

BUILDING AND HOME AUTOMATION CONTROL SYSTEM

buspro











Building and Home Automation Control System

HDL social media and more...

We, the team at HDL, are pleased to invite you to join us in the social media community. As an HDL customer, you are very important to us, and we look forward to assisting you however and whenever we can. We invite you to explore our solutions, learn more about us online, and connect with others who can inspire and help you. Follow us on Facebook, Twitter, YouTube and Google+!

Follow us on Facebook, Twitter, Youtube and Google+!









HDL Automation

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HDL Automation HDL A

HDL Automation



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Company Profile

HDL is an international company which has prided itself on providing the highest possible level of professional service since 1985.

With its headquarters based in Guangzhou for manufacturing, distribution and integration solutions, HDL has become one of the main participants on the international scene of home and building automation.

Due to the reliability of the HDL Buspro, we have developed different kinds of projects, ranging from a smart house in Norway, through a luxury hotel in Dubai and a lighting control system in the famous Sydney Opera House, to the biggest international events, such as the Shanghai Expo 2010.

The HDL brand has been widely distributed around the world, and is available in more than one hundred countries, through various dealers, integrators and distributors.

We are proud to state the reason why we have become a top company in the sector. Caring about our customers is our priority, and we are always searching for the next innovative step to provide our customers with a customised solution for their homes, and the most productive and energy-efficient solutions for their businesses.

A Powerful R&D Department

The aim of HDL is to accelerate the worldwide transition to the full automation of homes and buildings, with a full and diverse range of increasingly-affordable HDL Buspro products. To this end, our engineers constantly work on the cutting edge of innovation, looking for the next challenge to create products with new functionalities, more customisable for our customers, and widely compatible with the different technologies available in the market.

Excellent Technical Support

The best way to recognise good service is, of course, to have experienced bad service in the past, and then to experience good service to compare it against. We are confident that you will only ever experience the highest level of service with HDL. If any of your products do give you any problems, you should be able to find the solution as quickly as possible. Your time is valuable to you and us, and it should not be wasted.

Our team was designed and constructed to work closely with our R&D department. We are able to provide a fast and very direct technical support service which will help you with your installation, configuration, and all types of issues that may present themselves.



Advantages of HDL

VALUE



- Best Price-Quality / Functionality Ratio.
- Highest cost-performance in the market.

SERVICE



- Fast and decisive Technical Support service.
- Customization of our products, materials or design on customers request.
- Possibility to provide OEM solutions.

DELIVERY



- Quickest delivery in the market. Ready to delivery to whichever part of the world.
- Availability of shipping by plane and ship.
- Free shipping only in case of manufacturing defect.

02/HDL



Would you like to become an HDL Member?





An interesting and promising business opportunity is waiting for you. Contact with us: sales@hdlautomation.com



- HDL is an international company with a presence in more than eighty different countries all around the world.
- Its headquarters are situated in Guangzhou, with offices in Oslo, Dubai, Munich and London.
- HDL's distribution network covers the whole world, with more than 200 dealers and distributors, and over 1,000 installation designers and electrical installers.

HDL $\setminus 03$

BEIJING GREAT HALL OF THE PEOPLE

THEATER LIGHTING CONTROL PROJECT

BMW WORLD MUSEUM IN GERMANY

M DMX SHOW CONTROL PROJECT







From 1995 to the present

The largest and most outstanding stage lighting control system in China was built by HDL.

HDL provided 95% of the stage lighting solution for this iconic building, which is used for legislative and ceremonial activities of the Communist Party.

From 1995 until the present, HDL has been the company in charge of maintaining, checking over and upgrading the intelligent control system, which has more than 6,000 different lighting channels, and stage lighting with more than 20,000 lamps.

The whole of the intelligent control system is managed through Ethernet, and from the control center we can monitor the state of each single device and lamp.

HDL was not only focused on the improvement of the stage lighting control system, but also enhanced and optimized the energy-saving aspect of the project.

The BMW Museum Center is the symbol of Munich. The modern museum is located at the Olympic Park, and is a reference model for multi-functionality in building, as well as a great example of an energy-saving system.

Eventa AG, as the construction contractor, selected HDL to provide the DMX Lighting Control solution for the spectacular glass showroom.

In this case the customer asked us to keep the balance between outdoor and indoor lighting through a huge sensors system connected by HDL Buspro.





HDL \05

GUANGZHOU ASIAN GAMES PROJECT

M HOME AUTOMATION CONTROL PROJECT



SHANGHAI WORLD EXPO CENTER

■ BUILDING AUTOMATION CONTROL PROJECT
 ■ BUILDING BUI







In 2010, Guangzhou celebrated the 16th edition of the Asian Games (ASIAD), the best Asian Games so far. This was a massive event unprecedented in both size and scale. HDL contributed to this success by implementing their solutions for the Asian Games Village.

HDL provided the home automation for all the apartments in the Asian Games Villas. The solution chosen by the organization was an integration of lighting, curtains, AC, background music, video, security, monitoring systems, intercom, and door access, with everything controlled by HDL's App available for tablets and smart phones.

Shanghai became the capital of the world during the world Expo in 2010. The theme of the exposition was "Better Life-Better City" and it had the largest number of countries participating, and was the most expensive Expo, in the history of the world, with more than 73 million participants.

HDL was the company selected to integrate the solution for the most important building in the nationalities area, the China Pavilion, and also the China Aerospace Pavilion in the cooperates area.

HDL implemented and displayed an outstanding outdoor lighting effects, controlled by a combination of lighting network systems which covers the whole area of the World Expo Park.

The company achieved the target of making unique buildings which captured the attention and imagination of all the visitors, and HDL became established as an expert and reliable company for urban outdoor lighting landscapes, and stages for massive events.





HDL \07

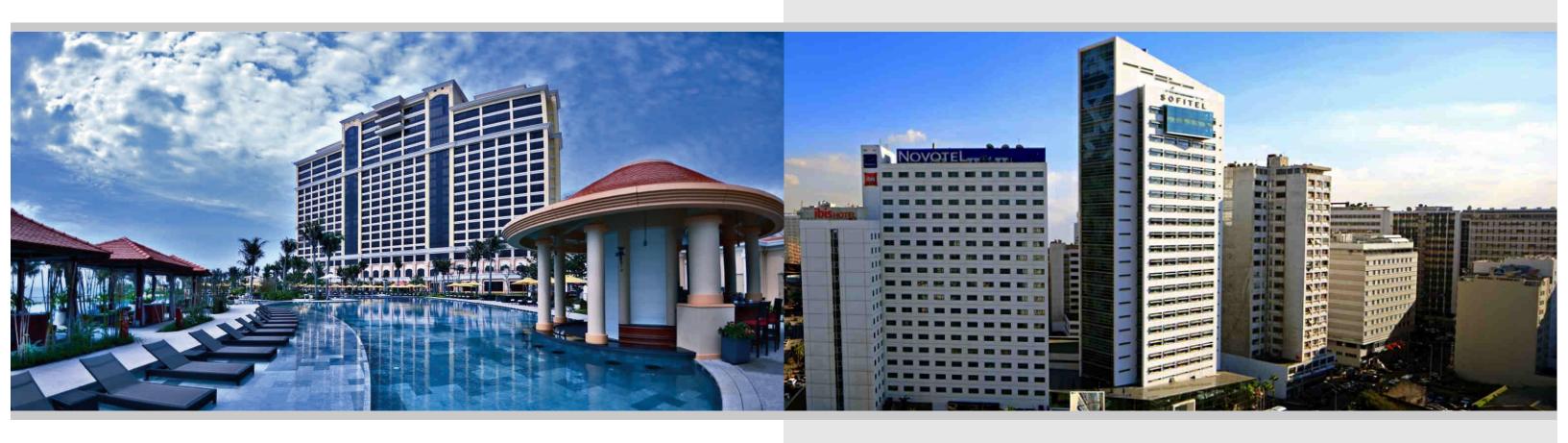
08/ HDL

VIETNAM GRAN HO TRAM STRIP CASINO HOTEL

LUXURY CASINO HOTELAUTOMATION PROJECT

SOFITEL CASABLANCA TOUR HOTEL

LUXURY RESORT HOTEL AUTOMATION PROJECT







HDL's Hotel Guestroom System was implemented in all of the 541 guest rooms in the hotel, in the biggest resort in Vietnam. This included: integrating lights control and AC control; clean room notifiers; provision of room status to reception (mostly used to prepare services in advance); motion sensors; dry contact modules for integration with doors' magnetic sensors; and door bells with DND service (Do not Disturb showed at the door's bell display).

The big challenge for HDL was to satisfy the requirement from the customer to make HDL's Hotel System compatible with the software used for the general management of the hotel, a hospitality ERP from the USA. Our engineers started to work right away, and HDL achieved the target with a high score. The customisation for the client was highly successful, and ready on time.

Furthermore, when the guest is checking in or out, the reception staff can remotely control all the room's functionalities from reception in order to prepare the room for a warm welcome to the customer in the case of check-in, or to save energy by switching off all the lights in the room after the customer has checked out.

All 171 rooms and 30 suites of the SOFITEI Casablanca had lighting, AC, and curtains fully automated, with control enabled via a customized DLP panel. To enable the energy consumption and guestroom amenities to be controlled and monitored, the hotel was equipped with HDL guestroom management software.

The solutions that you can find in the rooms are a control panel inside the room from which the customer can display the room status on an external doorbell display; and lighting and curtain functions that can be controlled from within the room from the room controller designed by HDL.

The system brought a minimalist and elegant but homely style to both customers and hotel workers. Different scene modes such as Read Mode and Night Mode make the otherwise complicated on/offs easier and more attractive for the guests.

