

Connection
and electronic
set-up

—
bioclimatic pergola

acristalia



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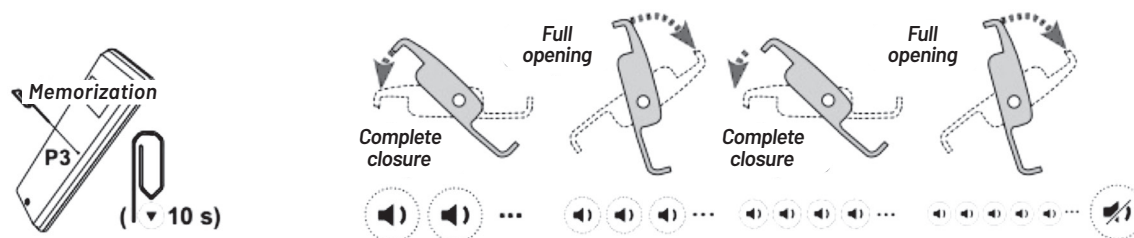
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QUICK BASIC CONFIGURATION GUIDE

Steps to follow once the correct connection of the different electronic components has been carried out:

Motor Configuration

Position the remote control on channel 1 (channel reserved for the motors) and then press the P3 button (located on the rear) for 10 s. The louvers will perform two full closings and two full openings. From that moment on you will be able to move the louvers to the different positions defined by the four lower buttons on the remote.



Wired rain sensor ACC0313

Read this section if you have this type of sensor. The wired rain sensor does not require any prior configuration for its operation. Once connected it will emit an intermittent flash. To check its operation, simply have the louvers open and cover the sensor's sensitive surface with your hand. For more information about its operation, see section 3.1 of the manual.

Wireless rain sensor ACC0369

Read this section if you have this type of sensor. The wireless rain sensor should be received already programmed; you only need to connect it to its power supply, and that in turn to a 230 V outlet. Once connected it will emit an intermittent flash. To check its operation, simply have the louvers open and cover the sensor's sensitive surface with your hand. For more information about its operation and programming, see section 6.1 of the manual.

Wired wind sensor ACC0312

Read this section if you have this type of sensor. The wired wind sensor does not require any prior configuration for its operation. The default activation speed threshold is set to 40 km/h; for more information about its operation, see section 3.2 of the manual.

Wireless wind sensor ACC0371

Read this section if you have this type of sensor. The wireless wind sensor should be received already programmed. The default activation speed threshold is set to 60 km/h; for more information about its operation and programming, see section 6.2 of the manual.

Louver lighting

Read this section if the pergola has LED spotlights in the louvers. The louver lights do not require any prior configuration for their operation. In section 1.1 you can check which channel on the remote they are stored under, depending on whether your pergola is in individual or duplex configuration. If they do not operate correctly, first check the wiring. If the problem persists, follow the programming steps described in section 4 of the manual.

RGB perimeter lighting

Read this section if the pergola has RGB perimeter lighting. The RGB perimeter lighting does not require any prior configuration for its operation. In section 1.1 you can check which channel on the remote it is stored under, depending on whether your pergola is in individual or duplex configuration. If it does not operate correctly, first check the wiring. If the problem persists, follow the programming steps described in section 5 of the manual.

Heating

Read this section if the pergola has a heating system. The heating system does not require any prior configuration for its operation. For more information about its operation and programming, see section 7 of the manual.

ZIP vertical awning

Read this section if the pergola has a ZIP awning system. The ZIP awning system must be configured by following the steps described in section 8 of the manual.

1 INTRODUCTION

Before beginning the initial configuration of any devices contained in the pergola, they must be powered by connecting them to the mains supply. You must check whether the device's power requirement is 24 V or 230 V. To configure certain devices, it will be necessary to access control unit ACC0309 or ACC0310 and locate the P1 and P2 buttons (see image 1).

For convenience, it is recommended to perform all configuration steps from the Noon remote control whenever possible. The manual describes the configuration procedures to carry out either from the remote control or from the control unit.

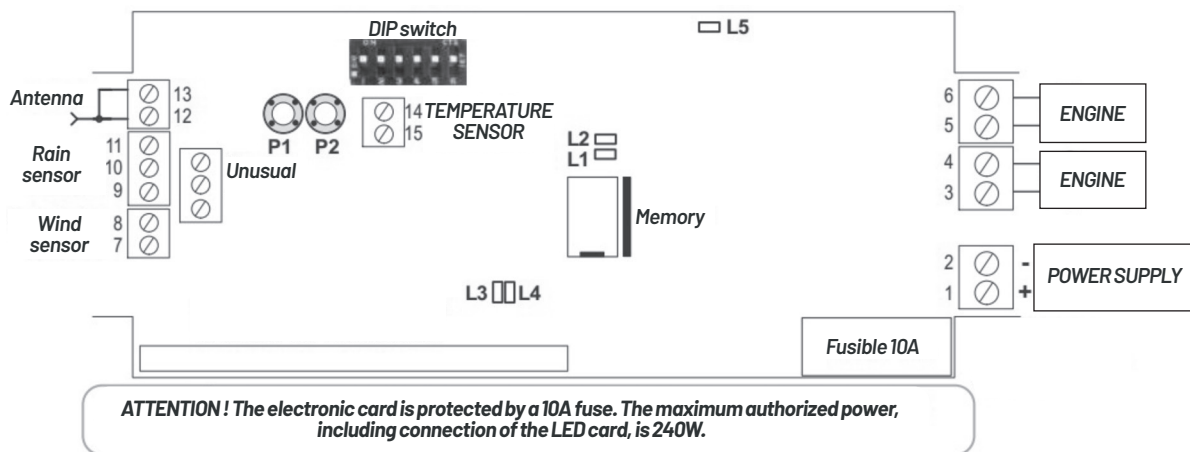


Image 1: Actc0309/ACC0310 power scheme

MEANING OF LED INDICATORS ON THE CONTROL UNIT

LED	COLOR	STATE	MEANING
L1	RED	On until the maneuver completes	MOTOR1: end-of-travel switch or current draw above limit
L2	RED	On until the maneuver completes	MOTOR2: end-of-travel switch or current draw above limit
L3	BLUE	ON	Synchronized mode activated
		One flash per second	Synchronized mode activated(during configuration)
		One flash every 2 seconds	Independent mode activated(during configuration)
L4	RED	One flash every 10 seconds	Survival alarm (see § 4.1)
		Two flashes every 10 seconds	Wind alarm (see § 4.2)
		Three brief flashes every 10 seconds	Snow alarm (see § 4.3)
		Four brief flashes every 10 seconds	Rain alarm (see § 4.4)
		Five brief flashes every 10 seconds	Water evacuation alarm (see § 4.5)
		Six brief flashes every 10 seconds	Temperature alarm (see § 4.6)
		Five brief flashes	High current draw in synchronized mode
		Six brief flashes	Integrated motor limit switch activated
		Seven brief flashes	Motor stopped due to current draw above limit
		Eight brief flashes	Safety limit switch activated
		Ten brief flashes	A motor has suffered a short circuit
		One flash per second	Survival mode is deactivated
		One flash every 2 seconds	Rain sensor is deactivated
		One flash every 3 seconds	Temperature sensor is deactivated
L5	RED	ON	Alimentation présente

☐ Climate-sensor alarms (from highest to lowest priority)

■ Motor alarms

1.1. NOON REMOTE CONTROL

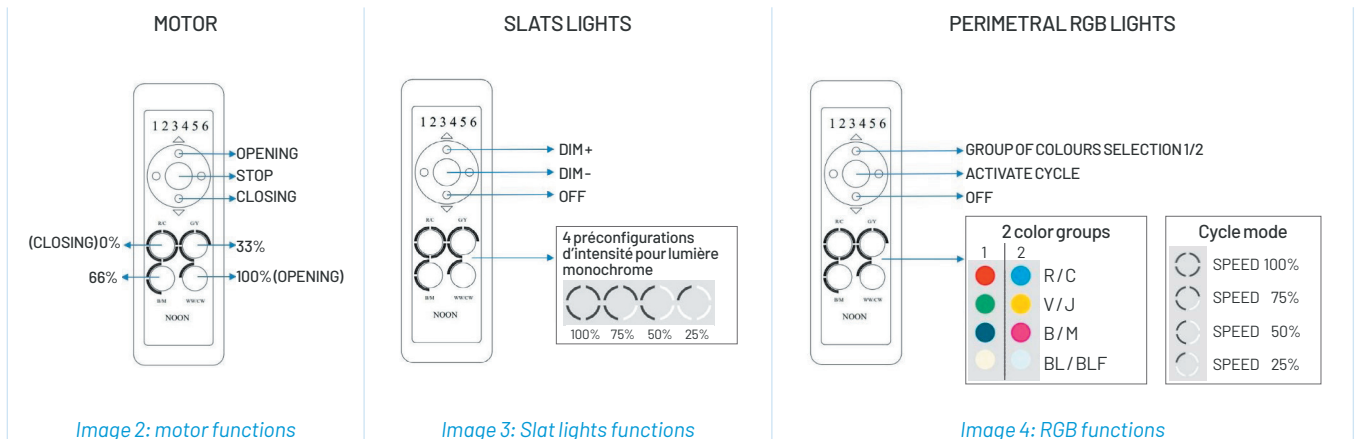
- **Preconfigured channels for individual pergola**

- Channel 1: motor
- Channel 2: louver lights
- Channel 3: RGB lighting

- **Preconfigured channels for duplex pergola**

- Channel 1: pergola 1 motor
- Channel 2: pergola 2 motor
- Channel 3: motors of pergolas 1 and 2
- Channel 4: louver lights of pergolas 1 and 2
- Channel 5: RGB lighting of pergolas 1 and 2

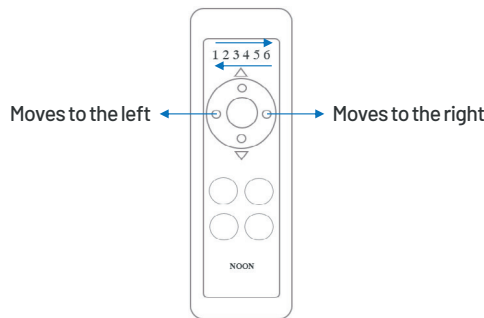
- **Functions:**



1.1.1. CHANNEL HANDLING

- **Moving between channels.**

To move between the different channels of the control, simply press the left or right buttons that are inside the circle.

