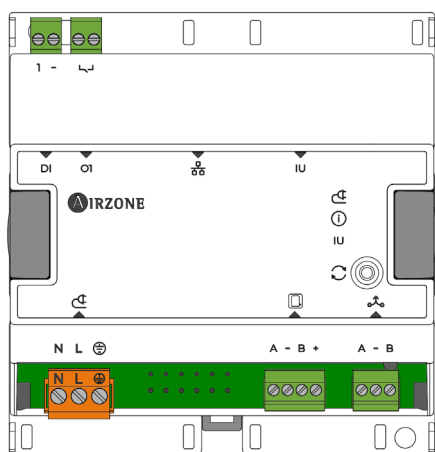
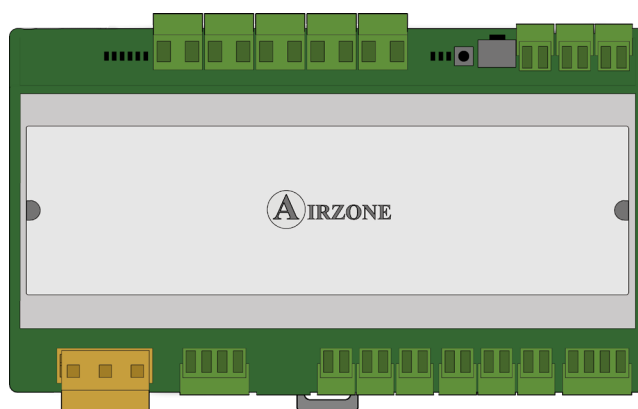
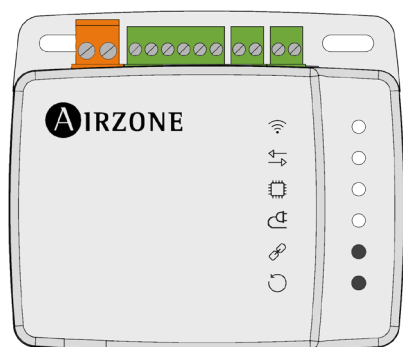




Integration manual



myRoom XC



Index

INTRODUCTION	3
> Description	3
> Technical specs	4
> Aidoo Pro DX	4
> Aidoo Pro Fancoil	4
> Aidoo Pro HUB	5
INSTALLATION	6
> Assembly and connection	6
> Connection diagrams	7
> Aidoo Pro connection diagram with the HomeWorks QSX processor	7
> Aidoo Pro connection diagram with the myRoom XC processor	8
> Aidoo Pro connection diagram with the Lutron Palladiom thermostat	9
CONFIGURATION OF AIDOO PRO WITH LUTRON PROCESSORS	10
> Integration identifiers	10
> Identification of the HVAC zone controlled by Airzone	10
> Identification of the HVAC zone controlled by Lutron	10
> Configuration with Lutron Designer	10
> Configuration with Airzone Cloud	14
CONFIGURATION OF AIDOO PRO WITH THE LUTRON PALLADIOM THERMOSTAT	15
> Configuration from Lutron Palladiom	15
> Configuration with Lutron Designer	15
> Configuration with Airzone Cloud	18

Introduction

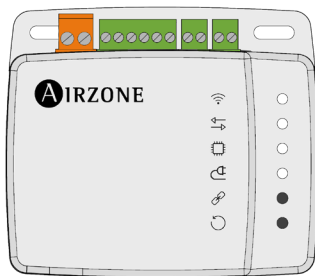
DESCRIPTION

The Aidoo Pro enables the integration of Lutron control systems into individual HVAC units through three devices:

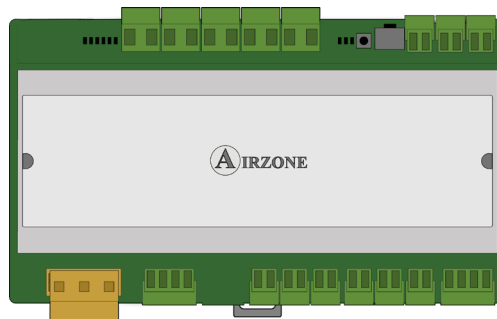
- HomeWorks QSX processor
- myRoom XC processor
- Lutron Palladiom thermostat

This is a Plug&Play device for the control of individual HVAC units that, through the RS-485 port of the Lutron Palladiom thermostat or through authentication/encryption using LAP and LEAP protocols (in the case of a HomeWorks QSX or myRoom XC processor), enables the following actions to be carried out:

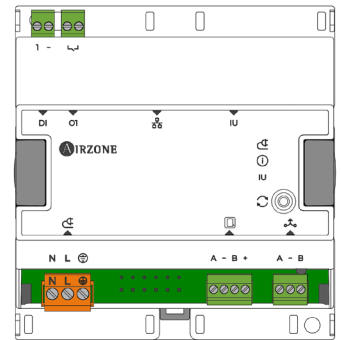
- Control of the different HVAC unit parameters:
 - ◊ Control of set point temperature
 - ◊ Control of the operation mode
 - ◊ Control of fan speed
 - ◊ Control of switching the HVAC unit on and off
- Communication via Wi-Fi Dual (2.4/5 GHz).
- Communication via Ethernet (only for Aidoo Pro HUB [AZAI8HBxxxx]).
- Detection of errors during communication.
- Access to device parameter settings via Bluetooth.



Aidoo Pro DX
(AZAI6WSPxxx)



Aidoo Pro Fancoil
(AZAI6WSPFAN)



Aidoo Pro HUB
(AZAI8HBxxxx)

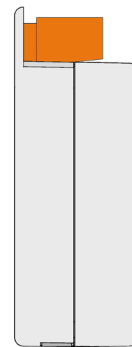
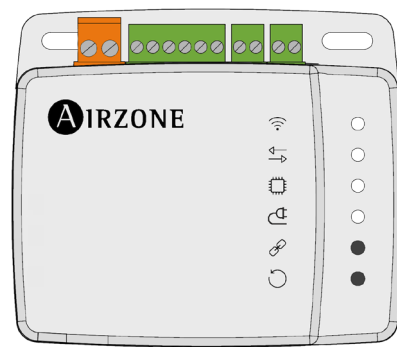
Note: For LEAP integration it is recommended to use the Aidoo Pro HUB.

TECHNICAL SPECS

Aidoo Pro DX

Power supply and consumption	
Type of power supply	Vdc
Max. V	18 V
Max. I	2 mA
Consumption	1.85 W
Operating temperatures	
Storage	- 20 – 70 °C (- 4 – 158 °F)
Operation	0 – 45 °C (32 – 113 °F)
Operating humidity range	5 – 90% (no condensation)

RS485 port	
Twisted shielded cable	2x0.22 + 2 x 0.5 mm ² (2 x AWG 23 + 2 x AWG 20)
Communication protocol	RS-485 BACnet MS-TP Even – 19200 bps
Wi-Fi	
Protocol	Wi-Fi CERTIFIED™ 802.11a/b/g/n/ac
Frequency	2.4 GHz (max. 150 Mbps) 5 GHz (max. 433 Mbps)
Maximum power	19.5 dBm
Sensitivity	- 82 dBm
Default IP addressing	DHCP

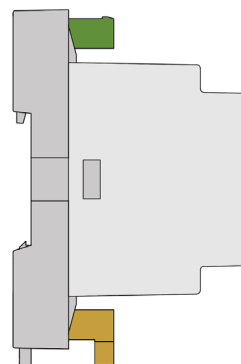
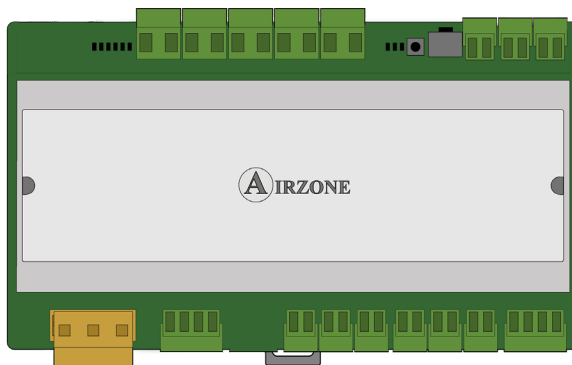


Note: For more information about the Aidoo Pro DX, please visit airzonecontrol.com.

Aidoo Pro Fancoil

Power supply and consumption	
Max. V	110 / 230 Vac
Max. I	250 mA
Frequency	50 / 60 Hz
Consumption	Stand-by: 4.5 W / Max. 20 W
Operating temperatures	
Storage	- 20 – 70 °C (- 4 – 158 °F)
Operation	0 – 45 °C (32 – 113 °F)
Operating humidity range	5 – 90% (no condensation)

RS485 port	
Twisted shielded cable	2x0.22 + 2 x 0.5 mm ² (2 x AWG 23 + 2 x AWG 20)
Communication protocol	Modbus RS-485 BACnet MS-TP Even – 19200 bps
Wi-Fi	
Protocol	Wi-Fi CERTIFIED™ 802.11a/b/g/n/ac
Frequency	2.4 GHz (max. 150 Mbps) 5 GHz (max. 433 Mbps)
Maximum power	19.5 dBm
Sensitivity	- 82 dBm
Default IP addressing	DHCP

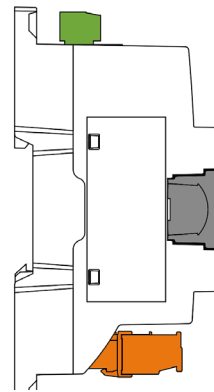
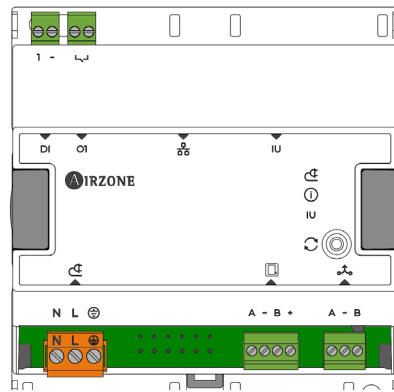


Note: For more information about the Aidoo Pro Fancoil, please refer to the [technical datasheet](#).

