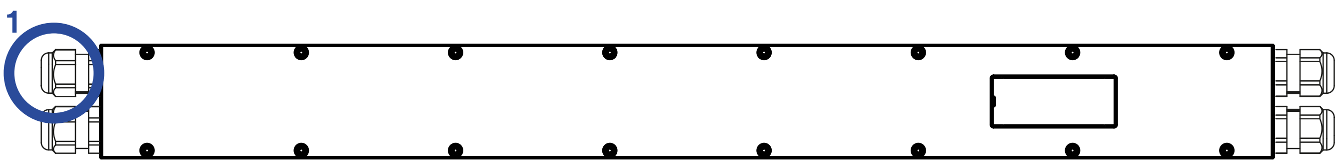
Code	Number of wired entrances provided
/	None
i	5 wire (4 push buttons)

2 - ELECTRICAL CONNECTIONS

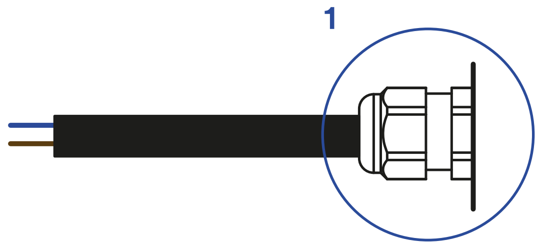
WARNINGS

- Installation must be carried out only by qualified technicians in compliance with the electrical and safety standards in force.
- All connections must be made with the power turned off.
- Use suitable cables.
- Do not cut through the aerial
- A suitably sized disconnection device must be set up on the electric power line that supplies
- the product.
- Disposal of waste materials must fully respect local standards.
- Do not exceed the load limits shown and use protected power supply units of the correct size for the load.

