



TRIAC CONTROL

Smart LED control system



Dimming Controller for LED systems and conventional lighting systems by means of an end-of-phase triac system (ELV) with push button. Compatible with Alexa and Google Home through LENNY-WIFOX1 gateway.

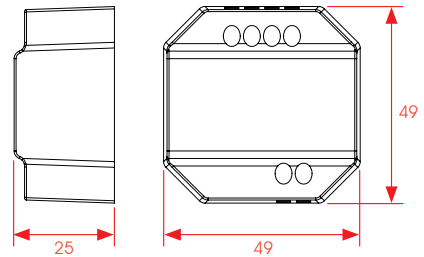
Owners manual

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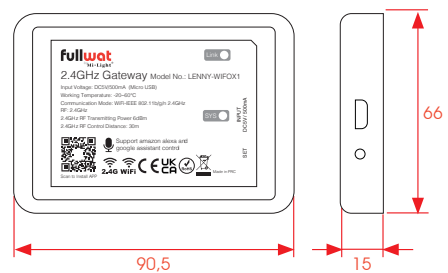
Technical specifications

TRIAC controller	
Modelo	LENNY-TRIAC1
Input voltage	AC 100-240V 50/60Hz
Output voltage	AC 100-240V
Output current	MAX 1.36A
Output power	150W@100VAC; 300W@240VAC
Regulation method	Wireless RF, push button, APP
RF range	30m
Working temperature	-10-40°C



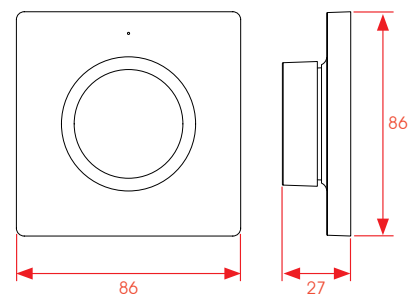
- There is no need to modify the previous installation or install new wiring.
- Low cost
- 2.4RF Remote control regulation with 30 m length performances.
- Push button regulation available.
- Trailing Edge technology (ELV)
- No gap soft regulation stepping from 10% to 100%
- Fast minimum level remote control regulation.
- Overheating and overload automatic detection to turn OFF
- Supports auto transmission and synchronization so that remote control distance to be unlimited.
- Simple connection handling with input/output terminal blocks.
- Polycarbonate fire resistant housing.

WiFi gateway	
Model	LENNY-WIFOX1
Working voltage	DC5V/500mA (Micro USB)
Working temperature	-20~60°C
Communication	WiFi-IEEE 802.11b/g/n 2.4GHz
Working frequency	2.4GHz
Transmission power	6dBm



* Suggested AC/DC adaptors (not included):
MWMU10GS
FU-ADPY10-5-USB

Control rotativo	
Modelo	LENNY-PAN-K1
Tensión de trabajo	3V (batería CR2032)
Potencia de transmisión	6dBm
Consumo en espera	<6uA
Frecuencia de funcionamiento	2.4GHz
Distancia de control	30m
Temperatura de trabajo	-10~40°C

