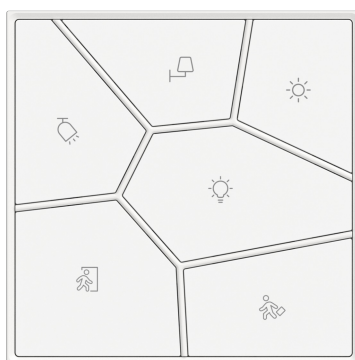


Inkslab Series Buttons Smart Panel (KNX)

Datasheet



MPBY-xB-KS.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 Buttons Smart Panel (KNX) adopts mechanical keys and supports multiple actuation modes and control types. It delivers basic functions: switching, dimming, colour temperature tuning, RGB control, curtain operation and scene recall. A built-in temperature sensor measures local ambient temperature and transmits data to the bus. Each button supports custom laser engraving and RGB status indication. Indicator colour and brightness are configurable via ETS software to accommodate various requirements. Available in plastic and metal versions, Yan series panels feature robust performance and broad applicability, making them an ideal solution for modern smart home designs.

Product Name	Model No.
Inkslab Series 1 Button Smart Panel	MPBY-1B-KS.18
Inkslab Series 2 Buttons Smart Panel	MPBY-2B-KS.18
Inkslab Series 4 Buttons Smart Panel	MPBY-4B-KS.18
Inkslab Series 6 Buttons Smart Panel	MPBY-6B-KS.18

Main Functions:

- Lighting Control: Switching, dimming, colour temperature tuning, RGB control.
- Curtain Control: Open, close, stop and percentage positioning.
- Scene Control: One-touch scene recall.
- Built-in Temperature Sensor: Transmits local temperature to the bus as trigger input for scenes and automation.
- RGB LED Indication: Configurable brightness and colour for button indicators.
- Button Lock: Locks panel buttons to prevent unauthorised or accidental operation.
- Proximity Sensing: Button LEDs auto-sleep and wake on human presence detection.
- Custom Laser Engraving: Customisable text content and size for button identification.
- Base Compatibility: Optional power-only, 2-channel and 4-channel relay bases are available. Note that base integrated relays cannot drive HVAC equipment. Standalone relay modules or dedicated HVAC modules are required for HVAC control.

◆◆ Appearance

Product Dimensions:

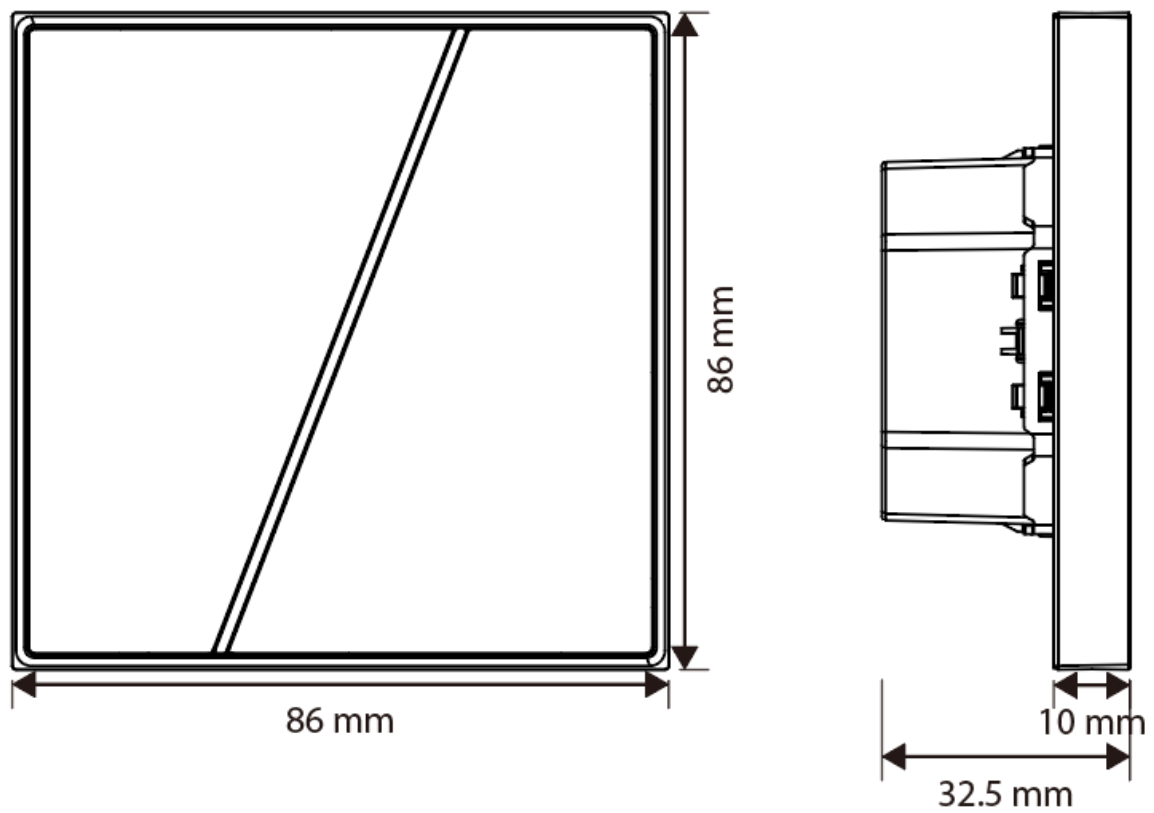


Figure 1

Product Appearance:

The series of button panels includes 1/2/4/6-button models. The front view of the panel and button numbering are shown below.

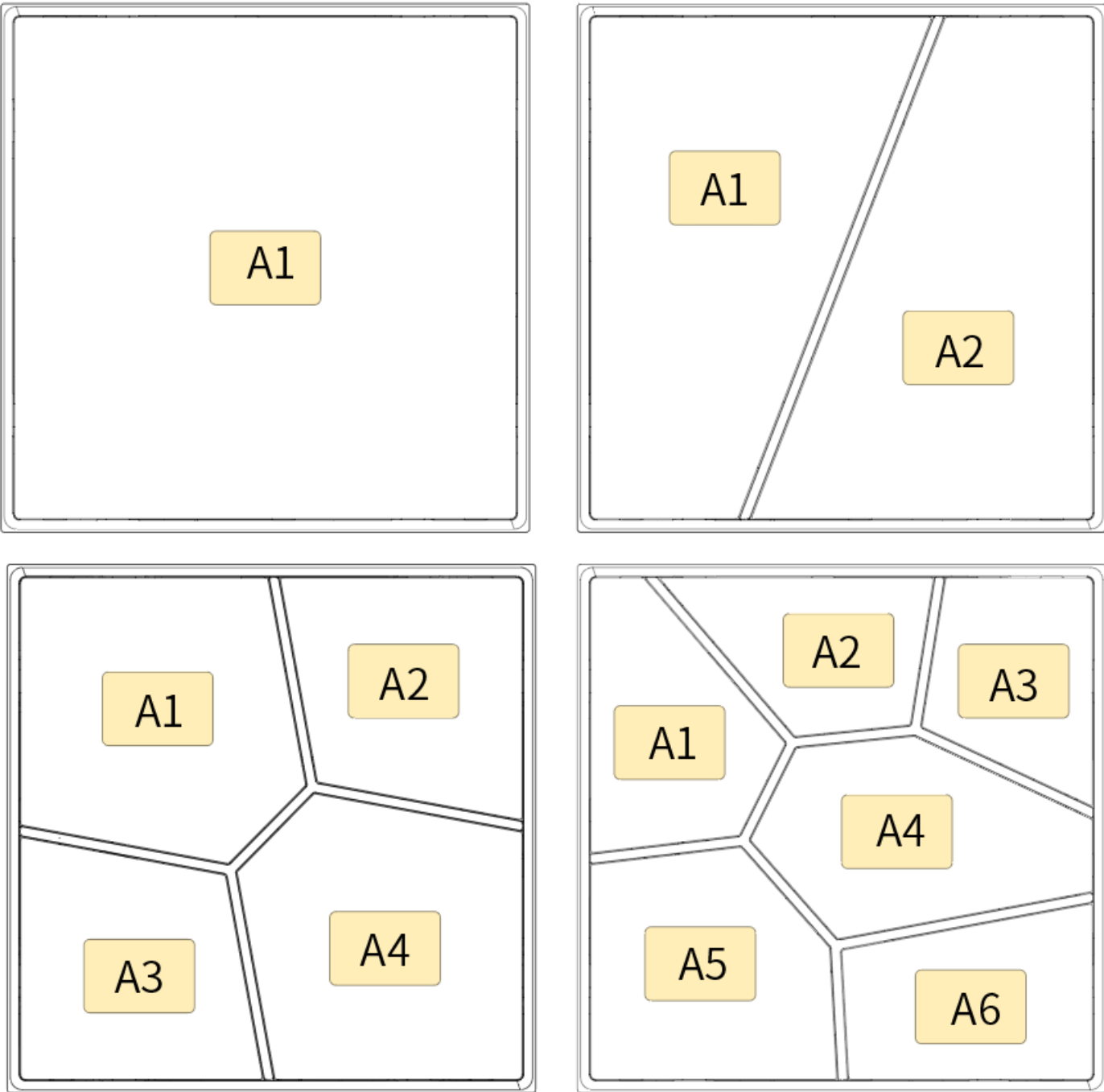


Figure 2

◆◆ Technical Data

		MPBY-1B- KS.18	MPBY-2B- KS.18	MPBY-4B- KS.18	MPBY-6B- KS.18
Bus power supply	Bus base	≤20mA/30V DC	≤23mA/30V DC	≤29mA/30V DC	≤36mA/30V DC
	2- channel relay base	≤10mA/30V DC			
	4- channel relay base	≤10mA/30V DC			

