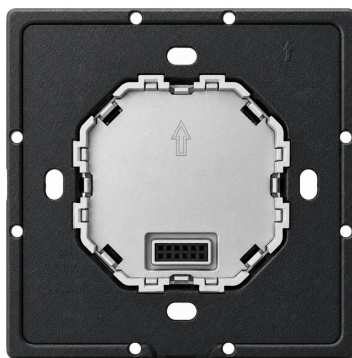


Inkslab Series Panel Power Interface (KNX)

Datasheet



MPFPIY-xF-KT.18



Please scan the QR code above to check the latest version of datasheet!

Before using this product, please read this datasheet carefully and
keep it properly!

Document Version: C

◆◆ Overview

Inkslab Series Panel Power Interface (KNX)

This base communicates and operates via the HDL KNX protocol. Designed for Yan-series KNX smart panels, it delivers operating voltage and communication signals to the panels.

It supports relay circuit on/off control through device ID addressing, and acts as the power interface for panels to enable intelligent control of household lighting, curtains, fans, sockets and other electrical loads.

Product Name	Model No.	Remark
Inkslab Series Panel Power Interface EU	MPFPIY-1PF-KT.18	EU-standard Base (with mounting bracket)
Inkslab Series Panel Power Interface With Auxiliary Power Supply EU	MPFPIY-2PF-KT.18	EU-standard Base (with mounting bracket)
Inkslab Series Panel Power Interface With 2CH 10A Relay	MPFPIY-0210F-KT.17	GB-standard Base (with mounting bracket)
Inkslab Series Panel Power Interface With 4CH 10A Relay	MPFPIY-0410F-KT.17	GB-standard Base (with mounting bracket)

◆◆ Appearance

(1) EU-standard Base:

MPFPIY-1PF-KT.18

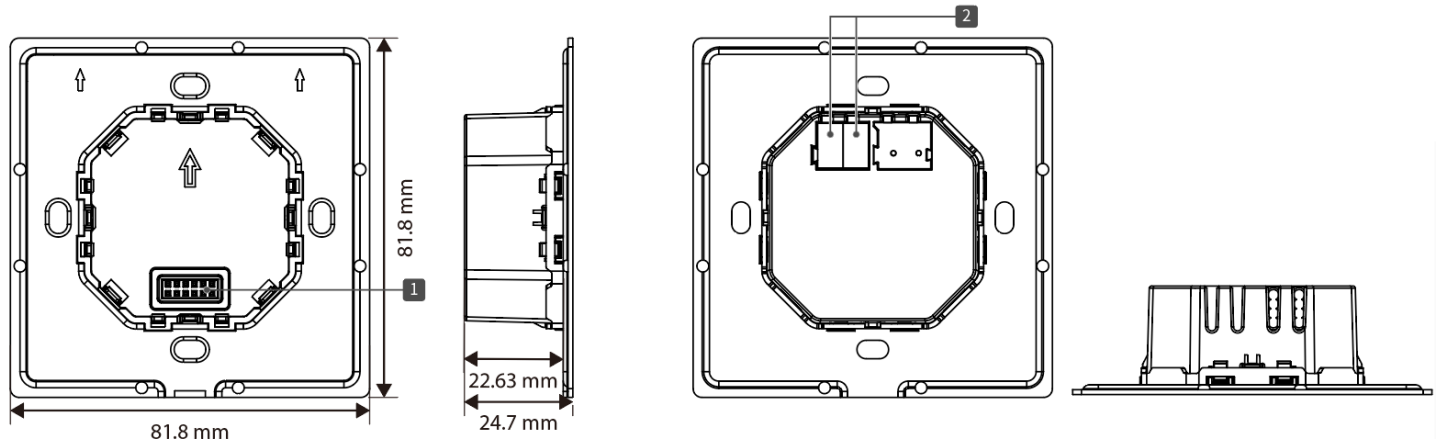


Figure 1

MPFPIY-2PF-KT.18

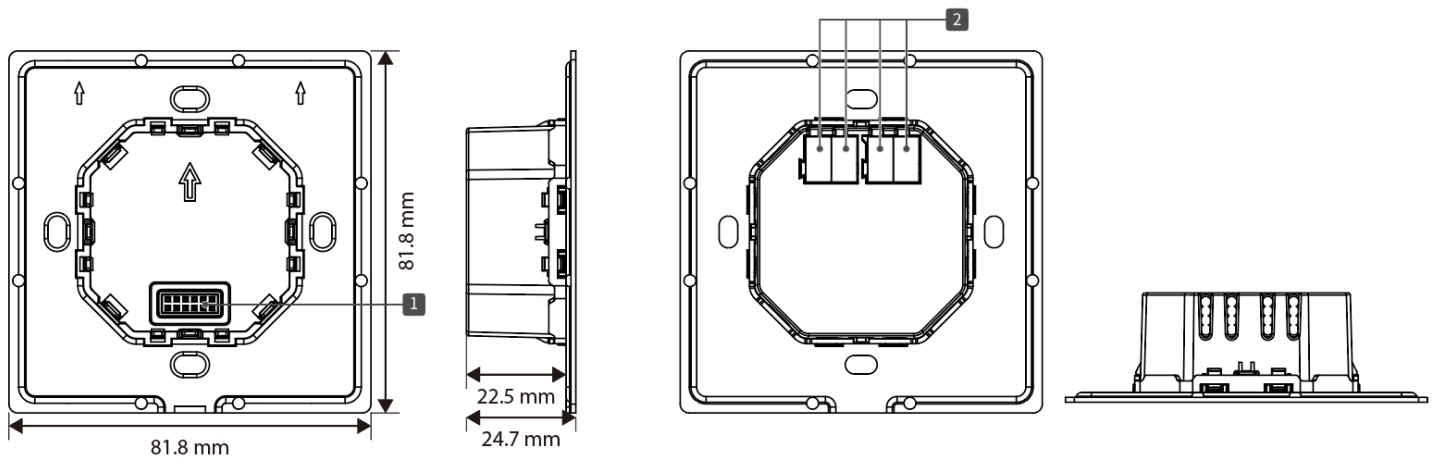


Figure 2

(2) GB-standard Base:

MPFPIY-0210F-KT.17

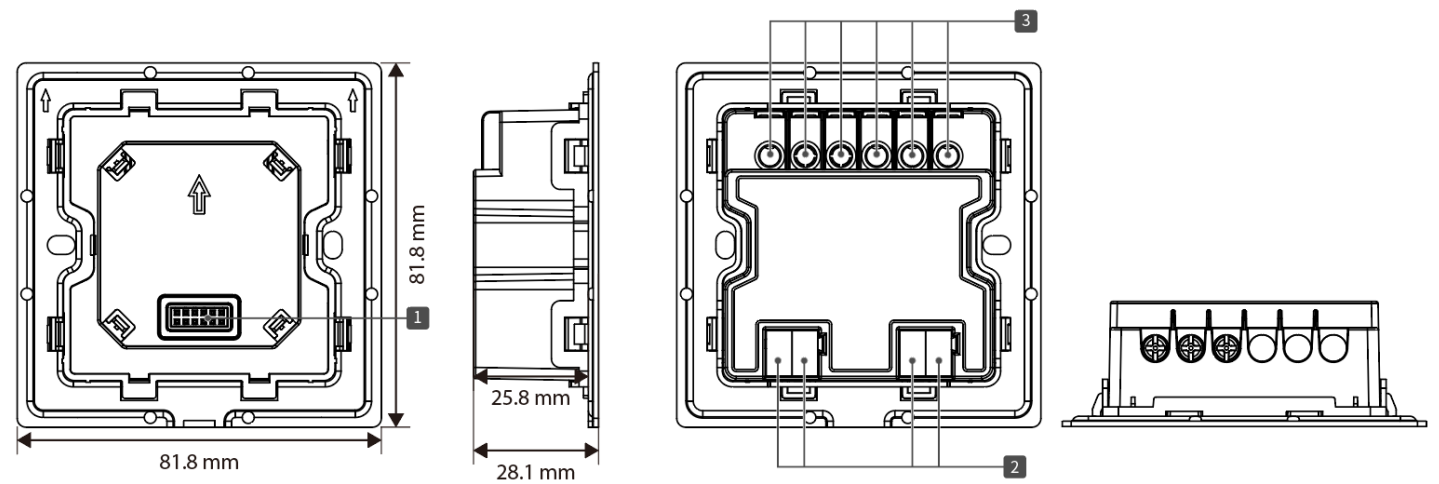


Figure 3

MPFPIY-0410F-KT.17

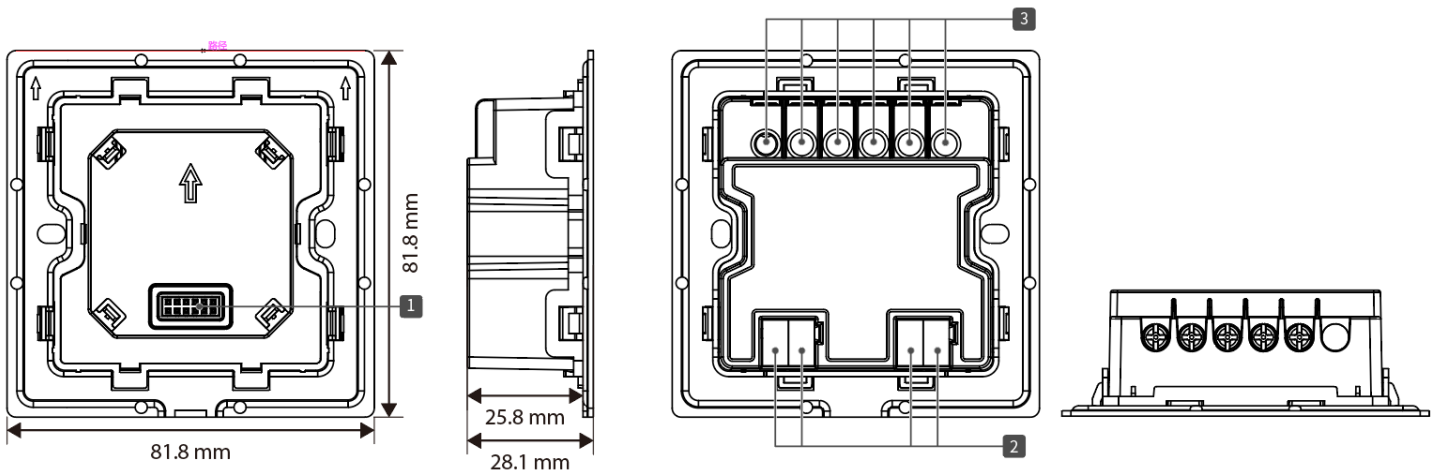


Figure 4

Port Information:

1. Communication Interface: Supplies operating voltage and communication signals.
2. HDL KNX Bus Interface
3. Relay Circuit Wiring Terminals

◆◆ Technical Data

Item	Parameter
Working voltage	21-30V DC
Auxiliary voltage	20-30V DC
Input voltage	MPFPIY-0210F-KT.17: 100-240V~50/60Hz MPFPIY-0410F-KT.17: 100-240V~50/60Hz
Output channel	MPFPIY-0210F-KT.17: 2CH, 10A/CH MPFPIY-0410F-KT.17: 4CH, 10A/CH Resistive load: 1100W@230Vac/channel, 550W@110Vac/channel Capacitive load: 400W@230Vac/channel, 200W@110Vac/channel
Communication protocol	KNX
Cable diameter of bus terminal	0.6-0.8mm
Working temperature	-5°C~45°C
Working relative humidity	≤90%RH, non-condensed
Storage temperature	-20°C~60°C
Storage relative humidity	≤93%

◆◆ Specifications

Item	Parameter
Dimensions (W X H X D)	MPFPIY-1PF-KT.18: 81.8mm × 81.8mm × 24.7mm MPFPIY-2PF-KT.18: 81.8mm × 81.8mm × 24.7mm MPFPIY-0210F-KT.17: 81.8mm × 81.8mm × 28.1mm MPFPIY-0410F-KT.17: 81.8mm × 81.8mm × 28.1mm
Net weight	MPFPIY-1PF-KT.18: 69g MPFPIY-2PF-KT.18: 71.6g MPFPIY-0210F-KT.17: 94.8g MPFPIY-0410F-KT.17: 111.3g
Housing material	PC
Installation	Wall box
IP degree(compliant with EN 60529)	IP20

◆◆ Safety Precaution

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. (hereinafter referred to as HDL) or its appointed service agencies. The electric construction shall comply with local

laws and safety regulations.

- HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this datasheet.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.

◆◆ Wiring

The device can be used with Inkslab Series Panel Power Interface EU, Inkslab Series Panel Power Interface With Auxiliary Power Supply EU, Inkslab Series Panel Power Interface With 2CH 10A Relay, Inkslab Series Panel Power Interface With 4CH 10A Relay.

- The relay-equipped bases control the on-off status of each circuit for connected wired loads, e.g. switching connected lighting on and off.
- Daisy-chain wiring is recommended for bus connection. Observe HDL standard KNX bus wiring: KNX+, KNX-, GND, +24 V.

(1) Wiring for EU-Standard Base:

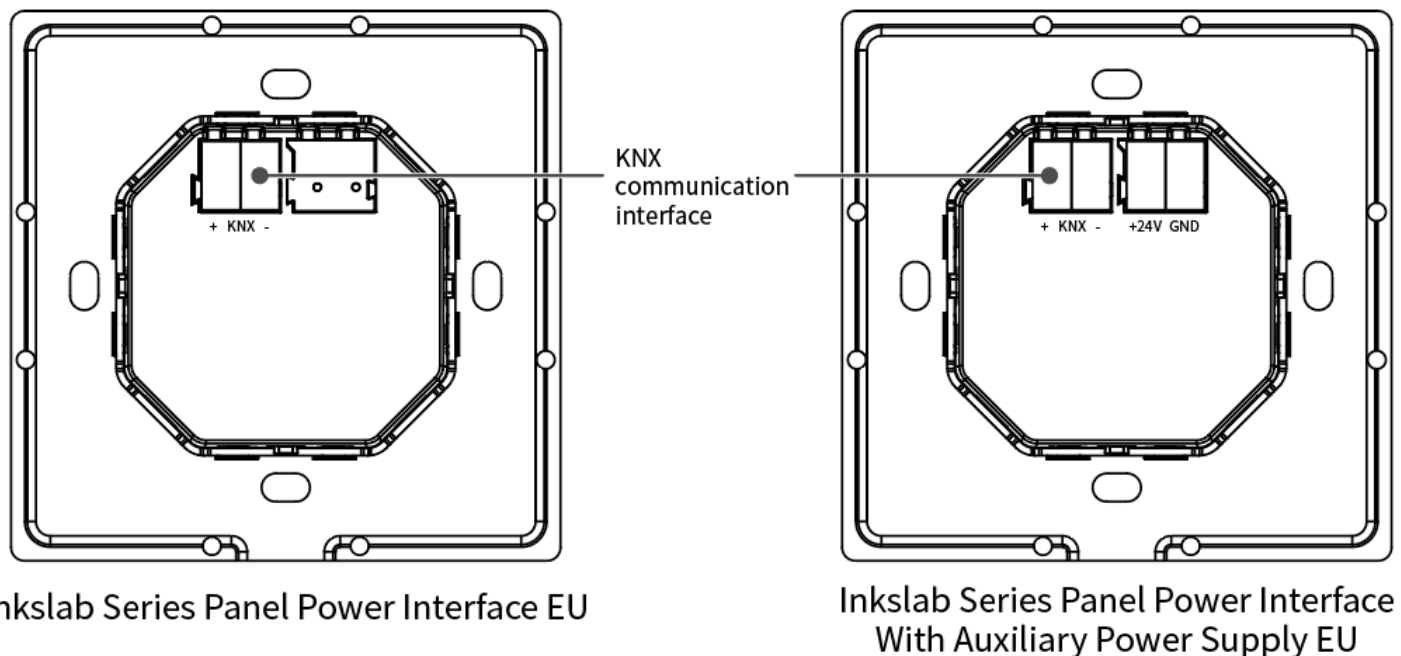
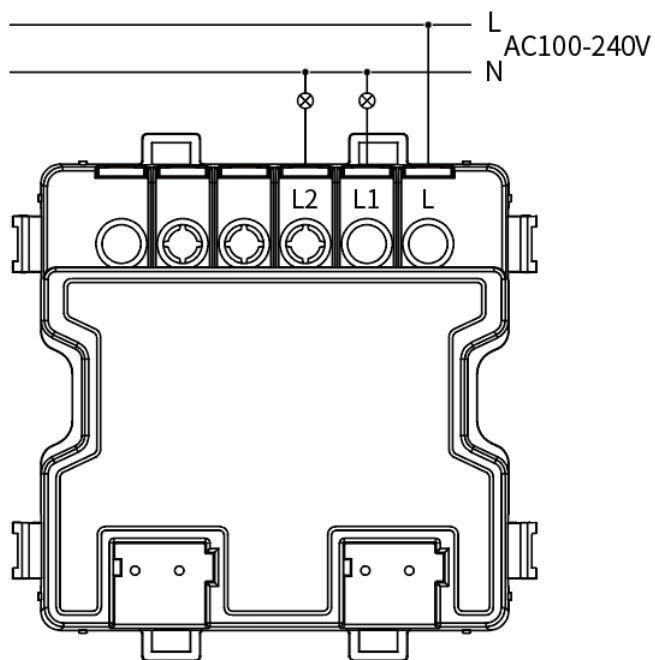


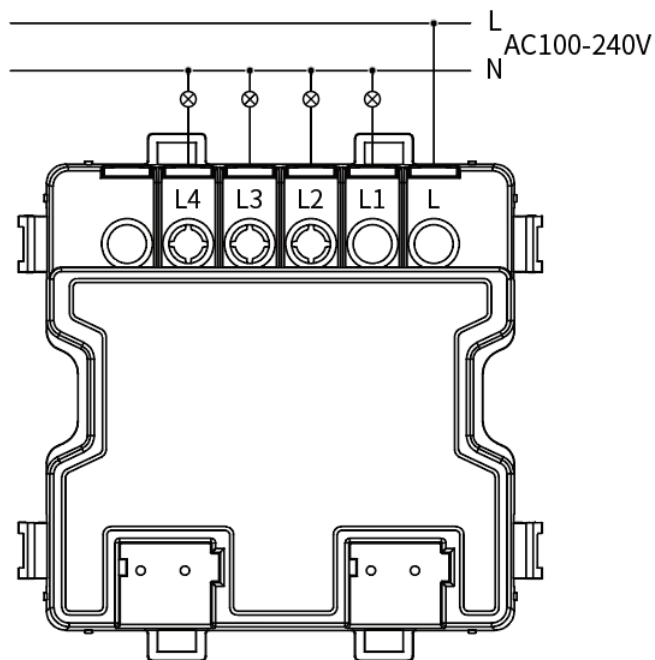
Figure 5

(2) Wiring for GB-Standard Base:

Note: Only 86-type wall box is available for installation. The depth of wall box should be $\geq 50\text{mm}$.



Inkslab Series Panel Power Interface With 2CH 10A Relay



Inkslab Series Panel Power Interface With 4CH 10A Relay

Figure 6

◆◆ Installation

Warning:

- Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.

Note:

- Before installation, if the panel is still assembled with power interface, please remove the panel by following the instructions in the section Disassembly.
- Before installation, please get the necessary cables ready in the wall box.

Installation Steps:

(1) EU-standard base

Step 1: Mount the back-box on the wall. Terminate KNX and signal cables with safe, firm and reliable connections.

Note: Only 86-type back-boxes with depth ≥ 45 mm are supported.