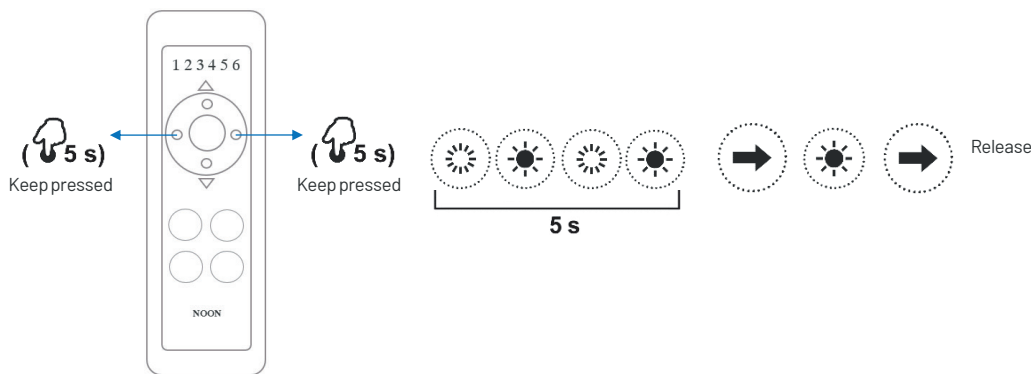


- **Leave the chosen channels active.**

If you wish to enable only the channels of the control in which you have memorised some of the pergola's functions, you must position on the last channel you have memorised, wait for the light on the control to go out, and then press and hold the left or right button until the lights on the control start to flash. If you want to reopen all the channels on the remote control, you will have to repeat the previous process.

- **Activate channels 7, 8 and 9.**

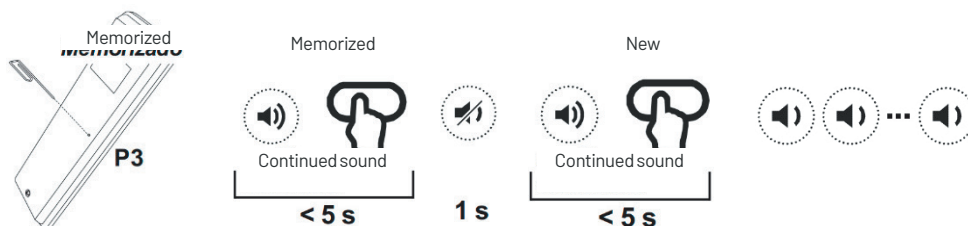
Although only channels 1 to 6 appear on the Noon remote control, it has up to 9 channels, but by default only the first six will be active. Only the first six will be active by default. In the event that you need to access the rest of the channels, with the remote control lights off, you will need to buttons pressed at the same time. The channels on the remote control will start to light up sequentially until they change to a steady light, at which point you can release the buttons. Channels 7, 8 and 9 are represented by the illumination of the numbers 1-2, 3-4 and 5-6 respectively. From now on, to move between channels 1 to 6, you must press the left button on the remote control and to move between channels 7 to 9 you must press the right button on the remote control.



1.1.2 REMOTE CONTROL SETTINGS

• Copying channels

If you wish to copy one of the channels in which you already have a stored function to another free channel or to a channel of another control unit, you must follow the following steps: First of all, you must select the channel of the remote control you wish to copy, which you have already memorised. Then, press the P3 button on the rear of the remote control and hold it until a continuous beep sounds for 5 seconds. During this time, you must press any button on the control unit, for example the central button (STOP), the sound will stop for 1 second and will start to emit a continuous sound for another 5 seconds. During this time, you must scroll to the channel where you want to copy it, either in the same remote control or in a new one, and then press any button, for example the central button (STOP). An intermittent sound will confirm that the process has been carried out correctly.



Es importante tener en cuenta que todos los canales del mando que se copien a otro canal se quedarán memorizados en ese canal, no se eliminarán los copiados anteriormente, es decir, si copia varios motores y luces a un mismo canal, todos ellos se quedarán memorizados y podrá controlarlos a la vez desde ese canal.

• Deleting a channel

If you wish to delete a channel from the remote control, you must follow the steps below: Firstly, you must select the channel of the control that you wish to delete. Then, press the P3 button on the control 3 times, located on the back of the remote control, and on the last press, keep it pressed. The control unit will emit a slow intermittent sound for 5 seconds. During this time, you must press any button on the control unit, for example the central button (STOP). After the deletion has been carried out, the beeping will stop.



IMPORTANT: if several different pergola motors have been memorised in a channel of the control unit, you will have to repeat the process as many times as pergola motors have been memorised.

1.2. ELECTRONIC INSTALLATION AREA

To install the different electronic components, **it is recommended to follow the “Wiring diagram” drawing supplied together with the pergola.** This drawing shows a possible distribution of the electronic components. This layout can be modified as desired, as long as the wiring lengths and connections allow.

2 MOTOR

2.1. SINGLE PERGOLA SETUP

An individual pergola configuration will have one or two motors, depending on its length. These motors are connected to terminals 3 and 4 of the control unit. After completing the full electronics installation, the only step you will need to perform is the end-of-travel learning procedure, as described in section 2.1.3.

2.1.1. WIRING

For an individual pergola, connect the cable coming from the two motors to the switchboard cable labelled "motor" through the watertight connector. In the case of two pergolas with a single control unit, the motors of the second pergola must be connected to the second pergola with the other cable of the control unit labelled "motor". In this second case, the control unit is configured in synchronised motors mode, and the slats of both pergolas will move at the same time from channel 1 of the Noon remote control.

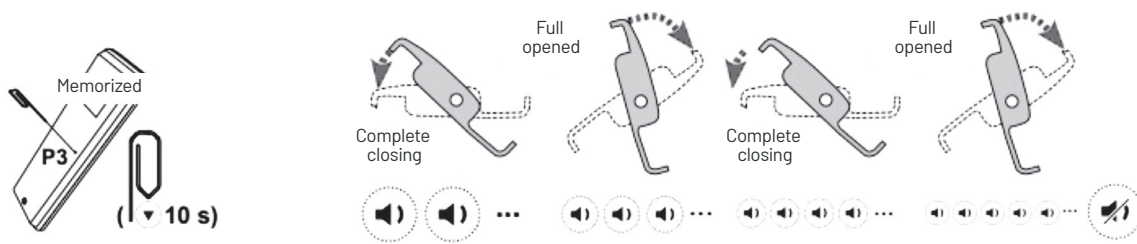
2.1.2. PROGRAMMING THE LIMIT STOPS

This step can be carried out from the remote control or from the control unit. It is recommended for practical reasons to carry out all the steps as far as possible from the remote control.

• From the Noon remote control

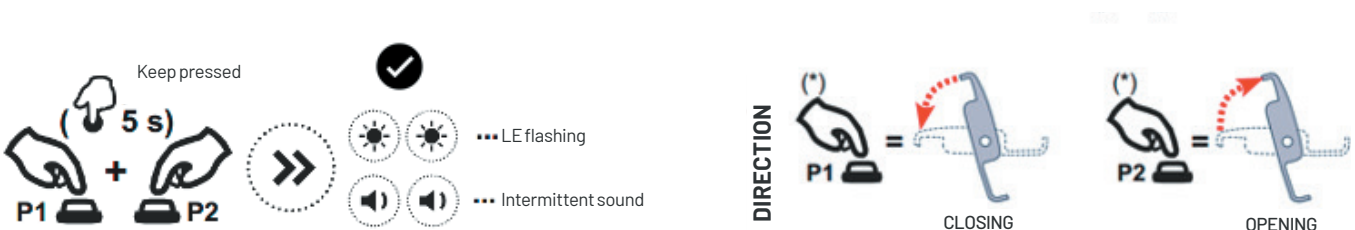
IMPORTANT: Before performing this step, the slats must be left halfway open.

You can move the slats by keeping pressed the open button on the remote control (see picture 2 of the Noon remote control functions). If the slats are closed instead of opening, the polarity of the motor cables has been reversed. They must be connected correctly. Position the control unit on channel 1 (channel reserved for the motors) and then press the P3 button (located on the back of the control unit) for 10 seconds. The slats will close twice and open twice completely.

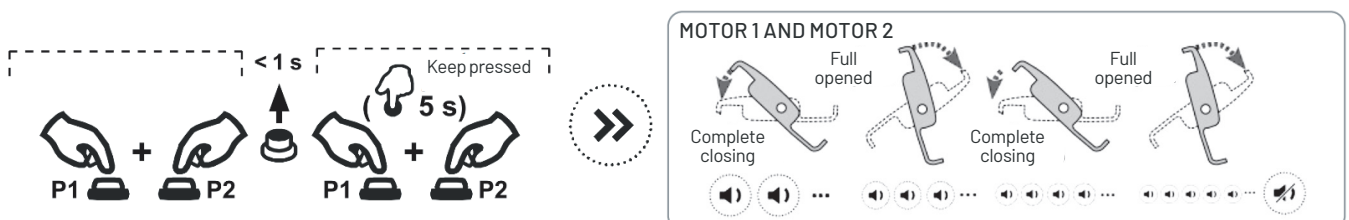


• From the switchboard

If you wish to set up the motors from the control unit, you will need to access the P1 and P2 buttons on the control unit (see image). Press P1+P2 simultaneously for 5 seconds. The control unit will start to beep and the L3 light will start to flash. At this point, check that by pressing P1 the slats open and by pressing P2 the slats close. If instead of the slats close instead of opening, the polarity of the motor cables has been reversed. They must be connected correctly.



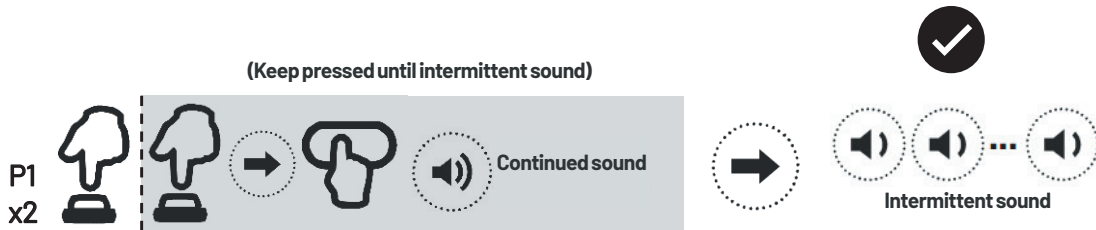
After that, press P1+P2 simultaneously, release and press again for 5 seconds. The slats will close twice and open twice completely.