Auxiliary power supply	2-channel relay base	$\leq 34\text{mA}/24\text{V}$ DC	$\leq 38\text{mA}/24\text{V}$ DC	$\leq 44\text{mA}/24\text{V}$ DC	$\leq 50\text{mA}/24\text{V}$ DC
	4-channel relay base	$\leq 54\text{mA}/24\text{V}$ DC	$\leq 58\text{mA}/24\text{V}$ DC	$\leq 64\text{mA}/24\text{V}$ DC	$\leq 70\text{mA}/24\text{V}$ DC
Communication protocol		KNX			
Cable diameter of Bus terminal		0.6-0.8mm			
Working temperature		$-5^{\circ}\text{C}\sim 45^{\circ}\text{C}$			
Working relative humidity		$\leq 90\%$, non-condensed			
Storage temperature		$-20^{\circ}\text{C}\sim 60^{\circ}\text{C}$			
Storage relative humidity		$\leq 93\%$, non-condensed			

◆◆ Specifications

Item	Parameter
Dimensions (W X H X D)	86mm x 86mm x 10mm (Base not included.)
Net weight	Plastic: 64g Metal: 110g
Housing material	Plastic / Aluminium
Installation	Wall box
IP degree(compliant with EN 60529)	IP 20

◆◆ Safety Precaution

- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

Warning:

- 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 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.

- It is not allowed to change the usage scenario or conditions, expand the transmission frequency range, increase the transmission power (including installing additional RF power amplifiers), or change the transmission antenna without authorization.
- No harmful interference shall be caused to other legitimate radio stations, nor shall protection against harmful interference be proposed.
- It should withstand interference from industrial, scientific, and medical (ISM) application equipment that radiates radio frequency energy or other legitimate radio stations.
- If harmful interference occurs to other legitimate radio stations, the use should be immediately stopped and measures should be taken to eliminate the interference before continuing to use.
- Radio observatories, meteorological radar stations, and satellite earth stations (including measurement and control, ranging, and reception) established inside aircraft and in accordance with laws, regulations, relevant national provisions, and standards.
- The use of low-power equipment in electromagnetic environment protection areas such as navigation stations, military and civilian radio stations, airports, etc. shall comply with the regulations of electromagnetic environment protection and relevant industry regulatory authorities.
- It is prohibited to use various model remote controllers within a radius of 5000 meters from the center point of the airport runway.
- When using low-power devices, the environmental conditions are -5 °C~45 °C and the input voltage is AC 100-240V (50/60Hz).

Caution:

- 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.
- It is a MUST to install the device with wall box.
- To protect this device and loads, it is recommended that a 10A circuit breaker be connected to each circuit.
- Do not use corrosive liquid to wipe the device body, especially the interface, so to avoid damage to the device.
- Prior to performing maintenance or cleaning on the device, disconnect the device from all voltage sources, to avoid electric leakage and electric shock.

◆◆ Wiring

- This device is available with power-only base, 2-channel relay base and 4-channel relay base for flexible

selection according to application scenarios.

- When fitted with a relay base, it can switch the on/off state of each connected circuit. For lighting loads, it controls light turn-on and turn-off.
- KNX bus wiring follows HDL specifications: KNX+, KNX-, GND, +24V.