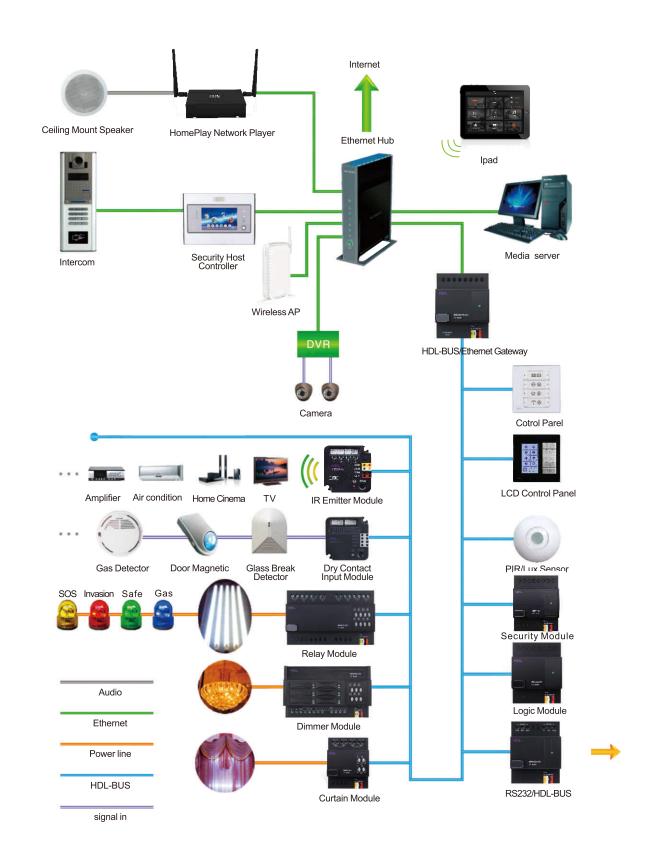


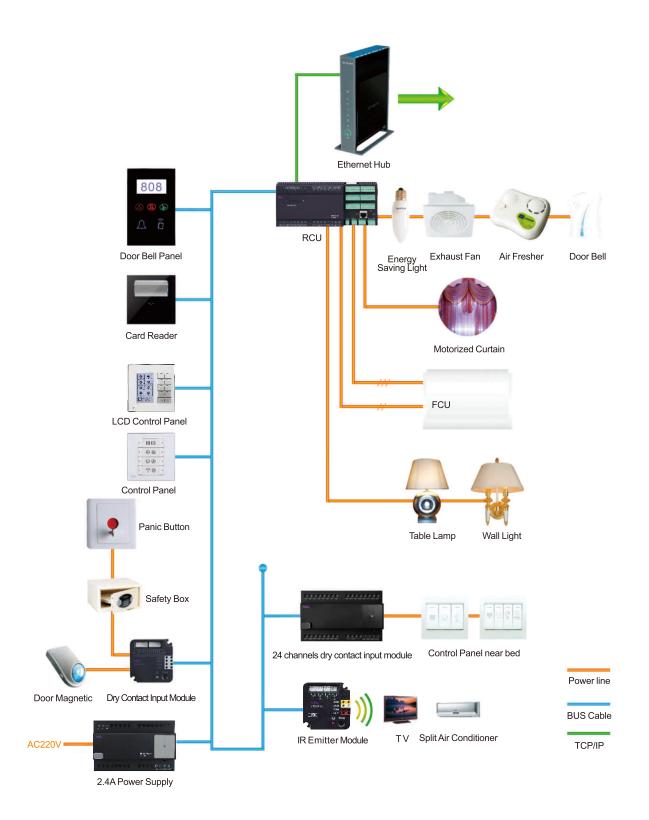


HDL $\setminus 09$

SMART HOME SOLUTIONS

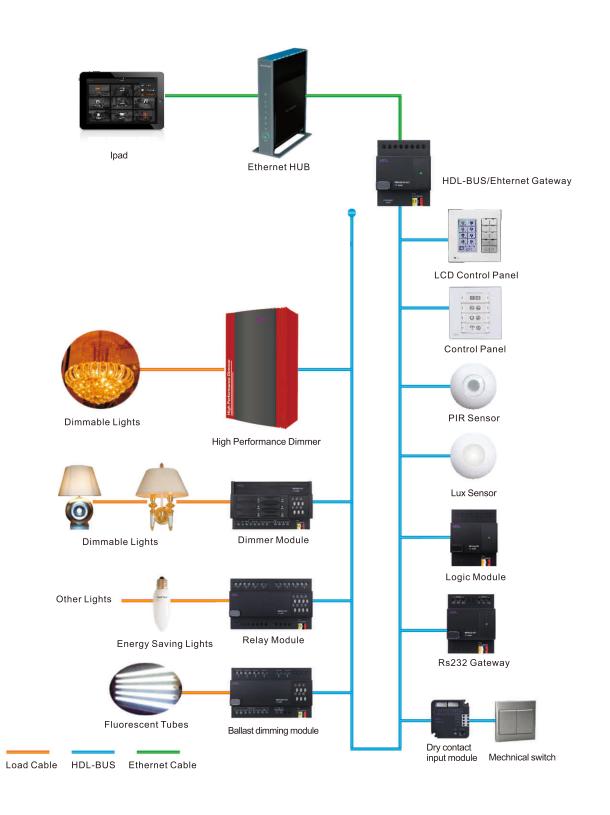
SMART HOTEL SOLUTIONS

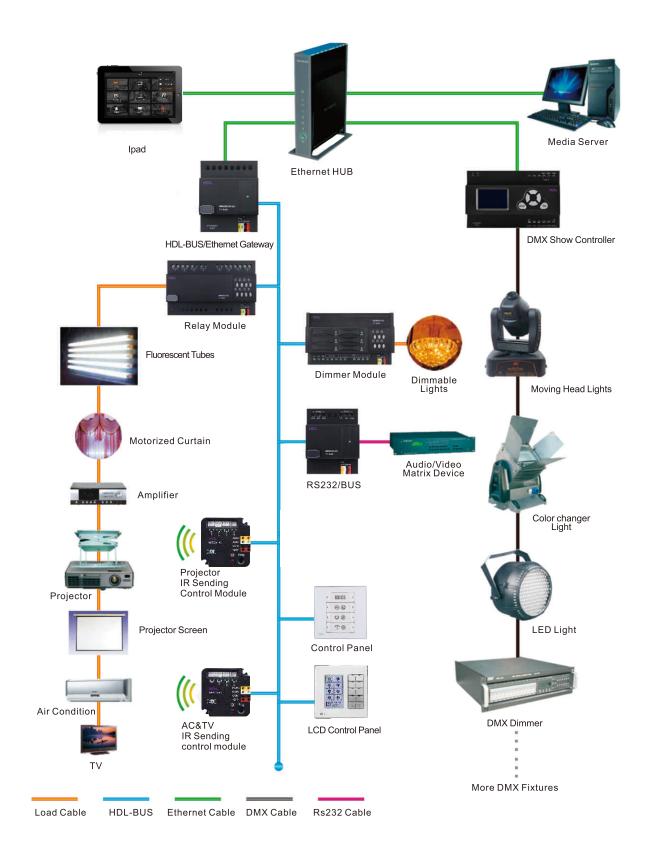




INTELLIGENT LIGHTING SOLUTIONS

SMART OFFICE





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WELCOME TO HDL's SHOWROOM

In HDL we think the best way to showcase our products is to allow you to experience them as if they were in your own home. We do this in our comfortable showroom which is situated in Guangzhou, China.

All our guests will feel and test the HDL Buspro technology in all the corners of this smart house, which you are cordially invited to visit, to experience the exciting home automation in its pure state.

66 Designed to stimulate your ideas and be a source of inspiration ??





66 Take a closer look to see how home automation equals comfort and luxury 99



66 The HDL Buspro training sessions and celebrations take place in the multi-functional auditorium room **



Feel how different scenes can create different environments and moods in your home. **



We are eagerly looking forward to your visit. We would love to have you as our special guest!





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66 We display useful innovative features, helping you to identify a design with functional benefits to suit your own needs. 99

HDL* \15

INTERNATIONAL TRAINING FOR HDL Buspro

Join the International HDL Buspro training and get the official HDL high-skilled user certification.

Also visit our factory and learn how the products are created, and how quality control is performed; because the best way to know how HDL Buspro works is to learn it from the engineers who have created it.

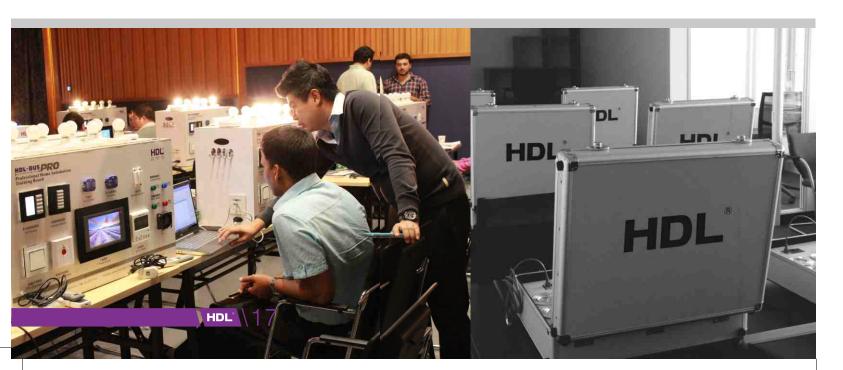






Characteristics of the HDL Buspro training

- Every year we arrange three or four international training sessions.
- The training sessions are delivered through fluent English.
- Different levels: basic course and advanced course.
- HDL provides special training for repair parts.
- HDL helps you to arrange all that you need for your trip.
- HDL also provides training in other countries: ask your distributor for details.



INTERNATIONAL EXHIBITIONS

HDL attends different theme exhibitions and fairs. HDL's attractive booth displays different solutions tailored to show the most relevant aspects of HDL Buspro to suit the topic of the specific event, to catch the attention of the new customers who still don't know about HDL Buspro

HDL is always present at the most important events and exhibitions







International exhibitions in which HDL has been presented

Frankfurt Light Building Expo

March 2016 in Frankfurt, Germany Lighting and Building



ISE 2017

February 2017 in Amsterdam, Netherlands
Integrated Systems Europe



2017 Integrate Expo

August 2016 in Melbourne, Australia

Australia's leading AV, Live Production

+ Systems Integration Event



BEX Asia Build Eco Xpo

September 2017 in Singapore

Asia Pacific's Largest Green Building Business Event



HI-TECH Building Exhibition

November 2017 in Moscow, Russia

The most important annual event for home and building automation in Russia & the CIS









Control everything from everywhere

CONTROL ALL THE FUNCTIONS OF HDL Buspro FROM YOUR SMARTPHONE AND TABLET

HDL ON App



Systems Supported: (iOS + (iOS - CO))

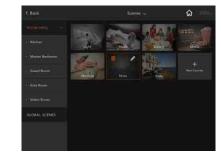




Lighting



• Air Conditioning



Scenes





Shading



Air Conditloning

Music





TV



Monitoring



Security



Irrigation

Description

Nowadays, consumers look for comfort and simplicity. This concept, extended into the home and building automation field, means the ability to have full control of HDL Buspro functions from the everyday devices that everybody has always on hand, like the smartphone or tablet.

