Installation Guide

For HyPanel Ultra



Smarter Home
Sweeter Life

Welcome!

This guide applies to PH81-PoE-ST model of HyPanel Ultra.

Contents

Before We Start 2

In the Box 3

Check Compatibility 4

Wiring 9

Installation 13

Get Help 20

Before We Start

Your first time installing this product may take up to 40 minutes.
You'll get faster after each installation.



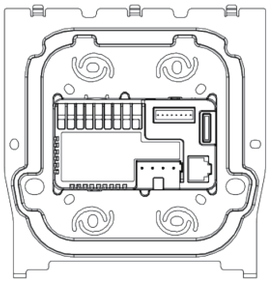
Warning

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 Ultra x1



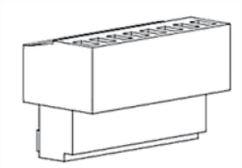
Flush Mounted Module x1



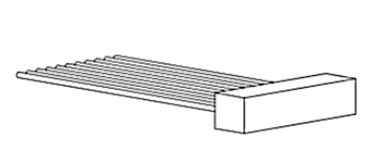
ST3.0x20mm Phillips
Self Tapping Screw x6



M4.0x20mm Phillips
Machine Screw x4



Terminal Block x1



10-Pin Cable x1

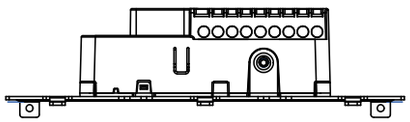


Hex Key x1

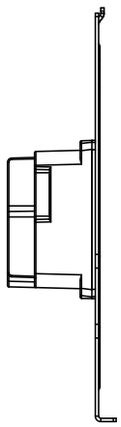
Check Compatibility

Product dimensions

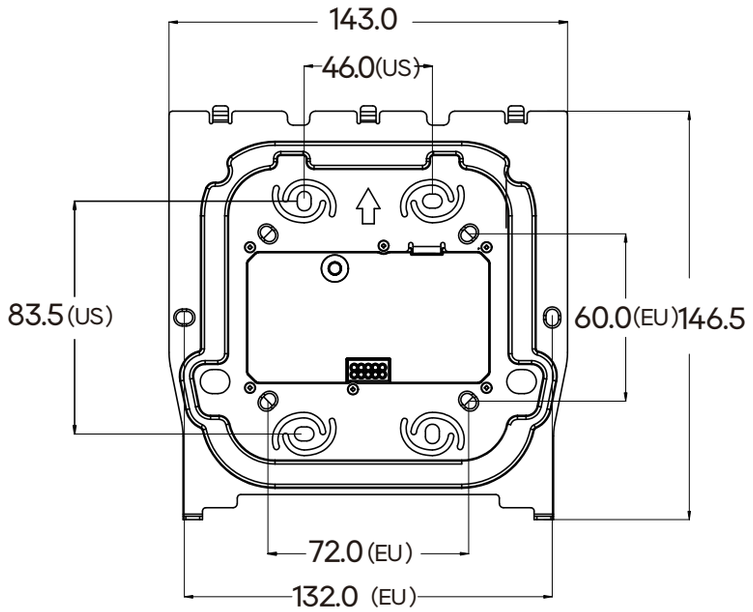
- **Flush mounted module**



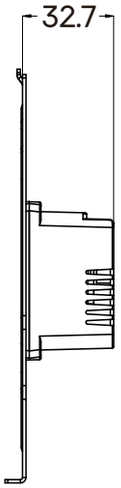
5 BOTTOM VIEW



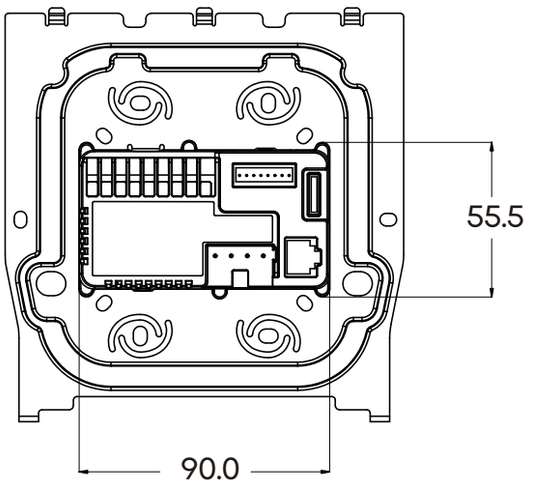
2 RIGHT VIEW



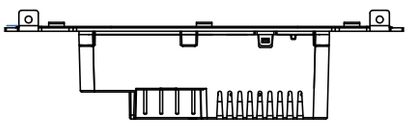
1 FRONT VIEW



3 LEFT VIEW



4 BACK VIEW



6 TOP VIEW

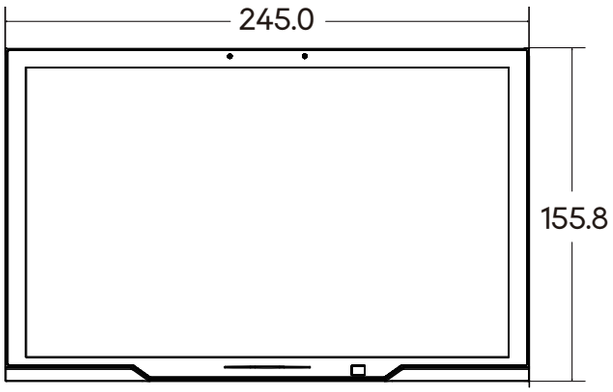
- **Panel**



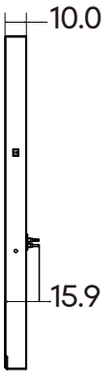
5 BOTTOM VIEW



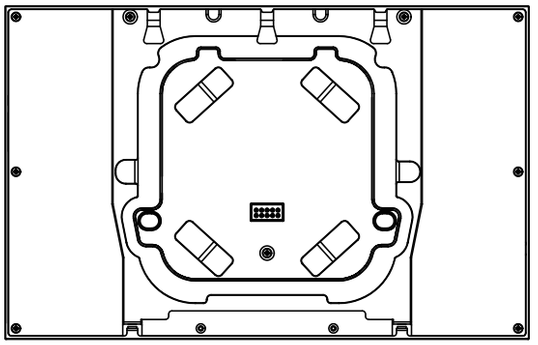
2 RIGHT VIEW



1 FRONT VIEW



3 LEFT VIEW



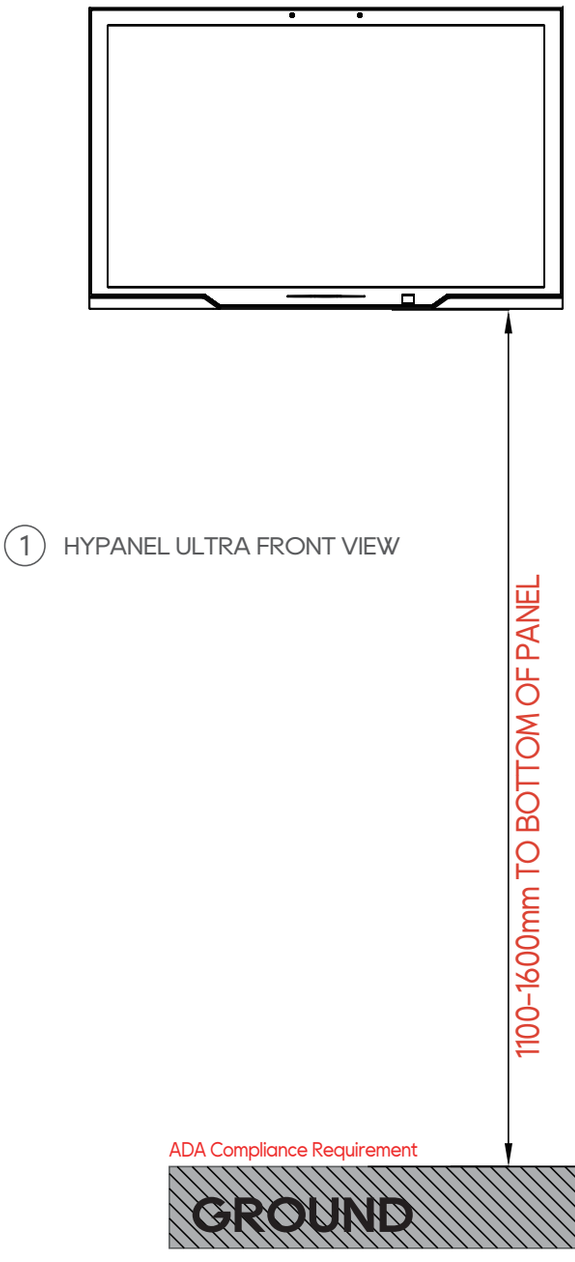
4 BACK VIEW



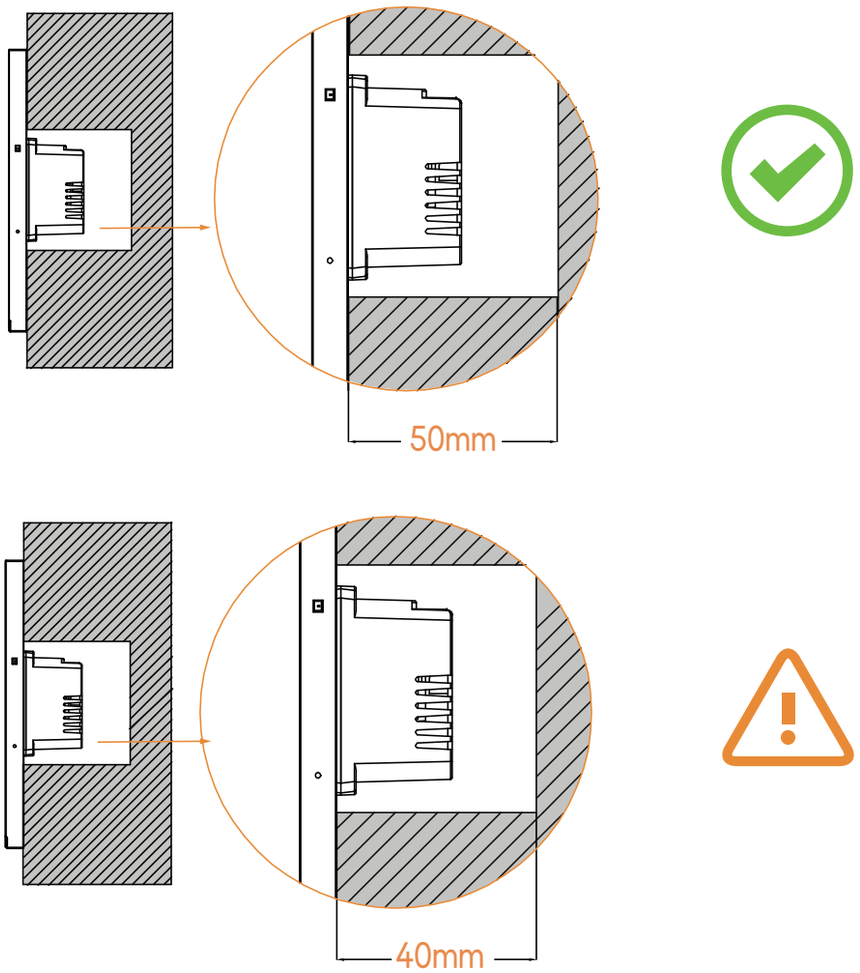
6 TOP VIEW

Working space

Make sure HyPanel Ultra is compatible with the location where you want to install it.