2.1.3. MEMORISATION OF THE ENGINES IN THE CONTROL REMOTE

**This step will not be necessary if you have correctly followed the previous steps, if you have correctly followed the previous steps, or if you do not wish to modify the positions of the channels stored on the remote, as by default you will receive the remote with the motors stored.*

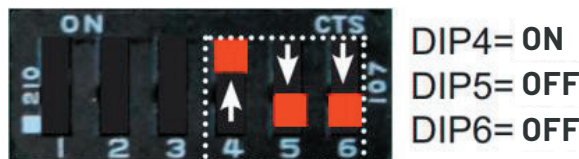
If you need to memorize the motor, you must follow the following steps: position the remote on the channel where you wish to memorize the motor, then press the P1 button on the control unit twice—on the second press, hold P1 while simultaneously pressing the remote’s central (STOP) button—and an intermittent beep will confirm that the process has been completed successfully.



2.2. DUPLEX PERGOLAS SETUP

By default, you will not need to perform these steps, as the pergola is delivered configured so that each pergola’s louvers operate independently. If required, the following explains how the motors of two pergolas controlled by the same control unit are configured.

To carry out this process, access the control unit and locate the panel with the DIP switches, then set DIP switch 4 to the ON position, as shown in the following image:



2.2.1. CONNECTIVITY

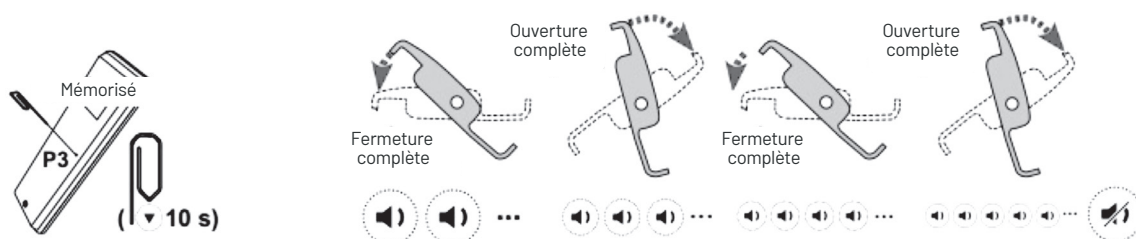
In case of having two pergolas together with a single switchboard, it will be necessary to connect each pair of motors (if each pergola has two motors) or each motor of each pergola (if each pergola has only one motor) to the waterproof connections of the cables that come out of the switchboard labelled “motor”. These cables will be connected to block terminals 3 and 4 (pergola 1 motor) and to block terminals 4 and 5 (pergola 2 motor). See the “electronic connection” drawing supplied with the pergola documentation.

2.2.2. PROGRAMMING THE LIMIT STOPS

This step can be carried out from the remote control or from the control unit. It is recommended for convenience to carry out all the steps possible from the remote control.

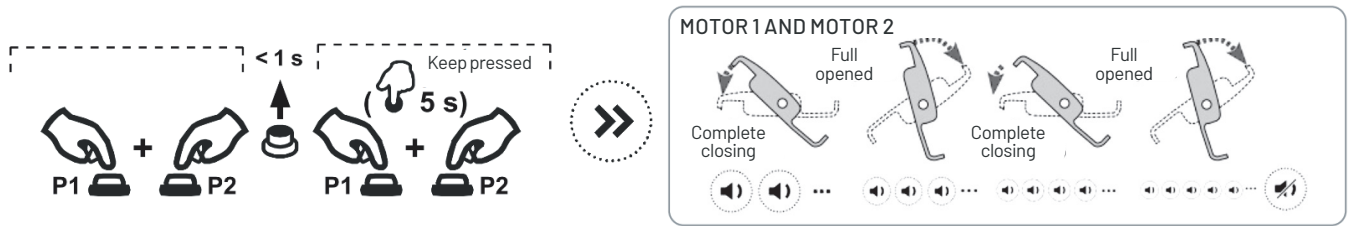
• **From the Noon remote control**

Position the control on channel 1, then press the P3 button (located at the rear) for 10 seconds. The slats will make two and two complete openings. First, pergola 1 will close and when this is finished, the pergola will start.



• Desde la centralita

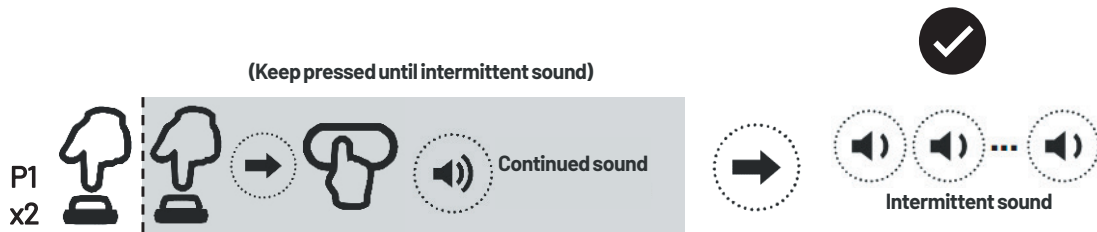
Localizar los botones P1 y P2 de la centralita (ver Imagen 1). Una vez localizados los botones, pulsar P1+P2 simultáneamente, soltar y volver a pulsar durante 5 s. Las lamas harán dos cierres y dos aperturas completas. En primer lugar, lo hará la pérgola 1 y cuando esta termine comenzará la pérgola 2.



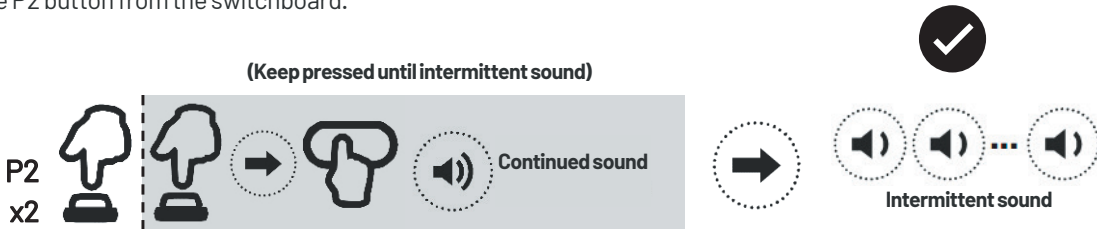
2.2.3. MEMORISATION OF THE MOTORS IN THE REMOTE CONTROL

The motors of both pergolas can be memorised in the desired control channels. If the pergola has lights on the slats, do not use channel 2, as the LED lights will already be configured on this channel. If you wish to configure a motor on channel 2, you must first copy channel 2 to the desired channel of the remote control. To copy an already memorised channel, see section “COPYING CHANNELS” 1.1.2 of this manual.

To memorise the motor of pergola 1, place the control unit on the desired channel, and then press the P1 button on the switchboard twice, holding it down the second time while pressing the central button (STOP) on the remote control. An intermittent sound will confirm that the process has been carried out correctly.



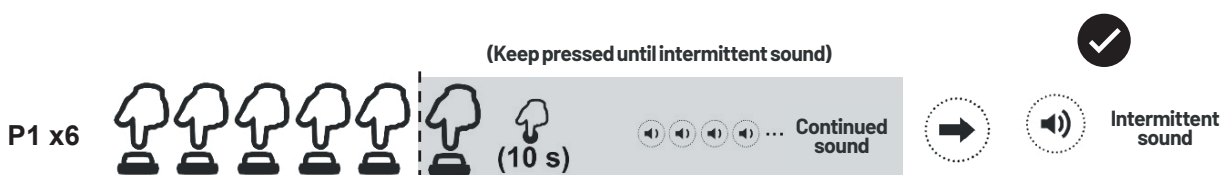
To memorize the motor from the pergola 2 you have to realize the same process described above, only difference that this time pressing the P2 button from the switchboard.



2.3. COMPLETE MOTOR ERASURE

In case you need to perform a complete erasure of the motors in order to reconfigure them, you must access the control unit and follow the procedure described below:

before beginning the process, it is important to know that the motors connected to terminals 3 and 4 of the control unit will be erased using the unit’s P1 button, and if there are motors on terminals 5 and 6, these will be erased using the control unit’s P2 button. To locate the position of these buttons, see image 1 of this manual. First, position the remote on the channel where the motor you wish to erase is stored; then press the control unit’s P1 button six times—and on the sixth press, hold it down for 10 s. Once this time has elapsed, the control unit will emit a continuous tone confirming that the erasure has been completed.



If the motors of another pergola are connected to terminals 5 and 6, you must repeat the previous process by pressing the P2 button on the control unit.

3 WIRED SENSORS: RAIN, WIND, TEMPERATURE AND SNOW

3.1. RAIN SENSOR ACC0313

3.1.1. HOW IT WORKS

- *WHEN IS THE ALARM DESACTIVATED?* THE RAIN ALARM IS DESACTIVATED WHEN THE SENSOR'S SENSITIVE SURFACE DOESN'T DETECT WATER.
- *When is the alarm activated?* The rain alarm is activated when the sensible sensor's surface detects drops of water. The alarm can also be triggered if you cover the surface with the hand.
- *What happens?* The slats of the pergola close immediately. As long as the alarm is active the slats cannot move.

Recomendatios: it is recommended to install the sensor in a vertical position (image 5) and to place it in a suitable area where it can be easily cleaned.

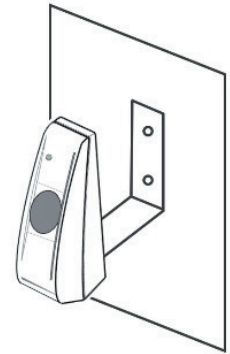


Image 5: sensor in vertical position

3.1.2. CONNECTIVITY

Locate the cable from the switchboard labeled as "sensor lluvia" (rain sensor), remove the plug and connect the rain sensor waterproof connection.