 $\ensuremath{\mathsf{HDL}}$ On is an app developed by $\ensuremath{\mathsf{HDL}}$'s engineers specially for $\ensuremath{\mathsf{HDL}}$ Buspro. With an attractive design and user-friendly interface, it is perfect for all kinds of people, whether or not they are familiar with the technology. Everybody will enjoy the power of controlling all the functionalities within their house or business with the flick of just a few buttons.



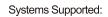


Universal Visualization & Control Software

CONTROL SOFTWARE FOR HDL Buspro



















66 Control your entire home automation system and audio/video equipment from a user-friendly interface ??























V2.1



- KNX
- Crestron
- AMX
- Modbus

Teco

HDL Buspro

- iNELS
- Helvar
- Domintell
- Lutron

Any Audio/Video equipment and Media Server

HDL* \19

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Buspro is a distributed communication bus protocol based on the RS-485 standard, which enables control of all building appliances, and integration with third party software and hardware. It allows technologies to merge and can be expanded in a simplistic manner.

1 Channel Tubular Blind Controller

MVSM45B.12



Common Parameters

• Power Supply: DC16~30V • Rated voltage: AC220V 50Hz

- Static direct-current power: 0.7W
- Dynamic direct-current power: 1.2W
- Working voltage range: AC190~235V
- Working current: 0.6A
- Rated power: 140W
- Rated torque: 10N.m
- Rated speed: 17r/min
- Terminal: HDL Buspro
- dB: 42dB
- Insulation class: H
- IP class: IP44
- Dimension: Φ45×75.5(cm)

Functions

- Can control to open, close, stop and percentage control
- Communication: HDL Buspro
- AC motor is power source, provide enough power, it can make the torque of tubular motor big enough
- Overheat protection
- Supports online upgrading
- Supports easy programming

MVSM45B.12



The MVSM45B.12 is a tubular blind controller, which has been designed to automate all common roller blinds. The unit can output 10 Nm of torque giving an effortlessly smooth action, and operates at a barely audible 42dB.

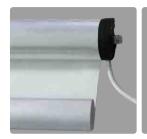




Using a single phase AC motor the unit can effortlessly control blinds via its 10 Nm of torque. To provide a user with the ultimate in blind control, the unit has percentage control; stop, up and down control.



To increase reliability and service life, the MVSM45B.12 utilizes overheat protection. This safeguards not only the unit itself, but the system it is integrated into.











HDL \21 22/ HDL

1 Channel Motorized Curtain

MWM70B.22





HDL-MWM70B.22 is the new motorized curtain, it supports open, stop, close and percentage control. And It has manual mode and over heat protection.

MWM70B.22



Created to open and close curtains effortlessly, the HDL-MWM70B.22 Motorized Curtain enables curtains to be completely integrated into a Buspro automation system. This lets you control your curtains with the press of a single button, or take full advantage of the Buspro system through:

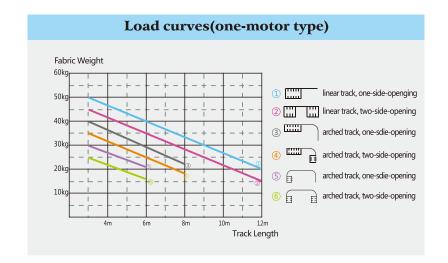
- Precise percentage control
- Scheduled opening and closing
- Scene and sequence integration
- Intelligent opening and closing based on sensor data
- Remote opening and closing via iOS and Android devices

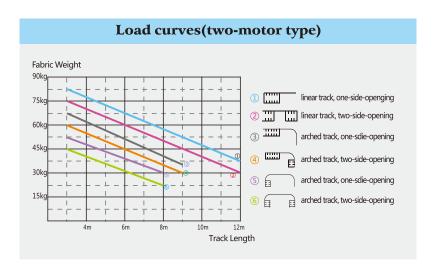
Parameters

Power Supply: AC220V 50HZ
Rated power: 75W
Rated torque: 1.2Nm
Rated speed: 112rmp
• Line speed: 20cm/s
Insulation class: I.CI.F
• IP class: IP20
Bus working voltage: DC12-30V
Bus power consumption: 40mA/DC 24V
Communication interface: HDL-Buspro
Interface: RJ11(6P6C)network port

Functions







HDL $\setminus 23$

Touch DLP Panel

MPTL14.46-A



MPTL14.46-A



Parameters





Points For The 'Touch' DLP Panel

■ 7 Different Pages

With 7 separate and easy to navigate pages, a user can take complete control over their lighting, air conditioning, back ground music, floor heating, and security. Each of the pages has 8 buttons providing effortlessly smooth control, and 2 dedicated scrolling buttons. In addition to this located on the bottom of the panel are four customizable shortcut keys, giving you fast and intuitive system navigation.

Customizable

Every aspect of the DLP can be customised, from the on screen icons to the fascia colour, allowing the touch panel to be tailored to any environment or situation. A personalised logo or engraving can even be added to the screen to give you a truly unique solution.

Flush Mount

When the DLP touch panel is coupled with the flush mount system, the panel projects a mere 3mm from the wall. This seamless integration between panel and building has been designed to ensure that the panel is an organic element of the building, and does not intrude upon the aesthetics of a room.

Multi-functional

The DLP touch panel is able to do more than control every system and device in a building. With its built in temperature sensor, data can be sent to the thermostat allowing each room to be monitored independently. This ensures that your heating and cooling solutions are optimized, and work as efficiently as possible.



Customize different plate and frame color

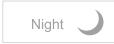












What's your favorite color?

Your Company's Logo In The Switches

Give an excellent branding for your company using customized front plates with the logo of your company or the corporate colors.

Choose The Color That Defines Your Home's Personality

We provide the possibility to print out layout colors, picture or image texture on the front plate that suit your lifestyle or with your interior designer's project. colors.



HDL $\setminus 25$

Enviro Panel

MPTLC43.46-A



MPTLC43.46-A



SIDE

Parameters

- Working voltage: DC12~30V (From HDL-MPPI.46)
- Power consumption: 85mA /DC24V
- Terminal: 0.75-0.85mm Diameter Single Core
- Housing Material: Glass, PC, ABS
- Installation: GI Wall Box
- Dimensions: 86x116.5x10.5(mm) (Normal) 96×126.5×10.5 (mm) (XL)

■ ENERGY MANAGMENT

The crowning feature of the Enviro panel is its ability to monitor in real time th electrical and water resources being consumed. This is particularly useful if a user is trying to cut down on their energy usage, or if they simply wish to be notified of excessive energy use.

MULTIPLE LANGUAGES

Designed to be simple to use and easy to understand, the Enviro Panel is able to display multiple languages effortlessly. From English to Japanese, and everything in between, whatever language you speak so does the EnviroPanel. This coupled with customizable icons and fonts makes total building control completely intuitive.

4.3" CAPACITIVE LED

Sporting a 4.3 inch capacitive touch LCD screen, the Enviro Panel allows a user to know at a glance exactly what systems are active. The screen also boasts a cool blue back lit display that is capable of being constantly active, allowing fast location detection in dim or unfamiliar conditions.

MUTIPLE TARGETS

Users can take complete control over every feature of their building, with a single Enviro Panel. From lighting, curtains, music, scenes, sensors, timers, AC, floor heating, and even security solutions. This effortless control enables a user to know exactly what feature or appliance is being used and where.



HDL \27

Touch Buttons Switch EU

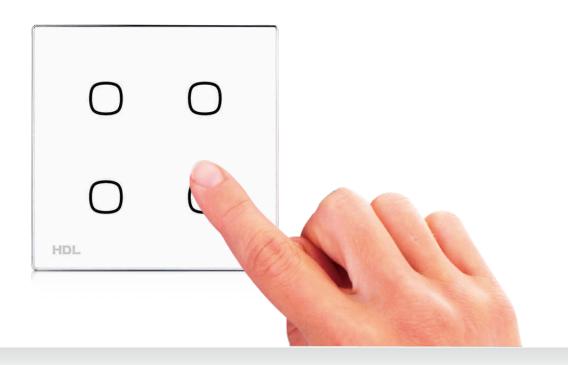
MPT4.48-A

SIDE

Touch Buttons Switch EU

MPT2.48-A / MPT2.46-A / MPT4.46-A / MPT6.46-A

MPT2.48-A



■ The back-light button lights up when it is touched

Each touch button has two-colour custom status which can be infinitely adjusted via the RGB value. The Touch Panel technology adjusts automatically to the changing environmental conditions such as humidity and temperature. Also other parameters such as the back-light's brightness and saturation are adjustable.

■ The color, icons and pattern of the plate can be customised

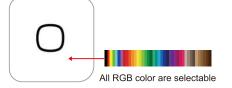




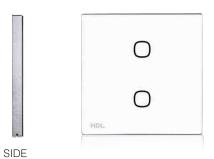








Status without backlight color



Parameters

• Power supply: DC12-30V • BUS power consumption: 20mA/DC24V Installation: Wall mounting • Dimensions: 86×86×10.5(mm)

Functions

 Working with MPPI.48 panel power interface • 1/2/3/4 touch control buttons • Multi modes for button: 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 press/long press, short press/long momentary etc. • Multi control types for button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security module, music Adjustable RGB backlight Support easy programming Support HDL Buspro online upgrading



IR Remote Built-in IR receiver (You need to replace a plate with an IR receiving hole to enable the IR remote control function)

Control

MPT2.46-A



MPT4.46-A



MPT6.46-A



MPT4.48-A

DLP Switch EU

MPL8.48-A

MPL8.48-A

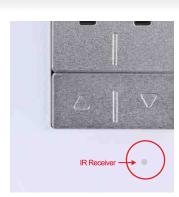


New generation DLP

New design features such as metal buttons with four left/right keys (in total eight individual buttons) which you can merge together and configure their LEDs. The frame and plate are selectable with different materials and colours to fit in with your lifestyle.

With just one DLP you can control your whole house. Up to 32 buttons distributed through four pages, you can control up to 99 targets with each button, and in total more than 3000 targets like lighting, curtain, blinds, HVAC, heating system, background music, etc.