1 HYPANEL ULTRA FRONT VIEW



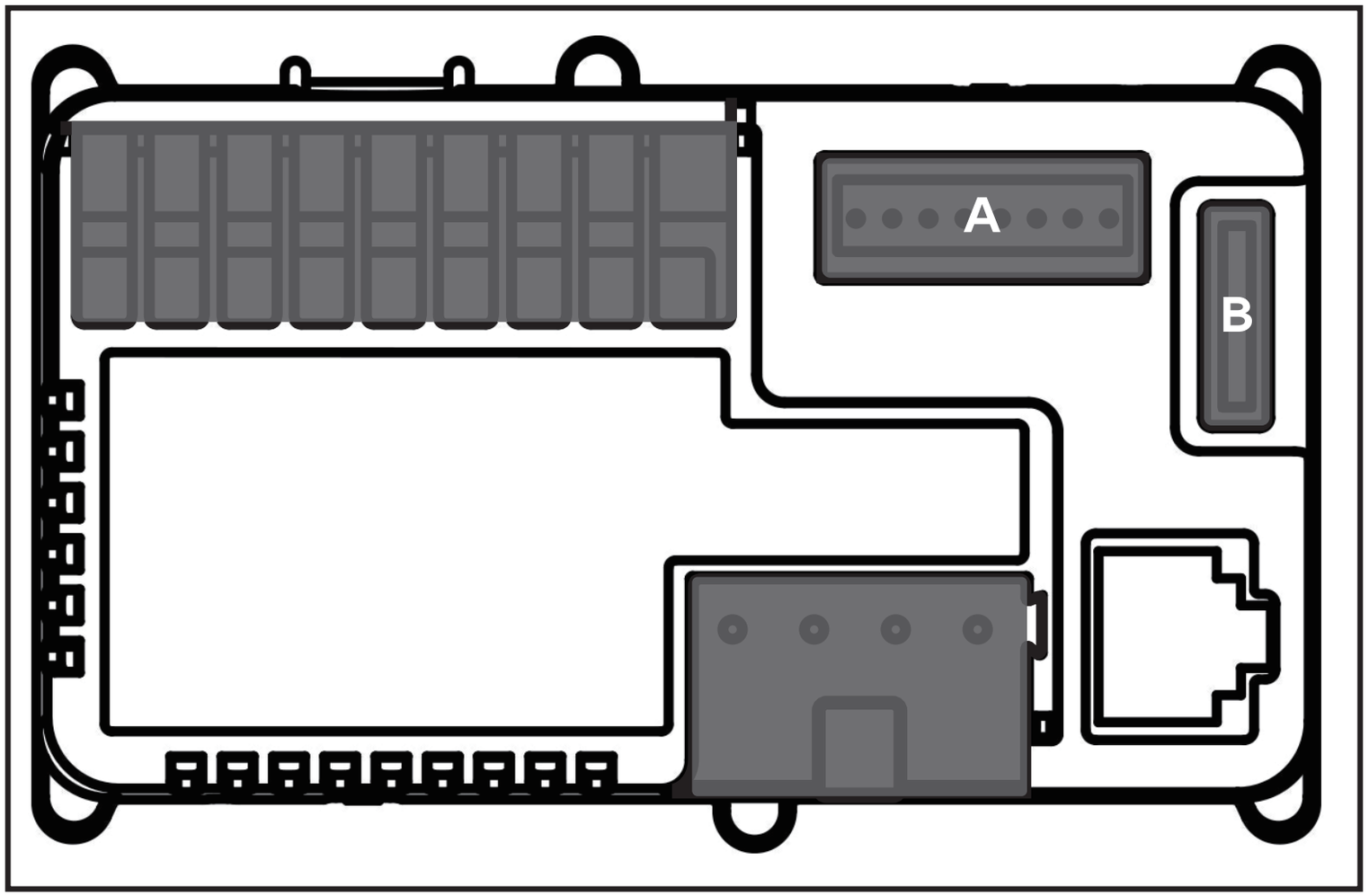
2 SIDE VIEW: HYPANEL ULTRA IN WALL

A 50mm(2 inches) deep electrical box is highly recommended for ease of installation.

Connector zone specifications

The flush mounted module has 2 connector zones: A and B， each designed for specific applications.

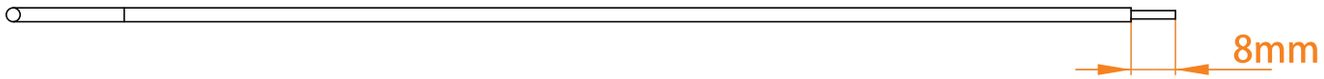
- Zone A:
  - Relay connections: Max 2A at 30VDC per channel
  - Power supply: 12~24VDC
- Zone B: 0~5VDC digital inputs.



Wire requirements

- **Wire sizes for each connector zone**
  - Zone A: 0.08mm^2~ 0.5mm^2 (28 ~ 20AWG) wires.
  - Zone B: Supplied 10-pin cable.

- **Stripped and straight wire ends:**
  - 8 mm (5/16 inch) after removing the plastic sheathing.



Powered by PoE or 12~24VDC supply

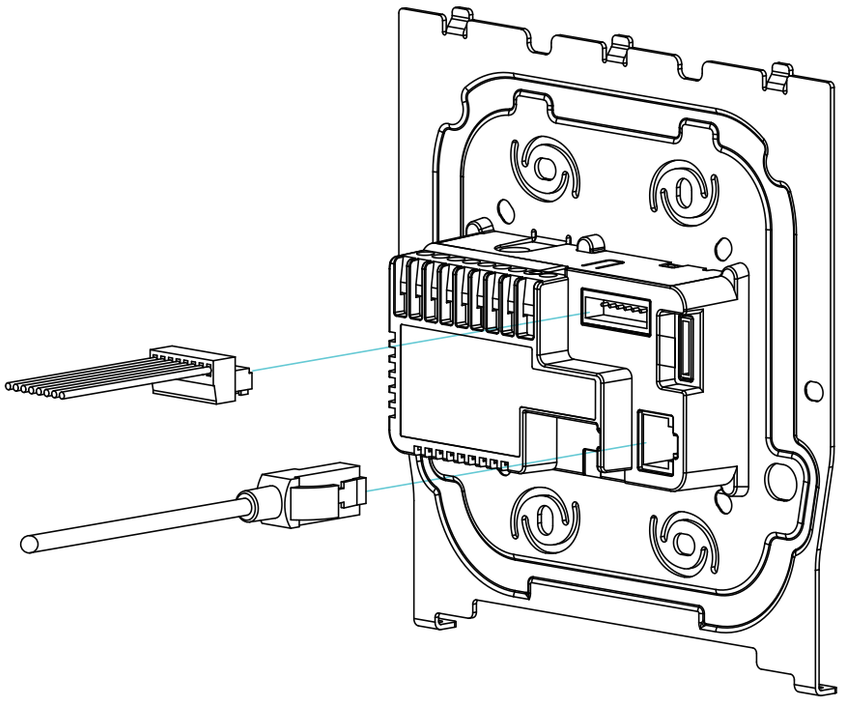
HyPanel Ultra offers two power options or a 12~24VDC power supply with a 18W rating.

Support Wi-Fi and Ethernet connections

HyPanel Ultra can operate with both wireless and wired networks. A wired connection is recommended for greater reliability and faster data exchange.

Wiring

Power supply connection



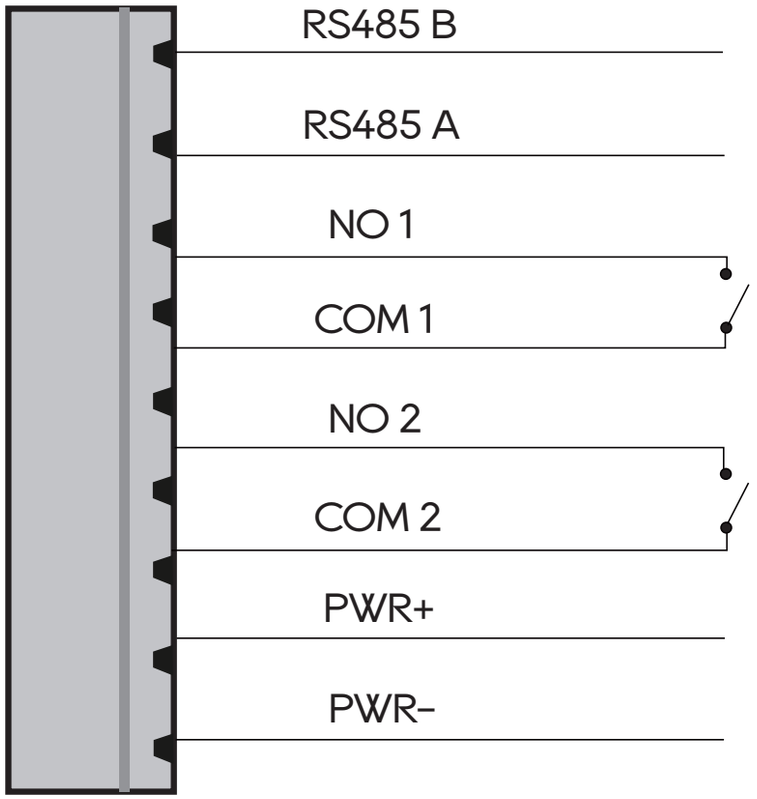
Option 1 Power via PoE

- Connect an Ethernet cable from a PoE switch to the device's Ethernet port.