Aidoo Pro HUB

Power supply and consumption	
Max. V	110 / 230 Vac
Max. I	250 mA
Frequency	50 / 60 Hz
Consumption	3.4 W (110 Vac)
	4.3 W (230 Vac)
Operating temperatures	
Storage	- 20 – 70 °C (- 4 – 158 °F)
Operation	0 – 45 °C (32 – 113 °F)
Operating humidity range	5 – 90% (no condensation)

Ethernet	
Cable type	UTP cat. 5
Standard	100BASE-TX
Default IP addressing	DHCP
Wi-Fi	
Protocol	Wi-Fi CERTIFIED™ 802.11a/b/g/n/ac
Frequency	2.4 GHz (max. 150 Mbps) 5 GHz (max. 433 Mbps)
Maximum power	17.93 dBm 0.1 dBi
Sensitivity	- 82 dBm
IP addressing	DHCP



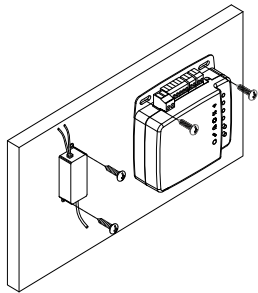
Note: For more information about the Aidoo Pro HUB, please visit airzonecontrol.com.

Installation

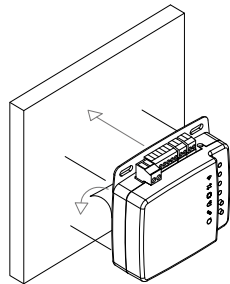
ASSEMBLY AND CONNECTION

The Aidoo Pro (DX) is surface mounted (using screws or double-sided adhesive tape). The Aidoo Pro Fancoil and Aidoo Pro HUB are DIN rail or surface mounted. For connection with the Lutron Palladiom thermostat, fix the cables with the screws on the terminal, following the polarity.

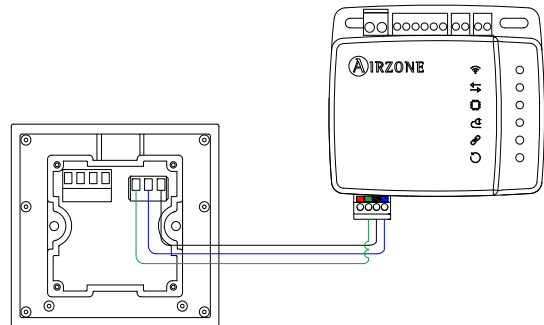
Aidoo Pro (DX)



Mounted using screws



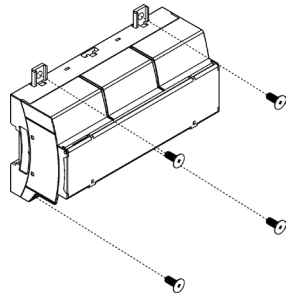
Mounted using double-sided adhesive tape



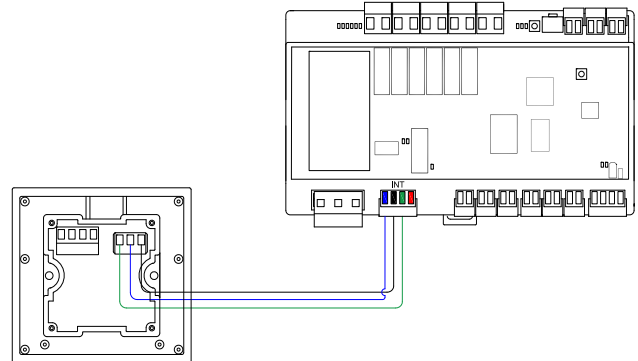
Aidoo Pro Fancoil



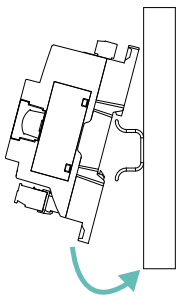
Mounted using DIN rail



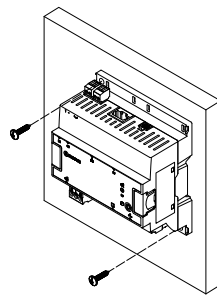
Mounted on wall



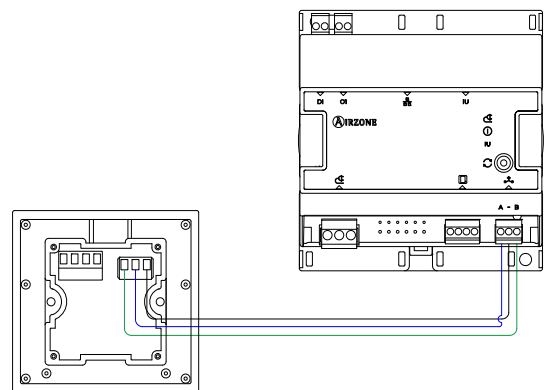
Aidoo Pro HUB






Mounted using DIN rail



Mounted on wall

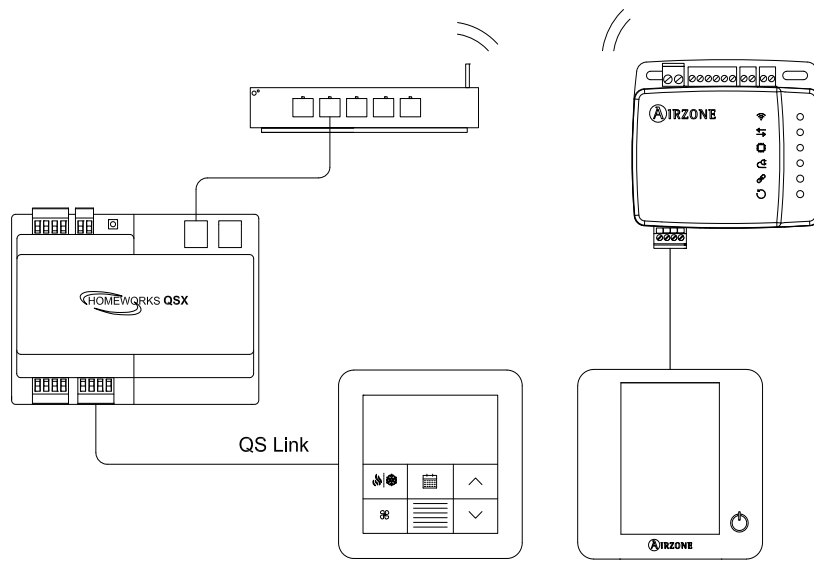


	Green	Mux -
	Blue	Mux +
	Black	Common (G)

