



HDL-MP4C.48

Figure 1 / 图1



HDL-MP6C.46

Figure 2 / 图2

Customizable label / 可定制标签

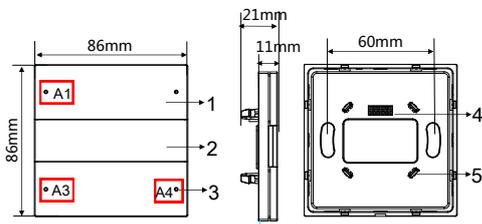


Figure 3 / 图3

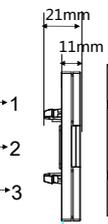


Figure 4 / 图4

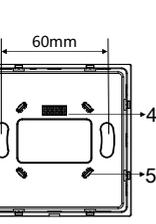


Figure 5 / 图5

HDL-MP4C.48

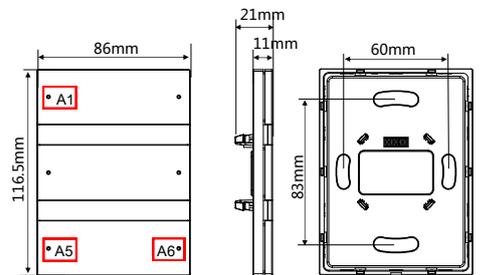


Figure 6 / 图6

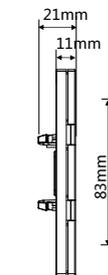


Figure 7 / 图7

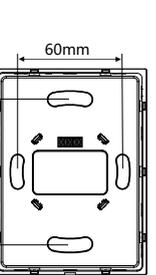


Figure 8 / 图8

HDL-MP6C.46

### Overview

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

### Functions

- Key Mode: Single on/off, Single on, Single off, Combination on, Combination off, Combination on/off, Double click/ Single on and off, Double click/ Combination on and off, Momentary, Short/long press, Short press/long press;
- Key Control Type: Scene, Sequence, Timer, Universal Switch, Single Channel Control, Broadcast Scene, Broadcast Channel, Curtain Control, GPRS Control, Panel Control, Security Module, Music Play, Universal Control, DALI Area Dimming, RGB Adjustment, Infrared Control, etc.;
- With built-in temperature probe, the panel can automatically obtain the temperature information;
- Adjustable color and brightness of the label backlight and button indicator;
- Test bus voltage function
- Combination button mutual exclusion function is available;
- Supports HDL Buspro online upgrades;

### Important Notes

- The panel must be wall box mounted.
- It must work in conjunction with the power interface.
- It is recommended to adopt Buspro Connection - Series connection (hand-in-hand).

### Product Information

#### Product 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. Normal and sleep mode can be set. The color and brightness of the label backlight can be defined by user.
  - 3. Button indicator:** It is used to indicate the status of the targets. The color and brightness of the indicator can be defined by user.
  - 4. Communication interface:** It connects to panel power interface.
  - 5. Fastener:** It connects to panel power interface.
- Address modification:** Keep pressing any button for 15 seconds, all the backlights will flash, the address of this device can be modified via HDL Buspro software: Submenu "address management-> address modify". Then press any button to exit.
- Panel locking and unlocking:** Press the top left corner and the lower right corner button (A1 and A4 for HDL-MP4C.48, A1 and A6 for HDL-MP6C.46) simultaneously for 2 seconds, the panel will be locked or unlocked.
- Manual upgrade:** When the panel is being powered on, pressing the 2 buttons at the bottom (A3 and A4 for HDL-MP4C.48, A5 and A6 for HDL-MP6C.46) simultaneously enables manual update.

#### The product installation and disassembly

(Take HDL-MP4C.48 as an example)

**Installation (See Figure 9-11):** Fix the power interface into the wall box with screws. Hold the edge of panel, then insert the panel into the power interface module vertically.

**Disassembly (See Figure 12):** Insert the panel gap with a slotted screwdriver, and pry up the panel gently. Then the panel can be taken off.