Option 2 Power via 12~24V adapter

- Plug the supplied terminal block into Zone A.
  - Insert wires from a 12~24 V DC power adapter into the PWR+ and PWR- terminals.

Zone A connections

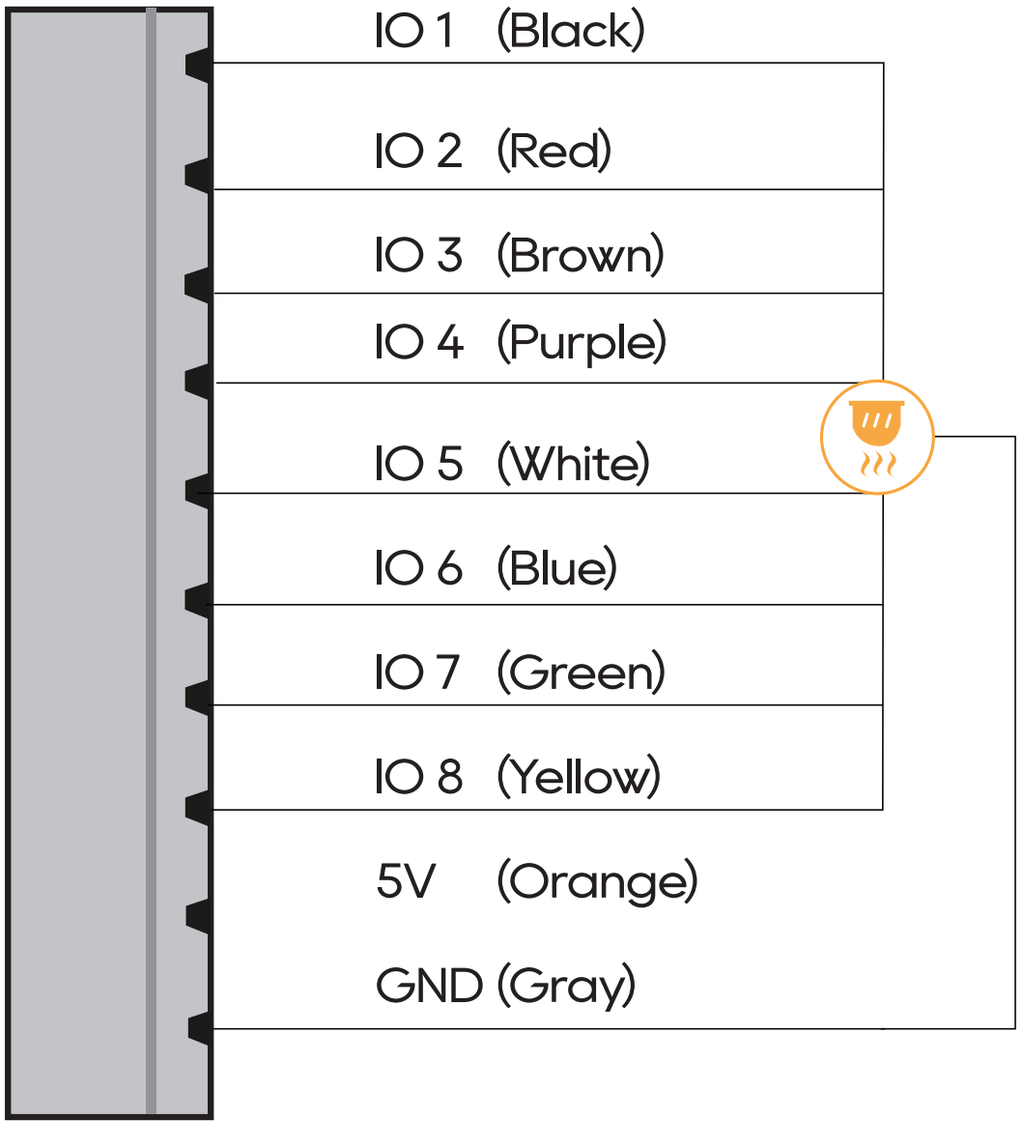


- RS485A/B: Connect to RS485 devices.
- NO: Normally Open terminals, connected to devices such as door locks. Note that each channel supports 2A/30V maximum.
- COM: Common terminals, connected to devices such as door locks. Note that each channel supports 2A/30V maximum.
- PWR+/–: Connect to a 12~24 VDC power adapter to provide power to HyPanel Ultra when PoE is not used.

Zone B connections

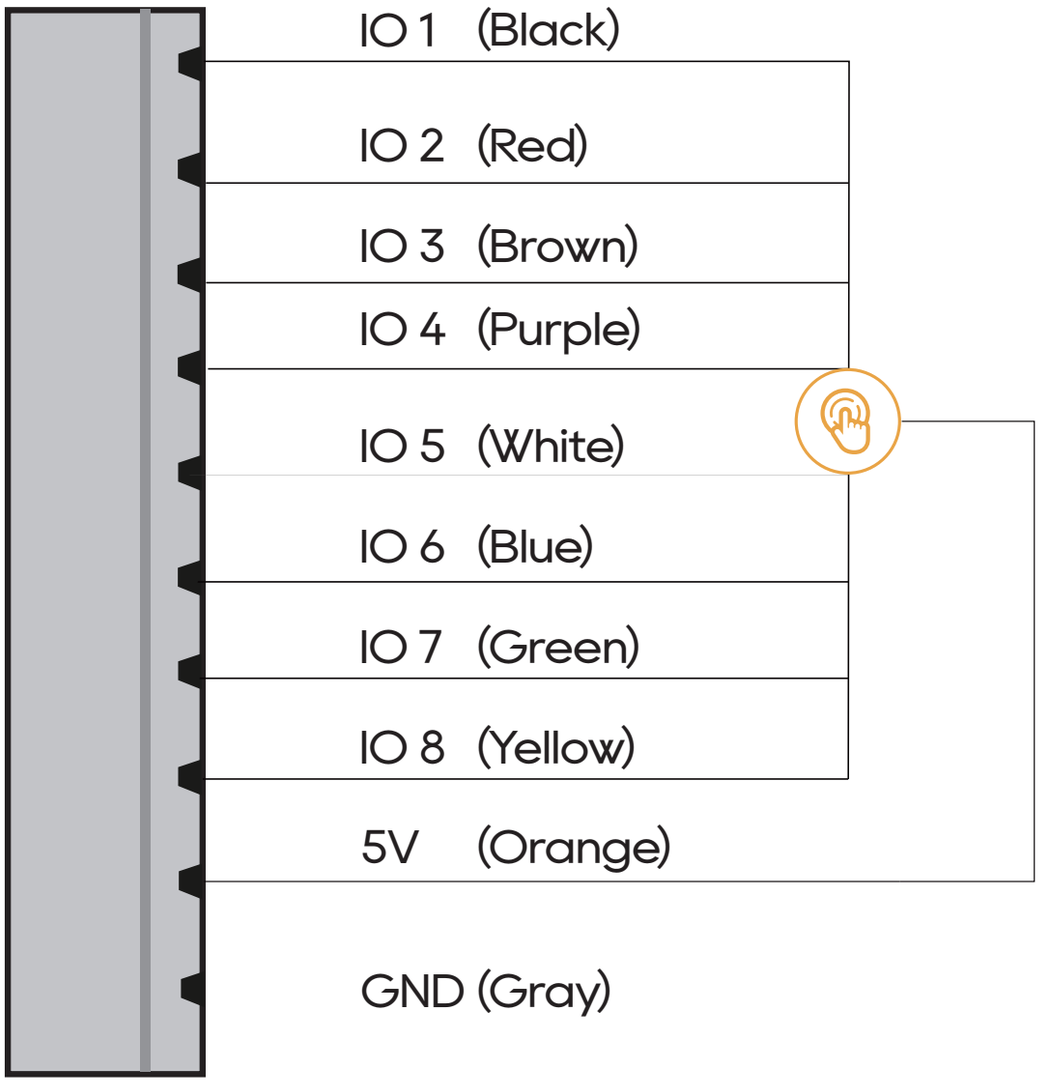
Sample connection 1: Devices with their own power source