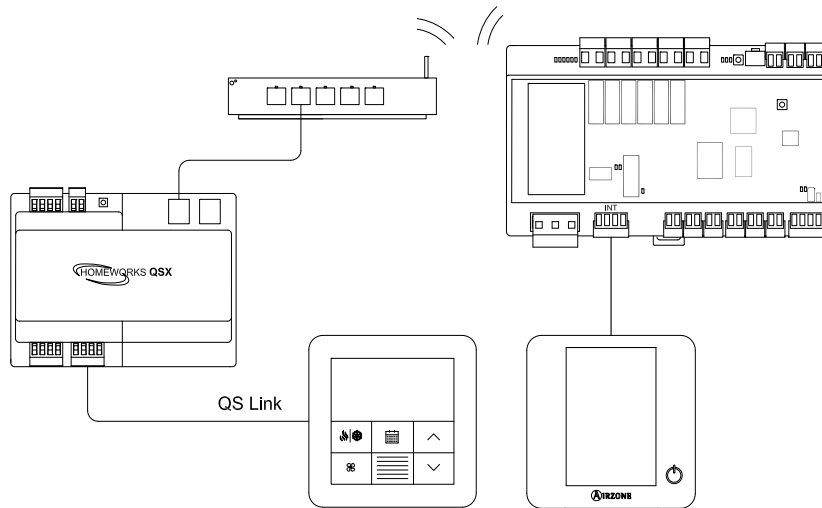
CONNECTION DIAGRAMS

Aidoo Pro connection diagram with the HomeWorks QSX processor

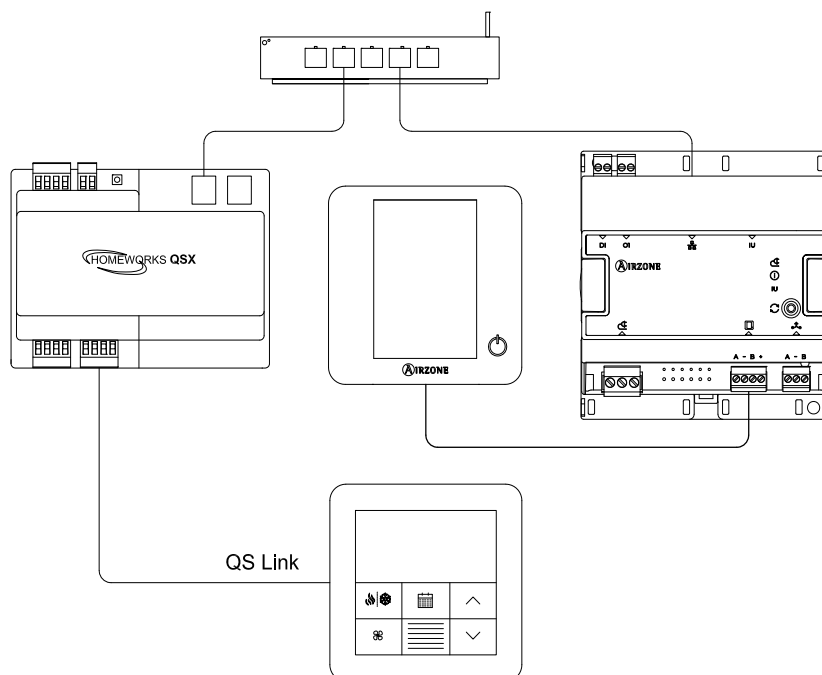
Aidoo Pro (DX)



Aidoo Pro Fancoil

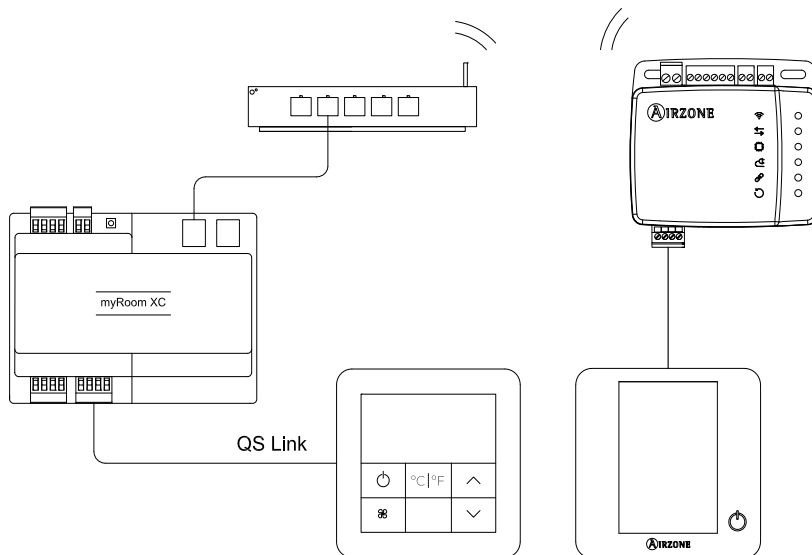


Aidoo Pro HUB

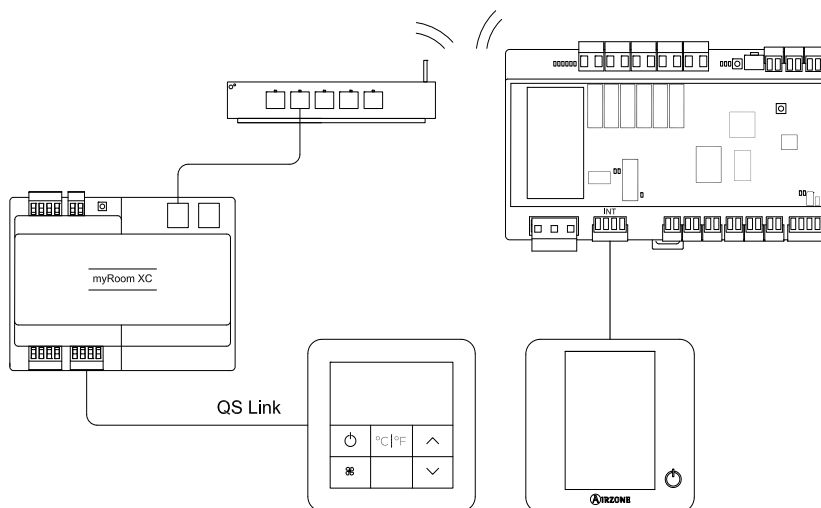


Aidoo Pro connection diagram with the myRoom XC processor

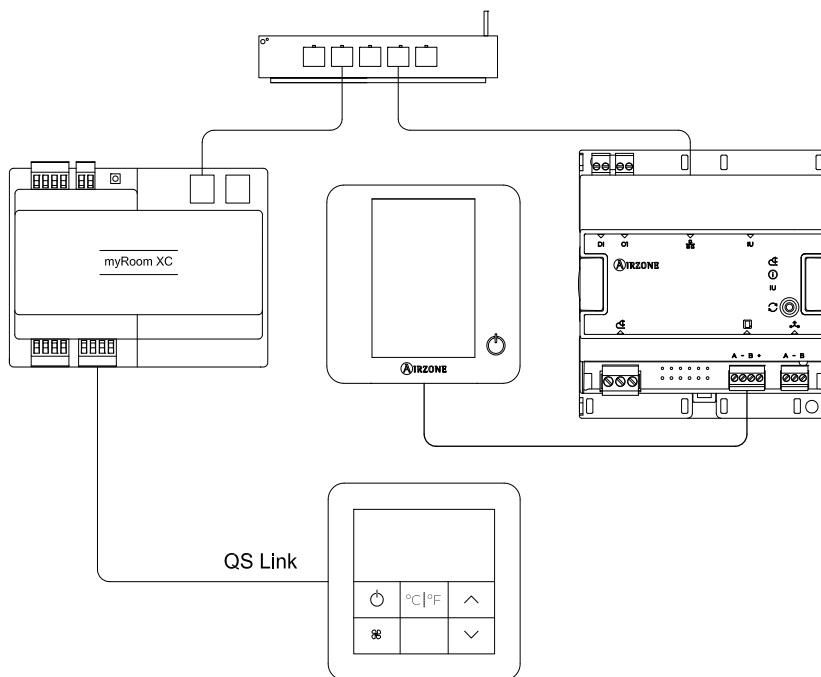
Aidoo Pro (DX)



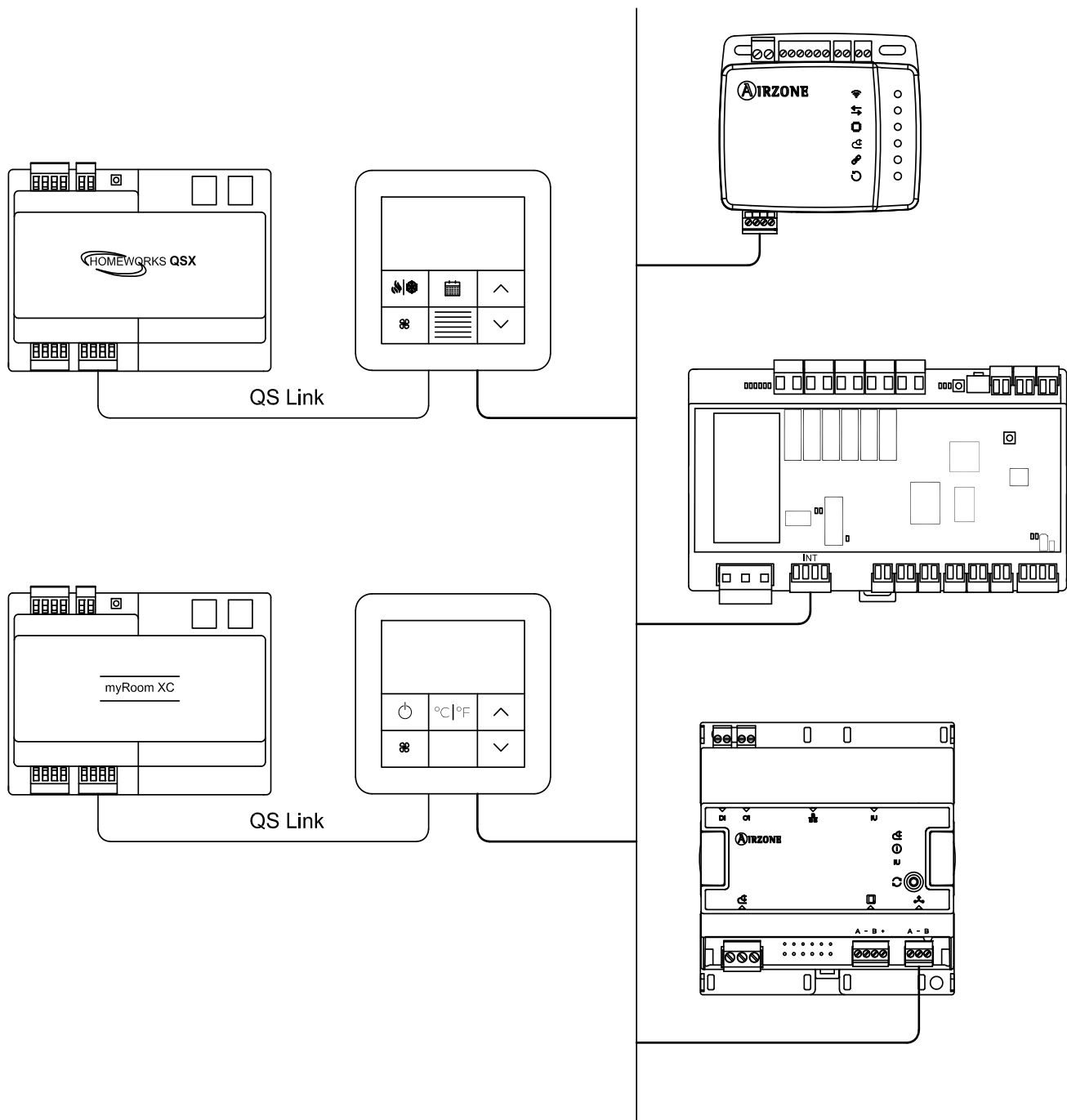
Aidoo Pro Fancoil



Aidoo Pro HUB



Aidoo Pro connection diagram with the Lutron Palladiom thermostat



Note: The connection between the Lutron Palladiom thermostat and Aidoo is made through the Modbus RS485 port.