2.1 - 230VAC POWER CONNECTION

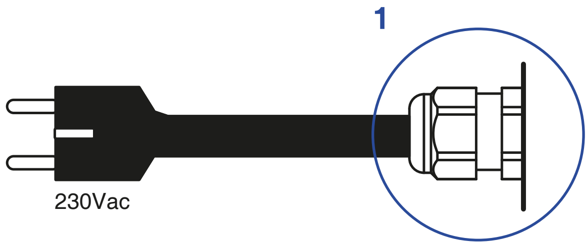


SERIE TKL***/RGBW*F***

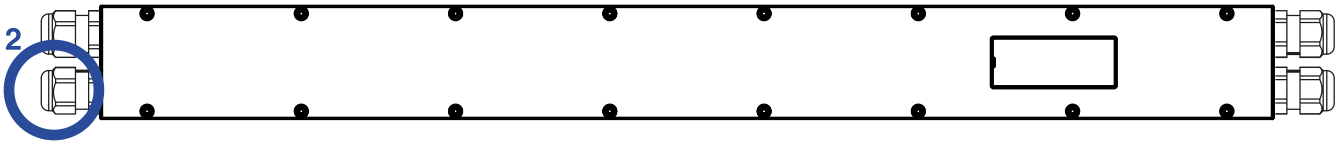


BLUE WIRE= Neutral
BROWN WIRE = Phase

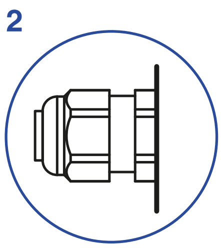
SERIE TKL***/RGBW*P***



2.2 - WIRED INPUT CONNECTION

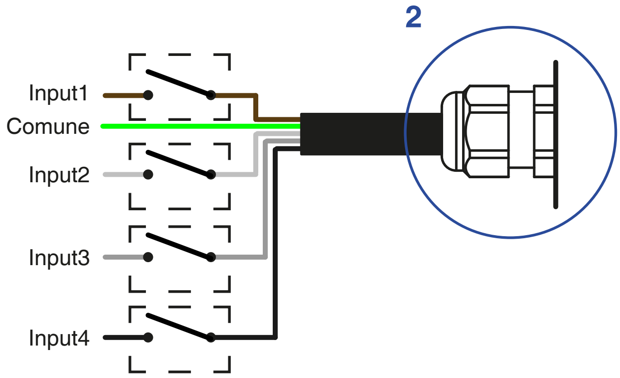


SERIES TKL*****/RGBW**0



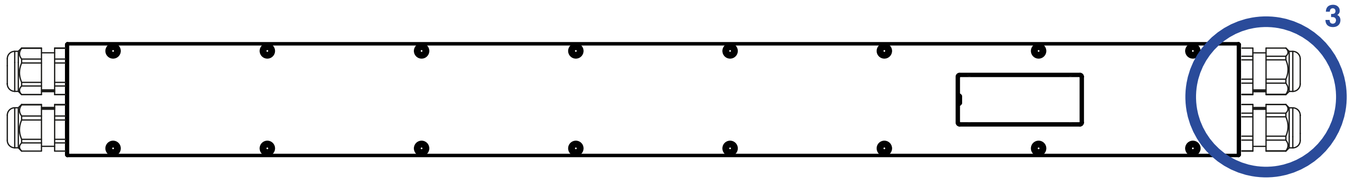
No wiring

SERIES TKL*****/RGBW**i

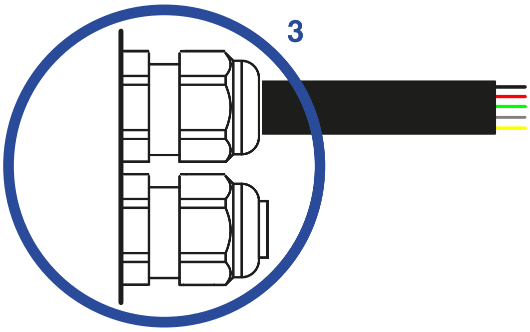


GREEN WIRE = Common
BROWN WIRE = Input1
On/Off (short press) and dimmer (long press) of OUT1 WHITE
WHITE WIRE = Input2
On/Off (short press), dimmer (long press from light on) and colour change (long press from light off) of OUT2 RGB
BLACK WIRE = Input3
Off of OUT1 WHITE
GRAY WIRE = Input4
Off of OUT2 RGB

2.3 - OUTPUT CONNECTION

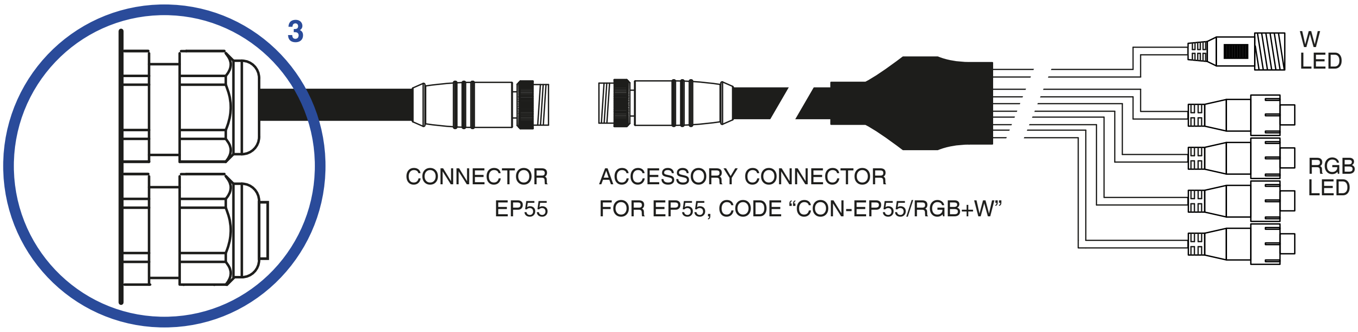


SERIES TKL*****/RGBWW**



RED WIRE =	+	
BLACK WIRE =	OUT1 WHITE STRIP LED	
GREEN WIRE =	OUT2 "B"	RGB STRIP LED
WHITE WIRE =	OUT2 "G"	
YELLOW/GREEN WIRE =	OUT2 "R"	

SERIES TKL*****/RGBWC**



THE FOUR RGB LED OUTPUTS HAVE SYNCHRONIZED OPERATION

3 - USE

RADIO COMMAND
To use the system with a remote control, you must have a compatible one and associate it with the procedure in paragraph 4.
Once associated, refer to the user manual of the remote control for its functions.