The new firmware supports 147 different languages, has a user-friendly interface, and provides easy programming functions as well. The DLP panel allows connections with dimmers, relays, curtains, etc. directly without software. All the buttons have the ability to record the state of the rest of buttons and create with them new scenes in the DLP panel. This special function makes creating and changing scenes easy for the end users.



IR Remote

Control

Built-in IR receiver (You need to replace a plate with an IR receiving hole to enable the IR remote control function)

DLP Switch / LCD Touch Thermostat with Metal Frame

MPL8.46-A / MPTAC01.48-A

Parameters

- Power supply: DC12-30V
- BUS power consumption: 30mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×86×10.5(mm)

Functions

- Works with MPPI.48 panel power interface
- 8 control buttons, 2 page buttons, button combine function
- Multi Modes for button: Single on/ off、 single on、 single off、 combination on combination off combination on/off double click/ single on/ off combination on/off double click/ single on/ off combination off combination on/off double click/ single on/ off combination on/off combi double click/combination on/off, momentary clock timer short press/long press、short press/long momentary、 "hyperlink" etc
- Multi control types for button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security, music
- IR remote control, adjustable LCD back light
- Floor heating, air conditioning and music control
- · Supports HDL Buspro online upgrading

MPL8.46-A



Parameters

- Working voltage: DC12~30V (From MPPI.48)
- Power consumption: 40mA/DC24V
- Temperature setting range: 0~30°C
- Dimensions: 86×86×10.7 (mm)

Functions

- The panel can control air conditioner 's temperature, mode, fan speed and power.
- Supports cooling, heating, dehumidification and fan speeds.
- · Supports high, medium, low, auto fan speeds.
- Supports temperature and status display of air conditioner
- · Supports IR, backlight intensity, and power saving mode.
- Supports firmware updates via HDL Buspro software.

MPTAC01.48-A



SIDE

32/HDLHDL \31

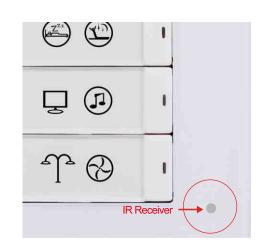
8 Buttons Switch

MP8B.48

DIY Concept Do It Yourself Selectable plate and frame this is ideal in situations where you may need to regularly change or adjust the 12 functionalities of different buttons. The text on the buttons is easily adjustable, removable, and replaceable to suit your individual and changing needs. **₽** You simply print what you want, fix it to the button and cover it with the plastic sleeve. T 0 This also makes it a very economical option as opposed to committing yourself to ones with design at the outset. 8 Q 8 BEDROOM

IR Remote Control

Built-in IR receiver (You need to replace a plate with an IR receiving hole to enable the IR remote control function)



2/4/6 Buttons Switch

MP2B.48 / MP4B.48 / MP6B.48

Parameters

Power supply: DC12-30V
BUS power consumption: 15mA/DC24V
Installation: Wall mounting
Dimensions: 86×86×10.5(mm)

Functions

Working with MPPI.48 panel power interface
4/6/8 control buttons
Multi modes for button: 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 press/long press, short press/long momentary etc.
Multi control types for button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security, music
Customize button labels
Key lock function
Key led status can be adjustable
Support easy programming
Support HDL Buspro online upgrading

Customize different plate and frame color



MP2B.48



MP4B.48



MP6B.48



HDL $\backslash 33$

4/6/8 Buttons Switch US

MP2B.46 / MP4B.46 / MP6B.46 / MP8B.46

Modern Series Intelligent Switch EU

MPH101.48 / MPH102.48 / MPH104.48 / MPH108.48

MP2B.46



MP8B.46



MPH101.48



Parameters

Functions

MPH108.48

• Power supply: DC12-30V • BUS power consumption: 15mA/DC24V • Installation: Wall mounting • Dimensions: 86×86x23(mm)

MP4B.46



Parameters

Power supply: DC12-30V
BUS power consumption: 15mA/DC24V
Installation: Wall mounting
• Dimensions: 86×116.5×10.5(mm)

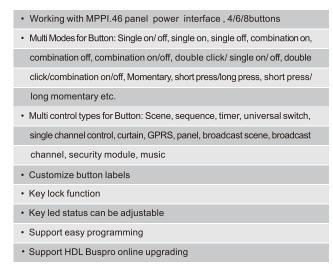


MPH102.48



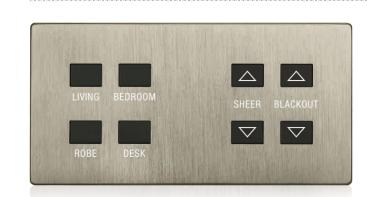
• Multi Modes for Button: Single on/ off, single on, single off, combination

Functions



MPH104.48





• Dimensions: 172x86x23(mm)

MP6B.46



Built-in IR receiver, need to replace a plate with IR receiving hole to realize IR remote control function



Black glass 2 button switch

frame color

4 button switch

Customize different plate and





6 button switch

8 button switch

Panel Power Interface

MPPI.46 / MPPI.48 / MPPI.46-A / MPPI.48-A

MPPI.46/MPPI.48





MPPI.46-A/MPPI.48-A





Parameters

- Power supply: DC12-30V
- · Installation: Wall mounting
- Installation: Standard GI and EU(US)box
- Dimensions: H83.5mm x W114.5mmx D 26.5mm(MPPI.46)

H73mm x W120mm x D 26.5mm(MPPI(k).48)

H83.5 x W83.5 x D 26.5(mm)

Functions

- Panel power interface, working with new panel plate EU(US)
- HDL Buspro interface, fast connector need to use HDL Buspro/KNX cable

Installation diagram







Panel plate Panel power interface

Back box

Outdoor sensor

MSOUT.4W

Parameters

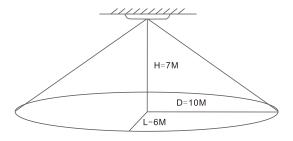
- Working voltage: DC12-30V
- Power consumption: 31mA/DC24V
- Temperature detection range: -40°C~60°C
- Illumination detection range: 0~15000LUX
- Humidity detection range: 20~95%RH
- Microwave detection range: H:7m D:10m L:6m
- Housing material: ABS: stainless steel
- Installation: Screw fixation
- Dimensions: 126X78X42 (mm)

Functions

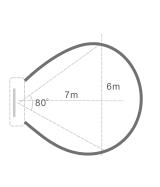
- Built-in LUX sensor, microwave sensor, humidity sensor, temperature sensor, dry contact, universal switch
- Two logical relations: OR, AND
- It has 24 logic blocks. Both true logic and false logiccan trigger the targets respectively. Each logic can set 20 targets
- Adjustable microwave sensitivity, range is 1-100
- Each logic supports trigger delay time from 0 to 3600s
- The range of universal switch number in logic is 201-248, each logic has 2 universal switch numbers, universal switch can close automatically, the time range is1-3600s
- Tamper-proof function.
- · Supports security function
- Sensor has heating function. It can make sure that the circuits can work normally while the temperature is below -5°C
- Supports online upgrading

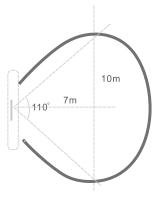
MSOUT.4W





Detection Range





Vertical Direction

Horizontal Direction

Temperature, Humidity / Indoor Doppler sensor

SB-CMS-THL/MSW01.4C

12 in 1 Multi-Function / Air Quality Sensor

SB-CMS-12in1/SB-CMS-LA

SB-CMS-THL



MSW01.4C



SB-CMS-12in1



SB-CMS-LA



Parameters

- Power supply: DC12-30V
- Bus power consumption: 25mA/DC24V
- Temperature detection range: -20~36℃
- Illumination detection range: 0~5000Lux
- Humidity detection range: 20-95°C
- Installation: Ceiling mount
- Dimensions: 80(diameter)x32(mm)

Parameters

- Working voltage: DC12-30V
- Power consumption: 32mA/DC24V
- Temperature detection range: -40°~60°C
- Illumination detection range: 0~5000LUX
- Humidity detection range: 20~95%RH
- Microwave detection range H: 7m D:12m L:6m

Parameters

- Power supply: DC12-30V
- Static power consumption: 40mA/DC24V (Relay off)
- Dynamic power consumption: 90mA/DC24V (Relay on)
- · Signal output: HDL Buspro signal
- Temperature detection range: 0°C~45°C
- Illumination detection range: 0-5000 Lux
- PIR sensing range in diameter: 6m (install height-3m)
- Ultrasonic sensor in diameter: 8m
- Installation: Ceiling mount
- Dimensions: 110(diameter)x35(mm)

Parameters

- Power supply: DC12-30V
- Bus power consumption: 25mA/DC24V
- Signal interface: HDL Buspro signal
- Temperature detection range: 0°C~45°C
- Illumination detection range: 0-5000 Lux
- Air quality detection: cigarettes, cooking odors, hydrogen, carbon
 - monoxide,ethanol,methane,isobutane,alcohol:
- Installation: Ceiling mount
- Dimensions: 80(diameter)x32(mm)

Functions

- Equipped with brightness sensor, temperature sensor, humidity sensor, two dry contact inputs, two universal switches, logic state etc which can be used as input conditions
- Two logic relations: Or, And
- With up to 24 logic block functions, max eight logic input conditions, up to 20 target outputs for logic conditions
- Security warning function, need to be used with the security module

Functions

- Built-in LUX sensor, microwave sensor, humidity sensor, temperature sensor, dry contact, universal switch
- Two logical relations: OR, AND
- It has 24 logic blocks, Both true logic and false logic can trigger the targets respectively. Each logic can set 20 targets
- Adjustable microwave sensitivity, range is 1-100
- Each logic supports trigger delay time from 0 to 3600s
- The range of universal switch number in logic is 201248
- each logic has 2 universal switch numbers
- Support security function
- Support online upgrading

Functions

- Equipped with a temperature sensor, brightness sensor, infrared motion sensor, ultrasonic sensor, two dry contact inputs, two external input conditions
- With infrared receiver function, can receive eight infrared remote control codes
- With infrared transmitter function, capable of sending 99 infrared remote control codes
- With four logic relations: OR, AND, NOR, NAND
- With up to 32 logic block functions, can be set nine input conditions, each logic block can be set 10 output targets
- 2 relay outputs
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