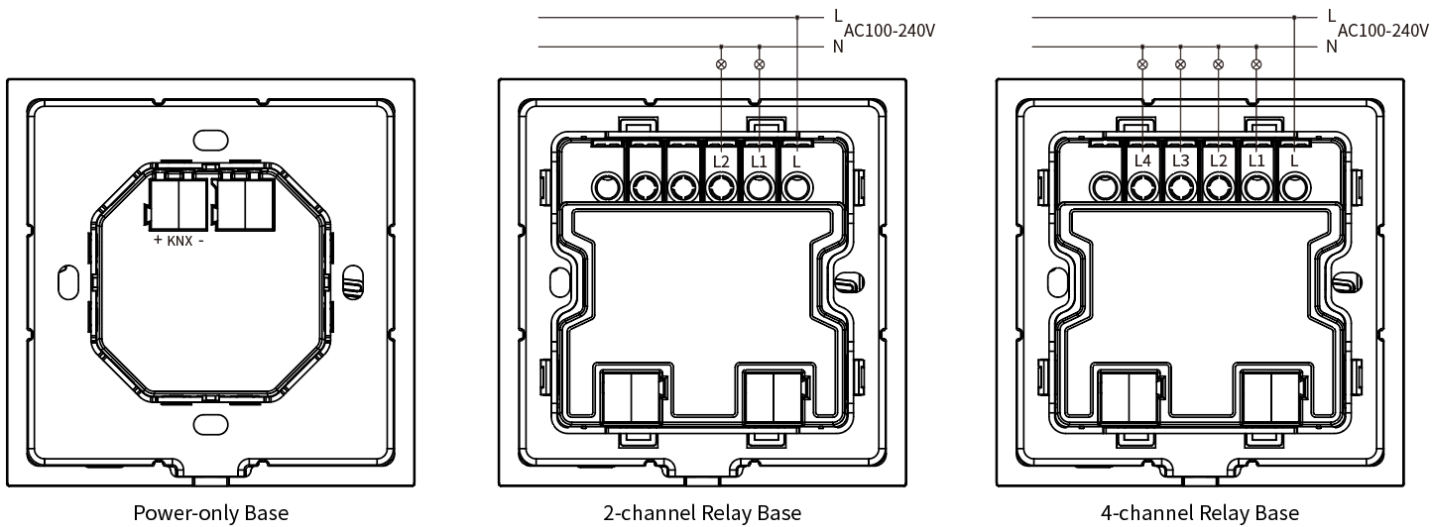


Figure 3

◆◆ 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.
- **Caution:** Before installation, if the panel is still assembled with power interface, please remove the panel by following the instructions in the section Disassembly.
- **Note:** Before installation, if the panel is still assembled with power interface, please remove the panel by following the instructions in the section Disassembly.

Step 1: Install the wall box (the depth of wall box should not be less than 45mm) on the wall and lead out Buspro cable . Connect the cables, and pay attention to safe and reliable wiring.