- Connect their wires to the **IO** and **GND** terminals.



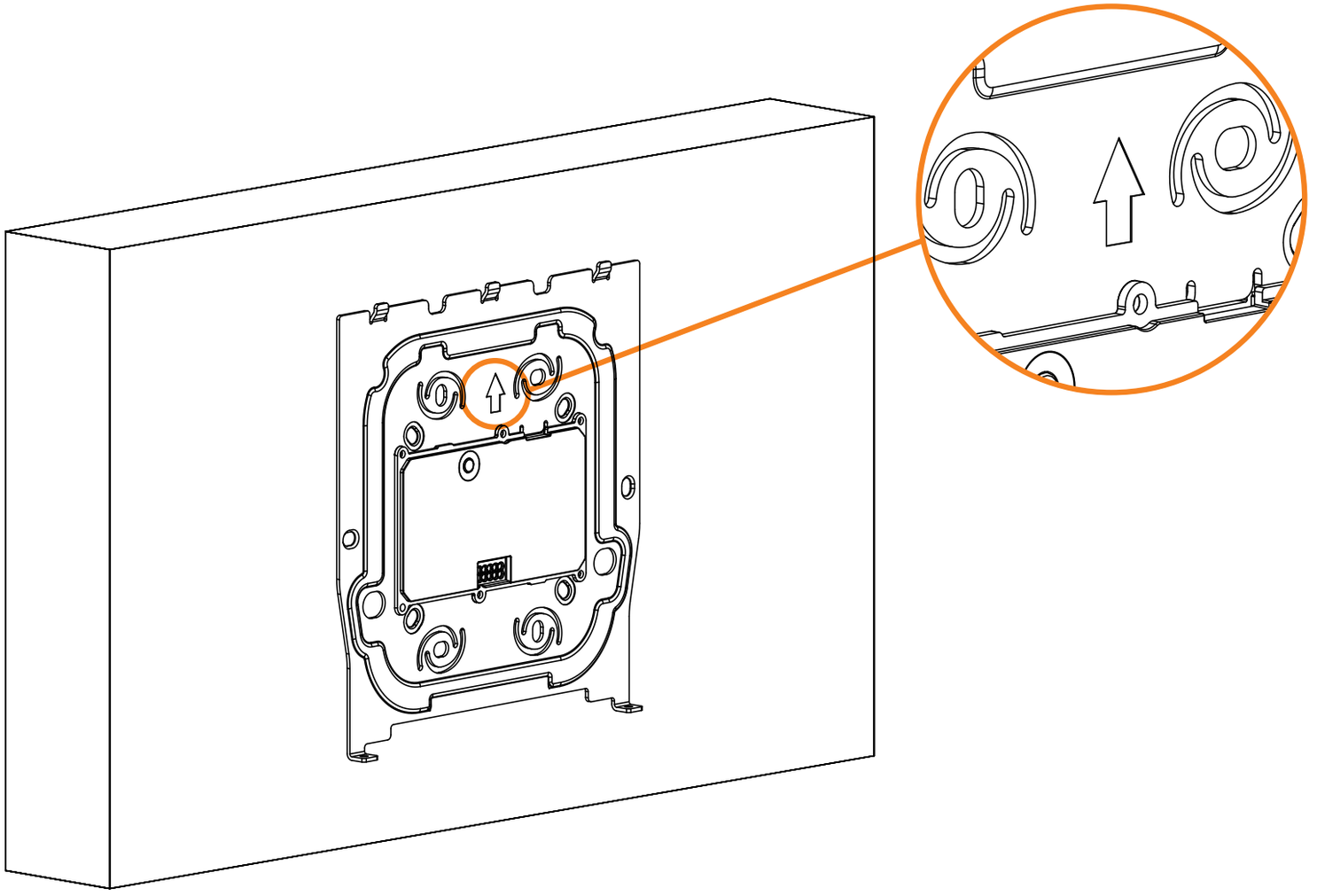
Sample connection 2: Dry contact devices without power source

- For dry contact devices without their own power source (e.g., doorbell buttons, SOS pull-cord buttons), connect their wires to **IO** and **5V** terminals.



