

Figure 1. M/P2R.1

Figure 2. M/P3R.1

图 1. 毅/金属按键面板 欧标

图 2. 毅/金属按键面板 美标

Customizable label / 可定制标签

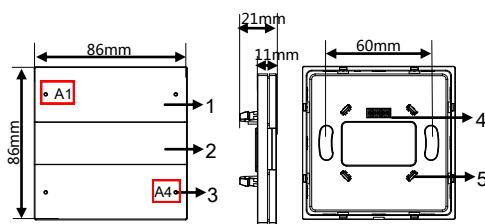


Figure 3 / 图 3

Figure 4 / 图 4

Figure 5 / 图 5

M/P2R.1

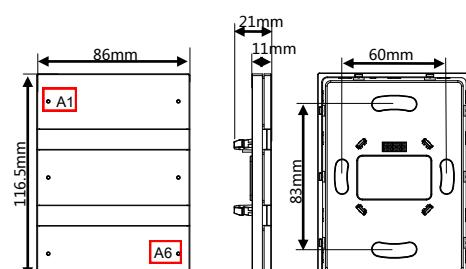
Figure 3 - 5. Dimensions  
图 3 - 5. 尺寸图

Figure 6 / 图 6

Figure 7 / 图 7

Figure 8 / 图 8

M/P3R.1

Figure 6 - 8. Dimensions  
图 6 - 8. 尺寸图

## Overview

Granite (See Figure 1-2) is a multi-function panel, which supports multiple control modes. It is embedded with RGB light for each button. Any color and brightness of label backlight and button indicator can be set in ETS software.

## Functions

- Mechanical buttons and button backlights are available;
- Supports button work modes: Left & right button combination mode or independent button mode;
- Adjustable color and brightness of the label backlight and button indicator;
- Supports multiple control modes: Switch control, dimming control, Shutter control, Flexible control, Scene control, Sequence control, Percentage control, Threshold control, String (14 bytes) control, Alternate control, RGB control, Fan control, Thermostat control, Combination control;
- With built-in temperature probe, the panel can automatically obtain the temperature information;
- The button indicator can be displayed mutual exclusively;
- Press the top left corner and the lower right corner button(A1 and A4 for M/P2R.1, A1 and A6 for M/P3R.1) simultaneously for 2 seconds, the panel will enter programming mode.

## Important Notes

- The panel must be wall box mounted.
- It must work in conjunction with the power interface.
- The device is compliant with KNX standard and the parameters are set by the Engineering Tool Software (ETS).

## Product Information

### Dimensions - See Figure 3 - 8

1. **Control button:** It is used to control the status of the targets
  2. **Label backlight:** It is for label backlight. The brightness can be automatically adjusted. The color and brightness of the indicator can be customized by user.
  3. **Button indicator:** It is used to indicate the status of the targets. The color and brightness of the indicator can be customized by user.
  4. **Communication Interface:** It connects to panel power interface.
  5. **Fastener:** It connects to panel power interface.
- Programming:** Press the top left corner and the lower right corner button(A1 and A4 for M/P2R.1, A1 and A6 for M/P3R.1) simultaneously for 2 seconds, the panel will enter programming mode.

### Product installation and disassembly

(Take M/P2R.1 as an example)

### Installation - See Figure 9 - 11

- Step 1. Fix the power interface into the wall box with screws.  
Step 2. Hold the edge of the panel, then insert the panel into the power interface module vertically.

### Disassembly - See Figure 12

- Step 1. Insert the panel gap with a slotted screwdriver.  
Step 2. Pry up the panel gently and hold the edge panel. Then the panel can be taken off.

### Glass replacement - See Figure 13 - 16 (Take M/P3R.1 as an example)

- Step 1. Insert the split gap on the left and right of the metal covers and the right split gap of the glasses with a slotted screwdriver, and pry gently, then remove the metal covers and glasses.  
Step 2. Align the new glasses and the original metal covers with the panel buckle and gently press to complete the glass replacement.

## 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 takes no responsibility for all consequences caused by installation and wire connection which are not in accordance with this document.
- 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

M/P2R.1 or M/P3R.1\*1 / Datasheet\*1

## 产品概述

毅（见图1-2）是一款多功能面板，支持多种控制模式。它设有多个按键，每个按键内嵌RGB灯。客户可通过ETS软件配置自己喜欢的标签背光灯及按键指示灯亮度和颜色。

## 功能说明

- 设有机械按键及按键背光灯；
- 按键模式：按键左右组合或独立按键模式；
- 标签背光灯及按键指示灯的背光亮度和颜色可调；
- 支持多种控制模式：开关控制、调光控制、窗帘控制、灵活控制、场景控制、序列控制、百分比控制、阈值控制、字符串控制（14字节控制）、交替控制、RGB控制、风扇控制、简易恒温控制、组合控制；
- 内置温度探头，可自动获取温度信息；
- 按键指示灯可以互斥显示；
- 同时按左上角和右下角按键(M/P2R.1 : A1和A4 ; M/P3R.1 : A1和A6)约2秒，面板将进入编程模式。

## 注意事项

- 面板必须暗盒安装。
- 必须与面板电源接口模块配合使用
- 本设备属于KNX标准设备，使用ETS软件进行编程。

## 产品信息

### 产品尺寸 - 见图 3-8

1. **控制按键:** 控制目标的状态。
  2. **标签背光灯:** 是用于标签背光，面板可自动调节背光灯亮度。用户可自定义标签背光灯的颜色和亮度。
  3. **按键指示灯:** 该指示灯可用于指示被控目标的状态。用户可自定义按键指示灯的颜色和亮度。
  4. **通信接口:** 连接面板电源底座。
  5. **卡扣:** 连接面板电源底座。
- 编程：**同时按左上角和右下角按键(M/P2R.1 : A1和A4 ; M/P3R.1 : A1和A6)约2秒，面板将进入编程模式。