3.1.3. CONFIGURATION

The wired rain sensor does not require any configuration for its operation, once connected it will be activated.

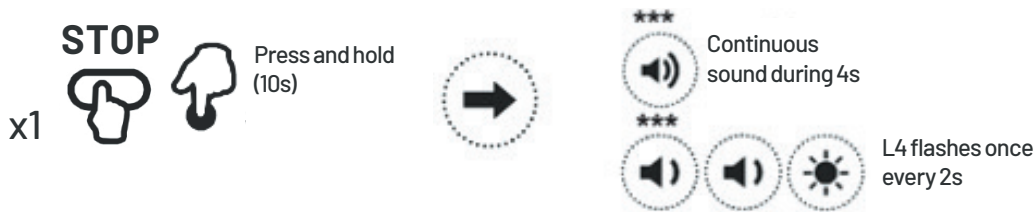
NOTE: any configuration that has to do with the sensors must be carried out with the Noon control located on channel 1, where the motors are configured.

In case you need to deactivate or activate the rain sensor, proceed as follows:

Note: This procedure can be carried out from the remote control or from the switchboard. It is recommended for convenience to perform as many steps as possible from the remote control.

• **From the NOON remote control:**

- Deactivation: press and hold the STOP button on the remote control(see picture 2) for 10 seconds. The switchboard will beep continuously for 4 seconds and L4 will flash every 2 seconds.



- Activation: press and hold the STOP button on the remote control(see picture 2) for 10 seconds. The switchboard will beep continuously for 4 s.



• **From the switchboard:**

- Deactivation: press the P2 button 7 times on the switchboard and hold it down for 5 seconds when pressing for the seventh time . The switchboard will beep continuously for 4 seconds and L4 will flash every 2 seconds.



- Activation: press button P2 on the switchboard 7 times and press and hold for 5 seconds when pressing for the seventh time. The switchboard will beep continuously for 4 s.



3.2. WIND SENSOR ACC0312

3.2.1. HOW IT WORKS

- *WHEN IS THE ALARM DEACTIVATED?* THE WIND ALARM IS DEACTIVATED WHEN IT DETECTS A WIND SPEED BELOW THE SET THRESHOLD FOR 60 SECONDS.
- *When is the alarm activated?* The wind alarm is activated when the detected wind speed is higher than the set threshold.
- *What happens?* The pergola slats will turn into a partially open position, till 33% of the full opening. It is like this because it allows the wind to escape and avoids the sail effect. As long as the alarm is activated, the slats cannot move.

If, in addition to the wind alarm, the rain alarm is activated, the wind alarm will be the dominant one, as it is more important to ensure the stability of the structure than the entrance of water.

Recommendations: the default speed threshold is 40 km/h. In case you want to increase this threshold, it is recommended not to exceed 60 km/h. If you wish to modify the wind speed threshold, this can be done as explained in section 3.2.3.

3.2.2. CONNECTIVITY

Locate the switchboard cable labelled “sensor viento”(wind sensor), remove the plug and connect the wind sensor waterproof connection.

3.2.3. CONFIGURACIÓN

The wired wind sensor does not require any configuration for its operation, once connected it will be activated.

IMPORTANT: The wired wind sensor does not require any configuration for its operation, once connected it will be activated.

IMPORTANT: the wind alarm overrides all other alarms, as the safety of the structure is priority. In the event that the wind speed exceeds the set threshold and it rains at the same time, the slats will remain open at 33%, and for as long as the wind alarm remains active, the motors cannot be activated. If you wish to keep the pergola closed, you must increase the wind speed threshold or switch off the wind sensor. If any of these procedures are carried out it will be performed at your own risk.

By default, the wired wind sensor is set to the minimum wind speed threshold (40 km/h). It is recommended that the maximum threshold for a pergola should not exceed 60 km/h*. In the event that you wish to increase this threshold, you will need to access the DIP switches from the switchboard (see picture1) and modify the positions of DIP 1, 2 and 3 (see image 6) according to the following table:

**If you wish to increase the wind speed threshold above the recommended value, you do so at your own risk.*

If any solar protection elements are installed on the pergola, you must set the wind speed threshold according to the wind limit supported by these elements.

DIP1	DIP2	DIP3	Km/h
OFF	OFF	OFF	40
OFF	OFF	ON	45
OFF	ON	OFF	50
OFF	ON	ON	55
ON	OFF	OFF	60
ON	OFF	ON	65
ON	ON	OFF	70
ON	ON	ON	75

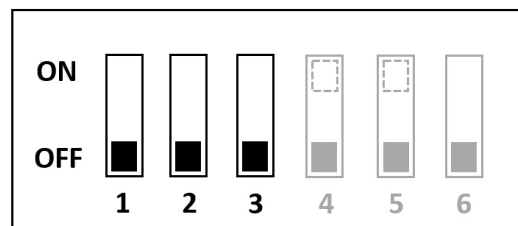


Image 6: by default the configuration from the DIP switches

3.3. TEMPERATURE SENSOR

3.3.1. HOW IT WORKS

The temperature alarm is activated when there is a danger from icing.

- *WHEN IS THE ALARM DEACTIVATED?* THE TEMPERATURE ALARM IS DEACTIVATED WHEN THE AVERAGE TEMPERATURE IS HIGHER THAN 3 °C (37,4 °F) OR THE SLATS ARE MOVED BY THE REMOTE CONTROL.
- *When is the alarm activated?* The snow alarm is activated when the average temperature is below 2°C (35,6°F) and the pergola is closed.
- *What happens?* The pergola slats are placed in a minimum opening position, only at 10% from the full opening capacity.

Recommendations: The temperature sensor is deactivated by default. If the pergola is installed in an area where temperatures are often below temperatures of 2°C (35,6°F), it is recommended to activate the temperature sensor.

3.3.2. CONNECTIVITY

The temperature sensor is already connected to the switchboard. If desired to be localized, take a look to the black wire coming out from the terminal blocks 14 and 15 from the switchboard (look at picture 1).

3.3.3. CONFIGURATION

The temperature sensor does not require any configuration for its operation. It will be necessary to activate it in order for it to be operational.

NOTE: any configuration that has to do with the sensors must be carried out with the Noon command located on channel 1, where the motors are configured.

In case you need to activate or deactivate the temperature sensor, proceed as follows:

Note: This procedure can be carried out from the remote control or from the switchboard. It is recommended for convenience to perform as many steps as possible from the remote control.

• **From the NOON remote control:**

- Activation: press the STOP button on the remote control (see picture 2) 10 times, and press and hold for 2 seconds when pressing for the tenth time. The control remote will beep continuously for 4 seconds and L4 will flash every 3 seconds..



- Deactivation: press the STOP button on the remote control (see picture 2) 10 times and hold it down for 2 seconds after pressing it for the tenth time. The control unit will beep continuously for 4 seconds and L4 will flash every 3 seconds.



• **From the switchboard:**

- Activation: press button P1 on the control unit 7 times and press and hold it down for 5 seconds after pressing for the seventh time. The switchboard will make a continuous beep for 4 s.



- Desactivación: pulsar 7 veces el botón P1 de la centralita y en la pulsación 7 mantener pulsado durante 5 s. La centralita emitirá un sonido continuo durante 4 s y L4 emitirá un destello cada 2 s.



3.4. SNOW SENSOR

3.4.1. HOW IT WORKS

It is important to clarify that the snow sensor is the sum of the temperature sensor plus the rain sensor. Therefore, if one of these two sensors is deactivated, the snow alarm will never be activated. By default, the temperature sensor is deactivated.

- *WHEN IS THE ALARM DEACTIVATED?* THE SNOW ALARM IS DEACTIVATED WHEN THE TEMPERATURE IS ABOVE 3°C (37,4 °F) AND NO RAIN IS DETECTED.
- *When is the alarm activated?* The snow alarm is activated when the average temperature is below 2°C (35,6 °F) and rain has been detected..
- *What happens?* The slats of the pergola are placed in an open position, at 66% of full opening capacity. This is to prevent snow from accumulating on the blades and ending up being deformed by the weight. As long as the alarm is activated, the slats can only be moved in "man present" mode, i.e. by pressing the open or close buttons on the Noon remote control (see picture 2).

Recommendations: If the pergola is installed in an area where there is a high snow load, it is recommended to activate the snow (temperature) sensor.

3.4.2. CONNECTIVITY

The snow sensor is the sum of the temperature sensor and the rain sensor. For the wiring of both, see sections 3.2.2 and 3.3.2.

3.4.3. CONFIGURATION

The snow sensor is the sum of the temperature sensor and the rain sensor. For the configuration of both, please refer to sections 3.2.3 and 3.3.3.

4 LAMP LAMPS

4.1. WIRING

Connect the male terminals of the cable T, arranged along beam 2, to the female terminals coming out of the slats with LED spotlights installed. Subsequently, connect the male terminal at the end of cable T to one of the two female terminals of the switchboard labelled "luz lamas"(slat lights). If you have two pergolas together with a single switchboard, you must connect the male terminal of the T cable of this pergola to the second female terminal of the switchboard labelled as "luz lamas"(slat light).