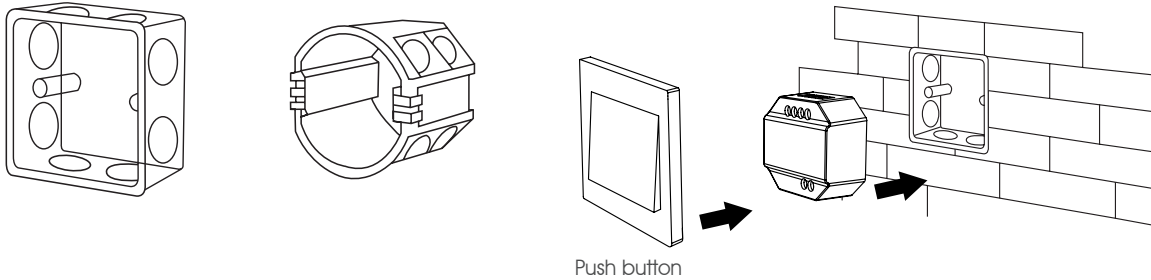


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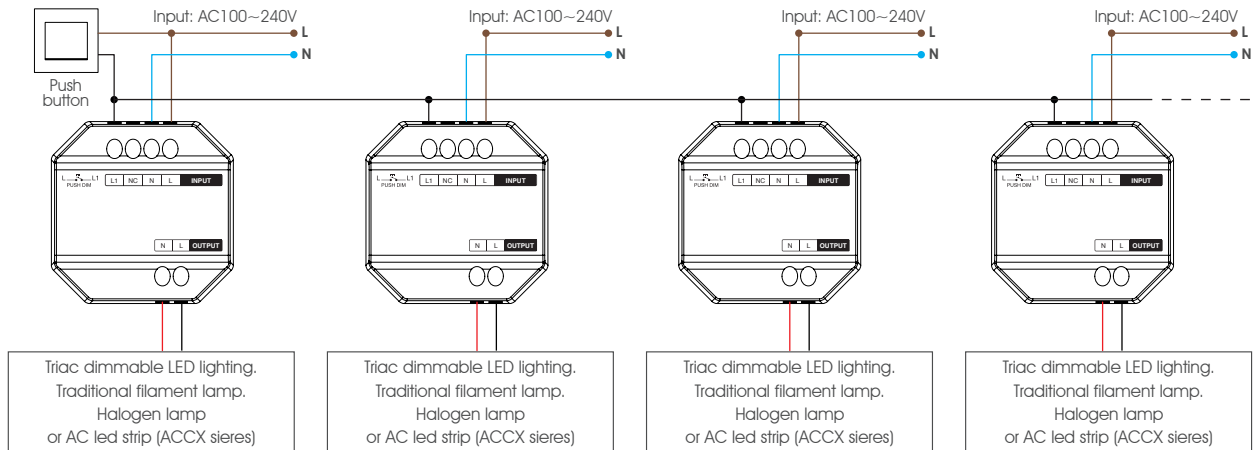
Installation diagram

Installation



Push button control

Connection drawing



Functioning

Short press: Switches the connected device ON/OFF.

Long press (press and hold): increases or decreases the intensity of the light.

Connection

The maximum number of TRIACs is 25 pieces and maximum wiring distance from the push button is 20m.

To control everything with a single push button, LENNY-TRIACs must be connected in cascade according to the connection diagram.

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Remote and panel controls

Compatible Remote and panel controls



LENNY-MD-006



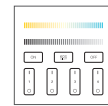
LENNY-MD-007



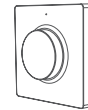
LENNY-MD-087



LENNY-PAN-B1



LENNY-PAN-B2



LENNY-PAN-K1

K1: Linking, unlinking and working.

Linking

1. Learning model enter.

Procedure 1: Soft push on "SET" button from LENNY-TRIAC1 device. Indicator led will flash very fast.

Procedure 2: Switch off, main AC source for 10 sec, then re-connect again.

Procedure 3: Soft push on external push button while lighting up dimming.

2. Push "SET BUTTON" on panel device LENNY-PAN-K1 3 times during the first 3 seconds since previous step implemented.

Indicator led light from device flashes 3 times as linking confirmation is reached.

Unlinking

Procedure 1:

LENNY-TRIAC1

Push button SET continuously for 3 sec. until indicator led flashes quickly.

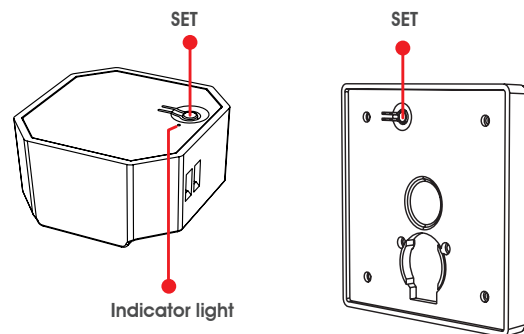
Procedure 2:

1. Enter learning mode

Procedure 1: Short Push on "SET" button from LENNY-TRIAC1. Indicator led will flash quickly.

Procedure 2: Disconnect main AC source for 10 sec and connect again.

Procedure 3: Soft push on external push button while lighting up dimming.



2. Push "SET BUTTON" on panel device LENNY-PAN-K1 5 times during the first 3 seconds since previous step implemented.

Indicator led light from device flashes 10 times very fast as unlinking confirmation is reached.

