KNX Tile Series Button Panel 2.0, plastic version and metal version

Product name	Buttons	Model No.
Tile Series Button Panel 2.0 (Plastic & metal versions)	1 Button Panel A	M/PT1RA.1
	1 Button Panel B	M/PT1RB.1
	2 Buttons Panel A	M/PT2RA.1
	2 Buttons Panel B	M/PT2RB.1
	4 Buttons Panel A	M/PT4RA.1
	4 Buttons Panel B	M/PT4RB.1

Hardware Version: B

Datasheet

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File Edition: E

Figure 1. 1 Button Panel A

Figure 2. 1 Button Panel B

Figure 3. 2 Buttons Panel A

Figure 4. 2 Buttons Panel B

Figure 5. 4 Buttons Panel A

Figure 6. 4 Buttons Panel B

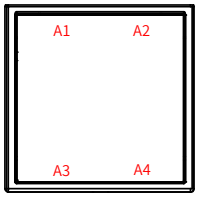


Figure 6-1. 1 Button Panel A /1 Button Panel B

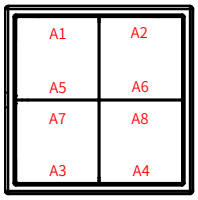
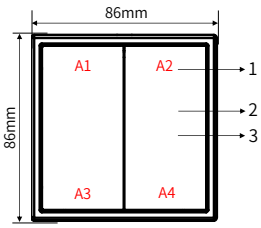
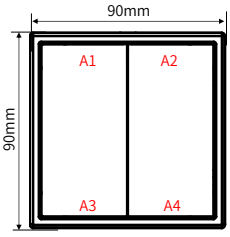


Figure 6-2. 4 Buttons Panel A /4 Buttons Panel B



2 Buttons Panel A/2 Buttons Panel B

Figure 7. Dimensions - Plastic version



2 Buttons Panel A/2 Buttons Panel B

Figure 8. Dimensions - Metal version

Figure 9. Dimensions - Side View

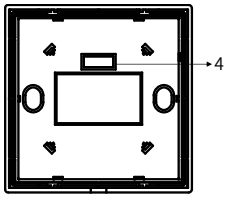


Figure 10. Components - Back View

Overview

KNX Tile series Button Panel 2.0 (See Figure 1-6) contains 1/2/4-button panels, both plastic and metal versions. Icons and text of each button supports laser labelling. With built-in RGB backlight for each pushbutton, the color and brightness level can be set by ETS or manually set on the panel. The panels support controls of lighting, curtains, scenes, music, etc.

Functions

- Built-in temperature sensor
- Built-in proximity sensor (maximum sensing distance: 20~30cm)
  The 1 Button Panel A/B in metal version (M/PT1RA.1, M/PT1RB.1) do not support proximity sensing function.
- 1/2/4-button panels with built-in backlight
- The color and brightness level of each button can be set.
- Button modes: single mode and combined mode
- Control modes: Switching control, Dimming control, Shutter control, Flexible control, Scene control, Sequence control, Percentage control, Threshold control, String (14 bytes) control, Alternate control, Pulse control, RGB control, Fan control, Combination control.
- Supports online upgrade.

Important Notes

- The panel should be mounted on the wall box with power interface (M/PTCI.1).
- The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).

Product Information

1 Button Panel A/1 Button Panel B - See Figure 6 -1

4 Buttons Panel A/4 Buttons Panel B - See Figure 6 - 2

Dimensions - See Figure 7 - 9

Components - See Figure 10

1. Button: Controls targets.

2. RGB backlight: Color and brightness level can be set.

3. Icons & text: Support laser labelling.

4. Communication interface

Backlight color setting:

Press Button A2 and A3 (see Figure 6-1, 6-2, 7&8) simultaneously for 7 seconds, and the panel enters color selecting mode. Pressing Button A2 means selecting previous color from local color library, while pressing Button A3 means selecting next color. The color will be finally determined if no operation is done within 20 seconds.

Programming mode: Press Button A1 and A4 (see Figure 6-1, 6-2, 7&8) simultaneously for 2 seconds, and the panel enters programming mode.

Upgrade mode: Press Button A2 and A3 simultaneously before powered on (see Figure 6-1, 6-2, 7&8), release the buttons after being powered on for 2s, then the panel enters upgrade mode.

Safety Precautions

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- The device should be wall box mounted. 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 operating instruction.
- 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 our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

Package Contents

Panel*1 / Datasheet*1

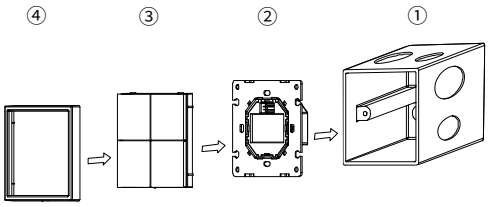


Figure 11. Installation

Figure 12. Horizontal installation

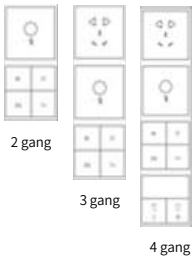


Figure 13. Vertical installation

Notes: Metal panels can be installed either horizontally or vertically. Plastic panels can be only installed horizontally.

Product name	Frame Types	Gang	Dimensions
2/3/4-gang frames	Metal	2 gang	176*90*11(mm)
		3 gang	262*90*11(mm)
		4 gang	348*90*11(mm)
	Plastic	2 gang	172*86*11(mm)
		3 gang	258*86*11(mm)
		4 gang	344*86*11(mm)

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	M/PT1RA.1: 7mA/30V DC M/PT1RB.1: 8.5mA/30V DC M/PT2RA.1: 9mA/30V DC M/PT2RB.1: 11.5mA/30V DC M/PT4RA.1: 12mA/30V DC M/PT4RB.1: 17mA/30V DC
Communication	KNX
Cable diameter of KNX terminal	0.6 - 0.8mm

External Environment

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

Specifications

Dimensions	Plastic version: 86×86×11(mm) Metal version: 90×90×11(mm)
Net weight	Plastic version: 64g Metal version: 110g
Housing material	Plastic version: Flame retardant PC Metal version: Aluminum alloy
Installation	Wall box (See Figure 11)
Protection rating (Compliant with EN 60529)	IP20

Approved

CE, RoHS

KNX

KNX Cable Guide

KNX	KNX Cable
-	Black
+	Red

Installation

Product installation (Take M/PT4RA.1 as an example)

Installation - See Figure 11

Step ①: Install the wall box in the wall.
Step ②: Secure the power interface to the wall box with screws.
Step ③: Install the panel on the power interface.
Step ④: Install the frame around the panel.

Horizontal installation - See Figure 12

Vertical installation - See Figure 13

Technical support
E-mail: hdltickets@hdlautomation.com
Website: https://www.hdlautomation.com