4.2. CONFIGURATION

The louver lights are preconfigured on the Noon remote (see functions in image 3 of section 1.1). Once the connections have been made, they will be fully operational. To carry out the following memorization or erasure processes for the louver lights, you must be familiar with the buttons required for each operation. In the following image, you can see which buttons you must identify before beginning::

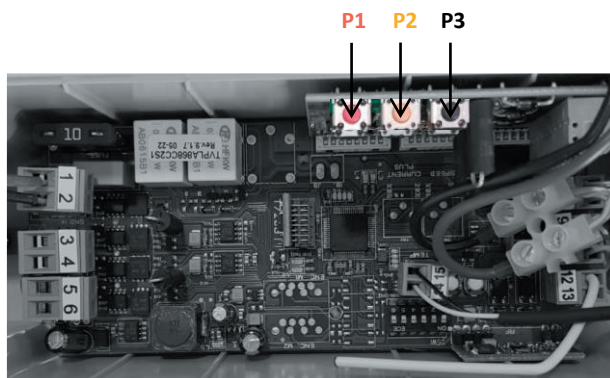
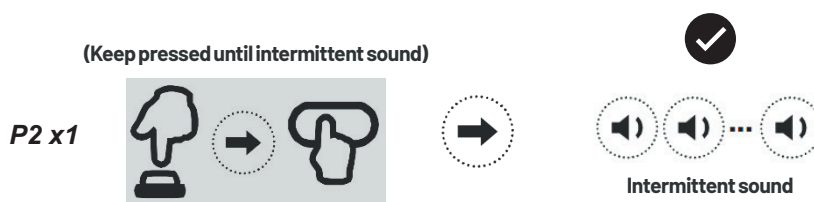


Image 7: interior of control unit ACC0310

4.2.1. MEMORIZING LOUVER LIGHTS ON THE REMOTE

If the louver lights are not stored on a channel of the Noon remote, you must access the control unit and perform the following procedure:

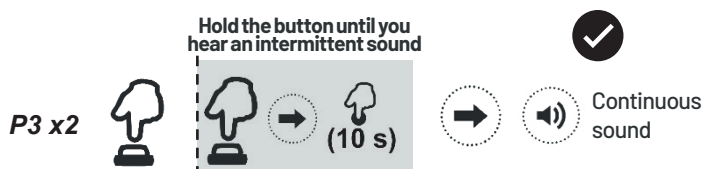
First, position the remote on the channel where you wish to store the louver lights. Then, hold down the yellow button on the LED board (P2), and immediately press the central button on the remote until the control unit emits an intermittent beep—at that moment, the memorization will be confirmed (hold until intermittent beep).



4.2.2. COMPLETE ERASURE OF LOUVER LIGHTS

As in the previous memorization step, you must access the control unit and perform the following procedure:

First, position the remote on the channel where you wish to delete the louver lights. Then press the black button on the LED board (P3) twice—and on the second press, hold it down for 10 s, until the control unit emits a continuous beep—at that moment, the complete erasure of the louver lights will be confirmed.



5 RGB PERIMETER LIGHTING

5.1. CONNECTIVITY

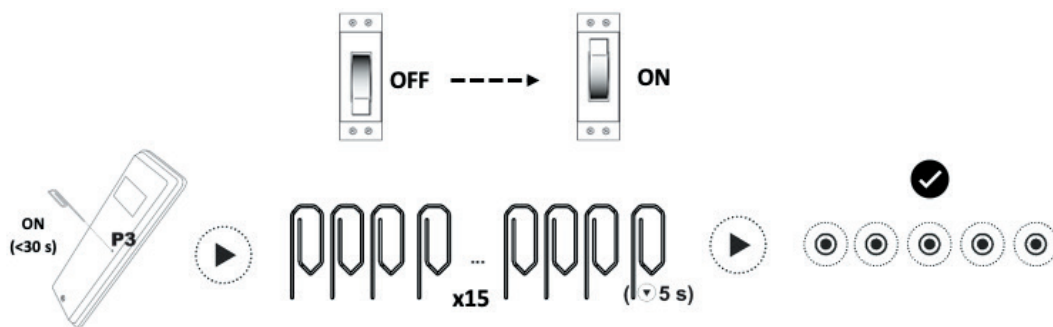
Locate the four extension cables labelled "RGB" from the RGB ACC0323 regulator, and connect to each end of the LED strips that will be installed in the gutter profile of each beam section. The extension cables for RGB extension cables may be of different lengths: ACC0325 (1 m), ACC0326 (5 m) or ACC0327 (7 m). According to the dimensions of the pergola different extension cables will be supplied.

5.2. CONFIGURATION

5.2.1. RGB DIMMER STICK CONFIGURATION

Before you start this step, you must position the Noon controller on a free channel to control the RGB lights from there! (Do not use channel 1 or 2).

Remove and switch on the power. Within 30 seconds after switching the system ON, press the P3 button on the Noon remote control unit 15 times. In the fifteenth time you press, hold down for 5 seconds, the LED lights should flash 5 times to confirm that this has been done correctly.

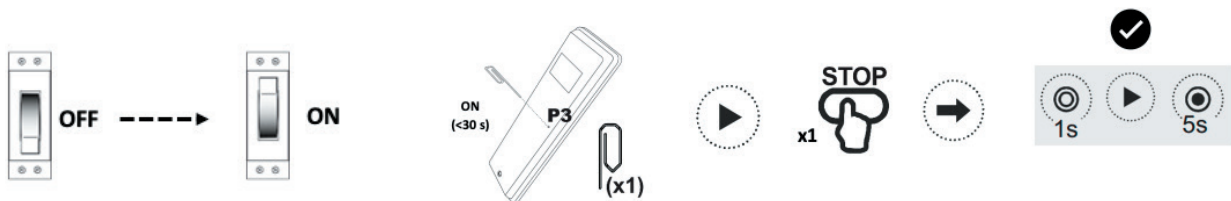


5.2.2. SETTING THE REMOTE CONTROL TO RGB MODE

Before starting this step, you must set the remote control in the channel chosen to control the RGB lights.

Remove and switch on the power. Within 30 seconds of the system being turned ON, press the P3 button on the Noon remote control once for 1 to 2 seconds, and then press the STOP button (see picture 2) once only. The RGB lights will turn on for 1 s, turn off, and then turn on for 5 s.

The RGB perimeter lights can now be controlled with the functions stored in the Noon remote control.

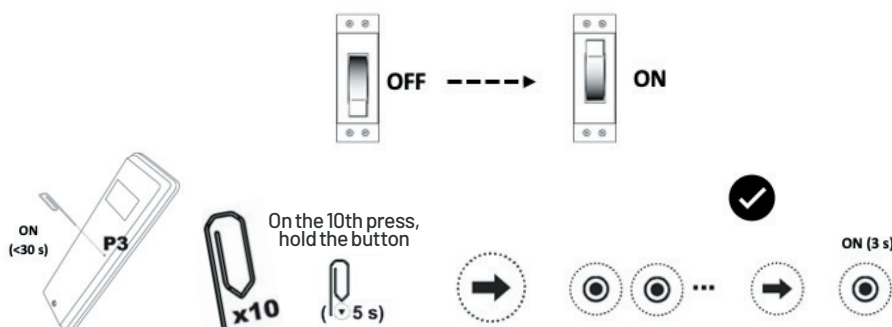


5.2.3. RESET RGB MODE

If any of the above steps have not been performed correctly, we can reset the devices and start from scratch.

This step removes both the RGB mode of the RGB Control Stick and the RGB mode of the remote control. Before starting this step, check that the controller is set to the correct channel.

Remove and switch on the power. Within 30 seconds of switching the system ON, press the P3 button on the Noon controller 10 times and, on the tenth time you press, hold for 5 seconds. The RGB lights will flash and then will remain steady for 3 seconds.



5.2.4. CONFIGURATION IN DUPLEX TYPE PERGOLAS

Assuming that the installation has more than one pergola and you wish to configure the RGB perimeter lighting of all of them from the same channel of the remote control, the previous step must be carried out with the perimeter light of each pergola one by one. It is recommended that in this it is recommended that only the RGB switchboard you are configuring is connected to the mains, and once they are all configured, connect all of them to the mains.

Once the first RGB switchboard has been configured, you must make sure that the perimeter light is showing the colours of group 1. For more information about the colour groups, see picture 4 in section 1.1 of this manual. This must be done so that the perimeter lights of all pergolas show the same colours once they are configured.

6 WIRELESS SENSORS: RAIN AND WIND

6.1. WIRELESS RAIN SENSOR ACC0369

6.1.1 HOW IT WORKS

- *WHEN IS THE ALARM DEACTIVATED??* THE RAIN ALARM IS DEACTIVATED WHEN THE SENSOR'S SENSITIVE SURFACE DOESN'T DETECT ANY WATER DROPS.
- *When is the alarm activated?* The rain alarm is activated when the sensitive surface of the sensor detects water drops. The alarm can also be triggered if this surface is covered by hand.
- *What happens?* The pergola slats close automatically. As long as the alarm is activated, the slats won't be able to move.

Recommendations: It is recommended to install the sensor in a vertical position (see picture 7) and to place it in an accessible area from where the sensitive surface can be easily cleaned.

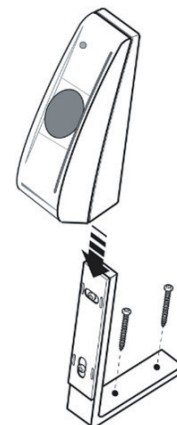


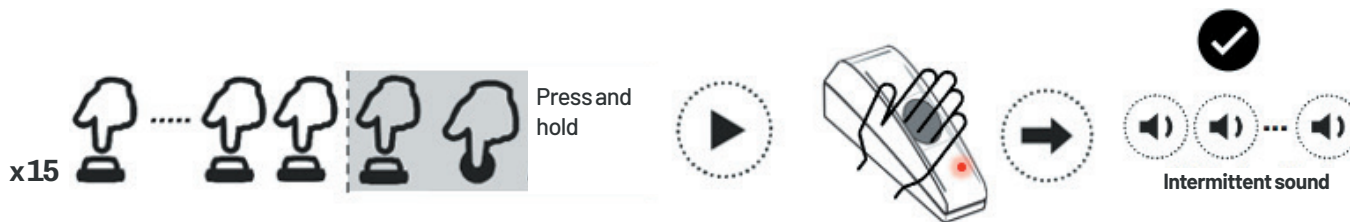
Image 8: Sensor in vertical position

6.1.2. CONNECTIVITY

Connect the sensor wires to the 5W ACC0370 power supply supplied with the sensor, and supply that power source at 230v.

6.1.3. CONFIGURATION

From the switchboard, press button P1 or P2 15 times, pressing and holding button when its the fifteenth time while activating the rain sensor. To activate the rain sensor, just cover the sensor with your own hand. The red led of the sensor will stay on without flashing (rain sensor The switchboard will emit an intermittent confirmation sound.



6.2. WIRELESS WIND SENSOR ACC0371

6.2.1. HOW IT WORKS

- *WHEN IS THE ALARM DEACTIVATED?* THE WIND ALARM IS DEACTIVATED WHEN IT DETECTS A WIND SPEED LOWER THAN THE SET THRESHOLD FOR 60 SECONDS.
- *When is the alarm activated?* The wind alarm is activated when the detected wind speed is higher than the set threshold.
- *What happens?* The pergola slats are in a partially open position, 33% of the full opening capacity. This is because it allows the wind to escape and avoids the sail effect. As long as the alarm is activated, the slats cannot move.