Minimum brightness setting

This device must be paired to a remote control before this setting can be accessed.

1. Press and hold SET button for 3 seconds until indicator LED on the panel flashes once and indicator LED on LENNY-TRIAC1 starts flashing.
2. Short press on panel to set between 10 brightness levels: 3%, 5%, 7%, 9%, 12%, 17%, 22%, 28%, 34%, 40%.
3. Short press on panel wheel to confirm settings set or wait 10 seconds for automatic confirmation and exit configuration mode.

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FUT006, FUT007, B1/T1, B2/T2, FIT087: Linking, unlinking and working.

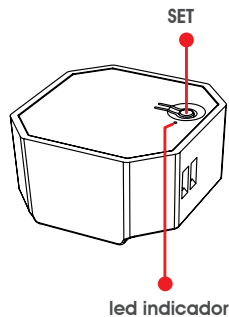
Linking

1. Enter learning mode

Procedure 1: Short Push on "SET" button. Indicator led will flash quickly.

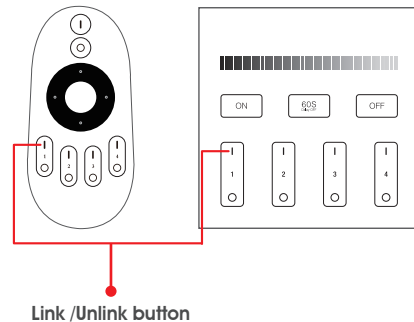
Procedure 2: Disconnect main voltage source for 10 sec and connect again.

Procedure 3: Soft push on external push button while lighting up dimming.



2. Push ON button from selected zone on panel or remote control, during first 3 seconds since previous step implemented

Indicator led light from device flashes 3 times as linking confirmation is reached.



Unlinking

1. Enter learning mode

Procedure 1: Short Push on "SET" button. Indicator led will flash quickly.

Procedure 2: Disconnect main voltage source for 10 sec and connect again.

Procedure 3: Soft push on external push button while lighting up dimming.

2. Push ON button 5 times from selected zone on panel or remote control, during first 3 seconds since previous step implemented.

Indicator led light from device flashes 10 times as linking confirmation is reached.

Minimum brightness setting

This device must be paired to a remote before this setting can be accessed.

- 1.** Press and hold OFF button on the remote until LED indicator flashes once and LED indicator on the remote starts flashing.
- 2.** Press OFF button to set between 10 brightness levels: 3%, 5%, 7%, 9%, 12%, 17%, 22%, 28%, 34%, 40%.
- 3.** Press any button except OFF to confirm setting.

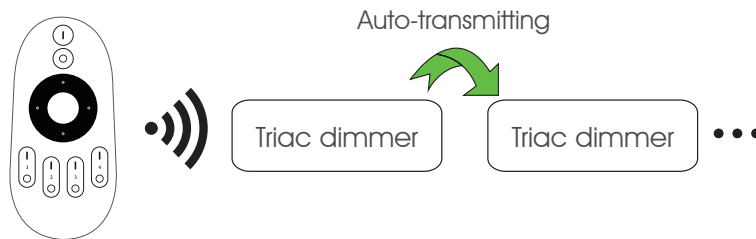
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Device auto-sync

This device can transmit the signal to another device within 30m range.

The control distance is unlimited if a device is placed every 30m.



Caution: all dimmers must be linked to a remote control device.

Important facts

- 1.- Main source must be switched off while installing or handling.
- 2.- Before anything check main AC voltage.
- 3.- These devices should be handled by technical staff only.
- 4.- Do not use devices close to metal or magnetic surfaces as they may interfere with the control signal.

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Mobile phone pairing (LENNY-WIFOX1)

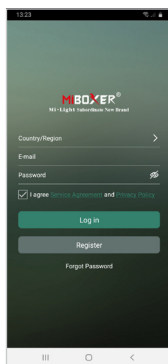
Download and install the application on your mobile phone:

- a. Via QR code
- b. Searching the Play Store for "MiBoxer".

