

HDL-MPTLC43.46-A 4.3 inch Enviro Touch Screen  
智绚S/彩色4.3寸触摸多功能液晶面板

HDL-MPTLC43-FM.46 4.3 inch Flush Mount Enviro Touch Screen  
智绚S/彩色4.3寸触摸多功能液晶面板

## buspro

Datasheet  
产品说明书

Issued: December 11, 2018  
发布: 2018年12月11日  
Edition V1.0.0



Figure 1. 4.3 inch Enviro Touch Screen  
图1. 智绚S/彩色4.3寸触摸多功能液晶面板

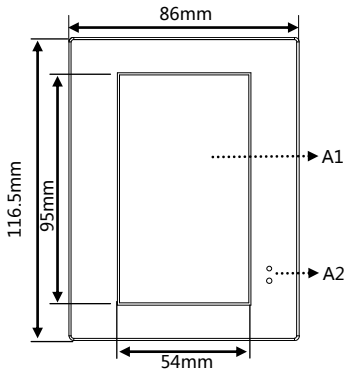


Figure 2 / 图2 (Regular)  
HDL-MPTLC43.46-A

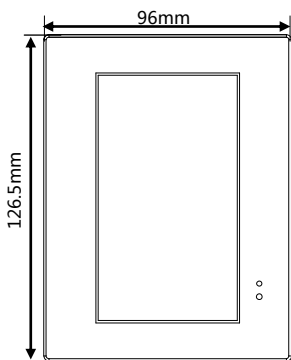


Figure 3 / 图3 (Larger)  
HDL-MPTLC43-FM.46

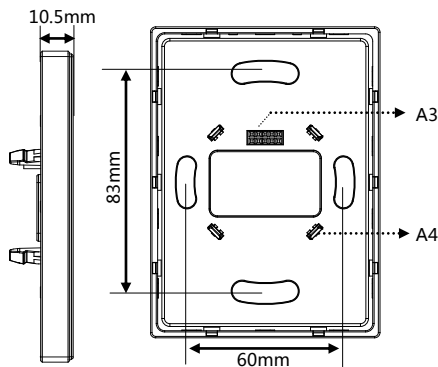


Figure 4 / 图4

Figure 5 / 图5

Figure 2 - 5. Dimensions  
图2 - 5. 尺寸图

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## Overview

Enviro Touch Screen (See Figure 1) is a high-end and multi-function control panel for home automation. With real color LCD screen, touch control, it is convenient for the users to control lighting, scene, curtain, music, air conditioning, floor heating and others in an intuitive way.

## Functions

- Built-in temperature sensor and proximity sensor;
- Adjustable LCD backlight;
- LCD screen wakes up automatically;
- According to the preset time, the panel can automatically switch to the set interface. As the set time passed, the screen dims and enters the energy saving mode;
- 60 control buttons in total can be set. The quantity and layout of the control buttons can be customized by user;
- AC control: Supports 9 air conditioners
- Floor heating control: Totally 9 floor heating modules supported. Floor heating modes: Normal, Day, Night, Away, Timing. (According to the preset time, the panel can switch automatically between Day mode and Night mode.)
- Music play: supports 9 music players  
Various music source supported: SD card, Audio-IN, BT, S/PDIF, RADIO;  
SD card playlist options: LIST1...LIST10;
- Timer function
- Security settings: supports various security modes: Vacation, Away, Day, Night, Meeting guests, etc.
- Standby interface: Date, time and current temperature display;
- Various key modes: Invalid, Single on/off, single on, single off, combination on, combination off etc.;
- Various key control modes: Scene, sequence, time switch, universal switch, single channel adjustment, broadcast scene, broadcast channel, curtain control, GPRS control, panel control, security module, music play, general control;
- Panel control functions include: Infrared receiving enable, AC on/off, AC cooling/heating mode, Auto temperature setting, fan speed adjustment, AC mode setting, AC temperature adjustment, backlight switch, AC lock, backlight and status indicator luminance setting, floor heating temperature and mode control etc.;
- Upgrading online via HDL Buspro is available.

## Important Notes

- The panel should be installed on wall box.
- The panel should work in conjunction with the power interface.
- It is recommended to connect wires in hand-in-hand.

## Product Information

Dimensions - See Figure 2 - 5

- A1: LCD screen:** 4.3-inch IPS true color LCD screen with customizable icons via HDL Buspro Setup Tool.
- A2: Proximity Sensing:** Also known as wake-up function, when human body approaches the sensor, the LCD screen will wake up.
- A3: Communication interface:** HDL Buspro bus connector. It connects to panel power interface.
- A4: Mounting slot:** Connects to panel power interface.