Installation

1 Confirm installation direction

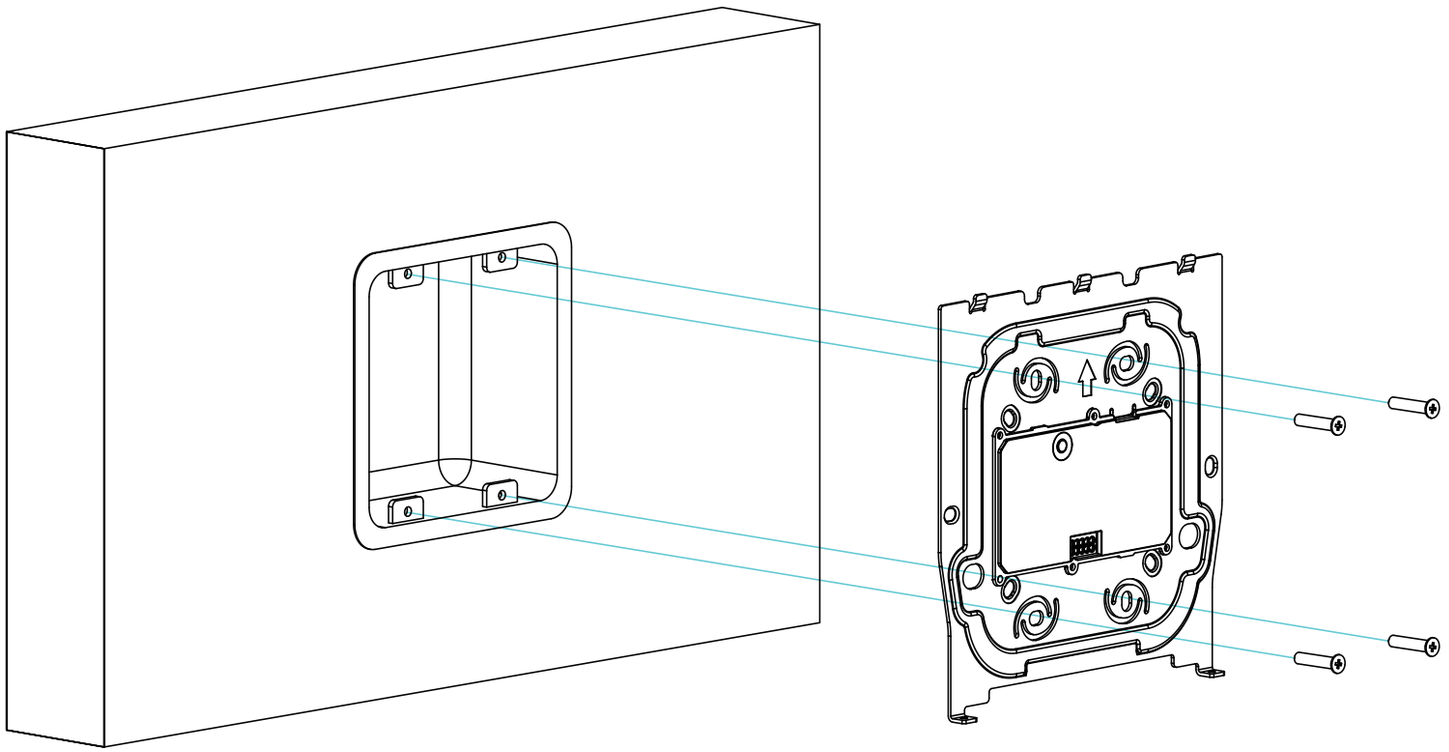


Make sure the arrow on the front of the flush mounted module is pointing up.

2 Install flush mounted module

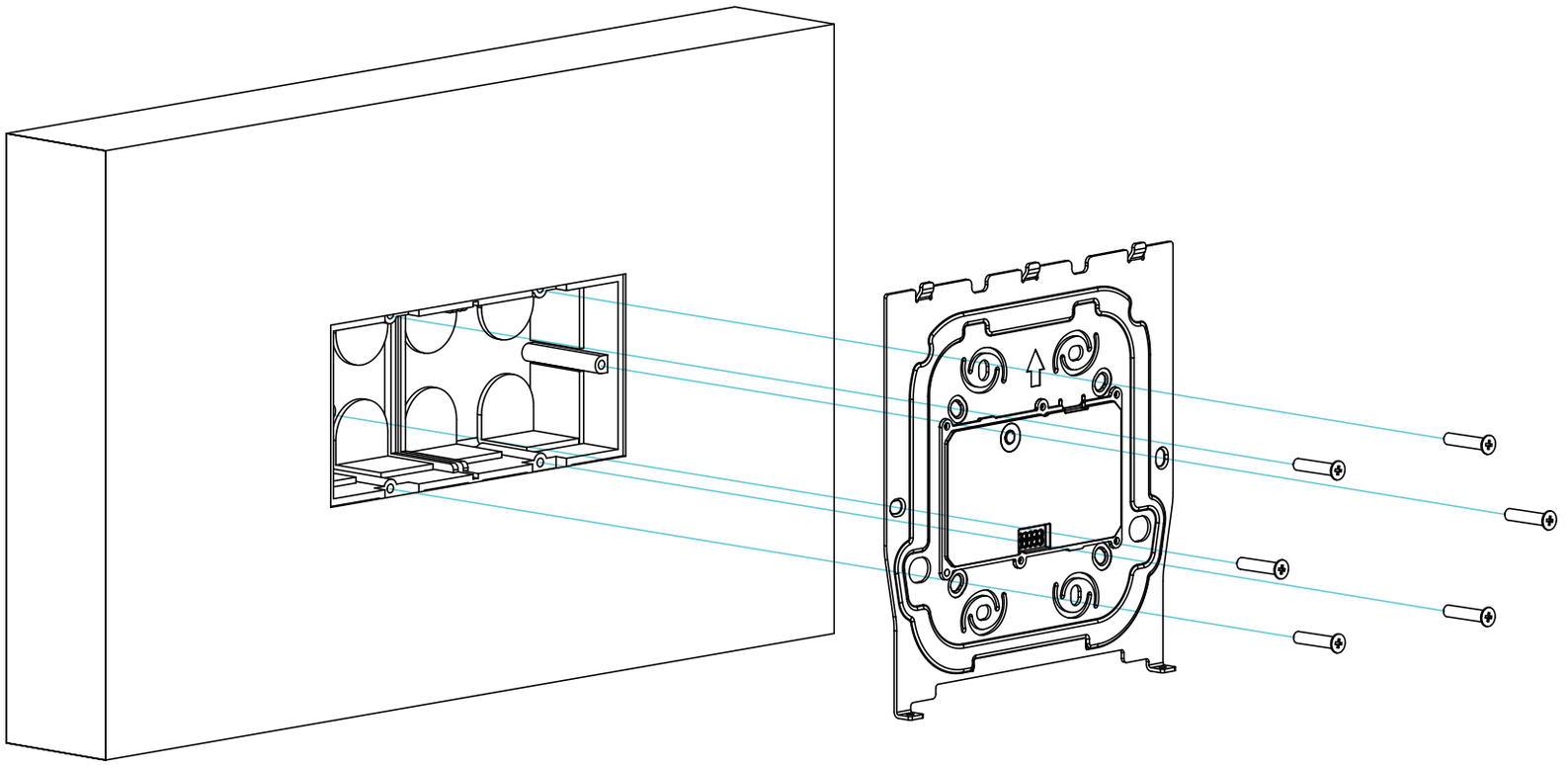
This installation step varies slightly depending on the specific standard electrical box.