Functions

- Equipped with brightness sensor, air quality sensor, two dry contact inputs, two universal switches, logic state etc which can be used as input conditions
- Two logic relations: Or, And
- With up to 24 logic block functions, max seven logic input conditions, up to 20 target outputs for logic conditions
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

HDL \39

Ceiling Mount Ultrasonic / Ceiling Mount PIR Sensor

MSPU03.4 / MSP02.4C

HDL 7 IN 1 Sensor / HDL 8 IN 1 Sensor

MSP07M.4C / MSP08M.4C

MSPU03.4C



MSP02.4C



MSP07M.4C



Parameters

- Power supply: DC12-30V
- Bus power consumption: 30mA/DC24V
- Detection range in diameter:6m(Installation height: 3m)
- Temperature detection range: 0°C~45°C
- Illumination detection range: 0-500Lux
- Dimensions: 63x63x38(mm)
- Cutting Size: 45mm(Diameter)

Parameters

- Power supply: DC18-30V
- Bus power consumption: 20mA/DC24V
- Detection range in diameter: 6m(Installation height: 3m)
- Illumination detection range: 0-5000 Lux
- Dimensions: 63×63×46.6(mm)
- Cutting Size: 45mm(Diameter)

Parameters

- Power supply: DC18-30V
- Bus power consumption: 25mA/DC24V
- Detection range in diameter: 8m(Installation height: 3m)
- Temperature detection range: -20 ℃~60 ℃
- Illumination detection range: 0-500 Lux
- Dimensions: 84mm(diameter)×37.5mm

Parameters

MSP08M.4C

- Power supply: DC12-30V
- Bus power consumption: 30mA/DC24V
- IR transmit frequency38KHz
- Detection range in diameter: 8m(Installation height: 3m)
- Illumination detection range: 0-500 Lux
- Dimensions: 84mm(diameter) × 37.5mm

Functions

- Equipped with brightness sensor, ultrasonic sensor and universal switch which can be used as logic conditions.
- 24 logic blocks, 20 output targets can be set in each logic block.
- Two logic relations: Or, And
- Sensitivity adjustable, range from 1-10
- Universal switch numbers were assigned to 201-248 in the logic conditions, 2 switch numbers for each logic, universal switch has auto-off function(from 1 to 3600 seconds)
- Logic can trigger the control target no matter it's valid or not
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

Functions

- Equipped with brightness sensor, PIR sensor and universal switch which can be used as logic conditions.
- $\bullet \ \ 24 \, logic \, blocks, 20 \, output \, targets \, can \, be \, set \, in \, each \, logic \, block.$
- Two logic relations: Or, And
- Sensitivity adjustable, range from 1-10
- Universal switch numbers were assigned to 201-248 in the logic conditions, 2 switch numbers for each logic, universal switch has auto-off function(from 1 to 3600 seconds)
- Logic can trigger the control target no matter it's valid or not
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

Functions

- Built-in infrared motion sensor, LUX sensor, dry contact, temperature sensor and universal switch control
- Seven logics for brightness sensor, temperature sensor,

 PIR sensor, two dry contact inputs and logical condition
- Two logic relations: OR, AND
- Adjustable infrared motion sensitivity, range from 1-10
- It has 24 logic blocks. The range of universal switch number in logic function is 201-248, each logic has 2 universal switch number. The universal switch has Auto-Off function, delay time is 1-3600s
- Logic can trigger the control target no matter it's valid or not.
 Up to 10 logic block functions to trigger the control target
- Supports upgrade from HDL Buspro
- · Constant illuminance function

Functions

- Built-in infrared motion sensor, LUX sensor, IR in/out, dry contact, temperature sensor and external conditions.
- Six logics for brightness sensor, temperature sensor,
 PIR sensor, two dry contact inputs.
- Two logic relations: OR, AND.
- Adjustable infrared motion sensitivity, range from 1-10.
- It has 20 logic blocks. The range of universal switch number in logic function is 201-240, each logic has 2 universal switch number. The universal switch has Auto-Off function, delay time is 1-3600s.
- Logic can trigger the control target no matter it's valid or not.
 Up to 10 logic block functions to trigger the control target.
- Up to 240 IR sending control target, the universal switch
 number is 1-240.It can upload multiple IR code
- Supports upgrade from HDL Buspro
- Constant illuminance function

10A Relay Module

MR0410.431 / MR0810.432 / MR1210.433

16A Relay Module

MR0416.431 / MR0816.432 / MR1216.433

MR0410.431



- Output channel: 4channel Relay
- Dimensions: 72×90×66(mm)
- 4 channel relay output
- Maximum 4 separate areas
- Each area has 8 scenes, maximum runtime of scene: 60 minutes

MR1210.433



- Output channel: 12 channel Relay
- Dimensions: 216×90×66(mm)
- 12 channel relay output
- Maximum 12 separate areas
- Each area has 24 scenes, maximum runtime of scene: 60 minutes

MR0810.432



- Output channel: 8 channel Relay
- Dimensions: 144×90×66(mm)
- 8 channel relay output
- Maximum 8 separate areas
- Each area has 16 scenes, maximum runtime of scene: 60 minutes

Parameters

- Power supply: DC15-30V
- Static BUS power consumption: 15mA/DC24V
- Dynamic BUS power consumption: 40mA/DC24V
- Current in each channel: 10A
- life time for relay unit: More than 60,000 times
- Protection: Need MCB for each channel
- Installation: Standard 35mm Din Rail
- Capacity load of Relay: < 150µF

Functions

- 4/8/12 channel relay output
- 4/8/12 separate areas
- Each area has 8/16/24 scenes, maximum runtime of scene: 60 minutes
- \bullet Each area has 2 sequences, each sequence has 12 steps
- Each channel has lights protection delay : 0-60 minutes
- Each channel has switch on delay time : 0-25 seconds
- Manual buttons ON and OFF for each channel
- Remote program and management are available
- Can go back to previous scene or designated scene once the system restart
- LED lights available for indicates of each channel
- Staircase lamps function and Mutual exclusion function
- Support easy programming
- Support HDL Buspro online upgrading

Parameters

- Power supply: DC15-30V
- Powerconsumption: Static power consumption: 10mA/DC24V

Dynamic power consumption: 35mA/DC24V

- Current in each channel: 16A
- life time for relay unit: More than 60,000 times
- Protection: Need exterior protection switch
- Installation: Standard 35mm Din Rail
- Capacity load of Relay: < 300μF

Functions

- 4/8/12 channel relay output
- Maximum4/8/12 separate areas,
- Each area has 8/16/24 scenes, maximum runtime of scene: 60 minutes
- Each area has 2 sequences, each sequence has 8 steps
- Each channel has lights protection delay: 0-60 minutes
- Manual buttons ON and OFF for each channel
- Remote program and management are available
- Can go back to previous scene or designated scene once the system restart
- Each channel has switch on delay time: 0-25 seconds
- Each area has 2 sequence, the maximum step units of each sequence is same as channel units
- Staircase lamps function and Mutual exclusion function
- Support easy programming
- Support HDL Buspro online upgrading

MR0416.431



- Output channel: 4 channel Relay
- Dimensions: 72×90×66(mm)
- 4 channel relay output
- Maximum 4 separate areas
- Each area has 8 scenes, maximum runtime of scene: 60 minutes

MR0816.432



- Output channel: 8 channel Relay
- Dimensions: 144×90×66(mm)
- 8 channel relay output
- Maximum 8 separate areas
- Each area has 16 scenes, maximum runtime of scene: 60 minutes

MR1216.433



- Output channel: 12 channel Relay
- Dimensions: 216×90×66(mm)
- 12 channel relay output
- Maximum 12 separate areas
- Each area has 24 scenes, maximum runtime of scene: 60 minutes

Leading Edge TRIAC Dimmer

MD0206.432 / MD0403.432 / MD0602.432

MD0206.432



- Output channel: 2CH/6A
- Fuse:10 A aR type
- TRIAC: 25A bidirectional TRIAC, minimum load 40W
- Maximum 2 separate areas, each area has 12 scenes

MD0403.432



- Output channel: 4 CH/3A
- Fuse: 8 AaR type
- TRIAC: 25A bidirectional TRIAC, minimum load 40W
- Maximum 4 separate areas, each area has 12 scenes

MD0602.432



- Output channel: 6CH/2A
- Fuse: 4 A aR type
- TRIAC: 16A bidirectional TRIAC, minimum load 40W
- Maximum 6 separate areas, each area has 12 scenes

Parameters

- Power supply: 110/220V
- BUS Working voltage: DC12-30V
- BUS power consumption: 28mA/DC 24V
- Dimming curves: linear, x¹⁵, x²⁰, x³⁰
- Dimensions: 144X90X66 (mm)

Functions

- Maximum 2/4/6 separate areas, each area has 12 scenes
- Maximum 6 sequences, each sequence has 12 steps
- 512 dimming step, 4 dimming curves
- Low, high or max threshold are available in each channel
- to suit the different loads;
- Manual buttons ON and OFF for each channel
- Can go back to previous scene or designated scene once
- the system restart
- Short circuit protection over temperature protection
- Support easy programming
- Support HDL Buspro online upgrading

Leading / Trailing Edge MOSFET Dimmer

MDT0203.433 / MDT04015.433 / MDT0601.433

Parameters

- Power supply: AC110/240V
- BUS Working voltage: DC12-30V
- BUS power consumption: 25mA/DC24V
- Dimming curves: linear, x¹⁵, x²⁰, x³⁰
- Dimensions: 216×90×66(mm)

MDT0203.433



Functions

- Maximum 2/4 /6 separate areas, each area has 12 scenes
- Each output channel has LED indicator for status and
 manual switch
- Maximum 6 sequences, and 12 steps for each sequence
- Low Threshold, High Threshold, Maximum Threshold are
 all available for each channel
- Each channel can choose leading edge or trailing edge
- Can select specified scene or scene before power off when

the device restarts

- Short circuit and over heat protection
- 4 dimming curves
- Supports online upgrading

MDT04015.433



MDT0601.433



HDL \45

2CH 10A Mosfet Power Amplifier / TRIAC Constant Current Load

MDB0210.433 / MCR01A.40

LED Dimmer / 64CH DALI Ballast Dimming Actuator

MDLED0605.432 / MC64-DALI.431

MDB0210.433

MCR01A.40

MDLED0605.432

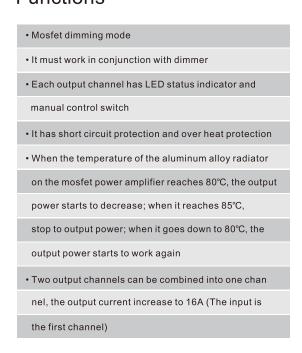
MC64-DALI.431



Parameters

AC power input: AC110/230V
 Output channel: 2CH,10A/CH
 Maximum output channel current in tota: 16A
 Dimming mode: Trailing edge

Functions





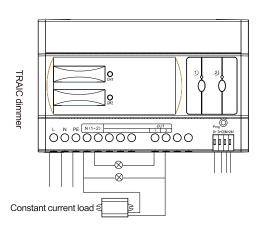
Parameters

• Power supply: DC 0-240V
• Load constant current: < 15mA
• Working condition: Working temp: -4℃~45℃
Working relative humidity: up to 90%
Storage temperature: -20℃~+60℃
Storage relative humidity: up to 93%
• Dimensions: 37.4×26.7×22.6(mm)

Functions

• 1 load channel	• 15mA constant current
Working with TRAIC dim	nmer
Connected in parallel w	hen working with the lamp

Diagram of constant current



Note: above picture is set HDL TRAIC dimmer as an example, the module can supply minimum 15mA current for TRAIC, this module can solve the flicker problem when dimming the Lamps such as some LEDs and low voltage Halogen.