### 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 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-MP4C.48 or HDL-MP6C.46\*1 / Datasheet\*1 / Warranty card\*1

### 产品概述

毅(见图1-2)是一款多功能面板,支持多种按键控制类型。它设有多个按键,每个按键内置RGB灯。客户可通过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

- 按键模式: 单一开/关, 单一开, 单一关, 组合开, 组合关, 组合开/关, 双击/单开, 双击/组合开, 点动, 短按/长按, 短按/长按动;
- 按键控制类型: 场景、序列、时间开关、通用开关、单回路调节、广播场景、广播回路、窗帘控制、GPRS控制、面板控制、消防模块、音乐播放、通用控制、DALI区域调光、RGB调节、红外控制等;
- 内置温度探头, 可自动获取温度信息;
- 标签背光灯及按键指示灯亮度和颜色可调;
- 总线电压检测功能;
- 组合按键互斥功能;
- 支持HDL Buspro在线升级

### 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
- 总线连接 - 推荐使用手拉手的连接方式

### 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, 可设置正常和休眠状态。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:** 连接面板电源模块。
  - 5. 卡扣:** 连接面板电源模块。
- 地址修改:** 长按任意一个按键约15s, 按键灯一起闪烁, 此时可通过“HDL Buspro系统控制软件”的“地址管理→地址修改”对该模块进行地址设置, 再按任意一个按键, 按键指示灯停止闪烁, 退出设置。
- 面板锁定及解锁:** 同时按左上角和右下角按键(HDL-MP4C.48: A1和A4; HDL-MP6C.46: A1和A6)约2s可锁定面板及解锁。
- 手动升级:** 面板上电时, 同时按最下方2个按键(HDL-MP4C.48: A3和A4; HDL-MP6C.46: A5和A6), 可手动升级。

#### 设备的安装和拆卸

(以HDL-MP4C.48为例)

**安装(见图 9 - 11):** 用螺丝将电源接口模块固定在暗盒里。手持面板边缘, 对准卡口, 垂直插入电源接口模块, 不可过用力按压面板。

**拆卸面板(见图 12):** 用一字螺丝批插入面板缺口, 撬动面板, 即可取下面板。

### 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

HDL-MP4C.48 或 HDL-MP6C.46\*1 / 说明书\*1 / 保修卡\*1

## Technical Data

### Electrical Parameters

Working voltage	12~30V DC
Power consumption	13mA/24V DC
Communication	HDL Buspro
Buspro terminal	0.6-0.8mm single core cable

### Environmental Conditions

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

### Product Specifications

Dimensions	MP4C.48: 86×86×11(mm)
	MP6C.46: 86×116.5×11(mm)
Net weight	MP4C.48: 109g MP6C.46: 138g
Housing material	Glass, PC, ABS, Aluminum
Installation	Wall box (See Figure 9-11)
Protection rating (Compliant to EN 60529)	IP20

### Name and Content of Harmful Substances in Products

Harmful substances	Part components			
	Circuit board	Housing	Wire	Accessory
Lead (Pb)	○	○	○	○
Mercury (Hg)	○	○	○	○
Cadmium (Cd)	○	○	○	○
Cr, VI	○	○	○	○
Poly-brominated biphenyls (PBB)	○	○	○	○
Poly-brominated diphenyl ethers (PBDE)	○	○	○	○

The circle symbol "o" indicates that the content of the harmful substances in all the homogeneous materials of the component is below the limit required by the Standard IEC62321-2015.

### HDL Buspro Cable Guide

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
Brown/ Orange	24V DC	Red
Brown white/ Orange white	COM	Black
Blue white/Green white	DATA-	White
Blue/ Green	DATA+	Yellow

## 技术参数

### 电气参数:

工作电压	12~30V DC
总线耗电	13mA /24V DC
通信协议	HDL Buspro
总线接线端子	0.6-0.8mm单芯电缆

### 条件环境:

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	MP4C.48: 86×86×11(mm)
	MP6C.46: 86×116.5×11(mm)
净重	MP4C.48: 109g MP6C.46: 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

有害物质	零部件			
	电路板	外壳	线材	附件
铅(Pb)	○	○	○	○
汞(Hg)	○	○	○	○
镉(Cd)	○	○	○	○
六价铬 (Cr, VI)	○	○	○	○
多溴联苯 (PBB)	○	○	○	○
多溴二苯醚(PBDE)	○	○	○	○

圆圈符号“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。

### 总线定义

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
棕/橙	24V DC	红
棕白/橙白	COM	黑
蓝白/绿白	DATA-	白
蓝/绿	DATA+	黄

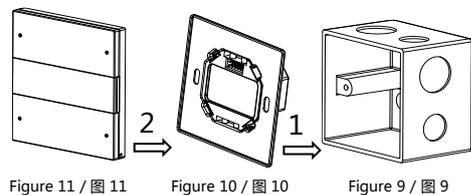


Figure 11 / 图 11      Figure 10 / 图 10      Figure 9 / 图 9

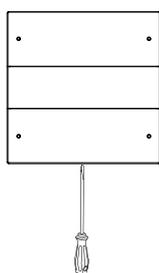


Figure 12 / 图 12

#### 技术支持

服务热线：020-84651666-7094

(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>