a.US standard electrical box



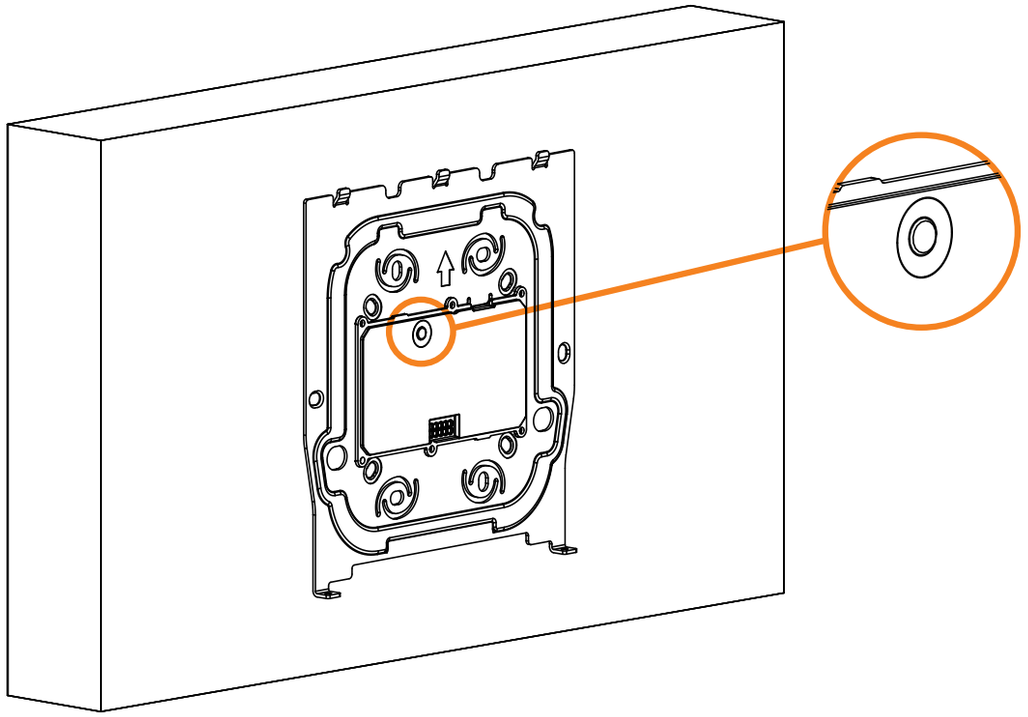
- Change the torque on the electric screwdriver to 5kgf.cm.
- Fix the flush mounted module to the wall using four supplied M4x20mm machine screws.
- Ensure the flush mounted module is level and flush against the wall.

b.EU standard electrical box



- Change the torque on the electric screwdriver to 5kgf.cm.
- Fix the flush mounted module to the wall using six supplied ST3.0x20mm self tapping screws.
- Ensure the flush mounted module is level and flush against the wall.

