

HDL-MPE04-RF.18

4 Buttons Wireless iSmart Panel EU

buspro  
WIRELESS

**Datasheet**

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Figure 1. 4 Buttons Wireless iSmart Panel EU

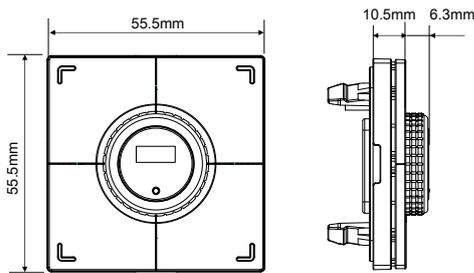


Figure 2. Dimensions - Front View Figure 3. Dimensions - Side View

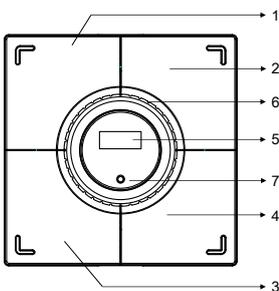


Figure 4. Components - Front View

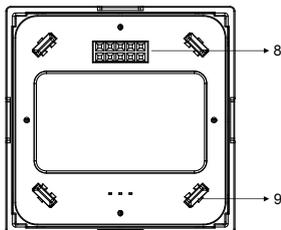


Figure 5. Components - Back View



Figure 6. Wireless power interface

## Overview

4 Buttons Wireless iSmart Panel EU (See Figure 1) , with push buttons and a central knob with integrated OLED display, supports multi-function panel control function and floor heating control. The panel enables to control targets in conjunction with mesh gateway via wireless communication.

## Functions

- Floor heating control enables to use floor heating or not.
- Floor heating modes: Day, Night, Away, Time, Home
- Temperature measurement: External and internal geothermal temperature sources are optional.
- Support synchronization control of different floor heating channels
- Key modes: Single on/off, Single on, Single off, Combination on, Combination off, Combination on/off, Double click/single on/off, Double click/combination on/off, Momentary, Short/long press, Short press/long momentary
- Key control types: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Curtain control, GPRS control, Panel control, Security module, Z-audio control, Universal control, Link page, DALI area dimming, RGB adjustment, IR control
- Supports dimming
- Button indicator brightness adjustable
- Supports HDL Buspro online upgrading

## Important Notes

- The panel must work in conjunction with mesh gateway.
- Installation - The panel should be installed with wireless power interface in flush mount.

## Product Information

**Dimensions - See Figure 2 - 3**

**Components - See Figure 4 - 5**

**Wireless panel power interface - See Figure 6**

1 , 2 , 3, 4 are buttons.

5. OLED display

6. Knob: Has different functions in different statuses

7. Temperature probe: Measure ambient temperature

8,9 are communication interface and mounting slot: Connects to wireless power interface

**Working modes switching:**

The panel has 2 working modes: intelligent panel mode and floor heating mode.

Keep pressing Button 3 and 4 simultaneously for working mode switching, and the red indicator will flash when the panel switches working mode successfully.

If no operation is made within 10 seconds in floor heating mode, the panel will switch to intelligent panel mode automatically.

The panel cannot be switched to the floor heating function status when the floor heating function is turned off. The floor heating function can be set in the HDL Buspro Setup Tool.

**Functions of buttons and knob in intelligent panel mode:**

Button 1, 2, 3, 4 are control buttons, which can be set to different modes to control targets.

When the panel supports dimming, the knob dims the last operated button.

When the panel does not support dimming, the knob controls the switch of the last operated button.

**Device ID and wireless setting:**

Keep pressing Button 1 and 2 for 20 seconds, the indicator flashes quickly, and the prompt ID\_CONFIG appears on the display. Then the subnet ID and device ID of the panel can be modified via HDL Buspro Setup Tool. Rotate the knob in this status until the indicator flashes slowly, and the wireless prompt appears, then the panel enters the public channel configuration mode. Press the button for the wireless gateway to enter the configuration mode, and the panel will automatically configure the same communication parameters as that of the gateway. After configuration succeeds, the panel will automatically exit public channel configuration mode.

**Functions of buttons and knob in floor heating mode:**

In the standby interface, rotate the knob to set the temperature for the current working mode of floor heating.

When each button is operated, the interface will display the current function, and the knob will have the corresponding function.

Button 1: Floor heating switch. The function of the knob is the same as that of the button.

Button 2: At the current temperature, outdoor temperature, local temperature switch. The knob has no function in this state.

Button 3: Adjust the floor heating working mode. In this state, the knob function is the same as the button function.

Working modes include: Day, Night, Away, Time, Home

In the standby interface, keep pressing the Button 3 for about 3 seconds to enter the floor heating function setting, and the knob performs the function mode selection: floor heating, floor cooling, and automatic.

Button 4: Enter the working temperature for setting the floor heating mode. At this time, the knob sets the working temperature of the current mode.

The software can be configured with a PWM output.

Note: The knob operation is based on that the floor heating is on.

**OLED interface display:**

The OLED enters the standby interface after no operation within 10 seconds. The parameters, time, date, local temperature, outdoor temperature and set temperature (can be displayed via HDL Buspro Setup Tool) are switched to display and the switching time can be configured by software (0.5-10 seconds).

Floor heating working mode: Day, Night, Away, Time, Home

Floor heating function mode: Floor heating, floor cooling, and automatic.

Geothermal switch: ON, OFF

Temperature setting: Display the set temperature

Dimming: Display dimming percentage

**Function Update**

Press the Button 3 and 4 simultaneously and power on, and manually upgrade the module.

The function parameters need to be set in the offline editing software.

**Installation - See Figure 7 - 10**

Step 1. Install the EU standard wall box.

Step 2. Fix the wireless power interface in wall box with screws.

Step 3. Put the frame on the wall box.

Step 4. Install the panel on the wireless power interface.

## Safety Precautions

- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- The device should be wall box mounted. HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this specification.
- Please do not privately disassemble the device or change components, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.

## Package Contents

HDL-MPE04-RF.18\*1 / Datasheet\*1



Figure 7



Figure 8



Figure 9



Figure 10

Figure 7 - 10. Installation

## Technical Data

### Basic Parameters

Working voltage	5V DC
Working current	64mA/5V DC
Wireless transmission power	+10dbm
Wireless sensitivity	-90dbm
Indoor communication distance	20m (barrier free)
RSSI (Received Signal Strength Indication)	>-80dbm
Factory frequency	Band, PSK (It is not recommended your setting of frequency and PSK be the same as the factory setting.)

### Frequency Allocation

(China) WPAN	780MHz to 786MHz
(Europe) SRD	864MHz to 870MHz
(North America)	904MHz to 928MHz
Default band	780MHz
Default PSK	HDL-SecurityKey0

### External Environment

Working temperature	-5°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
Storage relative humidity	≤93%

### Specifications

Dimensions	55.5×55.5×16.8 (mm)
Net weight	30.3g
Housing material	PC
Installation	Wall box (See Figure 7 - 10)
Protection rating (Compliant with EN60529)	IP20

### Name and Content of Hazardous Substances in Products

Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	x	-	-
Solder	x	o	o	o	-	-
PCB	x	o	o	o	o	o
IC	o	o	o	o	x	x

The symbol "-" indicates that the hazardous substance is not contained.

The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.

The symbol "x" indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

#### Technical support

E-mail: [hdtickets@hdlautomation.com](mailto:hdtickets@hdlautomation.com)

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