

# Installation Guide

# For HyPanel



Smarter Home Sweeter Life

## Welcome!

This guide applies to PS51-10VFANCOIL-EU and PS51-24VFANCOIL-EU models of HyPanel.

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## **Before We Start**

Your first time installing this product may take up to 40 minutes.

You'll get faster after each installation.



## Warning

The installation procedure involves handling high voltage wiring. Please be careful. To avoid serious personal injury, death, or property damage, turn OFF the power to the circuit and follow all safety precautions before proceeding.

Working with electricity can be dangerous. If you are unsure about, or uncomfortable with the installation, seek the help of a qualified electrician.



## Warning

Keep the device and all its parts out of the reach of children. The small parts or accessories contained may be a choking hazard to them.

## In The Box



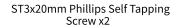
HyPanel x1



Flush Mounted Module x1





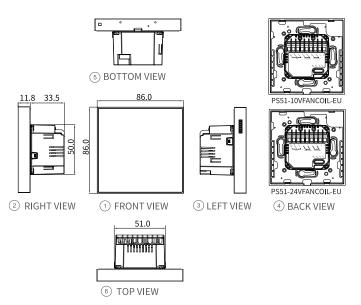




NTC Thermistor x1

## **Check Compatibility**

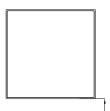
### Product dimensions (mm)



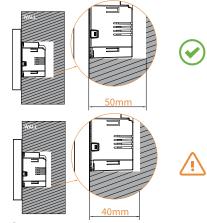
### **Working space**

Make sure HyPanel is compatible with the location where you want to

install it.



1 HYPANEL FRONT VIEW



2 SIDE VIEW: HYPANEL IN WALL

A 50mm(2 inches) deep electrical box is highly recommended for ease of installation. In some scenarios, especially when the wires can be pushed back into the wall far enough, it may be possible to use a 40mm(1.6 inches) deep box.

### **Output Load**

#### PS51-10VFANCOIL-EU

- Fan load capacity: Up to 5A (Resistive), 3A (Inductive)
- Valve compatibility: 0-10V

#### PS51-24VFANCOIL-EU

- Resistive load: 5A at maximum
- Inductive load: 3A at maximum

### 24VAC/DC power required

HyPanel operates with either a 24VAC or 24VDC power supply.

### Wire sizes for different connections

- RS485 and NTC: Recommended wire size is 0.14mm<sup>2</sup> 0.75mm<sup>2</sup> (26-18AWG).
- Fan and Valve: Maximum wire size should be 1.5mm<sup>2</sup> (16AWG).

## **Support Wi-Fi connection**

HyPanel supports Wi-Fi connectivity on both 2.4GHz and 5GHz frequency bands, complying with the IEEE802.11 b/g/n standards.

## Wiring



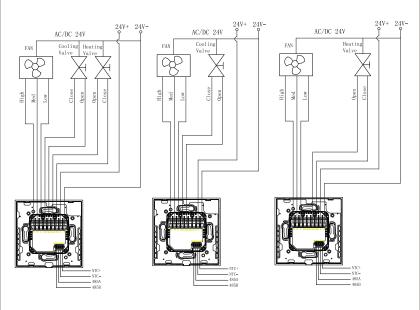
## Warning

Turn OFF the circuit breaker before wiring and proceeding! Always use a voltage detector to verify the power is OFF before wiring and installation!

## Wiring diagram

#### PS51-24VFANCOIL-FU

- The 24V- terminal is connected to the negative pole of the power supply.
- The 24V+ terminal is connected to the positive pole of the power supply.
- High/Med/Low wires regulate the fan motor speed.
- Open/Close wires control the cooling or heating valve.
- NTC+ and NTC- terminals are for the thermistor<sup>3</sup> s leads connection. Not required if no thermistor is used.
- 485A and 485B are two signal lines used to connect a third-party device.
  Not required if no RS485 device is used.