If, in addition to the wind alarm, the rain alarm is activated, the wind alarm will be triggered, as it is important to ensure the stability of the structure at the entrance of the wind rather than the entrance of water.

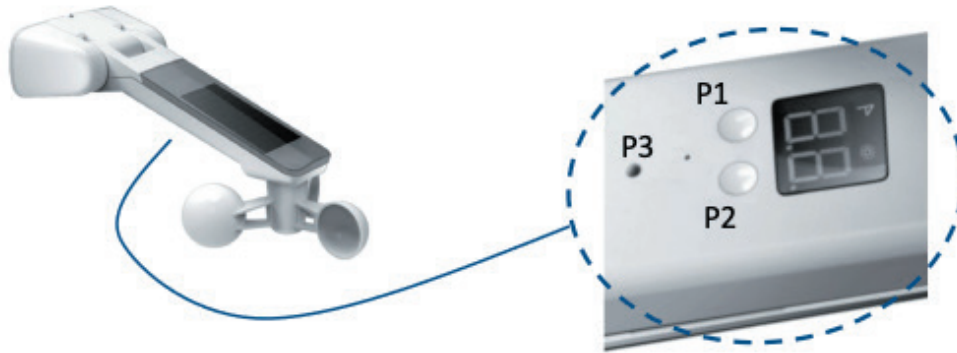
Recommendations: It is recommended that the maximum threshold for a pergola should not exceed 60 Km/h.

6.2.2. CONNECTIVITY

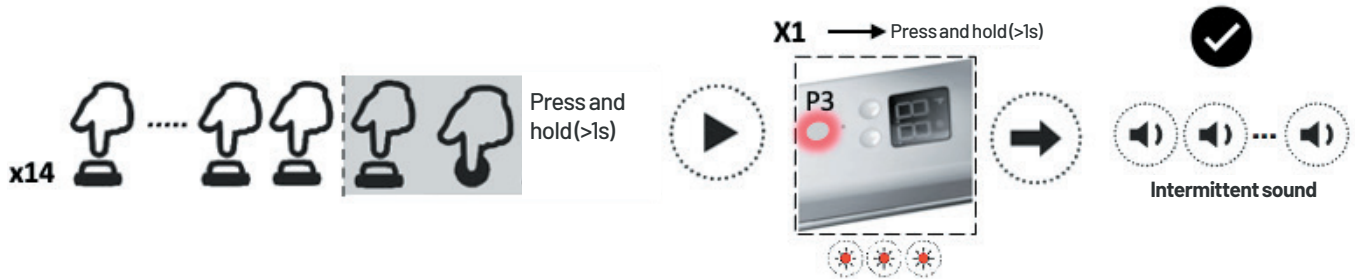
The wireless wind sensor doesn't require any connection, it is self-contained.

6.2.3. CONFIGURATION

Switch on the sensor by holding down the sensor buttons P1 + P2 simultaneously (see picture).



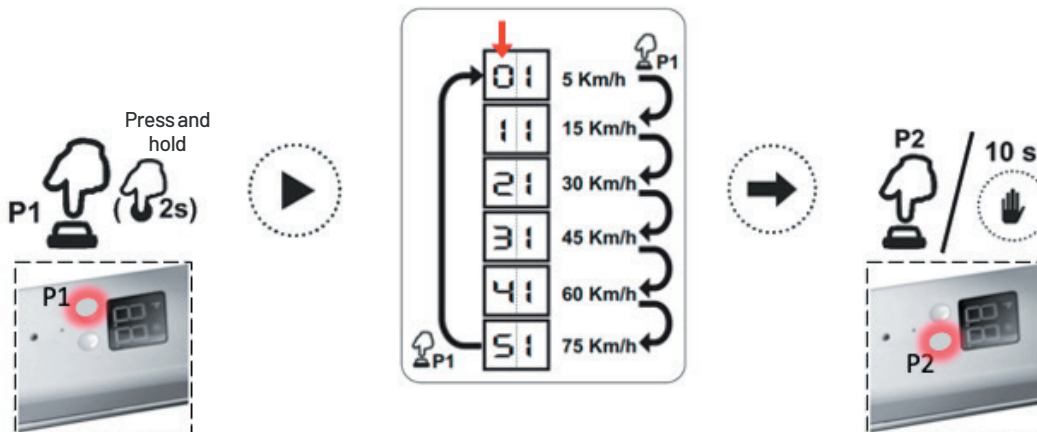
From the switchboard, press the P1 or P2 button 14 times, and on the fourteenth time press and hold. While holding it down, press the P3 button of the wind sensor for more than 1 s. You will see two flashing dots on the display. The switchboard will emit a continuous beep, followed by an intermittent confirmation beep.



• Configuration of wind speed thresholds

By default, the wired wind sensor is set to the minimum wind speed threshold (5 km/h). This threshold is too low, so you will need to increase it. It is recommended that the maximum threshold for a pergola should not exceed 60 km/h*. To modify the wind speed threshold, follow the steps below:

Press the P1 button on the sensor and hold for 2 s, then the first digit on the display will start flashing. You will need to press P1 to change the threshold until the desired threshold is set. Once the threshold has been chosen, press P2 to save and exit.



7 HEATING REGULATOR

7.1. CONNECTIVITY

First of all, you must identify the voltage input cable (IN) and the voltage output cable (OUT) of the heating controller ACC0364 (see fig. 9). Connect the 230v mains power supply cable to the watertight IN connector and the cable from the heater to the watertight OUT connector.

IMPORTANT: The maximum power allowed by this regulator is 2000W. Make sure that the heater does not consume more than this power.

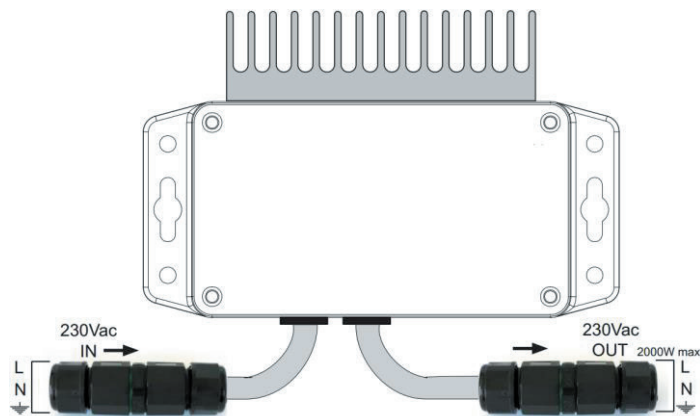
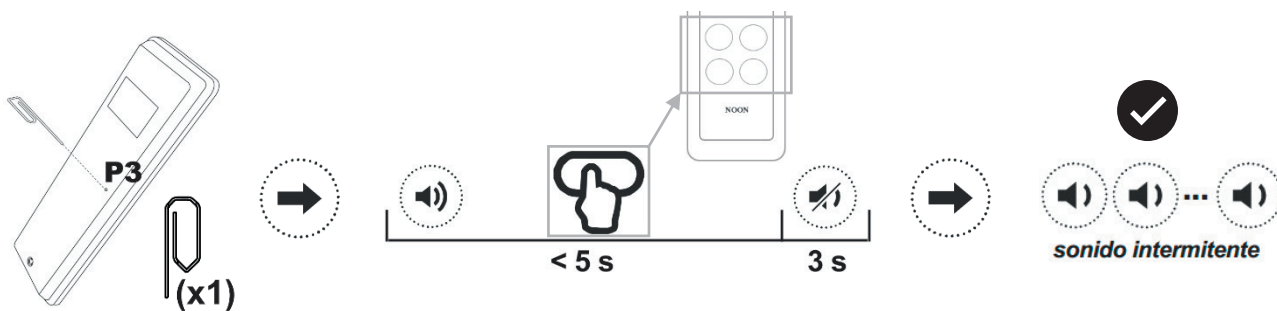


Image 9: connection of heating regulator ACC0364

7.2. CONFIGURATION

Position the Noon remote on a free channel from which you wish to control the heater. Press the P3 button on the remote; the heating regulator will emit a sound for 5 seconds. While the sound is active, press one of the four lower buttons on the Noon remote. The sound will then pause for 3 seconds and subsequently emit an intermittent beep, confirming that the configuration has been completed successfully..



7.3. REMOTE OPERATION

Unlike other devices, the heater is only controlled using the four lower buttons on the Noon remote. Three intensity levels can be adjusted (see image 10).

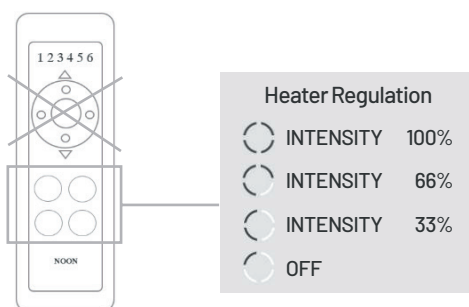


Image 10: heater intensity control functions

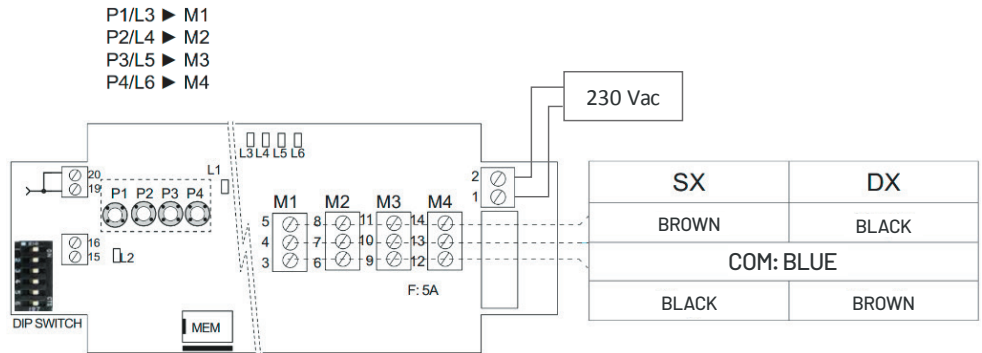
8 CENTRAL AWNING CONTROL UNIT

The function of the ACC0368 awning control unit is to control the movement of all ZIP awnings that can be installed on any side of the pergola. This control unit also allows the connection of wired and wireless wind and rain sensors. In the image X you can see the terminal block where these sensors are connected.