Parameters

• Power supply: DC15-30V
Static BUS power consumption: 20mA/DC24V
Dynamic BUS power consumption: 40mA/DC24V
• Output: 6CH/5A
• LED power input: 12-30VDC
• Dimensions: 144×90×66(mm)

Functions

Maximum 6 separate areas, each area has 12 scenes
Maximum 6 sequences, each sequence has 12 steps, each
step has 60 minutes as interval time; there are four types of
sequence: Forward/Backward/Random/Forward&Backward
Low, high or max threshold are available in each channel
to suit the different loads;
Can go back to previous scene or designated scene once
the system restart
Manual buttons ON and OFF for each channel
Short circuit protection, over load protection
• 5A output current in each channel
• PWM constant voltage output for LED Lamp and LED strip
Support easy programming
Support HDL Buspro online upgrading



Parameters

Power supply: DC15-30V
• BUS power consumption: 15mA/DC24V
DALI independent power supply: AC110/220V
• Interface: HDL Buspro, DALI
Installation: Standard 35mm Din Rail
• Dimensions: 72x90x66(mm)

Functions

Transform HDL signal into DALI signal
• Up to 64 DALI channels
Scene controller
Support maximum 16 independent areas
Available function for each channel: Low and high threshold,
system failure, DALI component electrify restore
Fire emergency function
After device reboot, there is a option to run the designated scene
or return back to the last 20 seconds scene before power off
Support HDL Buspro online upgrading

Ballast Dimmer, 0-10V Output / 6CH input & output Module

MRDA0610.432 / MSC06.432

6CH 10A / 12A Leading Edge Dimming Actuator

SB-WL-D0610/SB-WL-D0620

MRDA0610.432



- Current in each relay channel: 10A
- Capacity load: <150µF
- Support input DC24V
- Sink/output 100mA current for each 0-10v channel, 6 channel total no less than 300mA
- Suitable for 0-10V Fluorescent dimming control
- Suitable for 0-10V LED dimming control

Parameters

- Power supply: DC 15-30V
- Power consumption: 30mA/DC24V
- Installation: Standard 35mm Din Rail
- Dimensions: 144×90×66(mm)

Functions

- 6 channel relay output
- Manual buttons ON and OFF for each channel
- LED lights available for indicates of each channel
- Maximum 6 separate areas, each area has 12 scenes
- Maximum 6 sequences, each sequence has 12 steps, each step has 60 minutes as interval time; there are four types of sequence: Forward/Backward/Random/Forward& Backward;
- Low, high or max threshold are available in each channel to suit the different loads;
- Can go back to previous scene or designated scene once the system restart
- Support easy programming
- Support HDL Buspro online upgrading

MSC06.432



Parameters

- Working voltage: DC15-30V
- Static power consumption: 30mA/DC24V

• Supports input types: Dry contact, Voltage

- Dynamic power consumption: 80mA/DC24V
- Dimensions: 144×90×66 (mm)
- Installation: 35 mm Din Rail

Functions

- (0~1000mV), Analogy Voltage(0~10000mV,
 Electricity (4000~20000μA), Analogy Electricity
 (4000~20000μA).
 Analogy function: it can convert the value of voltage and current conversion into other types, such as temperature, Illuminance, humidness, pressure.
 Out1 to out6 are 10A relay outputs. Out 7 and out 8 are optional, can set 0-10V output or 4mA-20mA output.
 For inputs and outputs, each channel can be
- setseparately.

 It supports online upgrading via HDL Buspro software.
- It supports easy programming.

Parameters

- Input Voltage: AC220V±10%
- Frequency: 50Hz±2%
- Power consumption with load: Less than 10W
- Output channel: 6 channels
- Out current in each channel: Max. 12A/24A
- Total current in channe: Less than 60A/120A
- Connection: Three phase and five wires
- Dimensions: 470×290×162(mm), 600×290×162(mm)

SB-WL-D0610



Functions

- 10 Bit dimming accuracy
- 6-channel dimming outputs.
- LED indicator status.
- · Scene controller.
- Maximum 6 separate areas, each area has 99 scenes and the maximum running time is 60 min-utes.
- Up to 99 sequences, each sequence has 99 steps and the time interval is 60 minutes for each step,each sequence has
- 4 running modes of "forward", "backward", "forward and backward" and "random".
- Low, high, max threshold for each channel.
- Each channel has emergency bypass button and debugging bypass button.
- Each scene, area, sequence, channel should mark up.
- Each channel has current load testing.
- Each channel has MCB status testing.
- MCB switch trip warning.
- Bad lights warning.
- Communication: HDL Buspro.
- Provides 400mA current(DC24V) for HDL Buspro.
- Fire protection switch.
- Short circuit and overload protection, earth protection.
- Remote programming and management.
- Device can be restored to previous scene or speci-fied scene, sequence.

SB-WL-D0620



HDL $\setminus 49$

12CH 10A Leading Edge Dimming Actuator

SB-WL-D1210

SB-WL-D1210



3CH 650mA LED Driver / 48Channel DMX Controller

MLED03650MA / MC48IP-DMX.431

MLED03650MA



MC48IP-DMX.431



Functions

Parameters

• Input Voltage: AC220V±10%
• Frequency: 50Hz±2%

• Output channel: 12 channels

• Dimensions: 600×290×162(mm)

Out current in each channel: Max. 12A
Total current in channe: Less than 120A
Connection: Three phase and five wires

• Power consumption with load: Less than 10W

• 10 Bit dimming accuracy.
• 12-channel dimming outputs.
• LED indicator status.
Scene controller.
Maximum 12 separate areas, each area has 99 scenes and
the maximum running time is 60 min-utes.
• Up to 99 sequences, each sequence has 99 steps and the
time interval is 60 minutes for each step, each sequence has
4 running modes of "forward", "backward", "forward and
backward" and "random".
• Low, high, max threshold for each channel.
Each channel has emergency bypass button and debugging
bypass button.
• Each scene, area, sequence, channel should mark up.
Each channel has current load testing.
Each channel has MCB status testing.
MCB switch trip warning.
Bad lights warning.
Communication: HDL Buspro.
• Provides 250mA current(DC24V) for HDL Buspro.
• Fire protection switch.
Short circuit and overload protection, earth protection.
Remote programming and management.
• Device can be restored to previous scene or specified scene,
sequence.

Parameters

• Input power: DC10-30V
Voltage for LED driver: DC10-30V
• Power consumption without load: <2W
Output channel: 3 channels
Max Current of each channel: 650mA
• Dimensionsl: 96mm×58.5mm×22.5mm

• Installation: Standard 35mm Din Rail

• Dimension: 72x90x66(mm)

• BUS power consumption: 40mA/DC24V

• Dimension. 72x90x66(iiii

• Power supply: DC12-30V

• Built in ethernet port

Parameters

Functions

• 3 outputs for common anode RGB LED strip and single LED
Power Input: DC10-30V
Control Signal: DMX512
Constant voltage with PWM output
Built-in DMX512 buffer function

Functions

• Up to 48 areas
• Each area has 99 scenes, maximum scene run time:60 minutes
• Up to 99 sequences, each sequence has 99 steps, maximum
step run time: 60 minutes, 4 modes for the sequences "Forward",
"Backward", and "Back and forth", "Random".
Supports self-program and test functions
Supports remote program and manage functions
• Low, high, max threshold for each channel
HDL Buspro and Ethernet double way data communication
• Intelligent data exchange, reducing data traffic
• Device can be restored to previous scene or designated
scenes

HDL $\setminus 51$

How to combine HDL Buspro

Change the colors of your lights to give an outstanding

first impression to your customers or guest.