WIFI COMMAND
To use the system with the application it’s necessary to have a WiFi network with internet access and then make the association procedure in paragraph 5

WIRED BUTTONS COMMAND
If wired controls are provided, connect them following the instructions in paragraph 2.2.
To modify these functions see paragraph 6.4

4 - MANAGEMENT BY RADIOTRANSMITTERS

With the following procedures it is possible to pair a compatible transmitter to the control unit.
Programming a new transmitter can be done in 2 ways: with buttons on the board or near the control unit.

4.1 - PROGRAMMING OF TRANSMITTERS WITH BUTTONS ON THE CARD

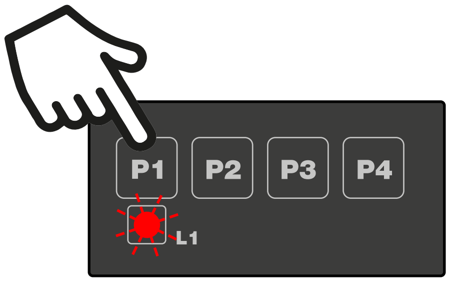
Requirements: the access at the programming area is located under the cap of the electronic control unit.

PROCEDURE:

STEP 1

Press key 1 a number of times equal to the output number on which you want to program the transmitter

n° pressure	Led colour	Output associated to the tx
1	Red	OUT1 (WHITE LED)
2	Green	OUT2 (RGB LED)
3	Off	/



X1 OUT1 (RED)
X2 OUT2 (GREEN)
X3 LED OFF

STEP 2

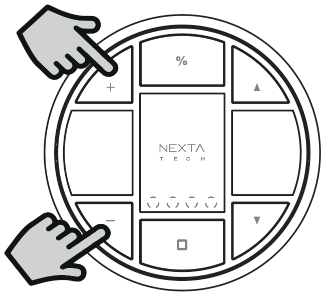
Within 60 seconds, make a transmission with the transmitter you want to program.
See the manual paragraph “transmitter programming” for detailed information based on the model.
The LED flashes three times and goes off.

4.2 - PROGRAMMING THE HB80-PRG100 TRANSMITTER AT BLACKOUT
Requirements: be able to remove and apply line voltage to the box and have a HB80-PRG200 transmitter.

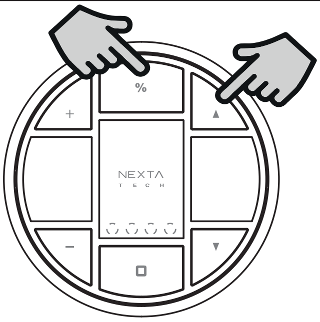
STEP 1
Create the desired channels in the transmitter based on the devices you want to control (see transmitter manual).

STEP 2
Disconnect and restore voltage to the box by disconnecting the 230Vac power supply.

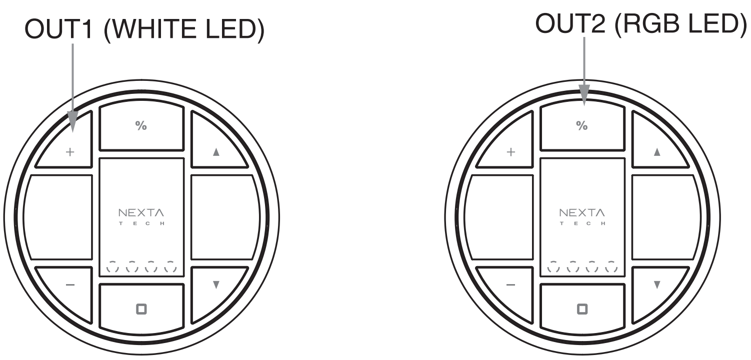
STEP 3
Use the “+” and “-” keys to select the channel of the transmitter you want to associate on the display.



STEP 4
Press simultaneously the “%” and “up arrow” keys.
The 4 LEDs on the transmitter light up steadily



STEP 5
With reference to the figure: press the key associated with the outputs of the control unit to be controlled.