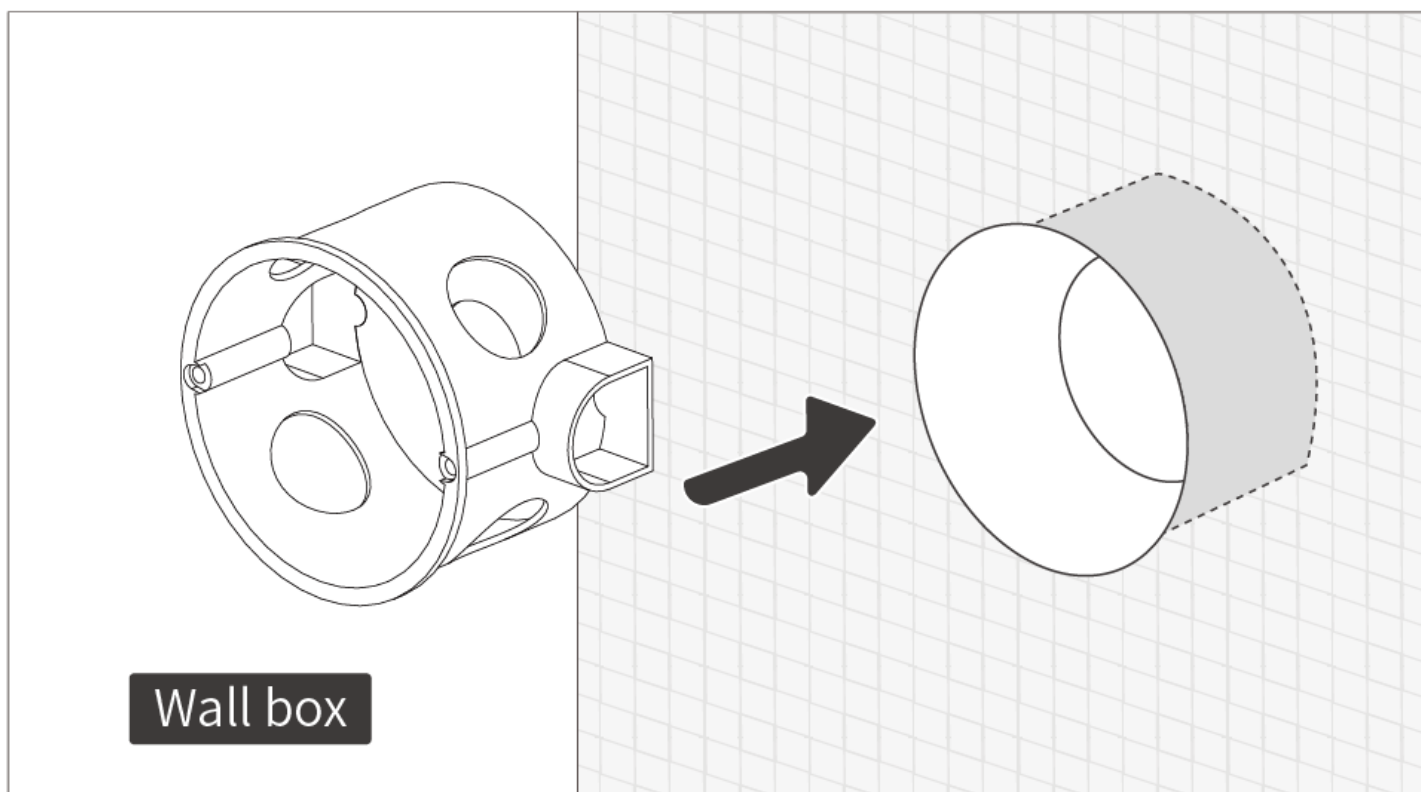


Figure 4

Step 2: Stick the frame onto the wall and align the opening to the wall box.

Step 3: Insert the power base into the frame, aim the screws on both sides of the base at the holes in the wall box, install them together and lock the screws.

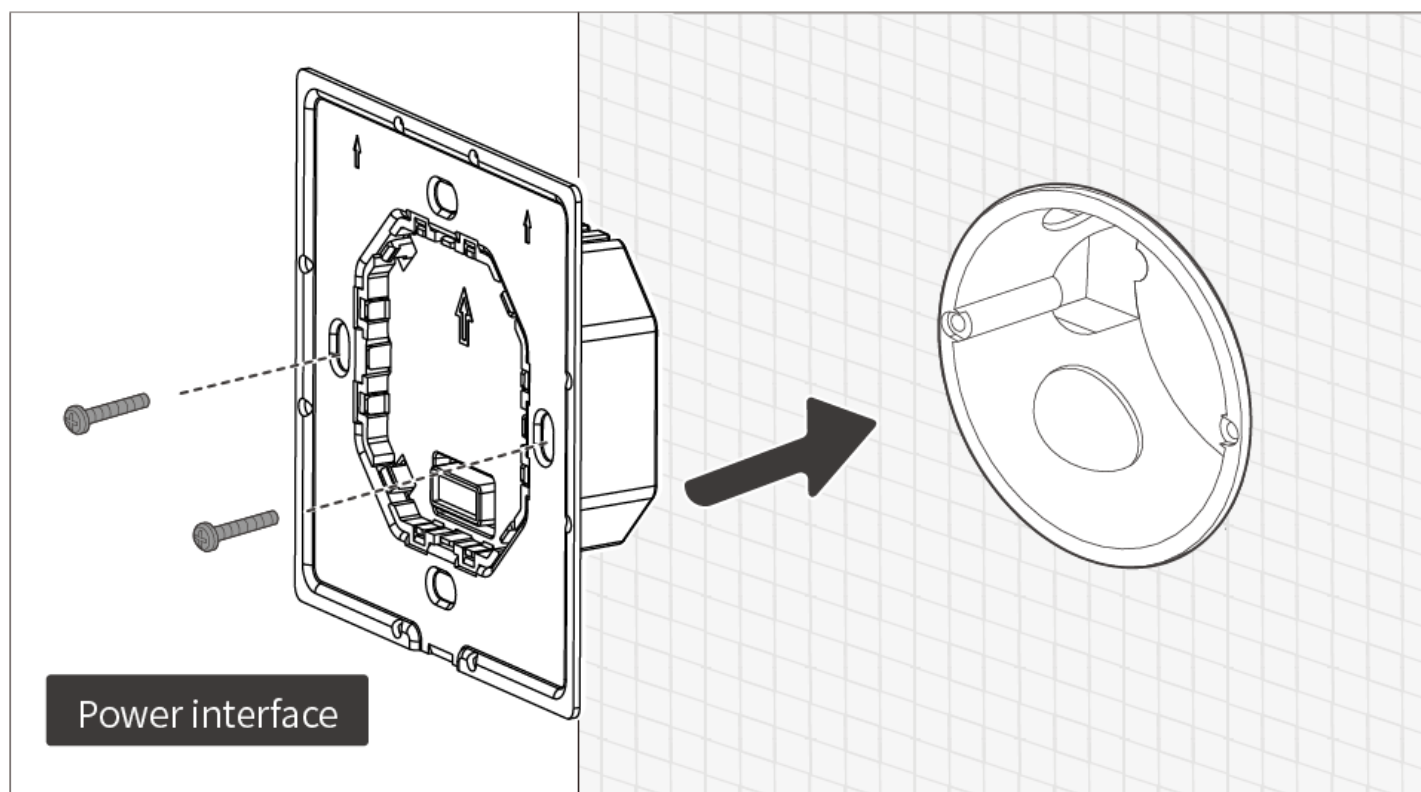


Figure 5

Step 4: Align the panel pins with the base holes, press gently and install on the base.