Configuration of Aidoo Pro with Lutron processors

INTEGRATION IDENTIFIERS

Depending on which device is in charge of providing the system with the room temperature, two different configurations are possible. According to this, the following will apply:

- Airzone will be in charge of providing the room temperature when it comes from one of the following devices: Blueface Zero Airzone thermostat, wired controller of the indoor unit, return from the indoor unit, or external sensor.
- Lutron will be in charge of providing the room temperature when it comes from the Palladiom thermostat.

Regardless of the thermostat used, the Lutron system will have full control of the zones from the keypads, timers and the Lutron app.

Identification of the HVAC zone controlled by Airzone

The Aidoo Pro uses *UID* to control the set point temperature, operation mode and ventilation mode. The necessary format for this identifier (*UID*) is: 10101*.

Identification of the HVAC zone controlled by Lutron

The *UID* identifier is used to exchange the room temperature measured by the Lutron thermostat in the zone with the Aidoo Pro. The necessary format for this identifier (*UID*) is as follows: 20101*.

Note: The first digit indicates which device sets the operating temperature: (1) if the temperature is set by the Blueface thermostat or the unit itself or (2) if the temperature is set by the Lutron thermostat.

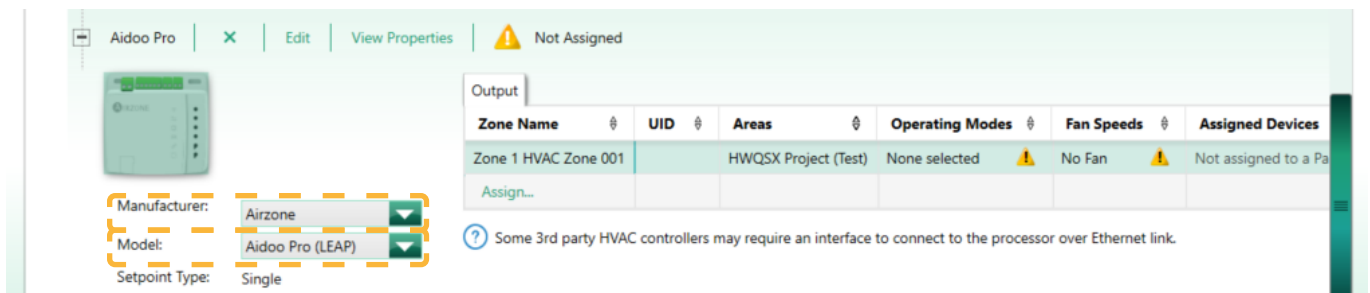
CONFIGURATION WITH LUTRON DESIGNER

Note: Lutron Designer software version 23.0 or higher must be used.

1. Define the Aidoo Pro on the *design - equipment* screen.

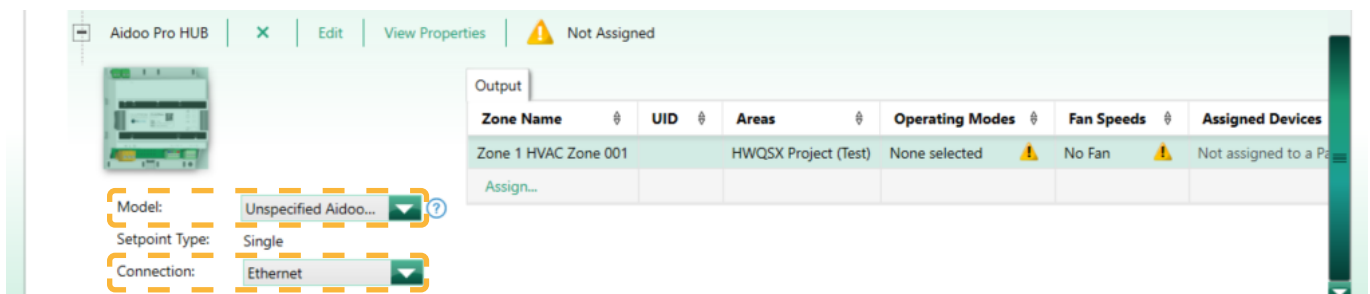
- Aidoo Pro DX and Fancoil. Add a “3rd Party HVAC” device. Select the following options in the drop-down menu:

- ◇ **Manufacturer:** Airzone
- ◇ **Model:** Aidoo Pro (LEAP)



- Aidoo Pro HUB: Add a “Aidoo Pro Hub” device. Select the following options in the drop-down menu:

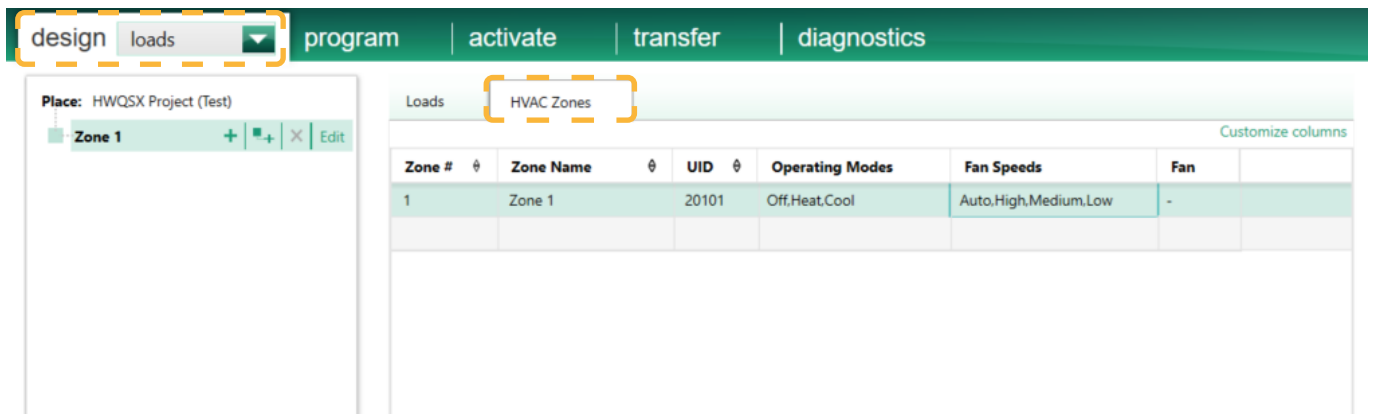
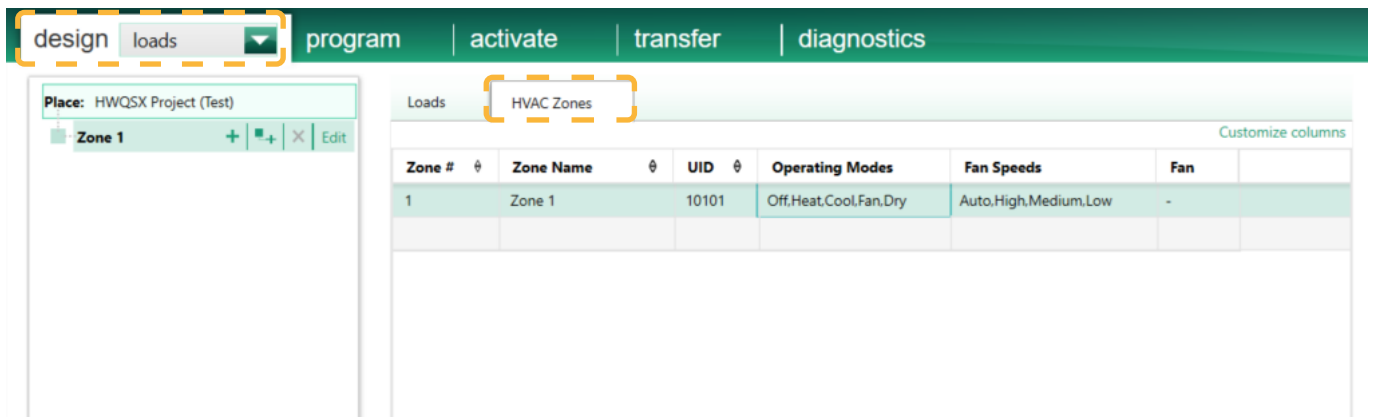
- ◇ **Model:** Your Aidoo model (if you don't know the model, you can leave it unspecified)
- ◇ **Connection:** Ethernet



Set the minimum and maximum set point temperature to 19°C and 30°C (66°F and 86°F), respectively. If you are using a Lutron myRoom XC processor, please note your installation must use a 4-pipe system and must operate in dual auto mode.