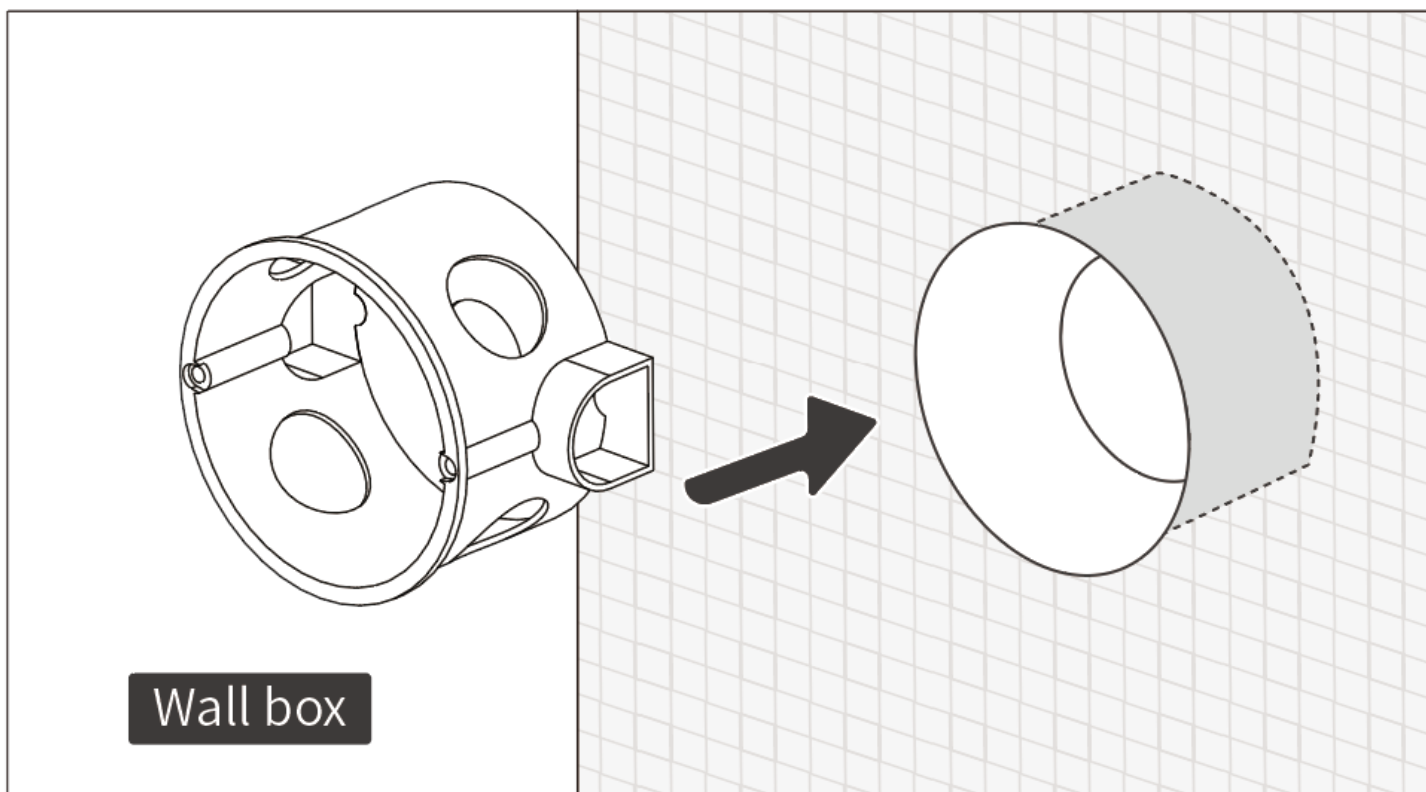


Figure 7

Step 2: Secure the power base within the back-box using screws.

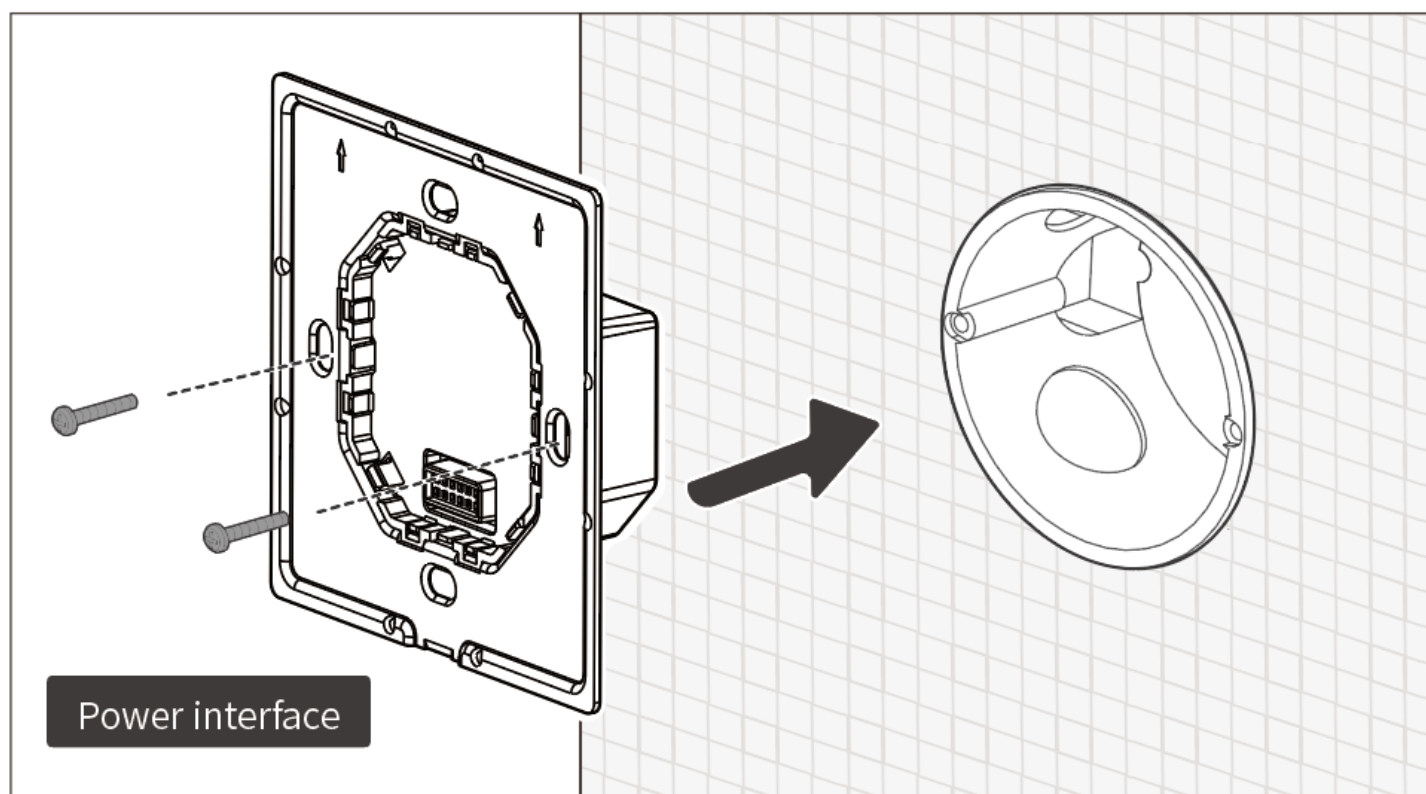


Figure 8

Step 3: Align panel pins to base holes and press gently to seat the panel.

Step 4: Install the panel frame.