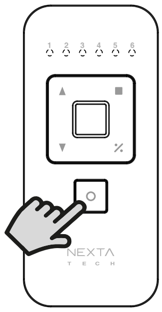
NOTE:
- After powering up the system, you must complete the procedure (steps 3, 4 and 5) within 15 seconds

4.3 - PROGRAMMING THE ECO-6L TRANSMITTER AT BLACKOUT

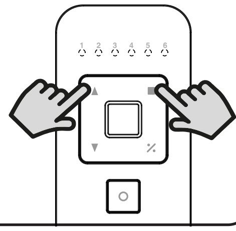
Requirements: being able to remove and apply line voltage to the box and have an ECO-6L transmitter

STEP 1
Disconnect and restore voltage to the box by disconnecting the 230Vac power supply.

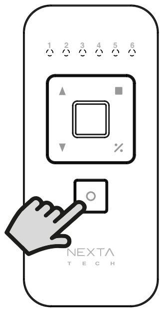
STEP 2
With the “circle” key select the channel of the transmitter you want to associate



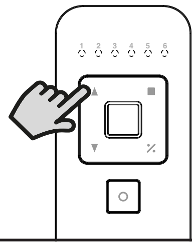
STEP 3
Press simultaneously the “up arrow” and “square” keys
The 6 LEDs on the transmitter light up steadily



STEP 4
Press the “circle” key to select on the LEDs:
- Number 1 for OUT1 (WHITE LED)
- Number 2 for OUT2 (RGB LED)



Press the “up arrow” key to confirm.



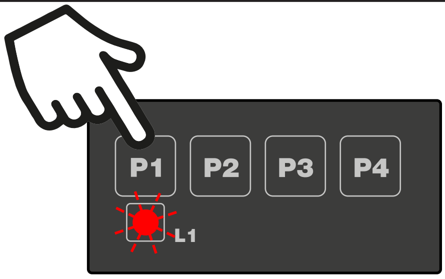
NOTE:
- After powering up the system, you must complete the procedure (steps 2, 3, 4 and 5) within 15 seconds
- The outputs to which a transmitter can be associated depend on the setting in paragraph 3.

4.4 - PROCEDURE OF CANCELLATION OF ALL TRANSMITTERS

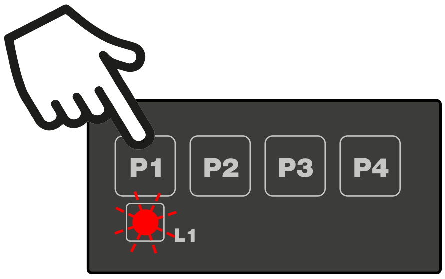
Requirements: the access at the programming area is located under the cap of the electronic control unit.

PROCEDURE:

STEP 1
Press and hold the P1 key until the red LED flashes.



STEP 2
Short press the P1 key.
The red LED emits rapid flashes and goes off.

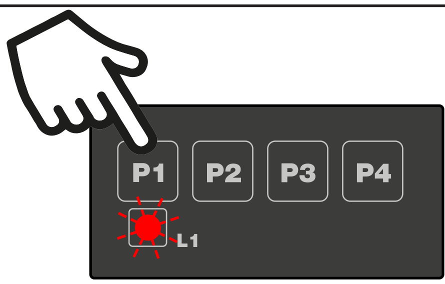


4.5 - PROCEDURE OF CANCELLATION OF THE SINGLE TRANSMITTER

Requirements: the access at the programming area is located under the cap of the electronic control unit.

PROCEDURE:

STEP 1
Press and hold the P1 key until the red LED flashes.



STEP 2
Within 30 seconds, send any radio command (ex: open) with the transmitter to be associated.
The red led emits three flashes and goes off and the buzzer emits three beeps.