SB-DN-512DMX

DLP Panel DMX Show Control BUS DMX Show Controller SB-DN-512DMX LED Driver 650mA LED Driver 4A

LED Strip

LED Strip with

water-proof shell





2 Channel Curtain Module / HVAC Module

MW02.431 / MAC01.431

MW02.431

MAC01.431



Parameters

Power supply: DC15-30V

BUS power consumption: 35mA/DC24V

Controllable curtain: 2 curtains

Motor type: Capacitive single phase

Channel max output current: 5A

Lifetime for relay unit: 60,000 times

Installation: Standard 35mm Din Rail

Dimensions: 72x90x66(mm)

Parameters

Power supply: DC15-30V

BUS power consumption: 95mA/DC24V

Max relay current load: 5A

Installation: Standard 35mm Din Rail Installation

Dimensions: 72x90x64(mm)

Functions

2 channel curtain control
Hardware and software interlock for forward or backward
Forward and backward delay

Functions

• Fan speed: High, medium or low
Control mode : cooling, heating, dehumidification
• To control AC fan speed and mode smartly by AC control panel
Supports input from up to four temperature sensors
One master module supports up to 8 slave modules
• DC0-10V fan speed control method
Supports HDL Buspro online upgrading

6CH Floor Heating Module / 4CH Electric Fan Controller

MFH06.432 / MSD04T.40

4CH IR Emitter with Current Detection / 8 Zone Dry Contact Module

MIRC04.40 / MSD08.40

MFH06.432

MFAN04.432

MIRC04.40

MSD08.40









Parameters

Power supply: DC15-30V

Dynamic power consumption: 150mA/DC24V

Static power consumption: 30mA/DC24V

Output channel: 6

Maximum channel current: 10mA/DC24V (0-10V output)

1A/220VAC (Relay output)

Lifetime for relay unit: 5,000,000 times

Protection: External breaker

Dimensions: 144x90x66(mm)

Functions

• 6 channels floor heating or cooling control
• 2 output ways in each channel: relay output and 0-10V output
• Temperature adjustment range:5℃~40℃ (0.5℃ accuracy)
• Timing or manually floor heating system flush function
by timer or manually
• Supports controlling external high power relay modules
• Supports HDL Buspro online upgrading

Parameters

Bus voltage: DC18-30V
Power consumption: 80.5mA/DC24V
Dimensions: 144mm×90mm×66mm
Installation: 35 mm Din Rail

Functions

The MFAN04.432 can simultaneously support four fans
The MFAN04.432 can be controlled via a HDL panel
Each channel can output 8 fan speeds; 0 being off and 7 being maximum
Through output different voltage to control wind speed The MFAN04.432 can be easily programmed
The MFAN04.432 communicates via the HDL Buspro protocol

Parameters

Buspro power supply: DC12-30V
BUS power consumption: 30mA/DC24V
• IR Transmit carrier frequency: 38KHz
• Dimension: 45x45x16(mm)
Distance for IR control: 6m

Functions

• Current detection: Detect the device status (on/off) by current.
Drive the transmitting tube directly
• 4 IR emission channels
Supports 24 devices and 100 learning IR codes.
Supports up to 99 UV switches

Parameters

• Power supply: DC12-30V
• BUS power consumption: 10mA/DC24V
• Dimensions: 45x45x16(mm)

Functions

8-channel dry contact input with tamper detection function.
Supported switch type: Mechanical switch, Single on, Single off, Single on/off, Combination on, Combination off, Multi-function, Parallel switch.
Supported switch mode: Switch mode, Dimmable two-way, dimmable increase, dimmable reduced.
Control target type: Scene, Sequence, Universal Switch, Single channel lighting control, Broadcast Scene, Broadcast channel, Curtain Control, Panel Control, GPRS control, Secu-rity Module etc.
Tamper-proof, need 1K Ohm resister in parallel to dry contact.
Security function, need to be used with the security module.
Supports online upgrading by HDL Buspro.

Infrared Code Learner / Smart IR Transmitter with Temperature

SB-IR-Learn.01 / SB-IR-EM

4 Zone Dry Contact Module / 24 Zone Dry Contact Module

MSD04T.40 / SB-DN-DRY-24Z

SB-IR-Learn.01



Parameters

• Frequency of IR: 38K Hz ± 20%
• Installation: USB 2.0 Interface
• Dimension: 98x70x38(mm)
• For Learning IR codes, sending learned IR codes for test
Indicator LED flashing when learning code

Functions

USB Interface, no driver and easy to use
Infrared Code learning
Infrared Code sending test
Indicator will flash when the device is learning the IR Code

SB-IR-EM



Parameters

Buspro power supply: DC12-30V
Buspro power consumption1: 5mA/DC24V
• IR codes store Maximum: 200 IR codes
Sending carrier wave frequency: 38KHz
Distance for IR Control: 6m
• Dimension: 45×40×13(mm)

Functions

Current detecting function for identify device On/Off status.
Maximum 200 IR Codes can be stored.
• To send the IR codes by using a IR LED.
Supports upgrade from HDL Buspro.

MSD04T.40



Parameters

Buspro power supply: 12-30VDC	
Buspro power consumption: 10mA/DC24V	
• Dimensions: 45×45×16(mm)	

Functions

4-channel dry contact input with tamper detection.
Supports temperature input
• LED indicators display status
• Support switch type: Mechanical switch, Single on, Single off,
Single on/off, Combination on, Combination off, Combination
on/off, Multi-function, Parallel switch, Temperature sensor.
Support switch mode: Switch mode, Dimma-ble two-way,
dimmable increase, dimmable reduced.
Control Target type: Scene, Sequence, Uni-versal Switch,
Single channel lighting control, Broadcast Scene, Broadcast
channel, Curtain Control, Panel Control, GPRS control,
Secu-rity Module, etc.
• Security function, need to be used with the security module.
Temperature alarm, when the temperature is beyond the
range it will be alarm.
Supports online upgrading by HDL Buspro.

SB-DN-DRY-24Z



Parameters

Power supply: DC24V
BUS power consumption: 12mA/DC24V
• Dimensions: 144 x 90 x 66mm
• Installation: Standard 35 mm Din Rail

Functions

• 24 channels dry contact input
Switch types include: Mechanical switches, Single-on, Single-Off,
Single-On/Off, Combination on, Combination off, Combination
On/Off, Invalid Switch, (Both mechanical switches and
combination switches can set 49 control targets)
• Control target type: Scene, Sequence, Universal, Switch,
Single Channel, Broadcast scene, Broadcast channel, curtain
control, panel control, GPRS and so on.
Security alerts feature need to be used together with Security
Command Module

RS232 / RS485 Gateway

MRS232.431 / MRS232U.431

HDL-BUS EIB Gateway / 1 Port Programming Gateway

SB-DN-EIB / MBUS01IP.431

MRS232.431

MRS232U.431

SB-DN-EIB

MBUS01IP.431









Parameters

Working voltage: DC15~30V
BUS power consumption: 15mA/DC24V
Baud rate: 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200bps
Data bit: 8
Stop bit: 1, 2
Communication: HDL Buspro/RS232/RS485

Functions

• Dimensions: 72x90x66(mm)

Realize mutual control between devices in RS232 and HDL Buspro.

Achieve remote transmission from RS232 to RS485.

It can achieve that RS232 controls HDL Buspro and HDL Buspro controls RS232.

It can input up to 99 control commands, each control commands can input up to 33 ASCII characters.

It can achieve that RS485 controls HDL Buspro and HDL Buspro controls RS485.

RS232 Baud rate: 1200, 2400, 4800, 9600, 14400,19200, 38400, 57600, 115200bps. User can set the RS232 interface Baud rate.

Communication: HDL Buspro, RS232,RS485

Supports online upgrades.

Parameters

Working voltage: DC15~30V
BUS power consumption: 15mA/DC24V
• Baud rate: 1200, 2400, 4800, 9600, 14400, 19200,
38400, 57600, 115200bps
• Data bit: 8
• Stop bit: 1, 2
Communication: HDL Buspro/RS232/RS485
• Dimensions: 72x90x66(mm)

rameters

Functions

Communication: HDL Buspro, RS232,RS485.

It can achieve that RS232 controls HDLBuspro and HDL Buspro controls RS232.

It can achieve that RS485 controls HDL Buspro and HDL Buspro controls RS485.

It can input up to 100 control commands, each control commands can input up to 33 ASCII characters.

Target number :1~10

User can set the RS232 interface Baud rate.

Parameters

KNX Power supply: DC15-30V
KNX power consumption: 5mA/DC24V
• Interface: HDL Buspro EIB-BUS (KNX)
Programming software: HDL Buspro setup tool
Installation: Standard 35mm Din Rail
• Dimensions: 72x90x66(mm)

Parameters

• Power supply: DC12-30V
BUS power consumption: 40mA/DC24V
• HDL Buspro subnet numbers: 1 HDL Buspro subnet
Signal interface: HDL Buspro, Rj45
Installation: Standard 35mm Din Rail
• Dimensions: 72x90x66(mm)

Functions

HDL Buspro and KNX two ways data converting
 Supports multiple types of data points
 Can be set up to 254 goals in two-way conversion control

Functions

HDL Buspro and Ethernet double way data communication
 support internet remote access connection
 Intelligent data exchange, reducing data traffic

IntelliCenter Model / 750mA Power Supply Module

MSERVER/D.20 / MSP750.431

1200mA / 2400mA Power Supply Module

MSP1200.431 / SB-DN-PS2.4A

MSERVER/D.20

IntelliCenter Model 2

MSSERVERID 20

CE Ratis

From Service Prop.

MSP750.431

MSP1200.431

SB-DN-PS2.4A



BB-DN-PS2.4A

Parameters

Working voltage: 12~30VDC
 Power consumption: 2.5W max.
 Communication: 1RJ45, HDL Buspro, KNX Bus
 BUS Terminal: 0.6-0.8mm diameter single core cable
 Operation system: iRidium Server software
 Dimensions: 72x90x66(mm)

Parameters

• Input voltage: AC85-260V 50~60Hz
Output current: 750mA
Output voltage: DC24V
Output ripple wave: Less than 150mV
• Dimensions: 72x90x66(mm)

Parameters

• Input voltage: AC85-260V 50~60Hz
Output current: 1200mA
Output voltage: DC24V
Output ripple wave: Less than 150mV
• Dimensions: 72x90x66(mm)

Parameters

• Input voltage: AC220V/AC110V±10%
• Frequency: 50~60Hz
Output current: 2.4A
Output voltage: DC24V
• Dimensions: 144×90×66 (mm)

Functions

Supports continuous monitoring and management the devices in HDL BusPro and KNX-bus network via the iRidium Server software.

Supports installing SD card to expand the storage capacity.

Supports easy programming.

Exchange data between devices in HDL BusPro and KNX bus network.

Support online upgrades.