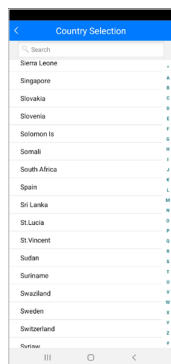


If you wish to link your LENNY system with our smartphone app, LENNY-WIFOX1 gateway is necessary.

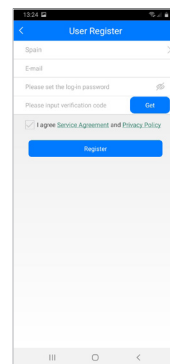
Register in MiBoxer:



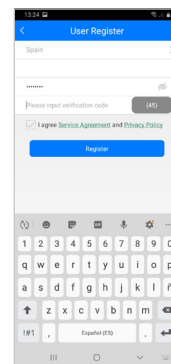
Insert your email address



Insert your country



Choose password



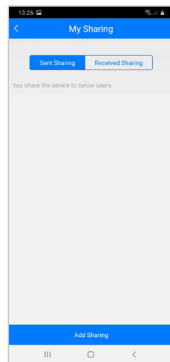
Accept conditions and terms

We will receive an e-mail with a registration verification code, which we will have to enter in the application to finish registering account.

Once on the main screen and our session started, we must add the LENNY-WIFOX1 device. To do this:



Push "+" to add device



Push "add sharing".

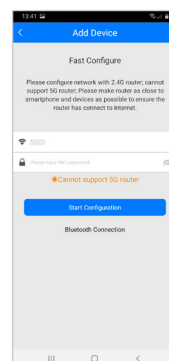


Select device model: In this case, click on "2.4GHz Gateway WL-Box1".



It is necessary a 5Vdc/500mA power adaptor with micro-USB to supply LENNY-WIFOX1.

If "SYS" indicator is not flashing, press for 3 sec on "SET" button.

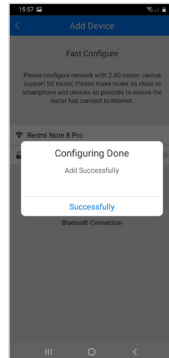
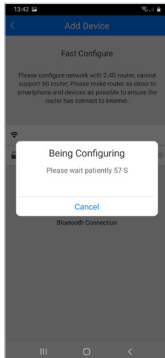


Enter network name and password.

Attention: only 2.4GHz network is supported (no 5G) and click on "Start configuration".

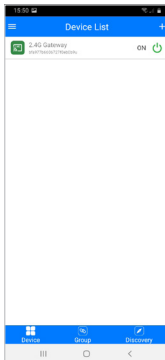
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A countdown will appear and once paired, it will indicate that pairing has been successful.

Our device will appear in the list of paired devices.



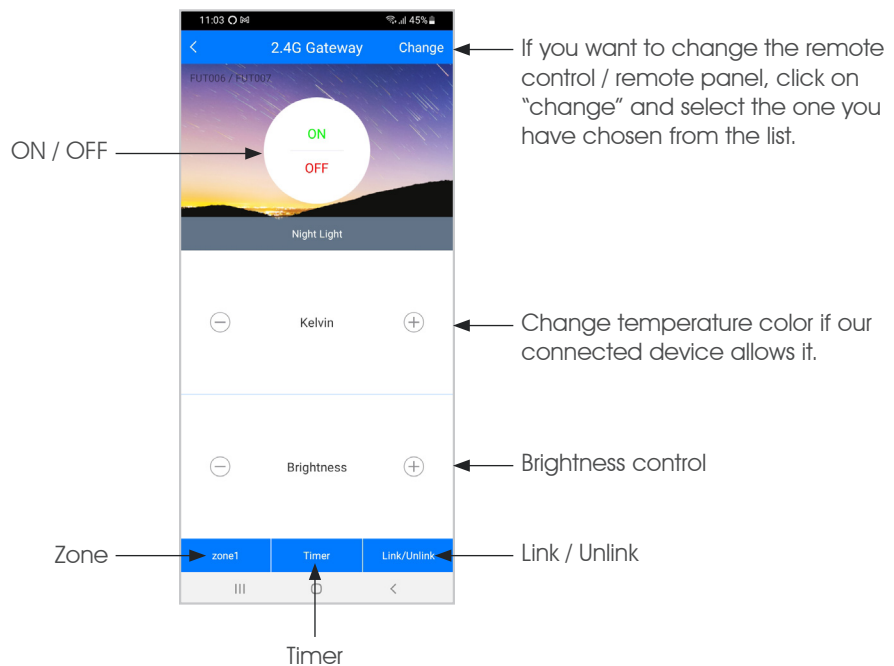
Linking your smartphone.