8.1. CONNECTIVITY

The awnings are controlled from a different switchboard to the pergola switchboard from which the movement of the slats and the slat lights are controlled. To connect the motor of each awning, each awning must be connected to the following terminals blocks M1, M2, M3 and M4 of the ACC0368 switchboard. The power supply to the mains will be made through terminal blocks 1 and 2 (see picture).

ES	
1	POWER SUPPLY 230V-(PHASE)
2	POWER SUPPLY 230V-(NEUTRAL)
3	MOTOR1(DOWN - EXTENSION)
4	MOTOR1(COMMON)
5	MOTOR1(UP - RETRACTION)
6	MOTOR2(DOWN - EXTENSION)
7	MOTOR2(COMMON)
8	MOTOR2(UP - RETRACTION)
9	MOTOR3(DOWN - EXTENSION)
10	MOTOR3(COMMON)
11	MOTOR3(UP - RETRACTION)
12	MOTOR4(DOWN - EXTENSION)
13	MOTOR4(COMMON)
14	MOTOR4(UP - RETRACTION)
15	WIND SENSOR(BLUE)
16	WIND SENSOR(BROWN)
19	RF ANTENNA
20	ANTENNAGND



SX	DX
BROWN	BLACK
COM: BLUE	
BLACK	BROWN

8.2. CONFIGURATION

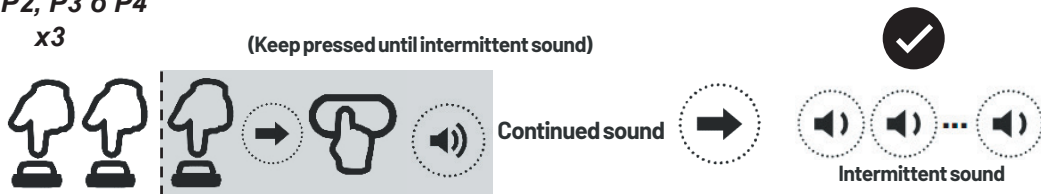
Once the awning motors have been connected to the ACC0368 switchboard, the motor that drives each awning must be memorised in the Noon remote control. You can store each motor in a separate channel of the remote control. If you also wish to control all awnings from the same channel, you simply need to store all motors in that channel.

8.2.1. MEMORISING AWNINGS IN THE REMOTE CONTROL

Firstly, you must place the remote control on the channel from which you wish to control the awning.

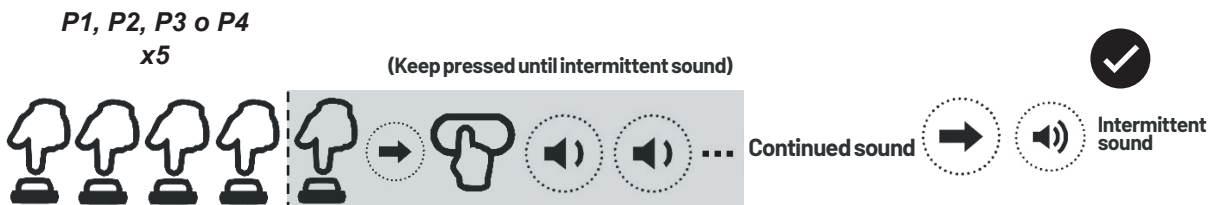
Then, press button P1, P2, P3 or P4 three times, depending on the motor you wish to configure (M1, M2, M3 or M4), and on the third press you must hold it down while pressing the central button (STOP) on the remote control. An intermittent sound will confirm that the process has been carried out correctly..

P1, P2, P3 o P4
x3




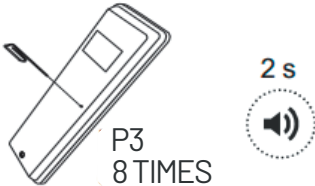



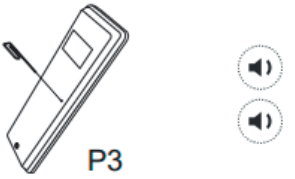
8.2.2. DELETING AWNINGS IN THE REMOTE CONTROL UNIT

If you wish to delete any of the channels in which you have previously memorised any awning, you must press five times P1, P2, P3 or P4, depending on the motor you wish to configure (M1, M2, M3 or M4), and on the fifth press you must keep pressed the central button (STOP) of the remote control at the same time. In this case, a continuous sound will confirm that the process has been carried out correctly.



It is also possible to delete the stored awnings from the control unit itself, without having to access the switchboard. To do this, refer to section 1.1.2 "DELETING A CHANNEL" of this manual.

8.3. LIMIT SWITCH CONFIGURATION

Option 2: Configuration with P3		
1		Scroll DIP5 AND DIP6 TO OFF
2		Press and hold down the P3 button on the transmitter 8 times. The selected motor makes a short movement and the buzzer sounds continuously for 2 seconds. In case of group control, to select another motor, repeat the operation.
3		Move the motor (man being present) until a stop is reached (if already programmed). Press the button on the transmitter with the "STOP" function. The motor buzzer will sound continuously for two seconds.
4		Press the «SUBIDA/RETRACCIÓN» button on the transmitter until the desired upper limit is reached. Press "STOP" to confirm. The buzzer emits a continuous sound.
5		Press the «BAJADA/EXTRACCIÓN» button on the transmitter until the desired lower limit stop is reached. Press "STOP" to confirm. The buzzer emits 5 continuous signals.
6		To program other motors memorised on the same 3 channels, follow the procedure from point 2; otherwise exit by pressing the P3 key. The buzzer emits 2 acoustic signals.

9 LOCAL CONTROL VIA SMARTPHONE

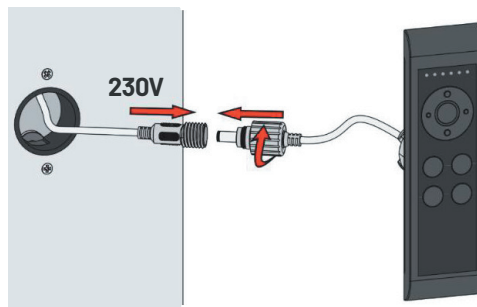
9.1. INSTALLATION OF THE LOCAL CONTROL SYSTEM VIA SMARTPHONE



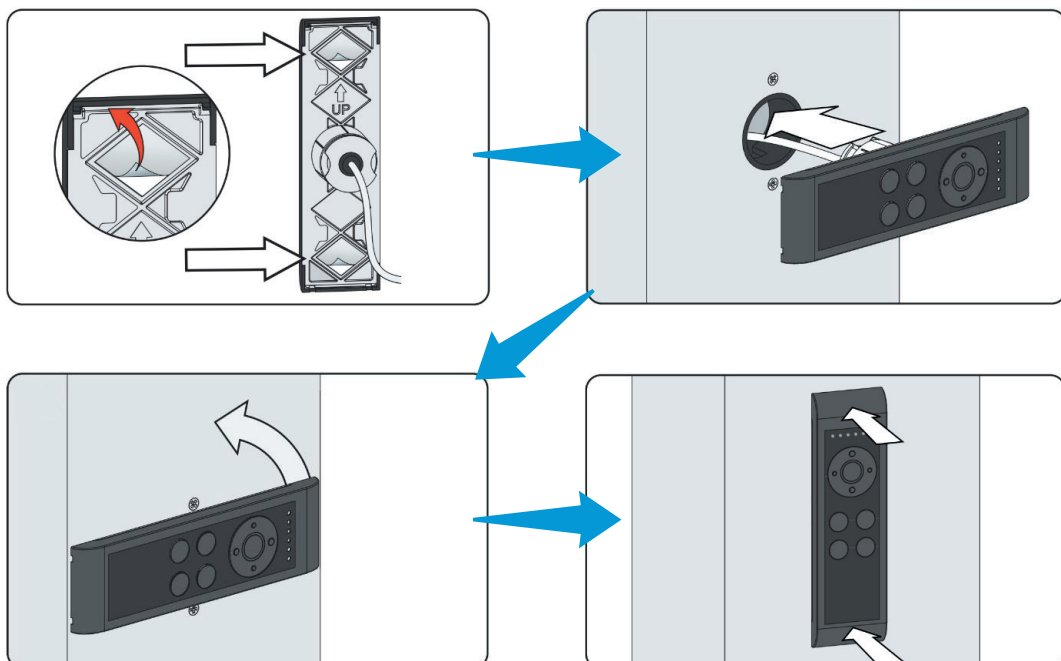
9.1.1. CONNECTION AND INSTALLATION OF THE REMOTE ON THE PILLAR

The remote must be connected to the cable coming from the control unit labelled “MANDO PILAR”; the connection will be hidden inside the pergola’s structure. Before installing the remote and attaching it to the pillar, the Altana app configuration described in section 9.1.2 must be completed. To do so, the pergola must be powered on to activate the remote.

IMPORTANT: do not connect any other device to this cable, as it is directly connected to 230 V.