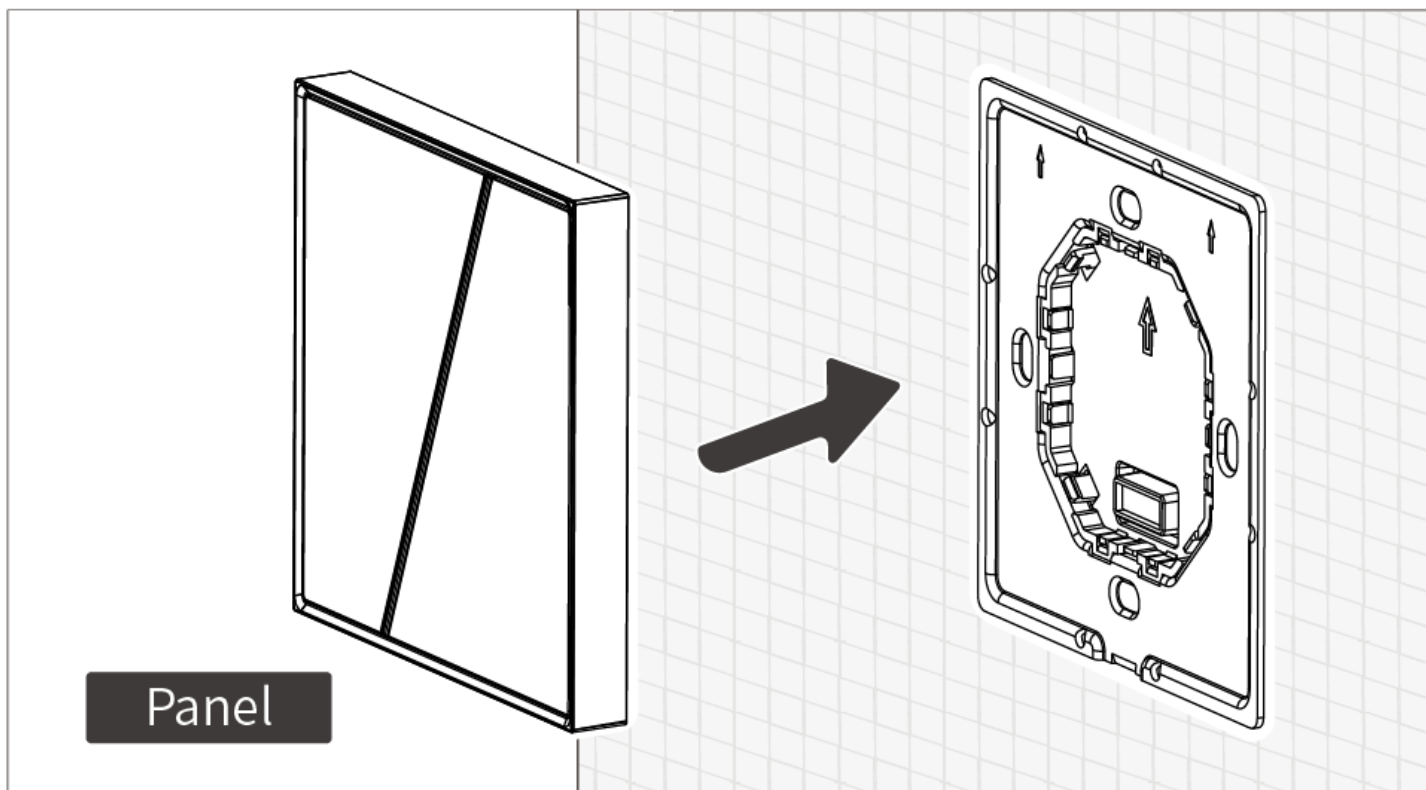
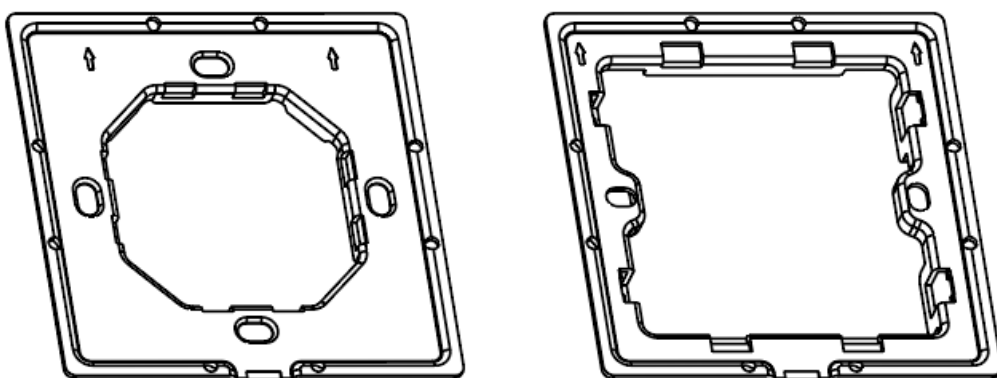