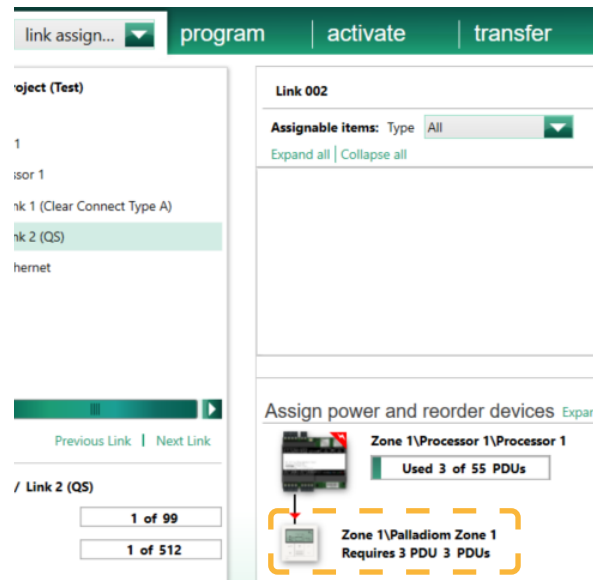
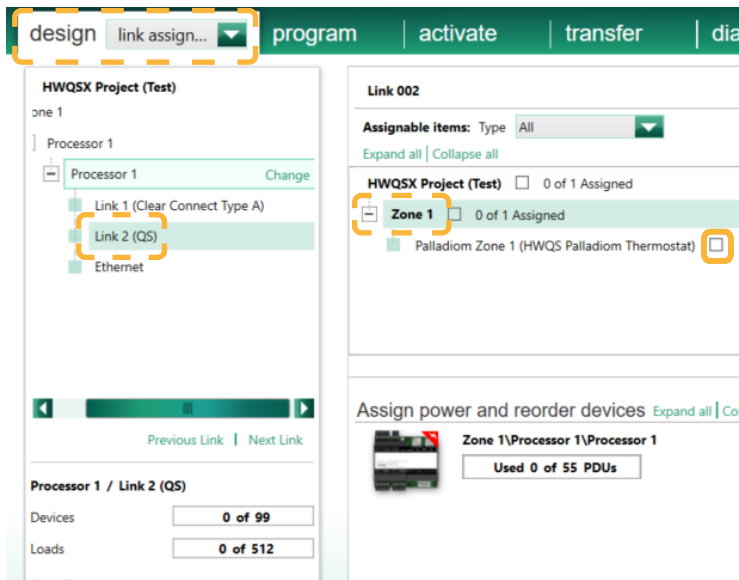
2. Define the HVAC zone on the *design - loads* screen, in the “HVAC zones” tab, and configure their parameters.

Note: The UID must be unique for each zone and will be assigned with the format 2XXYYY or 1XXYYY, depending on whether the zone has a Lutron Palladiom thermostat as a zone controller, as described in the “Integration identifiers” section.

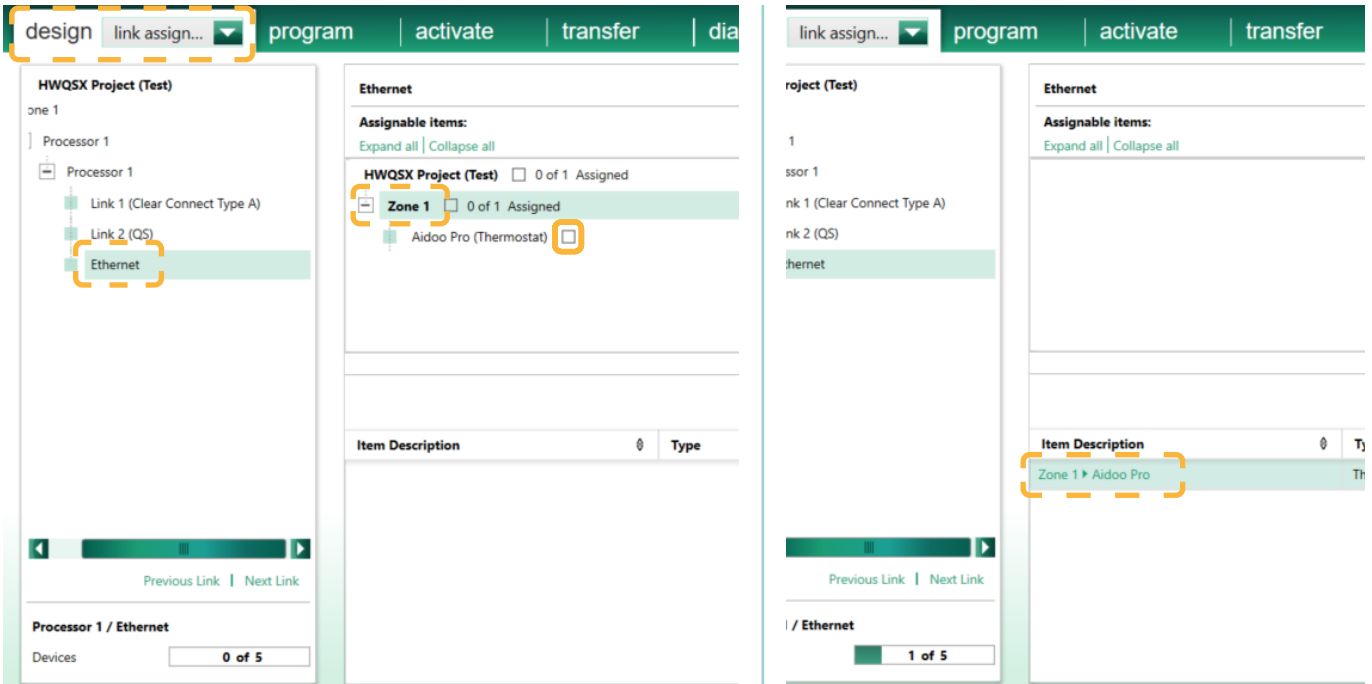


3. From the *design - link assignment* screen, assign the Aidoo Pro and Lutron Palladiom thermostat (if any) previously defined to the processor.

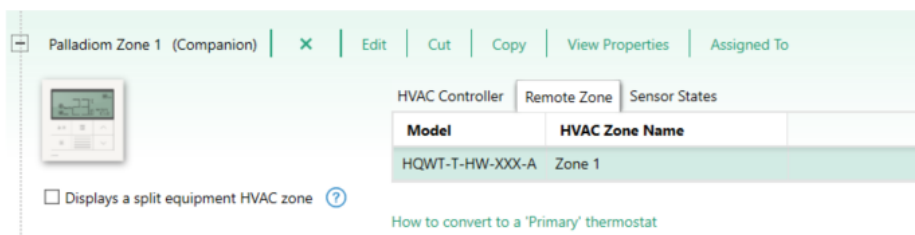
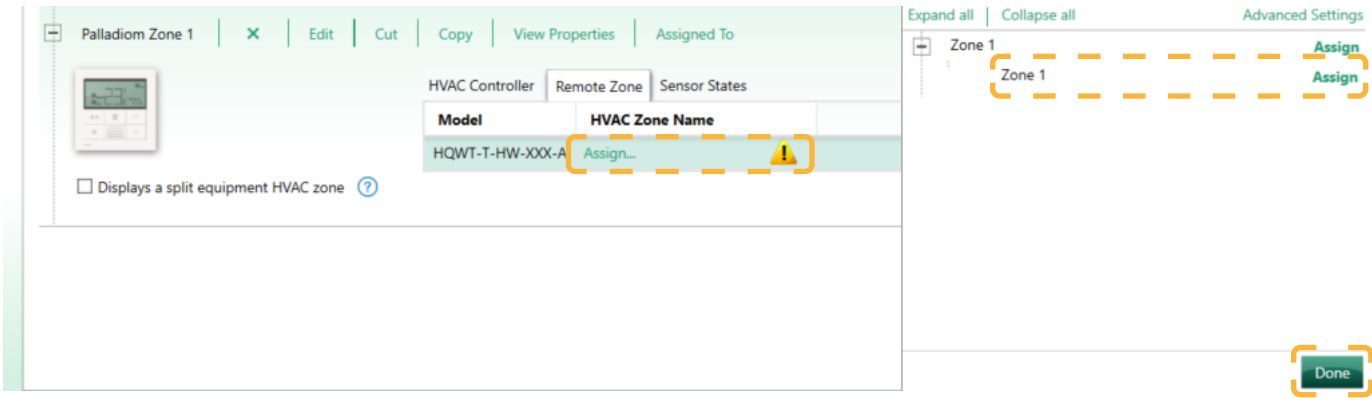
- Lutron Palladiom: Associate the thermostat to the processor's QS link.



- Aidoo Pro: Associate the Aidoo through Ethernet with the processor.



4. If you have a Lutron Palladium thermostat, from the *design - controls* screen, under the *Remote Zone* parameter, click "Assign" and add the HVAC zone.