5 - MANAGEMENT FROM “ONESMART” APPLICATION

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

5.1 - CONNECTION TO THE “ONESMART” APP WITH BUTTONS ON THE CARD

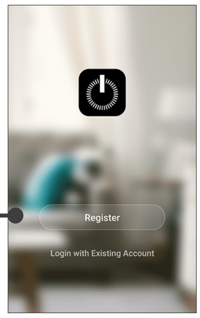
This procedure connects the control unit to the application. It must be repeated for each control unit in the system.
ATTENTION: for operation it is necessary to have a WiFi network with internet access to which to connect the control unit

PROCEDURE

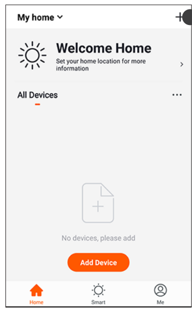
1. Download the “OneSmart” application from the store

OneSmart

2. After launching the application you will be prompted to create an account.
Complete the procedure.

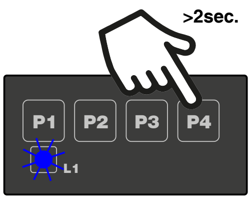


3. Press the “Add devices” icon



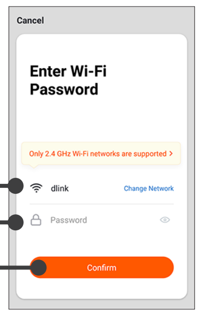
4. Select the “Smart Devices” category

5. Press the “P4” key on the control unit until the blue LED lights up, then release the key. After a few seconds the LED and the load flash



6. On the application press “Connect”

7. Select the wi-fi network on the application, enter the network password and confirm

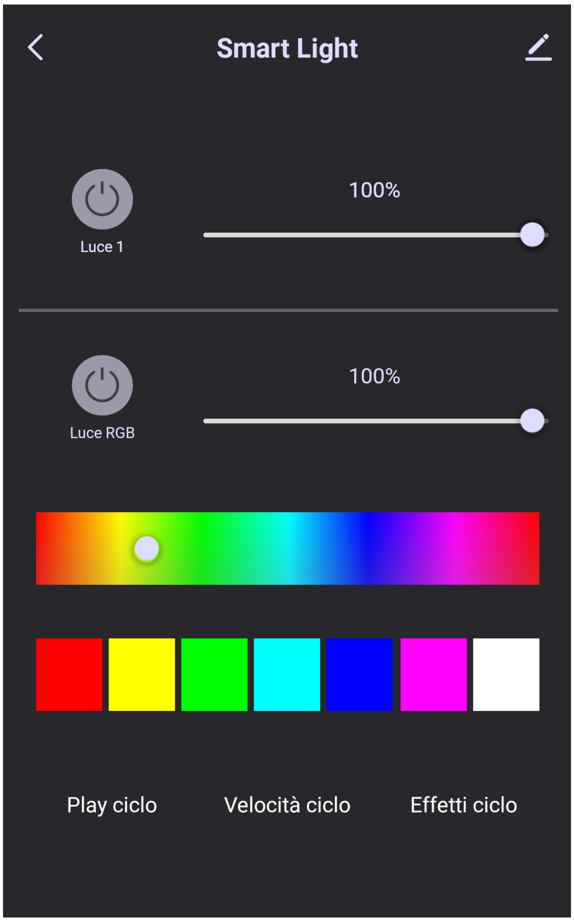


8. Now the device will configure itself automatically. The blue LED on the board signals the progress of the setting:
Series of flashes = the control unit is ready for configuration
Series of two flashes=
the control panel is trying to connect to the network
Series of 4 flashes=
the control panel connected correctly
Prior to the outcome of the procedure, the LED will switch off after two minutes.
FOR CONNECTION PROBLEMS, SEE PAR. 7.1

5.2 - CONNECTION TO THE “ONESMART” APP WITH WIRED PUSH BUTTONS
Requirements: have wired input one connected.

This procedure allows you to associate the control unit to a WiFi network without accessing the box but using the wired command buttons.
To complete the operation, follow the procedure in paragraph 5.1 and in step 5 instead of pressing the button on the board:
- Press input 1 10 times
- Complete the procedure in paragraph 5.1

7.3 - USE OF “ONESMART”
Through the screen it is also possible to remotely view the status of the light (off or on intensity).



6 - ADVANCED PROGRAMS

6.1 - CUSTOMIZING THE FUNCTION OF THE KEY OF THE “WIRELESS BUS” TYPE TRANSMITTERS

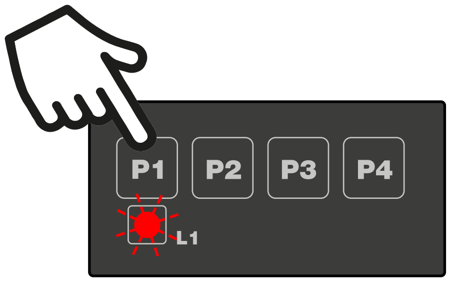
With the following procedure it is possible to set a customized function for the transmitter button of the “wireless bus” family.