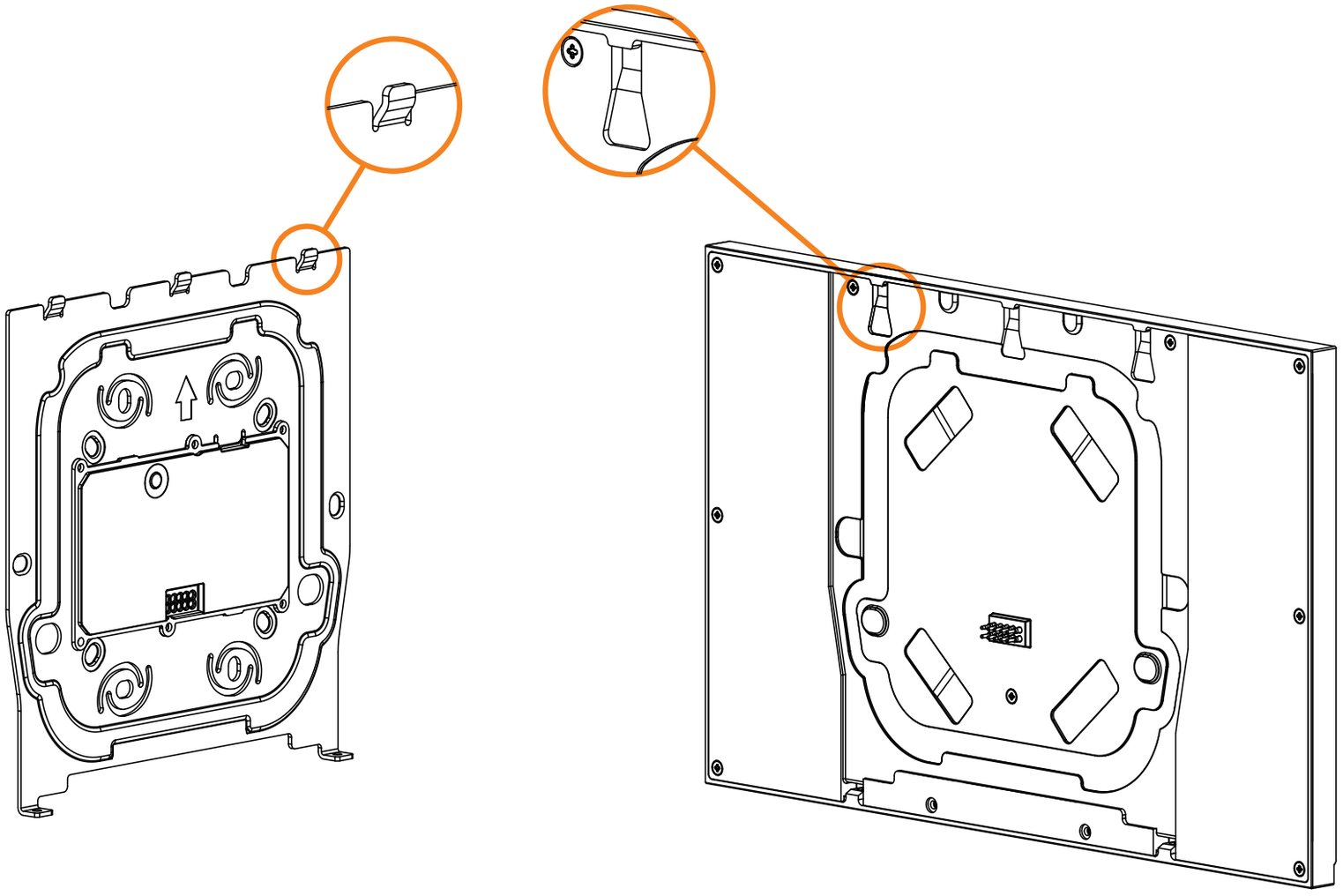
3 Test connected devices



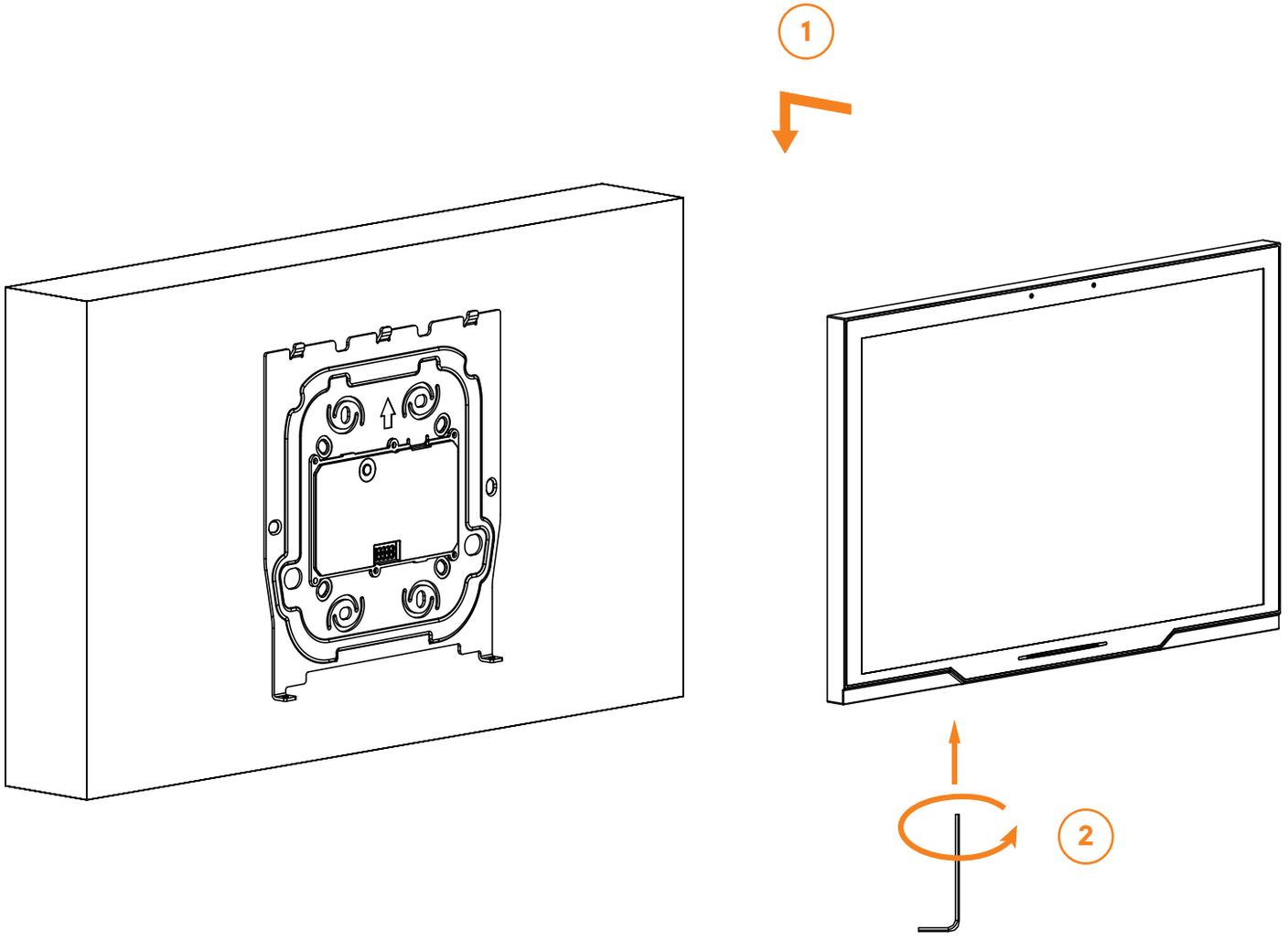
- Turn on the circuit breaker to provide power to the flush mounted module.
- Press the button to check if the connected devices can work.
  - Press the button once, the connected 100~240V device is turned on.
  - Press the button again, the device is turned off .
- Repeat this process to test the four connected 100~240V devices and two connected 2A/30V DC devices.

If the devices do not turn on/off, do NOT install the panel. Turn the power off and re-check the wire connections.

4 Install panel

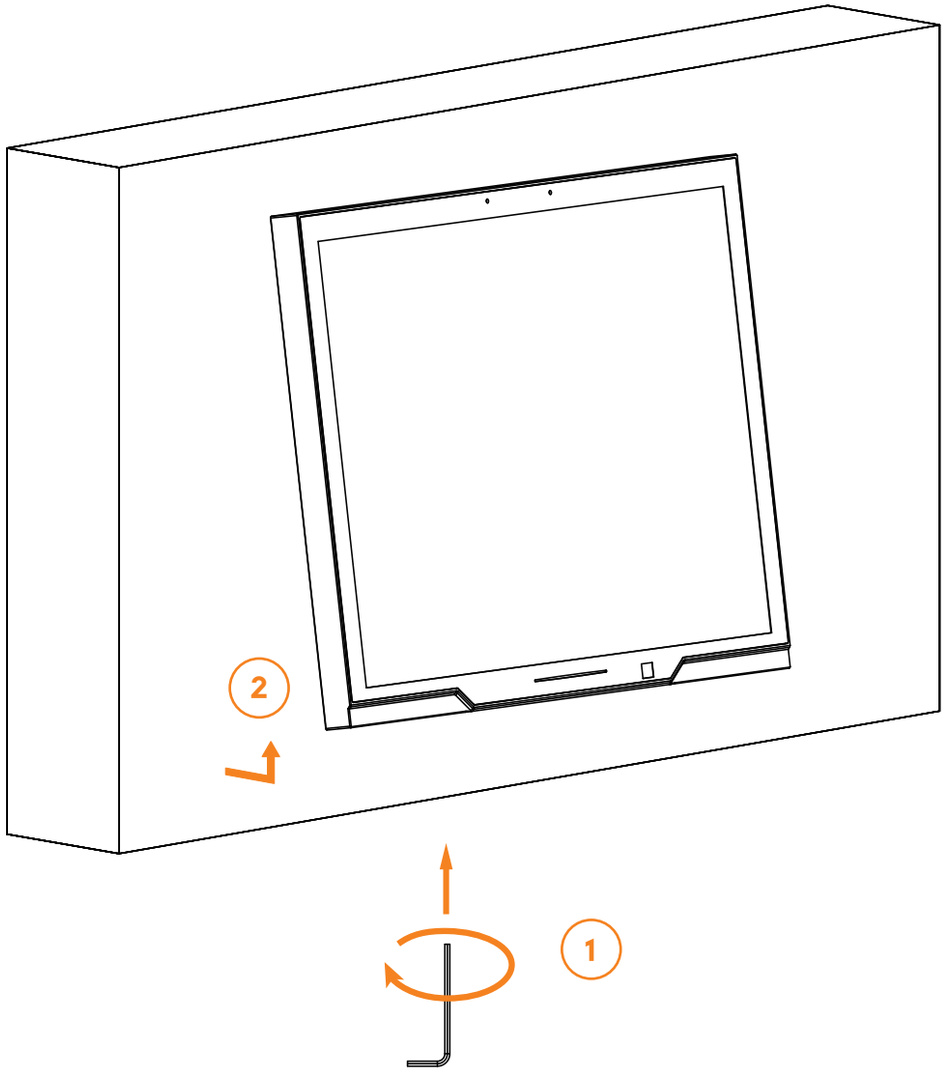


Line up the two clips on the flush mounted module with the notches on the panel. Snap the panel into place and press it down.



- Check the panel is properly clipped onto the module and is flush against the wall.
- Locate two screw holes at the bottom of the panel, each already containing a screw.
- Tighten the screws with the included hex key.

If you need to remove the panel



1. Turn two screws at the bottom with the hex key until the rear edge of the panel comes loose.
2. Hold the panel's top with one hand, and pull the panel outwards from the bottom.

Congratulations!

You are done with the HyPanel Ultra 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