Figure 6

Multi-gang installation:

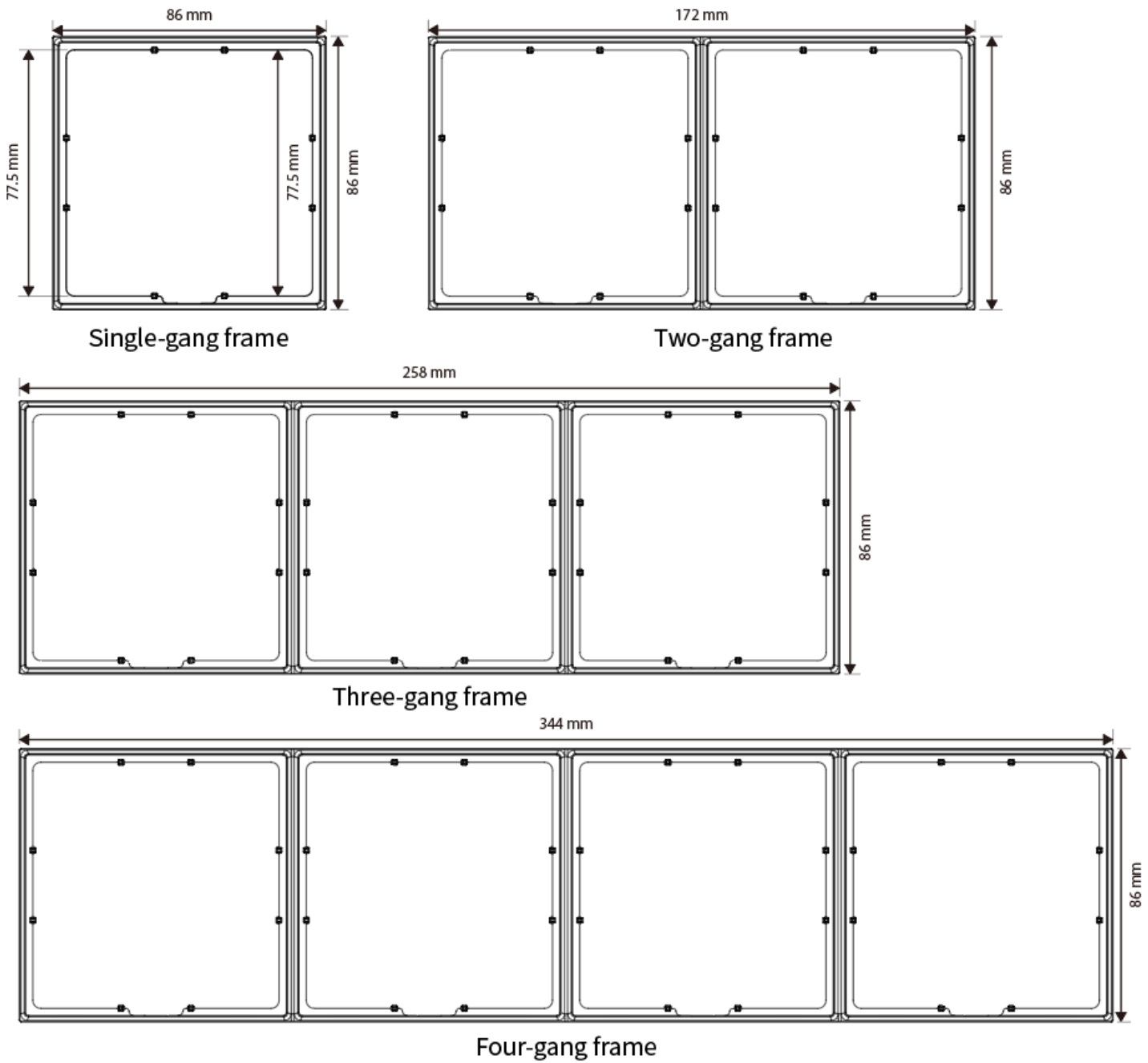
- Supports horizontal and vertical installation;
- Horizontal installation supports up to 4 rows;
- Vertical installation supports up to 4 columns.
- For multi-gang installation, use the combined base bracket. Align the arrow upward during mounting.



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)



◆◆ 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.