PROCEDURE

STEP 1

Press the P1 key a number of times equal to the output on which you want to associate the transmitter. The LED lights up according to the following table.
Based on the setting in paragraph 3, 1, 2, 3 or 4 outputs will be available.

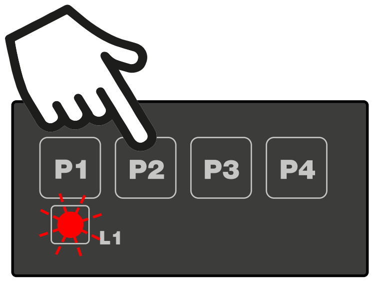
N° pressure	Led color	Output associated to the tx
1	Red	OUT1 (WHITE LED)
2	Green	OUT2 (RGB LED)
5	off	/



STEP 2

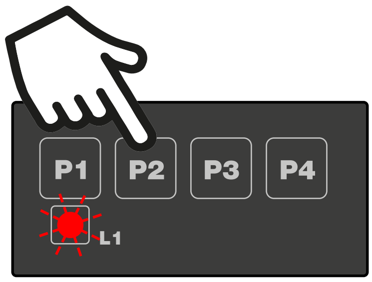
Short press the button P2 on the receiver and count the number of flashes emitted by the LED.

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



STEP 3

Short press the P2 key while the flashing corresponds to the desired function to end the count.
The LED lights up steadily.



ACTION: Short press of key 2 while flashing **LED:** Lights up red

STEP 4

Within 60 seconds, make a transmission with the transmitter you want to program. See the paragraph “transmitter programming” for detailed information based on the model.
The LED flashes three times and goes off.

ACTION: Sending a command from a transmitter **LED:** Flashes and turns off

6.2 - SETTING A TIMER

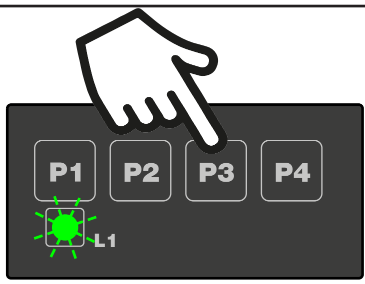
Default: 18 hours

With the following procedure it is possible to introduce a timer to switch off the light automatically.
All commands restart the time count, with the exception of the following which will immediately switch off the light: short press of the wired input with Off function, off command from transmitter, application or voice.

PROCEDURE

STEP 1

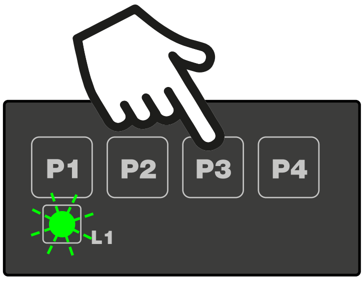
Keep the P3 key pressed, the LED turns on cyclically in green, blue and purple.
Release when the led is green.



STEP 2

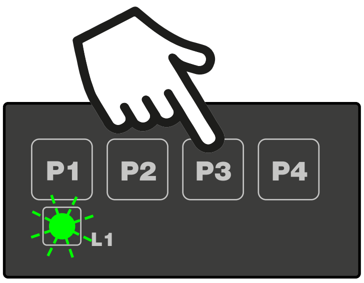
Short press the button P3 on the receiver and count the number of flashes emitted by the LED.

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



STEP 3

Short press the P3 key while the flashing corresponds to the desired function to end the count.
The LED lights up steadily.



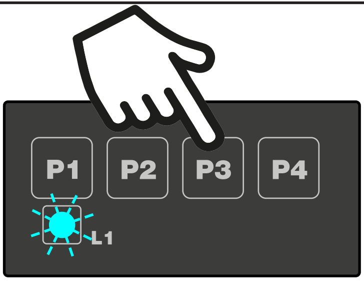
6.3 - STATUS OF THE LIGHT AFTER THE POWER SUPPLY CONNECTION

Default: last value before power failure

This procedure sets the state of the light when the control unit is powered (useful for example if the control unit is powered by a main switch or by a clock upstream).