5. Finally, select the *transfer* screen and start transferring the configuration to the processor.

The screenshot shows a software interface with a green navigation bar at the top containing the following tabs: **design**, **program**, **activate**, **transfer** (highlighted with a dashed orange border), and **diagnostics**.

On the left side, there is a panel with the following content:

- An information icon (i) followed by the text: **Securely transfer to the system from anywhere.**
- A sub-header: **Processor Connection Status** with a **Refresh** button to its right.
- A box containing the breadcrumb: **Zone 1 ▶ Processor 1 ▶ Processor 1** and a warning icon (⚠).
- A large green button labeled **Start Transfer**, which is also highlighted with a dashed orange border.
- Below the button is the text: **Advanced Options ▼**.

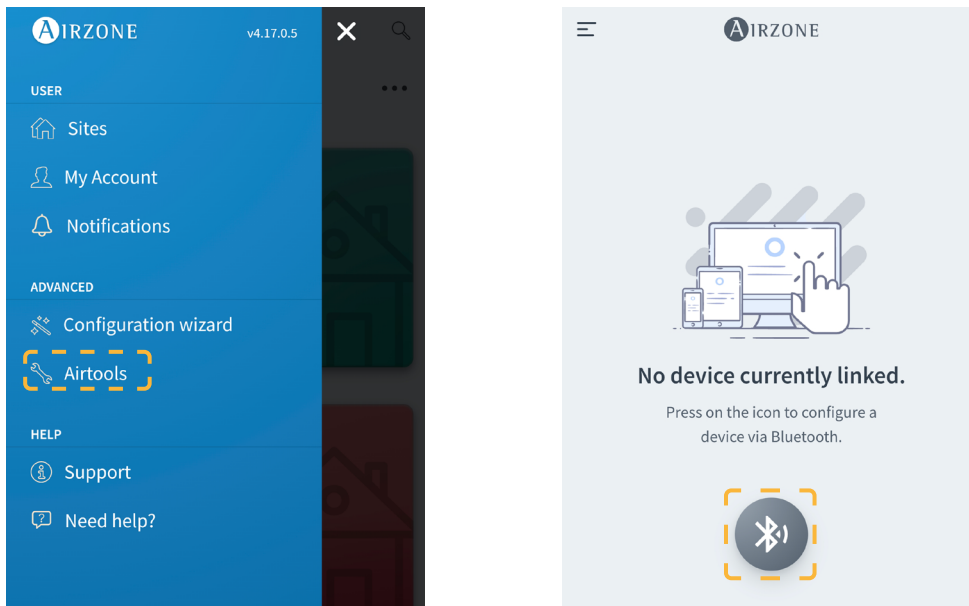
On the right side, there is a **Transfer Details** section with a large empty rectangular area.

Below that is the **Transfer Log** section, which includes:

- A checkbox labeled **Auto Scroll** that is checked.
- A **Show:** dropdown menu currently set to **All Messages**.
- An **Export to PDF** button.
- A large empty rectangular area for the log entries.

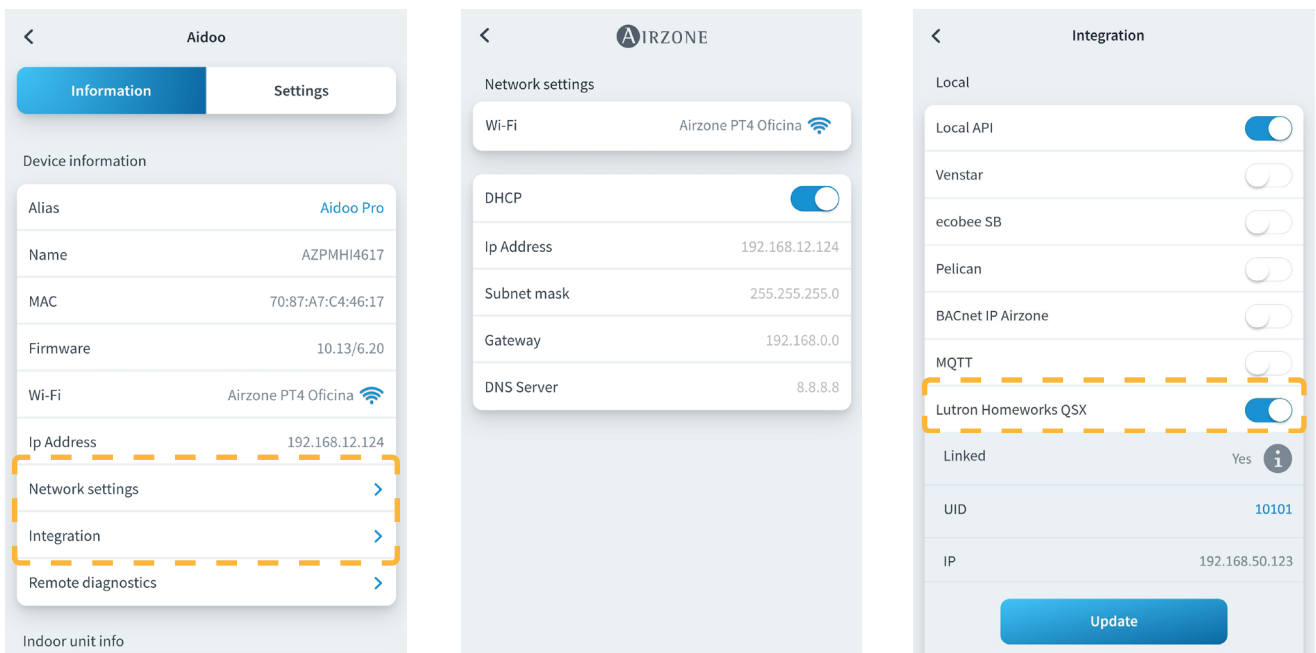
CONFIGURATION WITH AIRZONE CLOUD

Access the Airzone Cloud app and, in the side menu, click on “Airtools” to access the advanced settings. Click on the “Bluetooth” icon to search for devices and select the device that you want to configure.



You can see the *Network settings* in the “Device information” tab. By selecting the *Integration* submenu, you can also choose the type of integration of your Aidoo Pro.

Note: The Lutron HomeWorks QSX processor is available through Wi-Fi in the Aidoo Pro DX and Fancoil from version 10.13 and through Ethernet on the Aidoo Pro HUB (LEAP connection) from version 25.6.



After enabling integration with the Lutron processor, 3 parameters appear:

- **Linked.** This indicates whether Airzone has been linked to Lutron. Both systems must be on the same network (Wi-Fi or Ethernet) and the association process must have been enabled at least once on the Lutron processor (by pressing the button on the processor*). To delete a previous link, a factory reset can be performed from the Aidoo Pro (by pressing for 10 seconds or longer) or from the Airzone Cloud app by following the **Airtools** → **Bluetooth** → **Factory reset** path. Once the parameter status is active, the Aidoo Pro zone will be linked to the Lutron HVAC zone.

** During the association process, once the processor button has been pressed, it is sometimes necessary to wait several seconds for the link to be completed.*

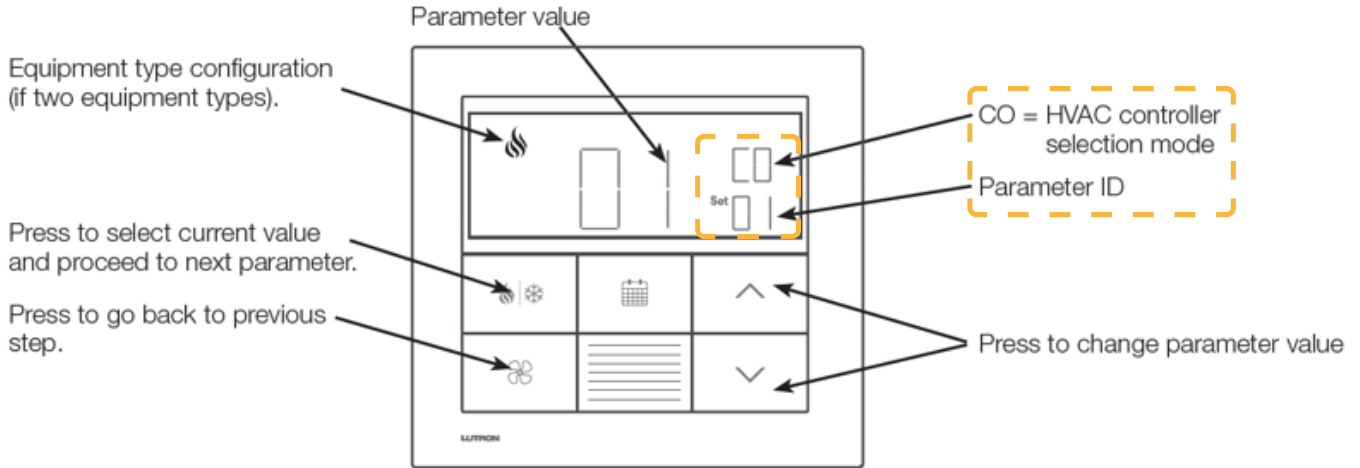
- **UID.** A configurable parameter that must correspond to the UID defined in the Lutron Designer software. This identifier must be unique within the installation so that, if additional devices are configured to be associated with the same processor, they may be easily identified.
- **IP.** Shows, on an informative basis, the IP address of the Lutron processor.