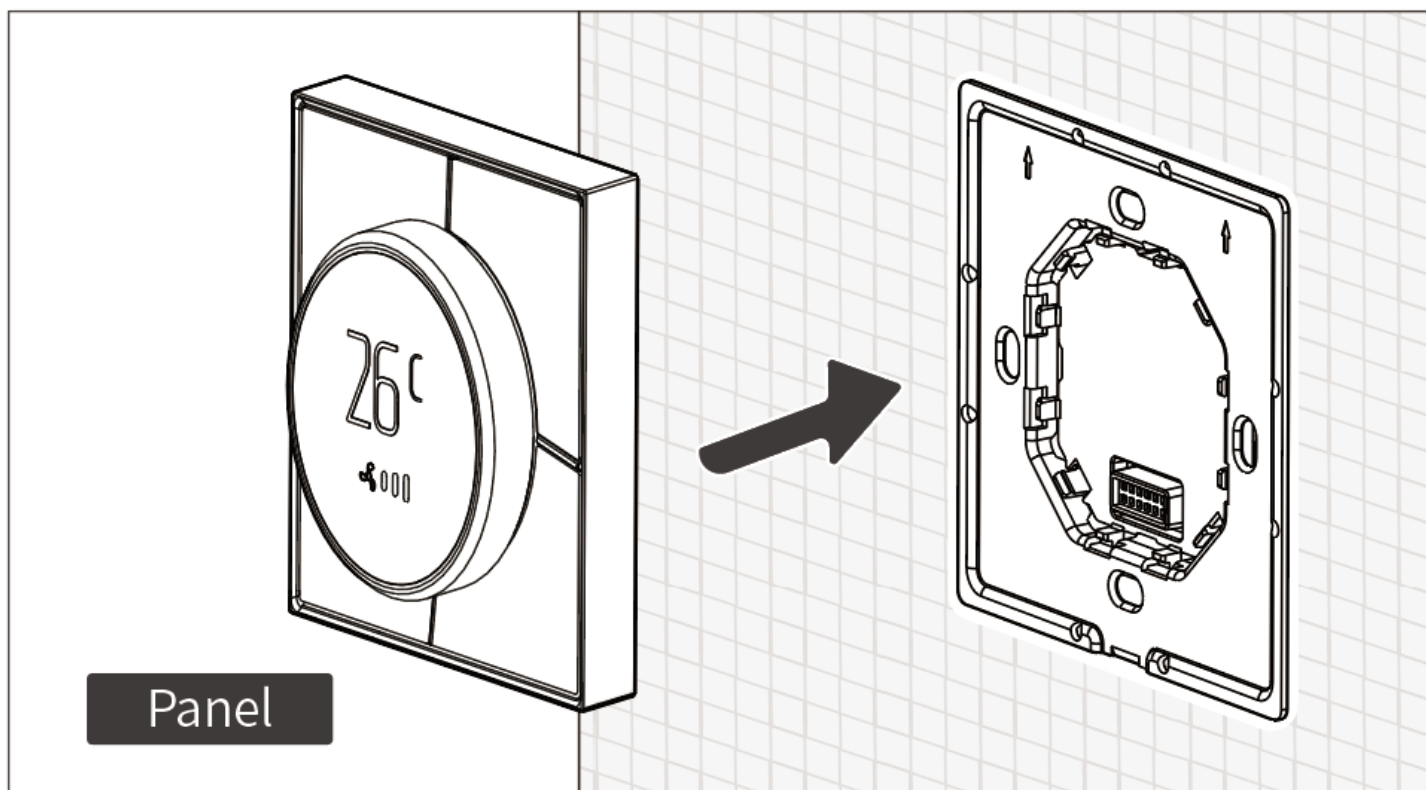


Figure 9

(2) GB-standard base

Step 1: Prepare a proper wall cutout and mount the back-box.

Step 2: Position the frame against the wall, aligning its opening with the back-box.

Note: Only 86-type back-boxes with depth ≥ 50 mm are supported.

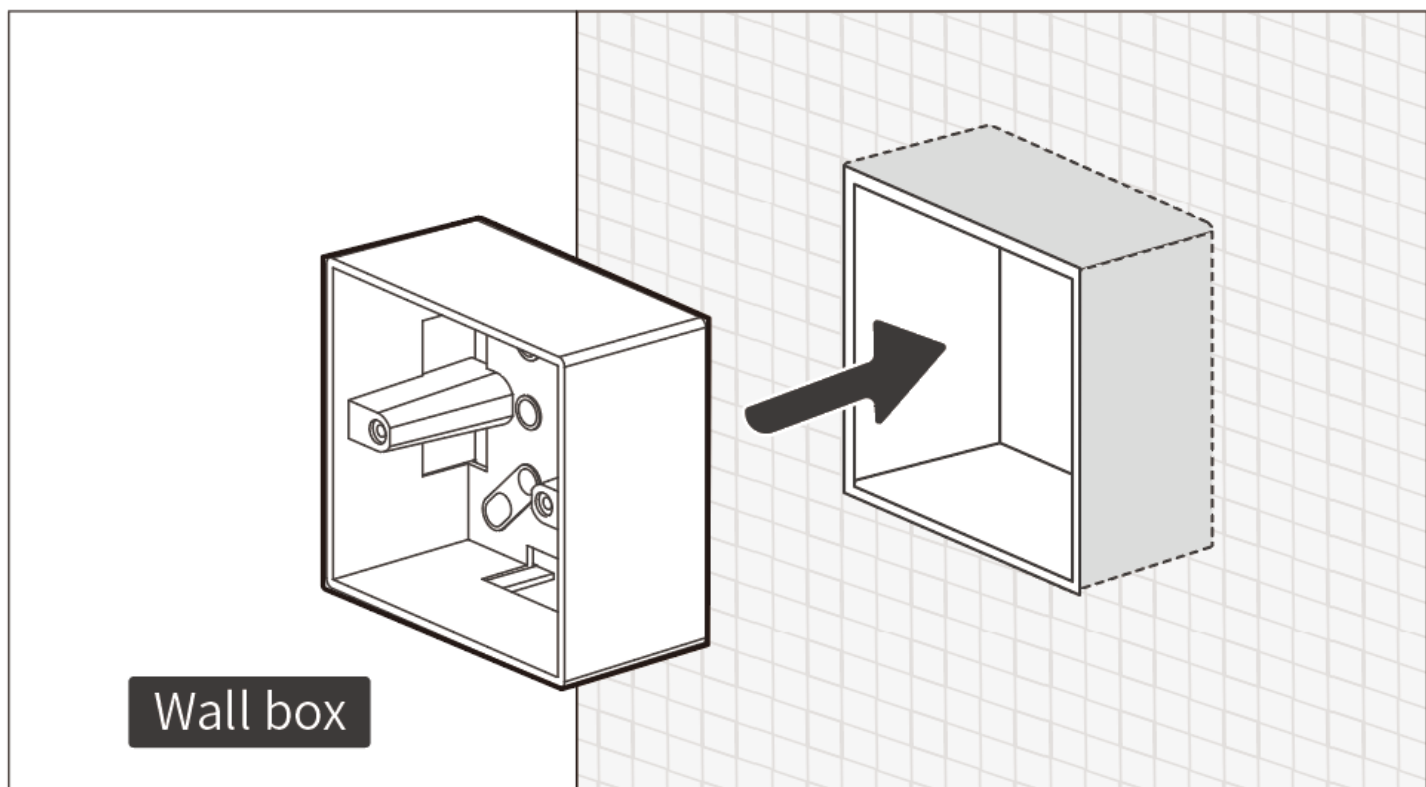


Figure 10

Step 3: Insert the base into the frame. Align the base's side screws with back-box mounting holes, fit the assembly into the back-box and tighten the screws.