PROCEDURE

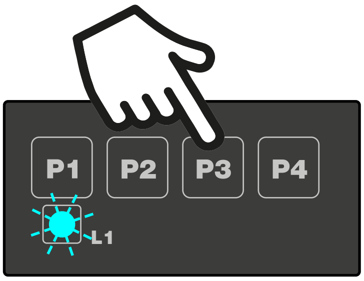
STEP 1
Keep the P3 key pressed, the LED turns on cyclically green, blue and purple.
Release when the led is blue.



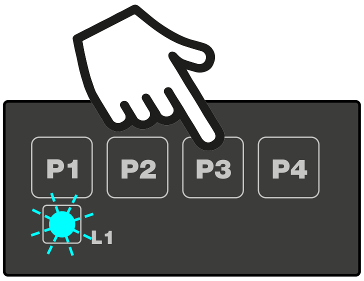
FIXED LIGHT STATUS

LAST STATUS MEMORY FUNCTION

STEP 3a
Set the light to the desired state.
Short press the P1 key to save the light status.



STEP 3b
Short press the P2 key to save the light status.

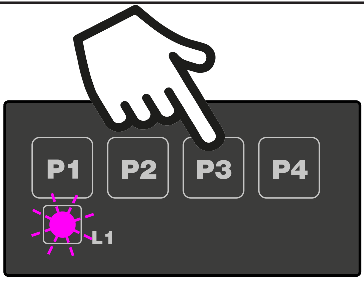


6.4 - SETTING OF THE WIRED COMMAND INPUTS

Default: mode 1 (In1: On/Off and dimmer of all led lines)
With the following procedure it is possible to modify the function of the wired command inputs connected to the board. The function of the inputs is independent of the number of LED lines set, any commands addressed to LED lines that are not present will not be performed.

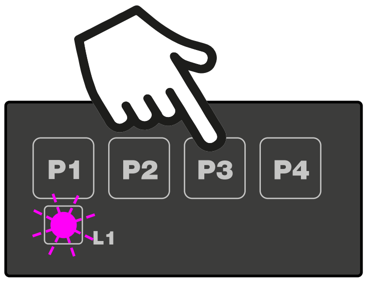
PROCEDURE

STEP 1
Keep the P3 key pressed, the LED turns on cyclically green, blue and purple.
Release when the led is purple.

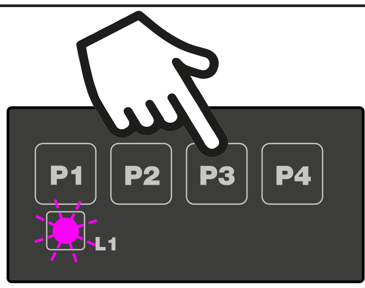


STEP 2
Short press the button P3 on the receiver and count the number of flashes emitted by the LED.

FLASHES NUMBER	SETTING MODE	INPUT 1 FUNCTION	INPUT 2 FUNCTION	INPUT 3 FUNCTION	INPUT 4 FUNCTION
1	Mode 1	On/Off (short press) and dimmer (long press) of OUT1 WHITE	On/Off (short press), dimmer (long press from light on) and colour change (long press from light off) of OUT2 RGB	Off of OUT1 WHITE	Off of OUT2 RGB
2	Mode 2	On (short press) and dimmer Up (long press) of OUT1 WHITE	Off (short press) and dimmer Down (long press) of OUT1 WHITE	On (short press) and dimmer Up (long press) of OUT2 RGB	Off (short press), dimmer Down (long press from light On) and colour change (long press from light off) of OUT2 RGB



STEP 3
Short press the P3 key while the flashing corresponds to the desired function to end the count.
The LED lights up steadily.