Four Pipe, On/Off

Two Pipe, On/Off

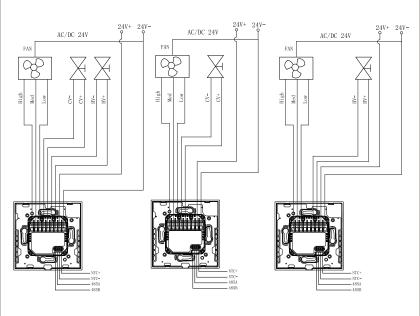
Two Pipe, On/Off

#### PS51-10VFANCOIL-EU

- The 24V- terminal is connected to the negative pole of the power supply.
- The 24V+ terminal is connected to the positive pole of the power supply.
- High/Med/Low wires regulate the fan motor speed.
- CV+/CV- wires control the cooling valve.

  Note that the description of the cooling valve.

  CV+/CV- wires control the cooling valve.
- HV+/HV- wires control the heating valve.
- NTC+ and NTC- terminals are for the thermistor's leads connection. Not required if no thermistor is used.
- 485A and 485B are two signal lines used to connect a third-party device.
  Not required if no RS485 device is used.



Four Pipe, On/Off

Two Pipe, On/Off

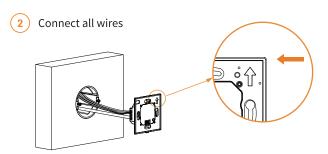
Two Pipe, On/Off

### **Connect wires**

1 Strip and straighten wires

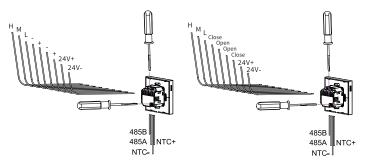


Wires connected to HyPanel should have stripped and straight ends. Remove the plastic sheathing of the wire, and make sure the exposed wire ends measure approximately 8 mm (5/16 inch) in length.



Always make sure the arrow on the front of the flush mounted module is pointing up.

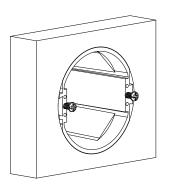
#### PS51-24VFANCOIL-EU



- Plug the wires to the corresponding terminals on the back of the flush mounted module.
- Tighten the screws clockwise with a flat-head screwdriver until wires are secure.
- Double check by gently tugging on each wire.
- To use a thermistor, plug the NTC cable into the designated terminals at the bottom right.
- To connect to a RS485 device, connect the RS485 cables to the designated terminals.

## **Installation**

## 1 Insert screws



- Insert the supplied screws into the designated holes on the electrical box.
- Change the torque on the electric screwdriver to 5kgf.cm.
- Turn screws clockwise with the screwdriver.
- Do not fully tighten the screws. The screw head must protrude at least 3 mm (1/8 inch) from the wall surface.

## Install flush mounted module

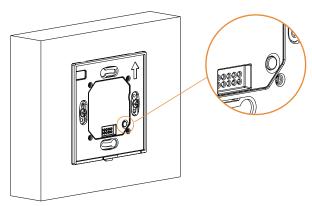


Attach the flush mounted module to the electrical box. The screws should go through the holes on the module.



- Adjust the module to be level and ensure it is flush against the wall.
- Tighten the screws to attach the module to the wall, taking care not to over-tightened them.

## 3 Test connected devices



- Turn on the circuit breaker to provide power to the flush mounted module.
- Press the button on the module to check if the connected devices can work.

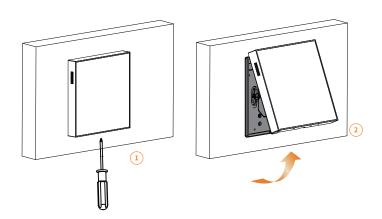
If the devices cannot function, do NOT install the panel. Turn the power off and re-check the wire connections.

## 4 Install panel



- Position the panel at a tilt as the picture shows.
- Press the panel into the flush mounted module until it clicks.

### If you need to remove the panel



- Insert a flat-head screwdriver with about 6mm width into the slot at the bottom edge.
- Gently pry the panel up.

## **Congratulations!**

You are done with the HyPanel installation!

Start your smart home journey with Akubela now!

## **Get Help**

For help or more assistance, contact us at: https://ticket.akuvox.com/

For videos, guides, and additional product formation, visit us at: https://knowledge.akuvox.com