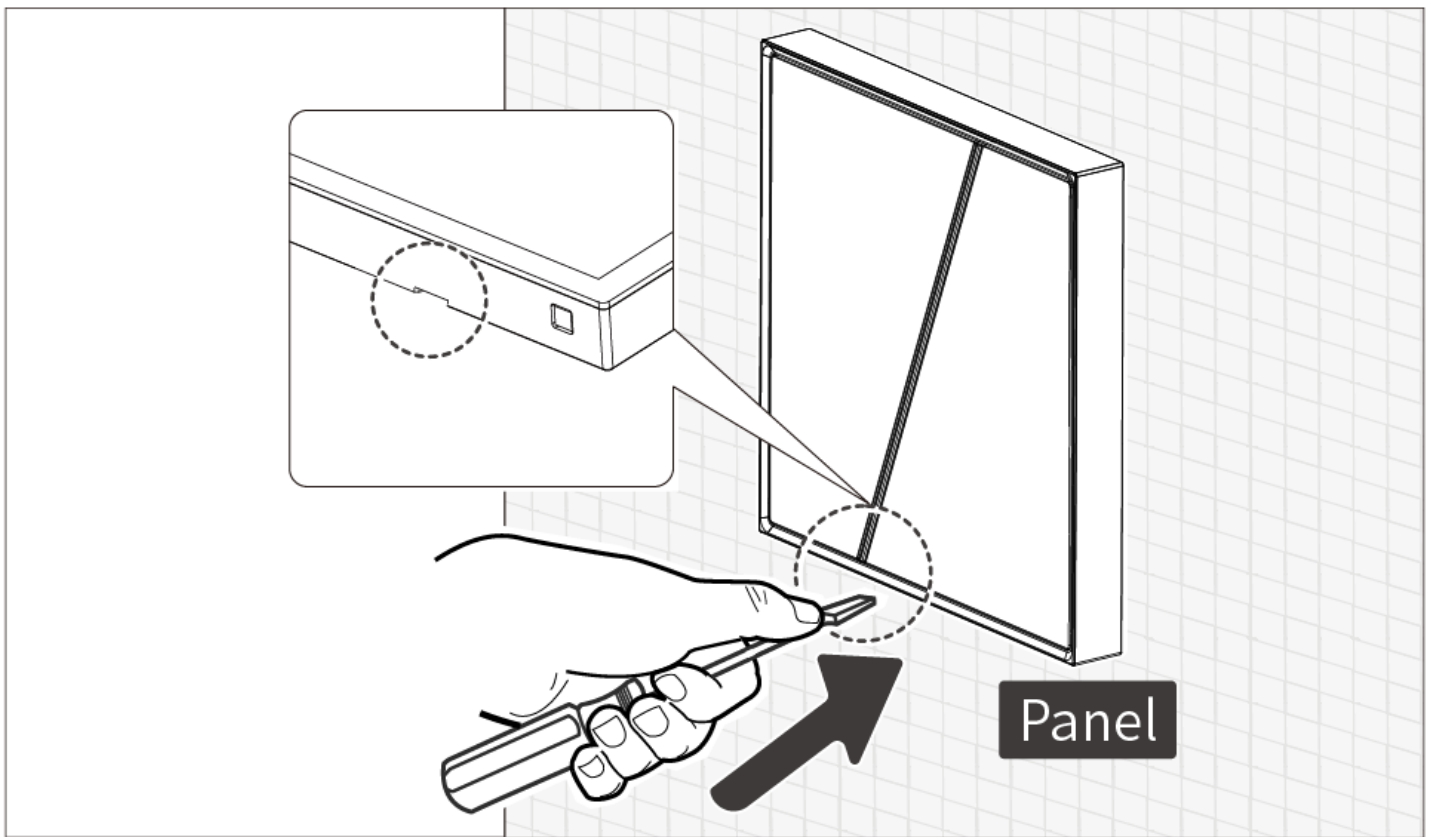


Figure 7

◆◆ Operation

1. Programming Mode: Press and hold any button for 15s. All indicators turn blue (slow flash) to enter programming mode, where Subnet ID and Device ID can be modified via ETS.
2. Panel Lock/Unlock: Supports manual and auto locking. Unlock operation is manual only (not available on 1-button panel).
 - Manual Lock: Short-press A1 and the last button simultaneously for 5s; indicators flash blue. Lock status is retained after power cycle.
 - Auto Lock: Configurable in ETS. Lock delay can be set; panel locks automatically upon timeout.
 - Unlock: Short-press A1 and the last button simultaneously for 5s to unlock.
3. Custom Button Indicator Colour: Indicator colours configurable via ETS (see commissioning guide).
4. Proximity Sensing Configuration: Wake-up sensing range and timing for button indicators configurable via ETS (see commissioning guide).

◆◆ Packing List

- Inkslab Series Buttons Smart Panel (KNX) × 1

Note: 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 15, 2026

◆◆ Technical Support

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