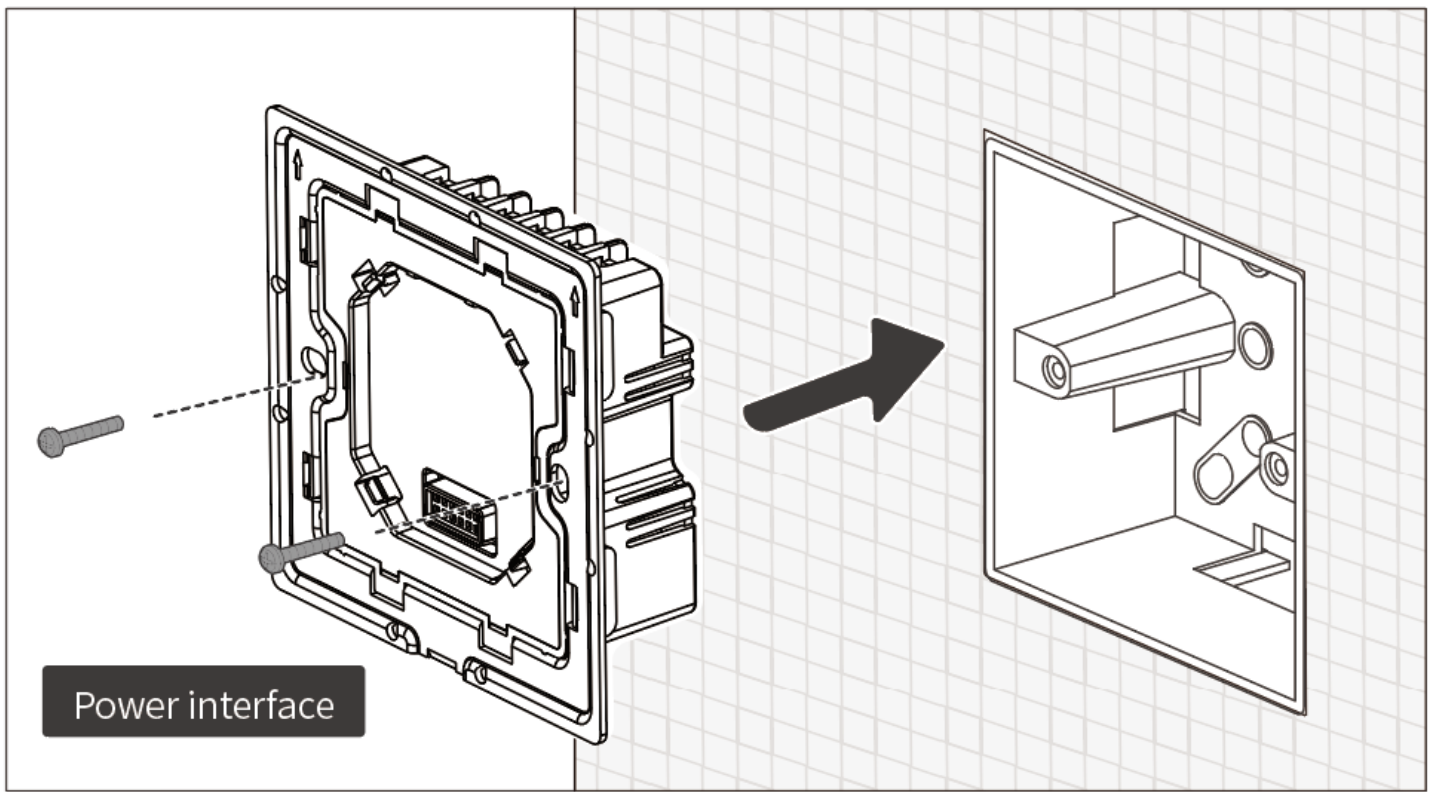


Figure 11

Step 4: Align panel pins with base holes and press gently to seat the panel.

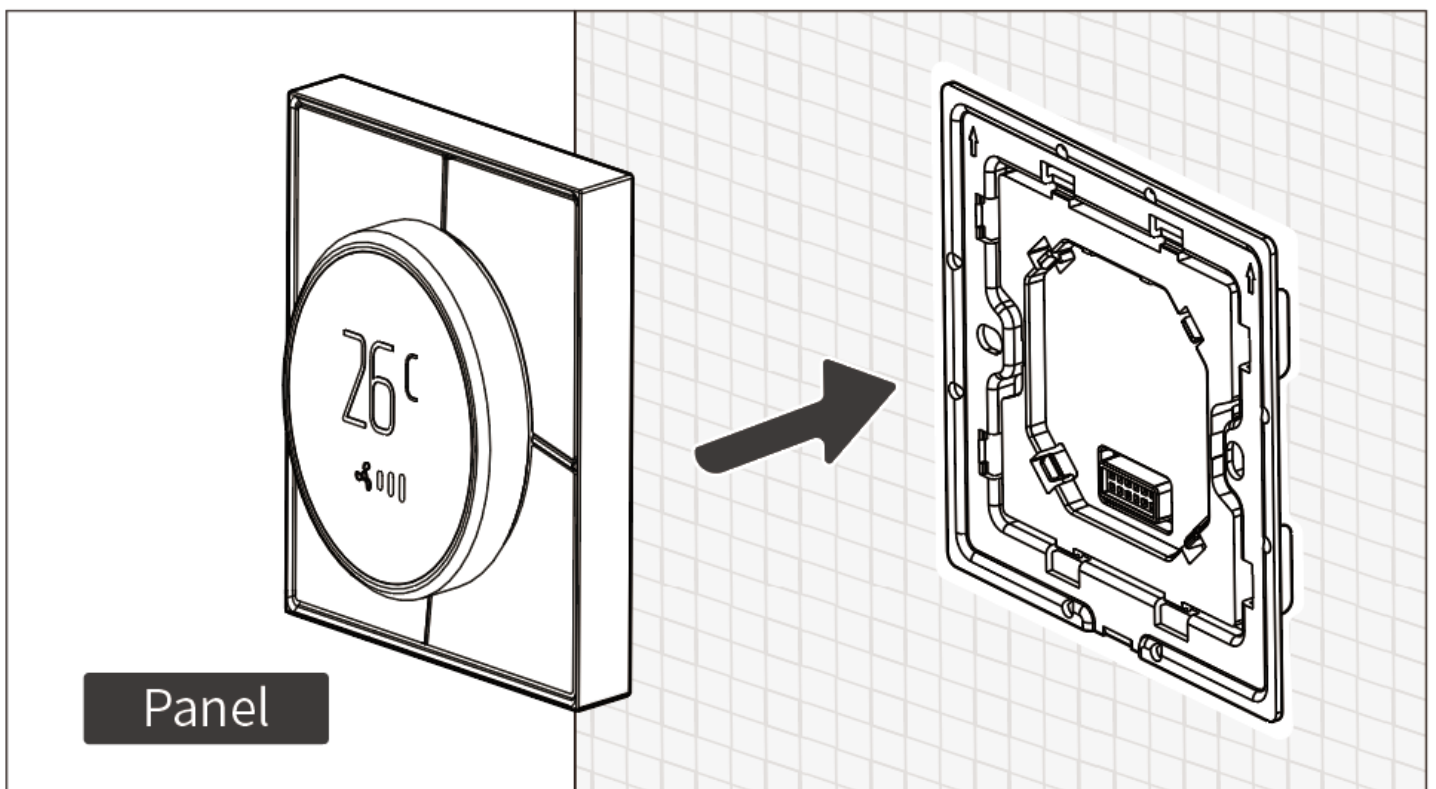
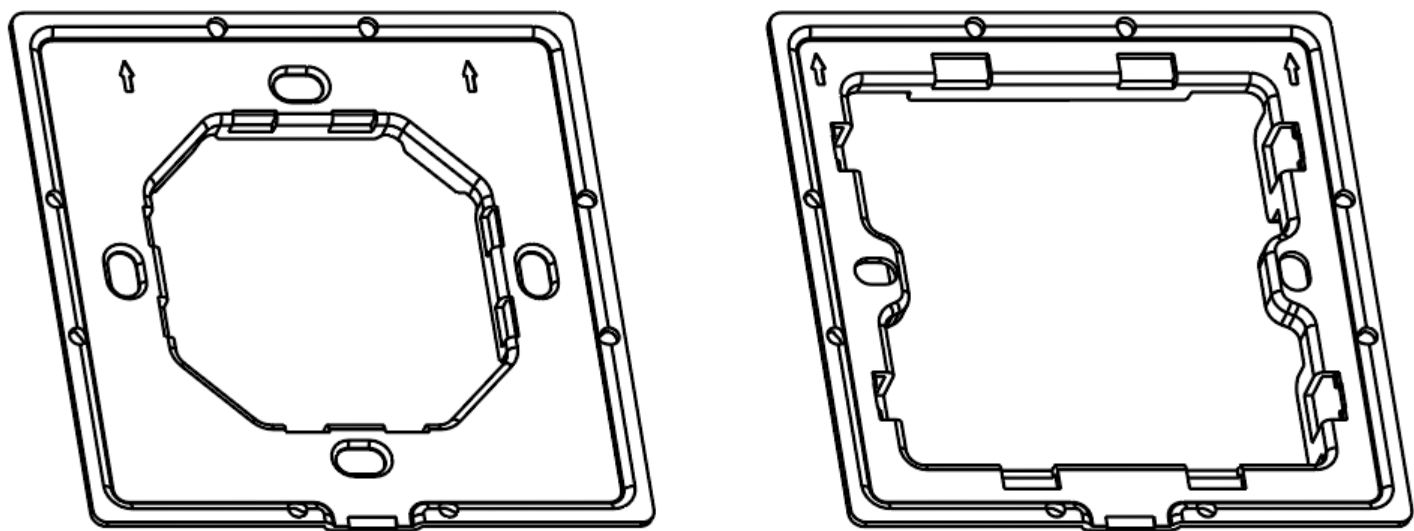