Click “Update” to refresh the status of the Aidoo association with the processor.

Configuration of Aidoo Pro with the Lutron Palladiom thermostat

CONFIGURATION FROM LUTRON PALLADIOM

When connecting the Lutron Palladiom thermostat to the Aidoo Pro for the first time, the following parameters must be configured:



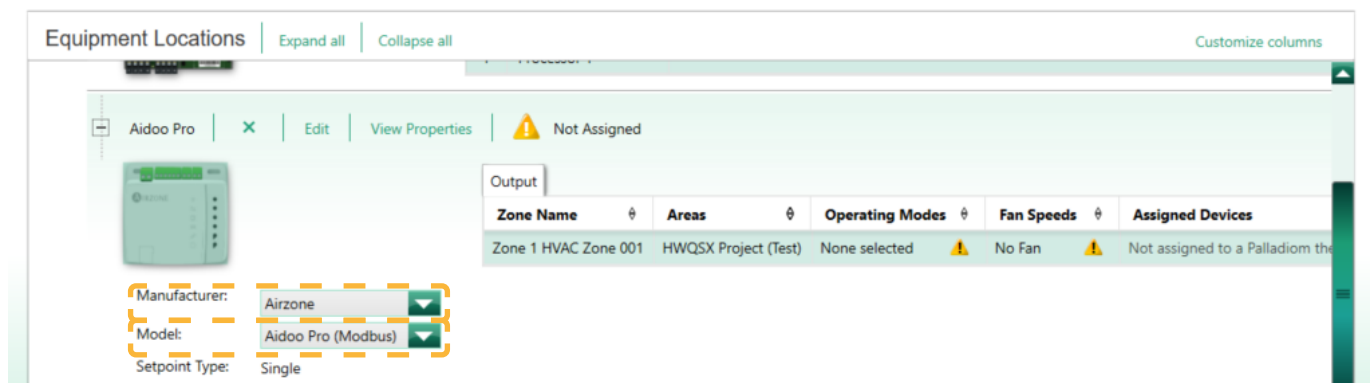
Parameter ID 01: HVAC controller option	03
Parameter ID 02: Modbus address	99*

- HVAC controller selection mode.** The thermostat will automatically enter HVAC controller selection mode if no HVAC controller has been previously selected.
- Parameter ID "01": HVAC controller option.** This parameter indicates the HVAC controller connected to the Lutron Palladiom thermostat. In the case of Aidoo Pro, the value of this parameter must be "03".
- Parameter ID "02": Modbus address.** This parameter indicates the Modbus address of the device. In the case of Aidoo Pro, the value of this parameter must be "99".

CONFIGURATION WITH LUTRON DESIGNER

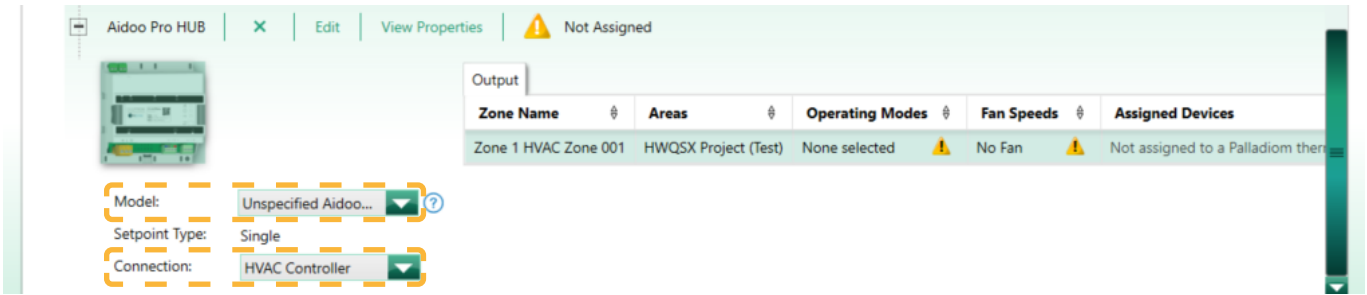
Note: Lutron Designer software version 13.0 or higher must be used.

- Define the Aidoo Pro on the *design - equipment* screen.
 - Aidoo Pro DX and Fancoil. Add a "3rd Party HVAC" device. Select the following options in the drop-down menu:
 - ◆ **Manufacturer:** Airzone
 - ◆ **Model:** Aidoo Pro (Modbus)



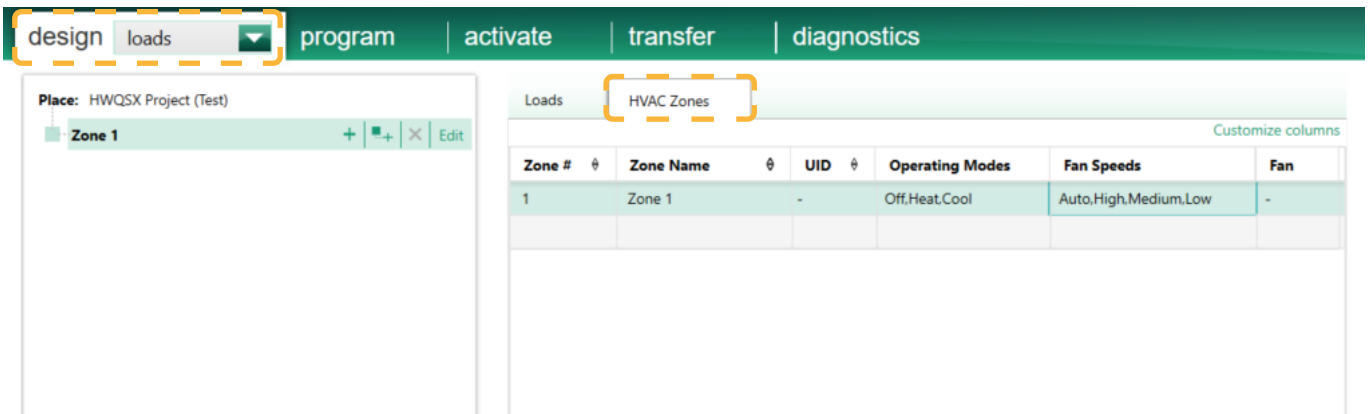
- Aidoo Pro HUB: Add a "Aidoo Pro Hub" device. Select the following options in the drop-down menu:

- ◊ **Model:** Your Aidoo model (if you don't know the model, you can leave it unspecified)
- ◊ **Connection:** HVAC Controller

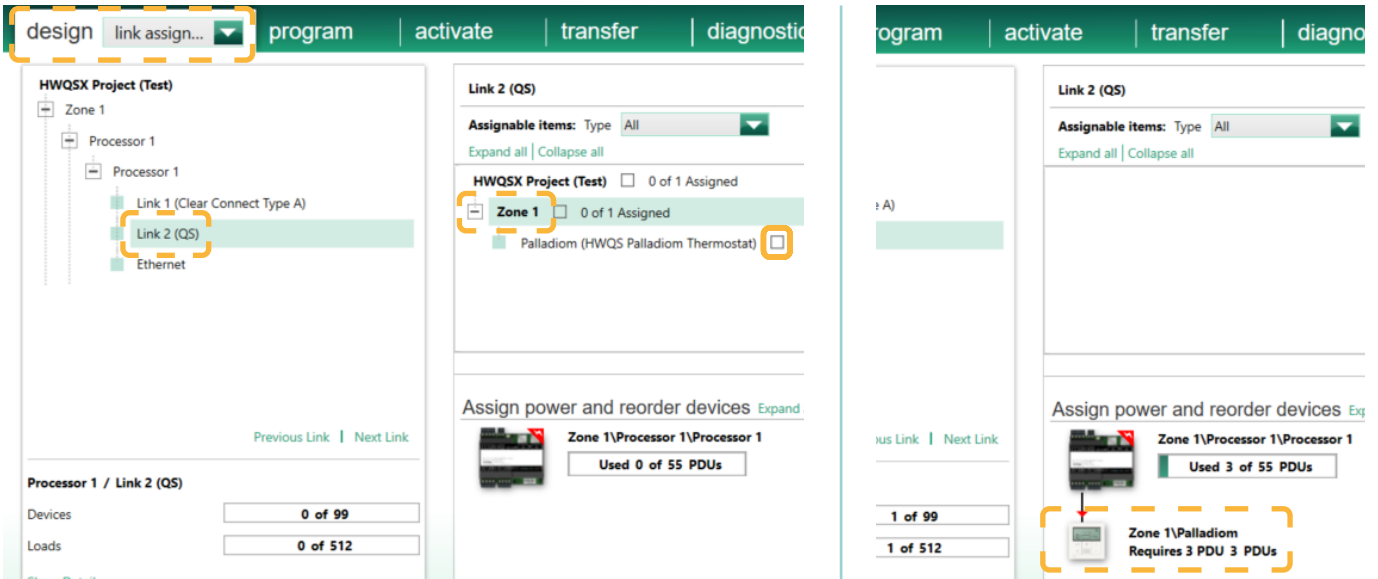


Set the minimum and maximum set point temperature to 19°C and 30°C (66°F and 86°F), respectively.