Once the remote has been powered on, proceed to section 9.1.2 to continue with the configuration of the app on your mobile device. After completing the configuration, you may continue with the installation of the remote on the pillar. The following images show the process:

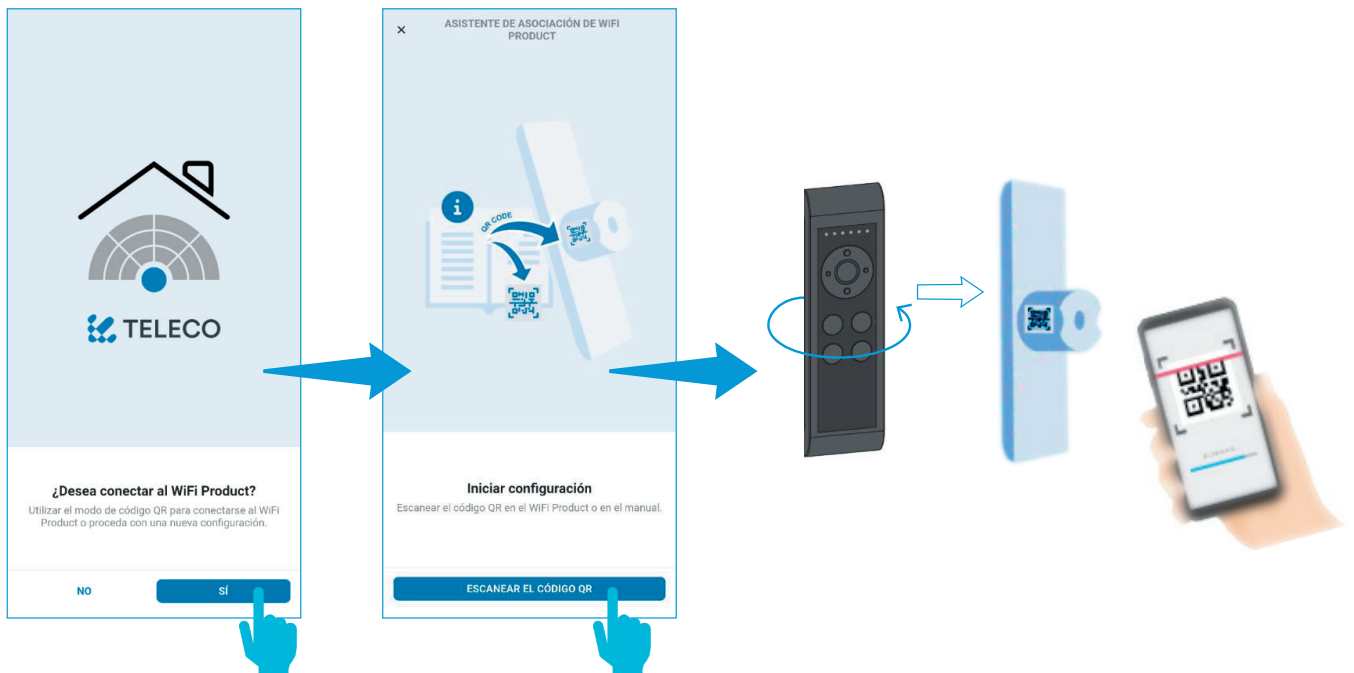


9.1.2. CONFIGURING THE ALTANA APP

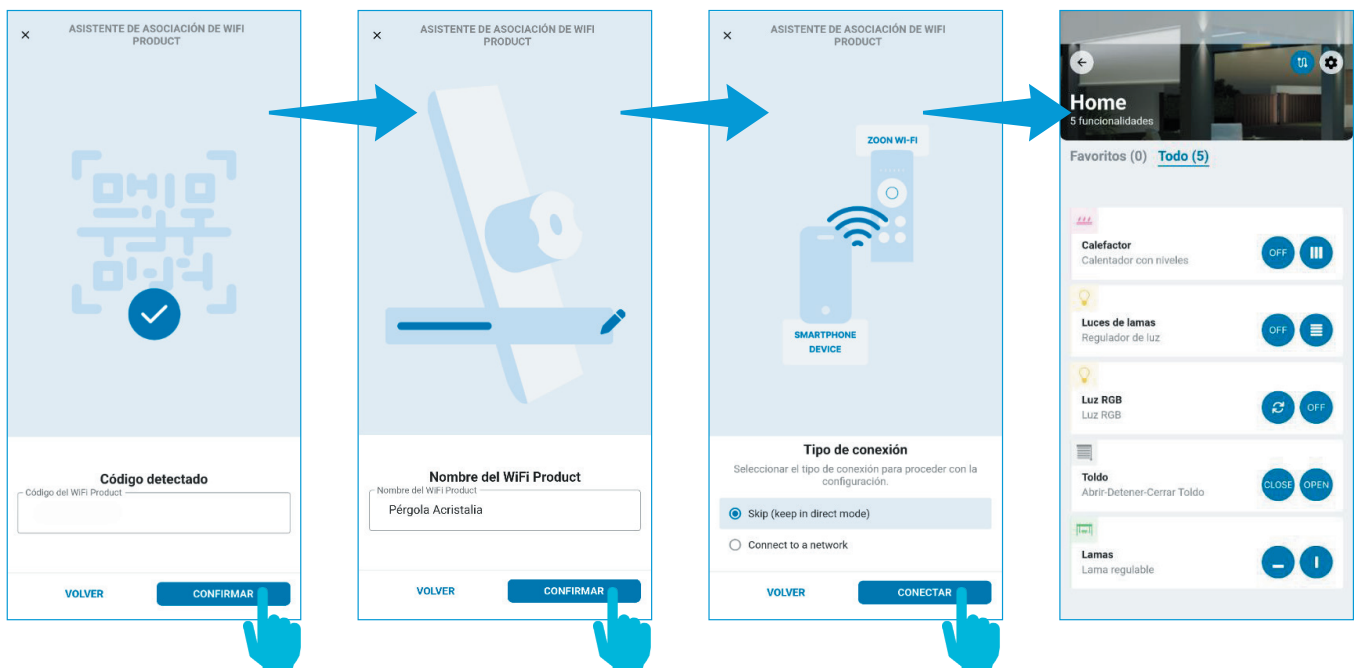
First, install the Altana app on your mobile device. You can download it directly by scanning the following QR code:



Once the app is installed, when you open it for the first time, it will prompt you to pair the remote. It is necessary to have both Wi-Fi and GPS enabled. The following is the process you will need to follow:

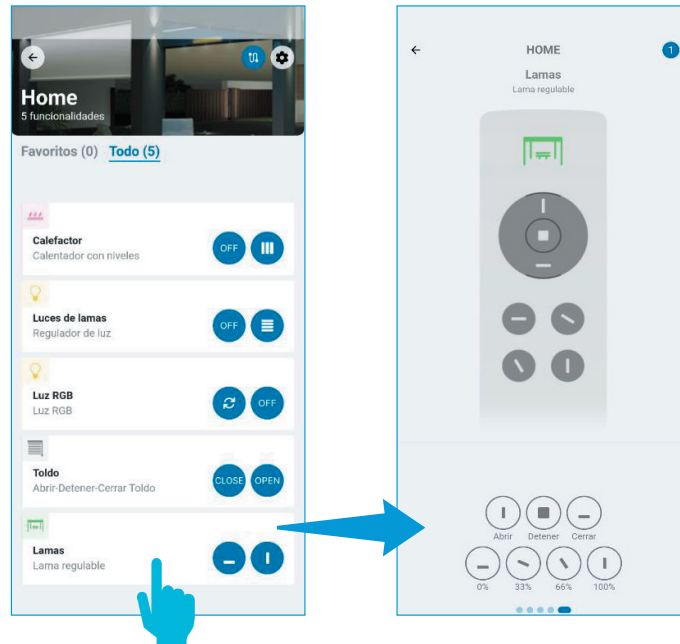


Once the QR code has been scanned, the following screens will appear:



All the devices to be controlled on the pergola will automatically appear: louver movement, louver lights, RGB perimeter light, awnings, and heating.

By accessing each of them, you will be able to control the defined positions of the louvers and lights, adjust the intensity of the lights and heating, change the RGB light color, etc.



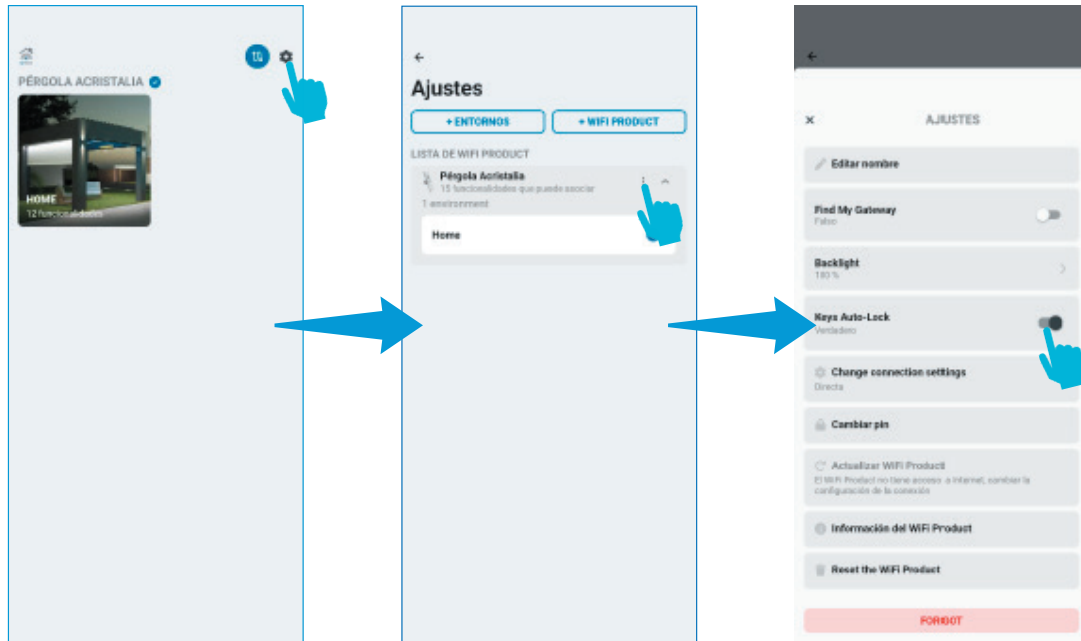
9.1.3. TVZOOM REMOTE

This remote performs the same functions as the Noon remote. To view these functions, refer to section 1.1 of this manual. The only function not available with this remote—due to the absence of the P3 button—is copying or deleting channels.

By default, the remote is configured with an auto-lock function: after a few seconds of inactivity, it will lock itself to prevent unauthorized control of the pergola functions. To unlock it, press and hold any button for a few seconds until the red light of the selected channel turns on.



If you wish to disable this function, you may do so via the mobile app. To do so, follow these steps:



IMPORTANT: please note that you must still follow the steps to program the end-of-travel learning process; these steps are described in section 2.1.2 of this manual.

THIS IS A GENERAL NOTICE THAT AFFECTS THE WHOLE MANUAL

IMPORTANT NOTICE: If, when pressing any button on the Noon remote control to operate the slats, the control emits a sound and the slats do not move, it means that an alarm is active. You should consult the table of light signals to detect the type of alarm in question. The slats will only move in man present mode, i.e. by holding down the open or close button. In this case, if you operate the slats with an active alarm, it is at your own risk. If after having detected the type of alarm you have not been able to solve it, please contact our technical department.

acristalia