Figure 12

Multi-gang Installation:

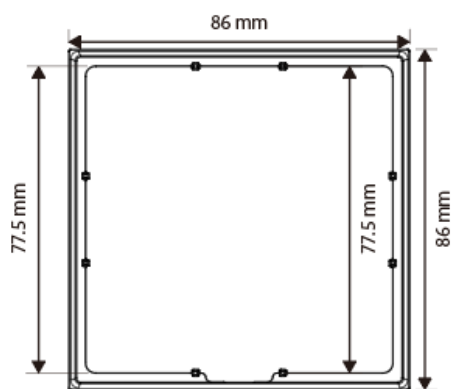
- Supports horizontal and vertical installation;
- Horizontal installation supports up to 4 rows;
- Vertical installation supports up to 4 columns.

- For gang-mount applications, use combined base brackets. Ensure bracket arrow points upward during installation.

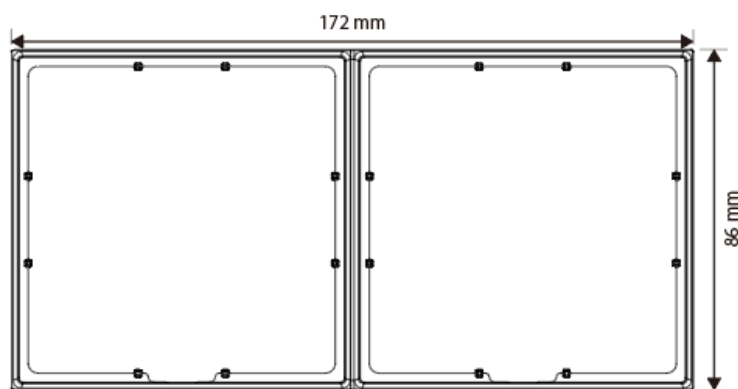


Orient the arrow on the base mounting bracket upward during installation.

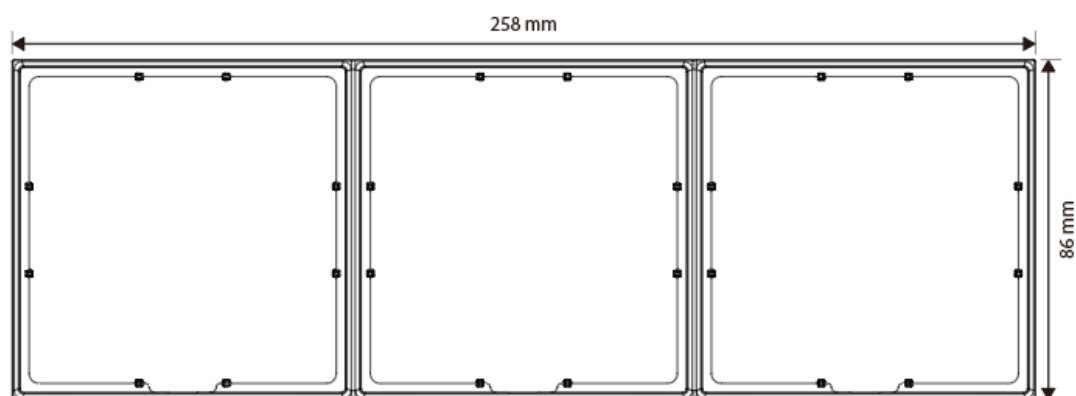
Frame type	Installation direction	Gang number	Size
PC	Horizontal/Vertical	1	86*86*10(mm)
		2	172*86*10(mm)
		3	258*86*10(mm)
		4	344*86*10(mm)
Metal	Horizontal/Vertical	1	86*86*10(mm)
		2	172*86*10(mm)
		3	258*86*10(mm)
		4	344*86*10(mm)