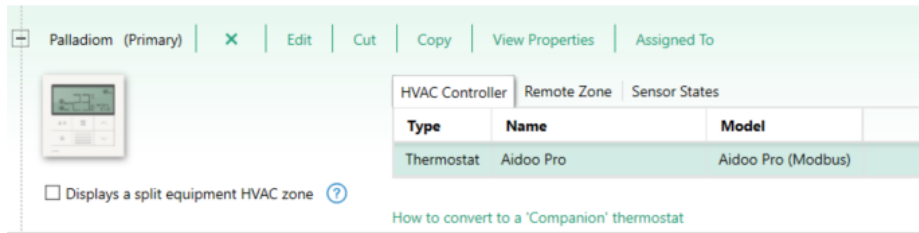
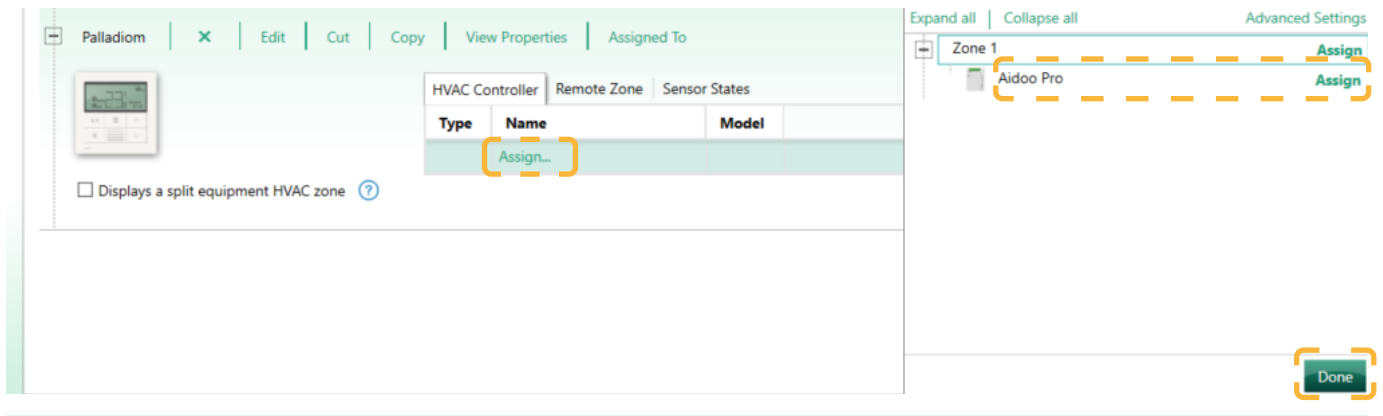
2. Define the HVAC zone on the *design - loads* screen, in the "HVAC zones" tab, and configure their parameters.



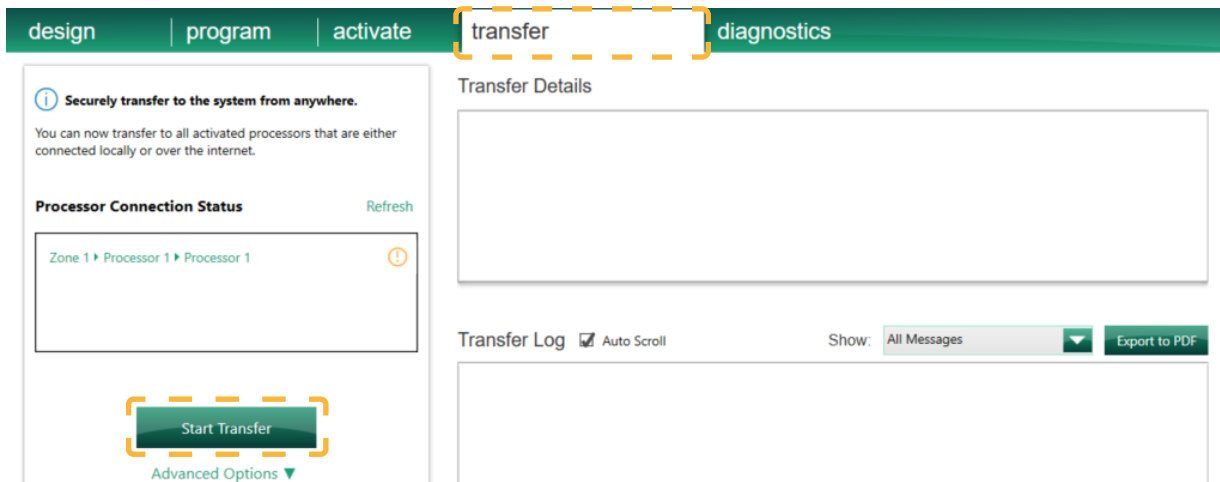
3. From the *design - link assignment* screen, assign the Lutron Palladiom thermostat to the processor's QS link.



4. From the *design - controls* screen, under the *HVAC Controller* parameter, click "Assign" and add the Aidoo Pro.

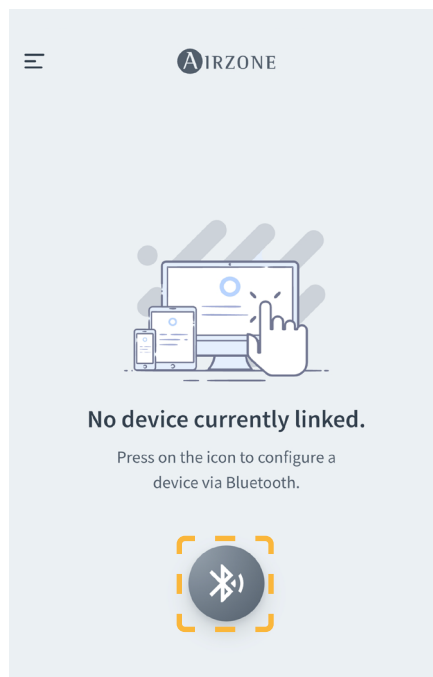
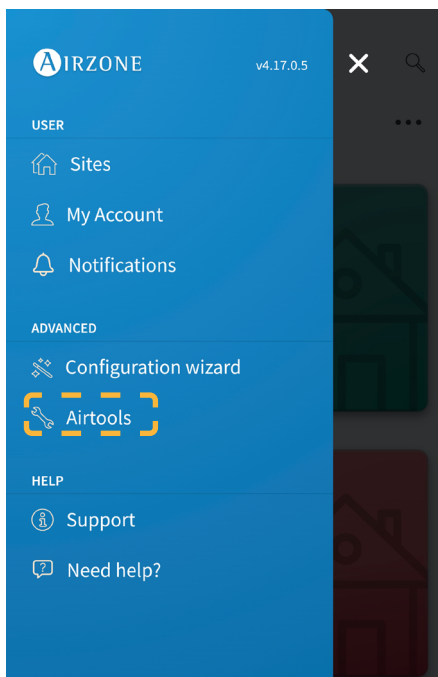


5. Finally, select the *transfer* screen and start transferring the configuration to the processor.

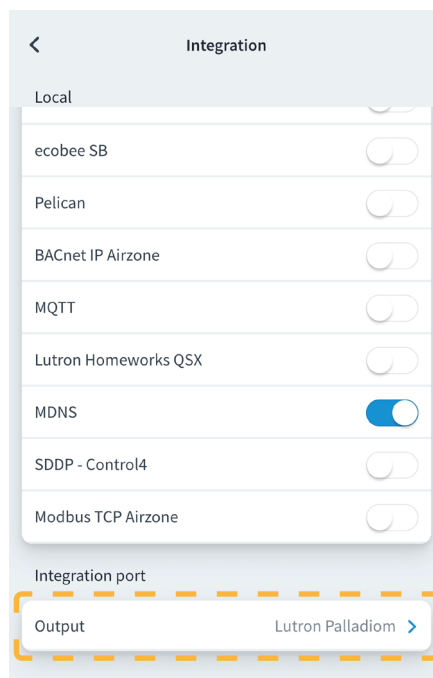
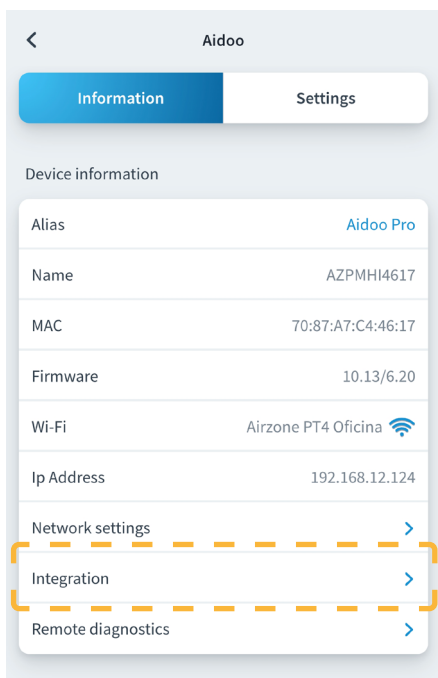


CONFIGURATION WITH AIRZONE CLOUD

Access the Airzone Cloud app and, in the side menu, click on "Airtools" to access the advanced settings. Click on the "Bluetooth" icon to search for devices and select the device that you want to configure.



Selecting the Aidoo Pro device, click on the *Integration* submenu. Then select "Lutron Palladiom" as the output of the integration port.





www.lutron.com



airzonecontrol.com

Marie Curie, 21
29590 Málaga
Spain

v100