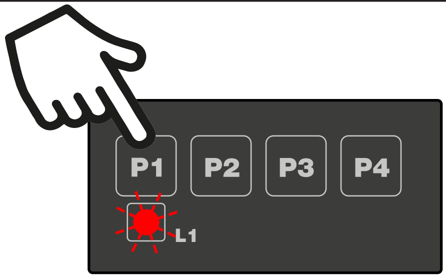
6.5 - FACTORY SETTINGS, RESET CONTROL UNIT

The following procedure restores the control unit to the factory parameters with the exception of:
- Possible connection to a WiFi network

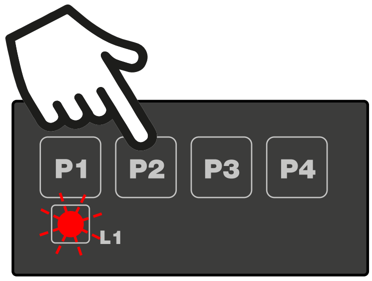
ATTENTION:
The reset also eliminates any password for accessing advanced programming and the counting of the maneuver time on the application.

PROCEDURE:

STEP 1
Press and hold the P1 key until the red LED flashes.



STEP 2
Short press the P2 key.
The red LED flashes quickly and goes off.



7 - FURTHER INFORMATIONS

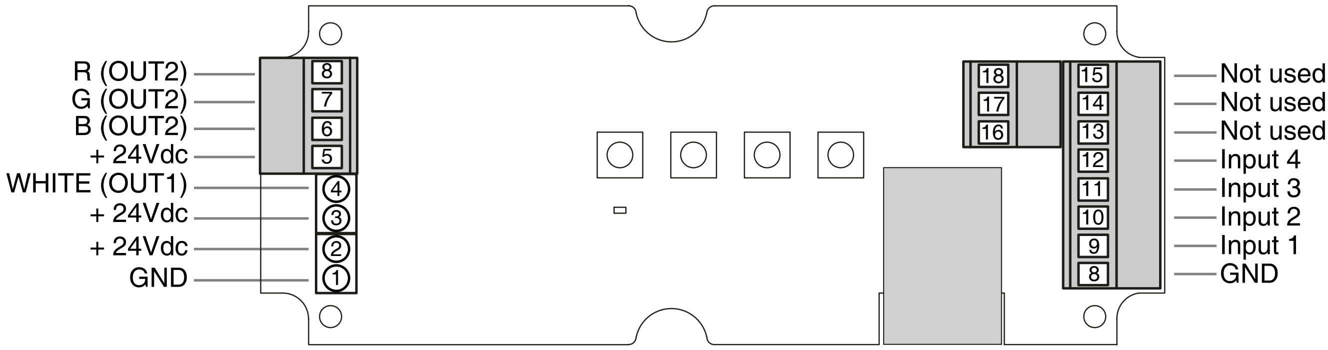
7.1 - CONNECTION PROBLEMS OF THE CONTROL UNIT TO THE ROUTER

If you have problems to connecting the card to the router, we recommend:
PRELIMINARY CHECKS
- Check that the network to which the control panel is being associated is 2.4GHz (not 5GHz)
- The mobile phone used for association must be connected to the same network to which the card is to be connected
- Check that the WiFi network password is correct

OPERATIONS
- Close the application and redo the procedure from step 1
- If possible try with a different mobile phone

If this does not resolve the problem, there may be some settings in the router that make the network incompatible with the control system.
To check and change these settings it is necessary to access the router configuration, based on the make/model this takes place either from a connected PC or from a manufacturer's application, usually the information is present on a label on the router itself.
The parameters to check/set are
WIFI FREQUENCY
Some routers generate a network that automatically uses a 2.4GHz or 5GHz frequency based on the device you are connecting to.
In the configuration phase, the device is the mobile phone which could use the 5GHz frequency preventing communication with the control unit.
It is therefore necessary to access the router settings and force the 2.4GHz network or alternatively create two networks, recognizable by the assigned name, at 2.4GHz and 5GHz.
During the association phase, pay attention to connect the mobile phone to the 2.4GHz network.
WIRELESS SECURITY
Some security protocols set in routers are not compatible with the system.
Within the router settings check and if necessary set
WIRELESS SECURITY:
SECURITY TYPE: WPA2
ENCRYPTION TYPE: AES

7.2 - CONNECTION DIAGRAM OF THE CONTROL UNIT IN THE BOX



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