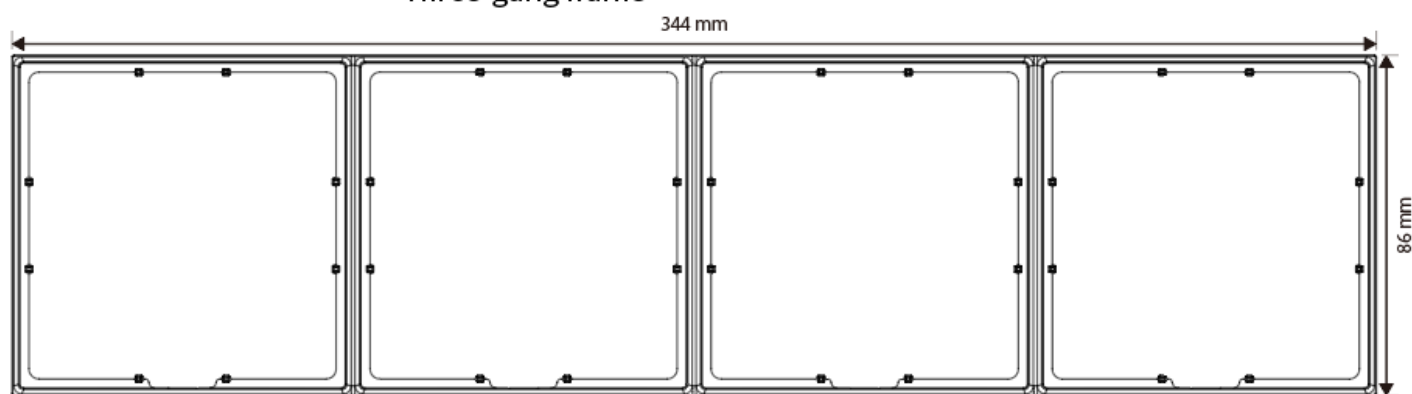
Single-gang frame



Two-gang frame

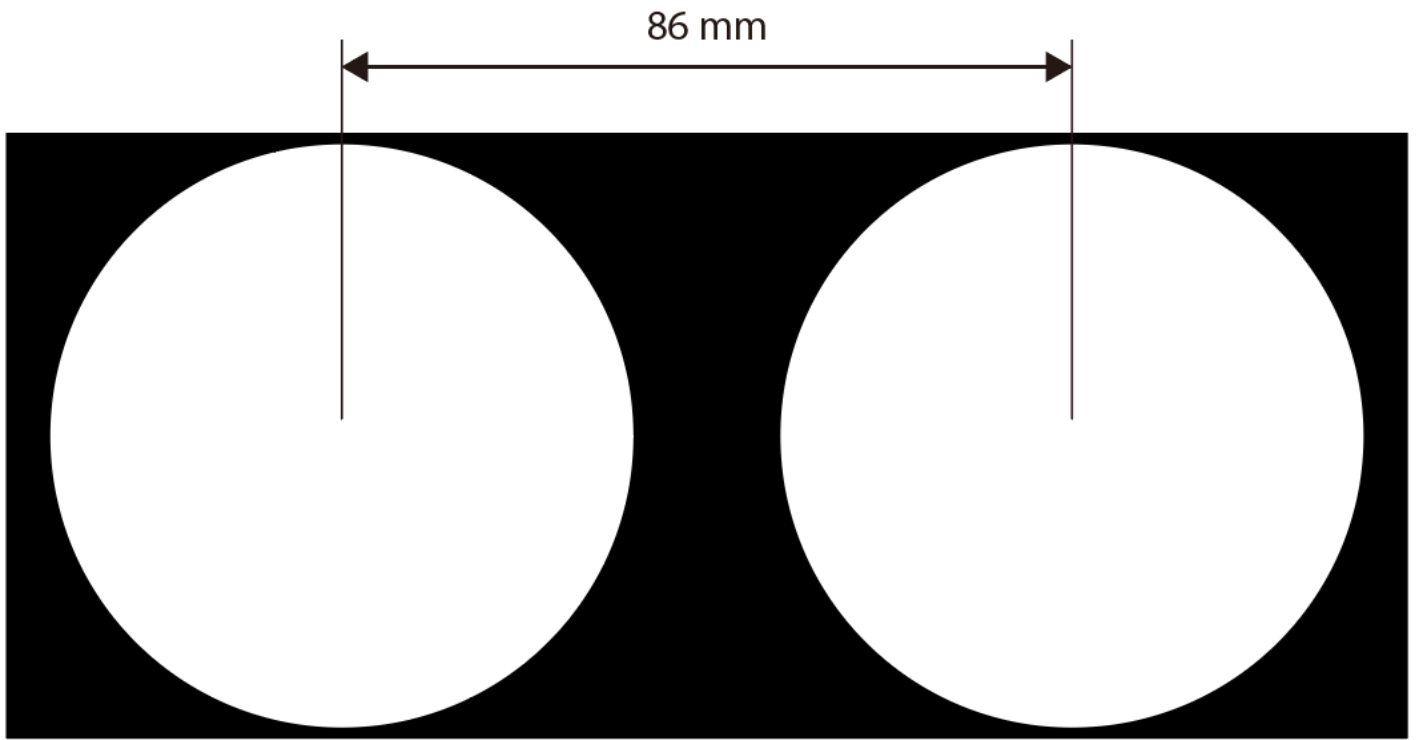


Three-gang frame



Four-gang frame

NOTE: When using the European standard installation box, ensure the center spacing of the installation base box is 86 mm when installing the base. Otherwise, multi-gang panels can not be installed.



European Standard Installation Box

◆◆ Disassembly

Warning: Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources.

Step 1. It is recommended to use a screwdriver to loosen the frame from the opening.

Step 2. After taking off the panel, use a Phillips screwdriver to remove the power interface and relay base.

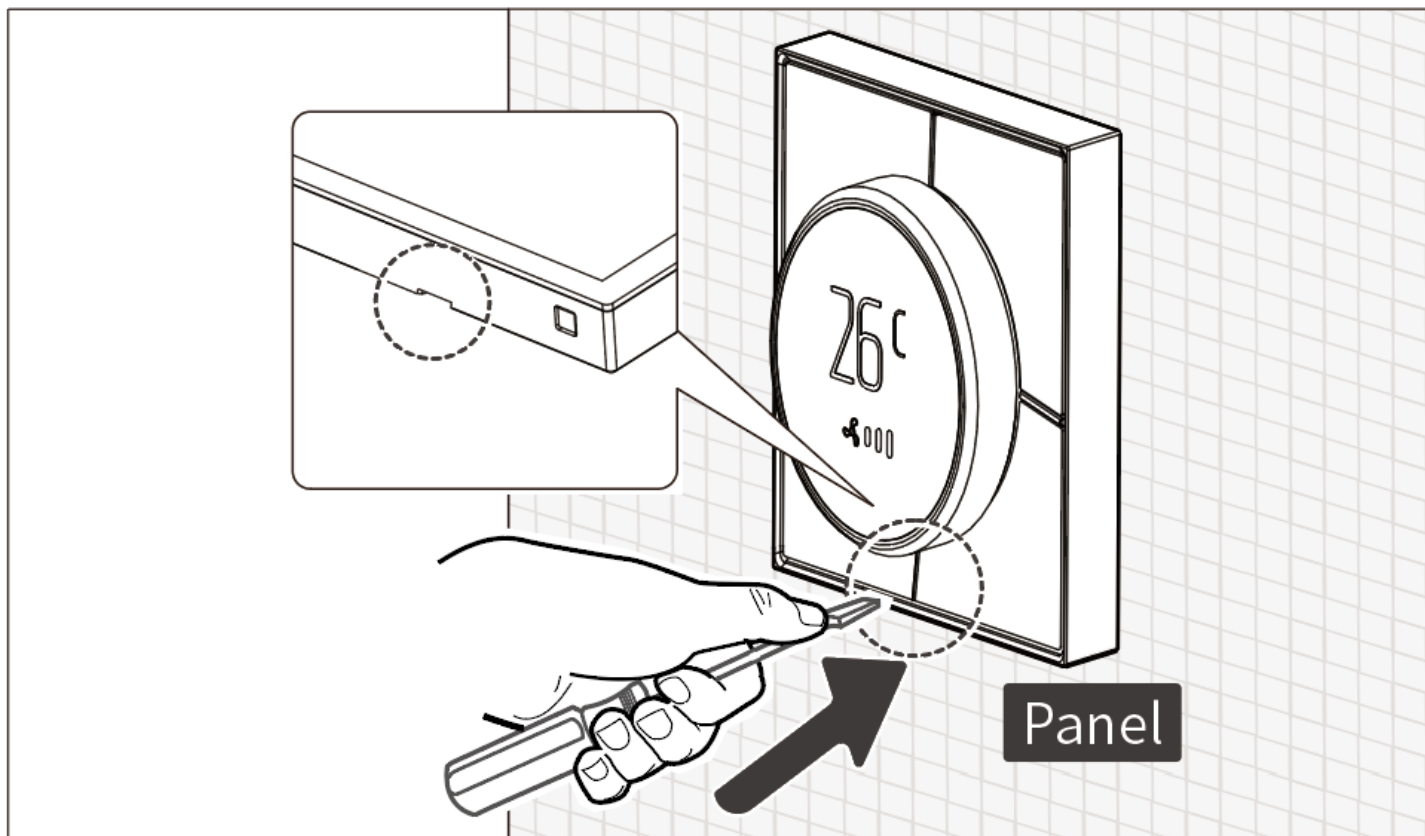


Figure 13

◆◆ Operation

Properly wire and get the device power on.

◆◆ Packing List

- Inkslab Series Panel Power Interface EU / Inkslab Series Panel Power Interface With Auxiliary Power Supply EU / Inkslab Series Panel Power Interface With 2CH 10A Relay / Inkslab Series Panel Power Interface With 4CH 10A Relay × 1
- M4 x 40mm long screws × 2
- M4 x 25mm short screws × 2

After unpacking, please check if the product and the parts are complete.

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Update History:

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	September 2, 2026
V1.1	Update voltage parameters	October 10, 2026

◆◆ Technical Support

E-mail: hdltickets@hdlautomation.com

Website: <https://www.hdlautomation.com>