### 设备的安装和拆卸

(以M/P2R.1为例)

### 设备的安装 - 见图 9-11

- 步骤1. 用螺丝将电源接口模块固定在暗盒里。  
步骤2. 手持面板边缘，对准卡口，垂直插入电源接口模块，不可过分用力按压面板。

### 拆卸面板 - 见图 12

- 步骤1. 用一字螺丝批插入面板缺口。  
步骤2. 轻撬面板，手握面板边缘，即可取下面板。

### 玻璃更换 - 见图 13-16 (以M/P3R.1为例)

- 步骤1. 用一字螺丝批分别插入金属面盖的两端拆分缺口和玻璃右端拆分缺口，轻撬并取下金属面盖和玻璃。  
步骤2. 将新的玻璃和原金属面盖对准面板扣位，轻轻按压，即可完成玻璃更换。

## 安全警告

- 本设备的安装及调试工作必须由我司或我司指派的机构进行。其电气安装的计划和施工，必须遵守当地相关的安全标准和法规。
- 该产品需暗盒安装，未按照本说明书进行安装及接线方式的，所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件，否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行，本产品的保修范围不适用于因用户拆卸产品而导致的故障。

## 装箱清单

M/P2R.1 或 M/P3R.1\*1 / 说明书\*1

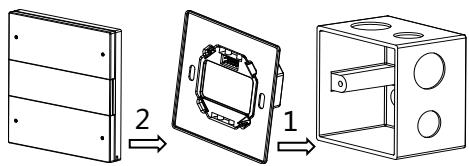


Figure 11 / 图 11      Figure 10 / 图 10      Figure 9 / 图 9

Figure 9 – 11. Installation  
图 9 – 11. 安装图

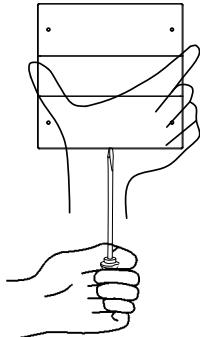


Figure 12. Disassembly  
图 12. 拆卸图

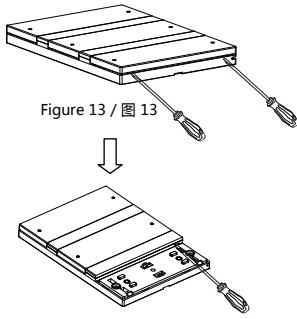


Figure 13 / 图 13

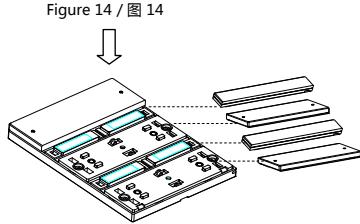


Figure 14 / 图 14

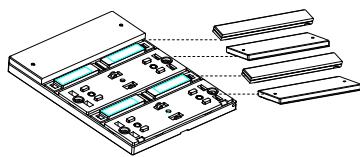


Figure 15 / 图 15



Figure 16 / 图 16

Figure 13 – 16. Glass replacement  
图 13 – 16. 玻璃更换

## 技术支持

服务热线 : 020-85820195

(工作时间 : 9:00-12:00, 13:00-18:00, 星期一至星期五)

邮箱 : kfb@hdlchina.com.cn

网址 : http://www.hdlchina.com

## Technical support

E-mail: support@hdlchina.com.cn

Website: https://www.hdlautomation.com

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EN

## Technical Data

### Electrical Parameters

Working voltage	21~30V DC
Working current	6mA / 30V DC
Communication	KNX
KNX terminal	0.6 - 0.8mm single core cable

### External Environment

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

### Specifications

Dimensions	M/P2R.1: 86×86×11(mm) M/P3R.1: 86×116.5×11(mm)
Net weight	M/P2R.1: 109g M/P3R.1: 138g
Housing material	Glass, PC, ABS, Aluminum
Installation	Wall box (See Figure 9 - 11)
Protection rating (Compliant with EN 60529)	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	
Glass	o	o	o	o	o	o	

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.

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## 技术参数

### 电气参数

工作电压	21~30V DC
工作电流	6mA / 30V DC
通信协议	KNX
KNX总线接线端子	0.6-0.8mm单芯电缆

### 外部环境

工作温度	-5°C~45°C
工作相对湿度	≤90%
储存温度	-20°C~60°C
储存相对湿度	≤93%

### 产品规格

尺寸	M/P2R.1: 86×86×11(mm) M/P3R.1: 86×116.5×11(mm)
净重	M/P2R.1: 109g M/P3R.1: 138g
外壳材料	玻璃, PC, ABS, 压铸铝
安装方式	暗盒安装 (见图9-11)
防护级别 (符合 EN 60529)	IP20

### 产品中有害物质的名称及含量

部件名称	有害物质						
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
塑胶组件	o	o	o	o	-	-	
五金铜件	o	o	o	o	-	-	
螺丝组件	o	o	o	x	-	-	
焊锡	x	o	o	o	-	-	
PCB组件	x	o	o	o	o	o	
IC	o	o	o	x	x	x	
玻璃	o	o	o	o	o	o	

- 表示不含有该有害物质。

o 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

### KNX Cable Guide

KNX	KNX 电缆
-	Black
+	Red

### KNX总线定义

KNX	KNX 电缆
-	黑
+	红