Once you get LENNY-WIFOX1 linking, we must get driver linking with our smartphone app.

Click on suitable device.

First we must choose whether we are going to configure one or more zones. In this case, as it is a zone, we enter the "change" section and select FUT006/FUT007.

On the screen of our mobile phone we will see image as follows:



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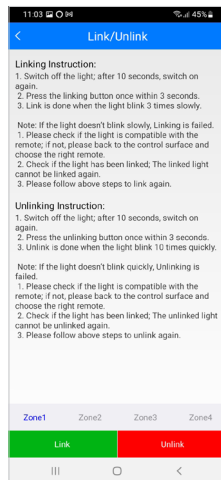
Smart LED control system

Now we must link our receiver with smartphone application.

In the application we can control up to 4 zones (minimum one LENNY-TRIAC1 per zone).

To do this, we must select the zone to which we are going to link our LENNY-TRIAC1.

Once the zone has been selected, we can link / unlink the device:



Click on "Link/Unlink".

Click on "Link".

Remove the power supply to controller for 10 seconds.

After 10 seconds, power the controller and in the first 3 seconds, click on the mobile screen on "link".

The light will flash three times and confirm correct linking.

In the case of unlink LENNY-TRIAC1 :

- Click on "Link/Unlink".
- Click on "unlink".
- Remove the power supply to controller for 10 seconds.
- After 10 seconds, power the controller and in the first 3 seconds, click on the mobile screen on "unlink".
- The light will flash three 10 times and confirm correct unlinking.

Multizone with the smartphone:

If we want to control several zones only with our smartphone we will need:

- WIFI gateway (LENNY-WIFOX1). It allows us to control up to 4 zones.
- One LENNY-TRIAC1 for each zone.

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ALEXA linking

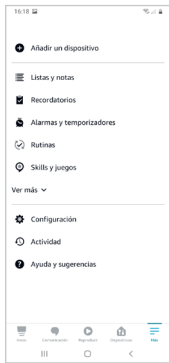
To control our system with Alexa, we need WIFI gateway: LENNY-WIFOX1 and link it to the smartphone (see section "Linking with smartphone", page 7).

Multizone with Alexa: If we want to control several zones with Alexa:

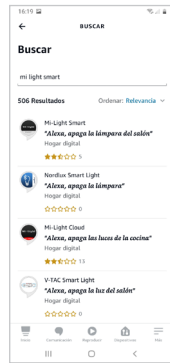
- One LENNY-WIFOX1 gateway for each zone.
- One LENNY-TRIAC1 for each zone.

Install Alexa app and log in using your account.

We need to install Mi-Light Smart skill. To do so:



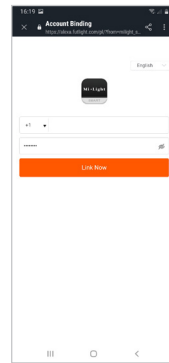
Click on "more" and select "Skill and games".



In the search engine type "Mi-Light Smart" and click on this option.



We allow application using.

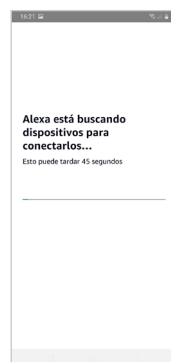
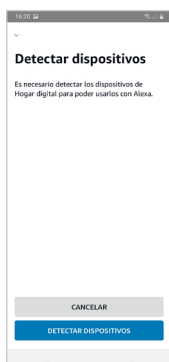


Log in with your MiBoxer data.



If everything is correctly done, we will see a message of successful linking

Once we have reached this point, we must search for devices we want to link.



We have to "detect devices". There will be a countdown and when device is detected, we will get a message.