### Product installation and disassembly

Installation - See Figure 6

- Step 1. Install the wall box in the wall.
- Step 2. Fix the power interface onto the wall box with screws.
- Step 3. Hold the edge of the panel, and insert the panel in the slots of power interface vertically.

Disassembly - See Figure 7

- Step 1. Insert a straight screwdriver into the gap between the panel and power interface.
- Step 2. Hold the panel, pry up the panel gently and take down the panel.

## 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 installed on wall box. HDL does not take responsibility for all the consequences caused by installation and wire connection that 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

Panel\*1 / Datasheet\*1

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## 产品概述

智绚S/彩色4.3寸触摸多功能液晶面板(见图1)是一款高端智能家居多功能控制面板。采用真彩液晶屏,全触摸控制,操作方便快捷。它通过直观方式实现对灯光,场景,窗帘,音乐,空调,地暖等控制。

## 功能说明

- 内置温度传感器及接近传感器;
- 液晶屏背光亮度可调;
- 液晶屏唤醒功能;
- 根据设置的时间,自动切换到设定界面,屏幕变暗,进入节能模式
- 共可设置60个控制按键,用户可自由选择控制按键数量和布局;
- 空调控制:支持9个空调;
- 地热控制:支持9个地热模块,模式:普通,白天,夜晚,离开,时间;(根据设置的时间,白天模式和夜晚模式自动切换)
- 音乐播放功能:支持9个音乐播放器。  
支持多种音乐播放源选择:SD, Audio-IN, BT, S/PDIF, RADIO;  
SD卡中播放列表选择, LIST1.....LIST10;
- 定时器功能, 定点提醒;
- 安防设置:可设置各种安防模式,如度假,离开,白天,夜晚,会客等;
- 待机显示界面:可显示日期时间,当时的温度等;
- 多种面板按键模式:无效模式、单一开/关、单一开、单一关、组合开、组合关等;
- 多种面板按键控制类型: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、通用控制等;
- 面板控制包括:红外接收使能、空调开关、空调制冷、制热、自动温度的设置,空调风速设置,空调模式设置,升高或降低温度,背光开关,空调锁,背光灯及状态灯亮度设置,地热温度及模式控制;
- 支持HDL Buspro在线升级;

## 注意事项

- 面板安装方式为暗盒安装。
- 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2-5

- A1: 液晶屏:** 该屏是4.3寸IPS真彩液晶屏,用户可以自定义图标。
- A2: 接近感应:** 即唤醒功能,当人体靠近此处时,液晶屏会被点亮。
- A3: 通信接口:** HDL Buspro。与电源接口模块连接。
- A4: 卡扣:** 与电源接口模块连接。

### 设备的安装和拆卸

安装 - 见图6

- 步骤1. 将底盒安装在墙上。
- 步骤2. 用螺丝将电源接口模块固定在底盒里。
- 步骤3. 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7

- 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。

## 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

面板\*1 / 说明书\*1

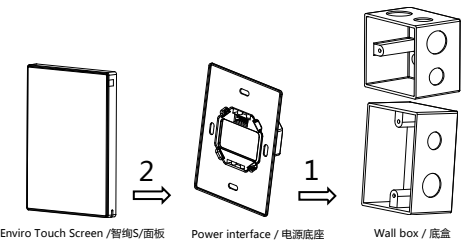


Figure 6. Installation  
图 6. 安装图

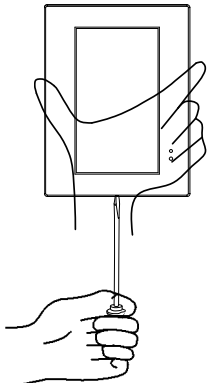


Figure 7. Disassembly  
图 7. 拆卸图

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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## Technical Data

### Electrical Parameters

Working voltage	12~30V DC
Working current	85mA/24V DC
Communication	HDL Buspro
Buspro 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

LCD resolution	480x272
Dimensions	86×116.5×10.5 (mm) (Regular) 96×126.5×10.5 (mm) (Larger)
Net weight	129g(Regular) , 186g(Larger)
Housing material	Glass, Aluminum alloy, PC, ABS
Installation	Wall box (See Figure 6)
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.

## 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

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## 技术参数

### 电气参数

工作电压	12~30V DC
工作电流	85mA /24V DC
通信协议	HDL Buspro
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

显示屏分辨率	480x272
尺寸	86×116.5×10.5 (mm)(通常) 96×126.5×10.5 (mm)(加大)
净重	129g(通常), 186g(加大)
外壳材料	玻璃, 铝合金, PC, ABS
安装方式	暗盒安装 (见图6)
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	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	o	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。

## 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