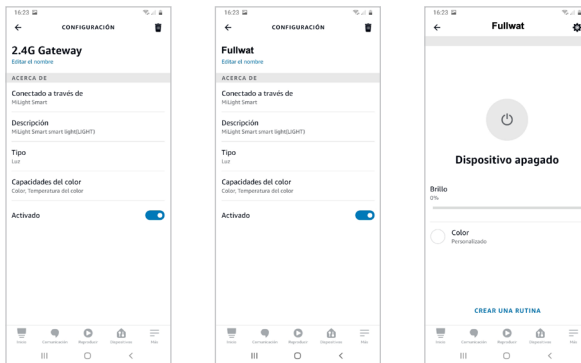
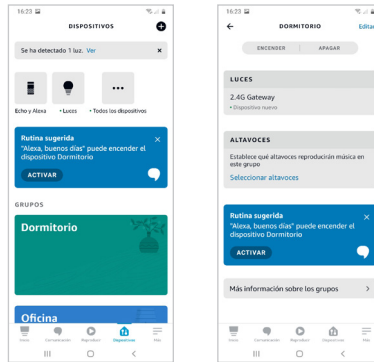
Configure device we have just detected. Select the group to which we want to link it in Alexa.

(with intention of saying: Alexa, turn off "bedroom" and then turn it off). So it will tell us that it has been configured correctly.

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Now you can work with standard ALEXA managing.



We can rename device to be able to control that device only instead of the whole group, command Alexa to turn off/on the device, etc.

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GOOGLE HOME linking

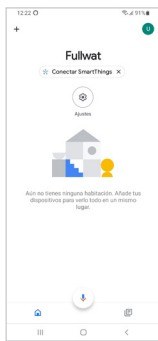
To control our system with Google Home, we need the WIFI gateway: LENNY-WIFOX1 and linking with smartphone (see section "Linking with smartphone", page 7).

Multizone with Google Home: If we want to control several zones with Google Home, we will need:

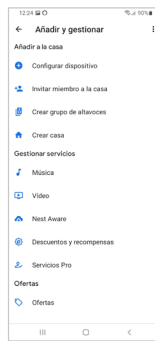
- One LENNY-WIFOX1 gateway for each zone.
- One LENNY-TRIAC1 for each zone.

We install Google Home app and log in with our Google account. If we do not have our home page configured, we can do it now or later.

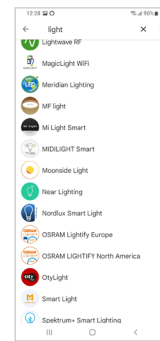
To pair the LENNY-WIFOX1 device, follow the steps below:



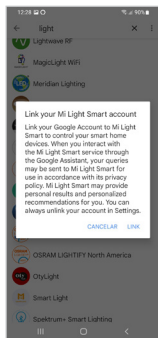
Click en "más"



Select "Configure device".



Look for the "Mi-Light Smart" application in the list of applications.



You may get a link warning message. Click on "Link" to accept.



Log in with your MiBoxer data.

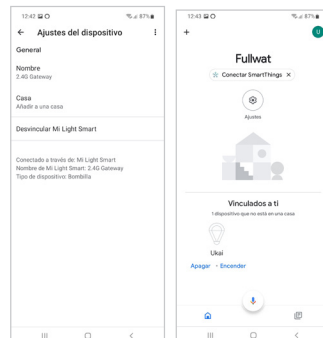


If we do it correctly, a successful linking message will appear.

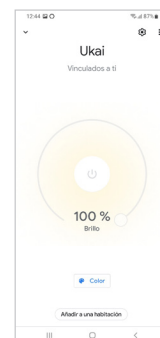
Once we have reached this point, the linking is done.



On the main Google Home screen, our home will appear with our device.



We can rename device to make "name it" easier.



Clicking on the device icon, you are reaching another page where you can control the lights too.

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GOOGLE ASSISTANT linking

Multizone with Google Assistant: If we want to control several zones with Google Assistant:

- One LENNY-WIFOX1 gateway for each zone.
- One LENNY-TRIAC1 for each zone.

And Install Google Assistant application via PlayStore on your phone:



We must configure it to recognize your voice. Then enter "settings" in the application and click on "Voice Match".

The application will ask you to repeat two phrases several times.

Once this is done, we will be able to "call" our device using "Ok Google". For example, "Ok Google turn on Fullwat" and LED strips connected to Fullwat receiver will light up properly.