Functions

Protection: Short circuit and over current protection
 Voltage Supply: DC24V
 Ripple Wave: Less than 150mV

Functions

Protection: Short circuit and over current protection
 Voltage Supply: DC24V
 Ripple Wave: Less than 150m

Functions

Protection: over voltage and short circuit

Power Supply: DC24V

Security Command Module / Logic Automation Module

MSM . 431 / MCLog.431

HDL BUS 6 Lines / HDL 6 Ports Switch

MBC06.431 / MBR06.431

MSM.431

MCLog.431

MBC06.431

MBR06.431









Parameters

- Working Voltage: DC15-30CV
- Power Consumption: 15mA/DC24V
- Dimmensions: 72mm x 90mm x 66mm
- Installation: Standard 35mm DIN Rail
- Interface: HDL Buspro

Parameters

- Power supply: DC15-30V
- BUS power consumption: 15mA/DC24V
- Installation: 35mm Din Rail Installation
- Dimensions: 72x90x66(mm)

Parameters

- Interface: 6 fast connections for HDL Buspro
- Installation: Standard 35mm Din Rail
- Dimensions: 72mm x 90mm x 66mm
- Protection: Ip20

Functions

- Simple method to interconnect 6 different HDL Buspro Lines.
- Easy installation and maintenance

Parameters

- Working voltage: DC 12-30V
- Power consumption: 10mA/24VDC
- Ports: 6
- Devices for each port: 0-63
- Communication: HDL Buspro • Housing material: Nylon, PC
- Installation: 35mm Din rail installation
- Dimensions: 72x90x66(mm)

Functions

- Filter data
- Check the data
- Supports 6 bus cables, each bus cable can connect up to 63 devices
- Communication: HDL Buspro
- · Supports online upgrading

Functions

- 8 Separate zones for different security purposes
- Timing, Etc.
- Multiple alarm modes: Invasion, Gas, Fire, Temperature, Emergency, Etc.

• Multiple security modes: Away, Holiday, Daytime, Nighttime,

- Multilevel security protection
- Can set up security protection for 8 zones simultaneously
- · Availability to check the alarm log
- Send commands to the GPRS SMS Controller or DialOut to
- send SMS messages or call to the emergency contact to ask for help or alarm's notifier in case of security problem
- Online upgrading is available

Functions

- Editable daily events
- Maximum 12 logic blocks, each block has 20 logic tables, tables can be connected with each other
- Maximum 4 input conditions and 20 output targets in each logic table
- Logic table input conditions: Time, status of channel, external inputs, universal switch etc
- Logic relations: and, or, nand, nor
- Support HDL Buspro online upgrading

HDL \63

HomePlay Network Player

MZBOX-A50B.30

MZBOX-A50B.30



Better Together.

Quickly and intuitively browse through the entirety of your music

With the ability to directly play files from network attached storage devices (NAS), an onboard Micro SD card slot, an onboard USB port, and your connected iOS & Android devices total audio management

This coupled with native MP3, WMA, AAC, AAC+. ALAC, FLAC, APE, and WAV format support makes all your music just a tap or click away.



















Multi-platform Compatibility.

At HDL we know that everyone has their preferred method of audio storage. That's why we've given HomePlay true multi-platform compatibility.

With Bluetooth and WiFi connectivity, a LAN port, and a USB port HomePlay can directly connect to your audio library. Seamlessly controlled through the HDL On app, you can stream all of your favorite tracks to any room to create your ideal audioscape.









Wi Fi Wi-Fi

Parameters

- HDL-M/MPT14.1-A2-46 : 5W+5W(8Ω/ohms 1kHz ,0.027%) $32W+32W(6\Omega/ohms,1kHz, 0.7\%)$ 40W+40W(8Ω/ohms, 20Hz-20kHz, 5%) - Speaker Impedance : $4\text{-}32\Omega$
- Dynamic Range : >87dB
- S/N Ratio : >88 dB
- Stereo Separation: >81.5dB (1KHz)
- Frequency Response: 20Hz to 20KHz (+3dB)

Functions

- Stream your music in high quality
- Stream your music anywhere in your room
- Stream music from different device
- Play from variety of sources
- · Start music for all rooms like a party
- Multi-Way for connection
- New features and services available by global online update



Hotel Doorbells / Air Condition Switch

MPB01.48 / MPB03.48 / MPAC01.48

Parameters

• Power supply: DC12-30V • BUS power consumption: 24mA/DC24V Installation: Wall mounting • Dimensions: 86×86x22.2 (mm)

Functions

- · PRIVACY status display;
- · Visiting function;
- Support HDL Buspro online upgrading

Parameters

- Power supply: DC12-30V
- BUS power consumption: 25mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×86×22.2(mm)

Functions

- Visiting function, time setup Backlight brightness adjustable
- Do not disturb Support HDL Buspro upgrading
- Please clean

Parameters

- Power supply: DC12-30V
- BUS power consumption: 25mA/DC24V
- Installation: Standard GI box
- Dimensions: 86×86×22.2(mm)

Functions

- · Control temperature, speed, mode, on/off
- · Air conditioning mode: cooling, heating
- Speed: high, low, medium
- Display indoor temperature and air condition status etc
- Support HDL Buspro online upgrading

MPB01.48



MPB03.48









MPH104.48



MPH108.48

MPAC01.48



HDL \65

Hotel Master Card Switch

MPCH01.48 / MHIC.48

Hotel Door Bell

SB-3S-Bell-XS / SB-3S-Bell / HDL-MPTB01RF.48

MPCH01.48



Parameters

Power supply: DC12-30V
BUS power consumption: 24mA/DC24V
Card type: MIFARE ONE S50 13.56MHZ
Installation: Wall mounting
Dimensions: 86×86×32(mm)

Functions

Insert key for power
Identification, insert a different card, run the corresponding scene card types: Guest card, service card, cleaner card, maintainer card, administrator card etc
Can be set mechanical switch when plug the card, the switch can be set 1 to 49 targets.
Other key mode can be set 1 to 99 targets
Support HDL Buspro online upgrading

MHIC.48



Parameters

Power supply: DC12-30V

BUS power consumption: 24mA/DC24V

Card type: MIFARE ONE S50 13.56MHZ

Installation: Standard GI and EU box

Dimensions: 86×86×20.5(mm)

Functions

Works with MPPI.48 panel power interface
Insert key for power
Identification, insert a different card, run the corresponding scene
Card types: guest card, servicing card, cleaner card, maintainer card, administrator card etc
Can be set mechanical switch when Plug the card, the switch can be set 1 to 49 targets. other key mode can be set 1 to 99 targets
Supports HDL Buspro online upgrading

Parameters

Power supply: DC12-30V
 Bus Power consumption: 45mA/DC24V
 Dimension: 105 x 170 x 40mm
 Installation: Back Box for HDL

Functions

Show different Number of Room, DND, Clean Room, and Laundry
 Door Bell
 Open the Door by RF card & history record function
 Support HDL Buspro online upgrading

Parameters

Power supply: DC12-30V
Bus Power consumption: 45mA/DC24V
Dimension: 105 x 170 x 40mm
Installation: Back Box for HDL

Functions

Show different Number of Room, DND, Clean Room, and Laundry
 Door Bell
 Support HDL Buspro online upgrading

Parameters

Working Voltage DC12-30V(From MPPI.48)

Buspro power consumption 45mA/DC24V

Card type MIFARE ONE S50 13.56MHz

Functions

Backlight RGB can be optional.
Door bell for visitors.
The touch sensitivity can be adjusted.
Supports to upgrade from HDL-Bus.

SB-3S-Bell-XS



SB-3S-Bell



MPTB01RF.48



RF Card Reader & Master Control

MPTC03.48 / MPTC03.46

Hotel IO Module / RCU Hotel Guest Room Control Unit

MHIOU.432/MHRCU.433

MPTC03.48



Parameters

Working voltage: DC13-30V
 Power consumption: 60mA/DC24V
 Dynamic power consumption: 300mA/DC24V
 Dimension: 86×116×20.4(mm)(US)
 86×86×20.4(mm)(EU)

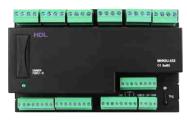
MPTC03.46



Functions

Master card for energy & power management.
3 touch buttons, sensitivity can be adjusted
Button color RGB can be adjusted
The touch button can be as the panel button to use, or
work with HDL touch door bell panel, to be displayed
DND, Clean, Wait.
Control of mechanical switch can be configured when
insert the card or take off the card, maximum 49 targets
can be controlled by the switch. Maximum 99 targets
can be controlled by other button modes
Support HDL online upgrading

MHIOU.432



Parameters

Power supply: DC15-30V

BUS power consumption: 30mA/DC24V

Dynamic power consumption: 180mA/DC24V

Communication: HDL Buspro

Buspro terminal: 0.75-0.85mm diameter single-core cable

Dimension: 144×90×56.3 (mm)

Functions

OUTPUTS:

Channel 1 and 2 are dimming outputs, total current no more than 2A Channel 3 to 10 are switch outputs, each channel 5A Channel 11 and 12 are curtain switch control INPUTS: 14-channel dry contact input 3-channel indoor doorbell control and 3-channel status indicator output 1-channel outdoor door bell control and 3-channel states indicator output 1-channel door bell switch control

MHRCU.433



Parameters

Power supply: DC20-30V

Static power consumption: 60mA/DC24V

Dynamic power consumption: 300mA/DC24V

Signal interface: HDL Buspro,RJ45, INNER Buspro Rj45 interface: UDP/IP network interface

STRIAC: 16A TRIAC, minimum load is 30w

Buspro terminal: 0.75-0.85mm single-core cable

Dimension: 216×90×56 (mm)

Functions

The host control functions: 48 Channel control • Total 99 scenes, each scene's running time is (0-250 second) Can run the scene according to the status of card master Hotel host have RJ45 port for connectivity with another room and reception or manager center, with hotel manage software this module can integrate with third part property manager software Mix control function: • Channel NO.1~13 are Relay output ,each channel 5A. • Channel NO. 14-17, are relay output, each channel 10A • NO.18 - 21 channels for dimming ,each channel 1A Dry contract: • 24 channels dry contract input Door bell function: • 5 channels state indicator output LED output function 6channels normal switch state indicator output

Hotel Room Control Host / 4CH 0.5A Universal Dimming Actuator

MHC48IP.431 / MHD04A.231

5 CH Switch Actuator / 20 CH Hotel Room Mix Control Module

MHR05L.231 / MHD02R18U.232

MHC48IP.431

MHD04A.231

MHR05L.231



Parameters

- Working power: DC12~30V
- Bus Power Consumption: 30mA/DC24V
- Installation: 35mm DIN rail installation
- Dimension: 72 x 90 x 66mm

Functions

- 48 channels control, each channel has parameter for lower limit, higher limit, the maximum limit
- There are totally 99 scenes, each scene's running time is 0-60 minute.
- Each channel has protection delay time (0-250 second).
- Each channel can delay the turn ON time (0-250 Second).
- It can run the scene according to the status of card master
- Monitors and controls A/C, curtain, lighting, room status, service from monitor software
- There is an RJ45 port on the hotel host, it can connect to each room, reception or manager.center. With hotel manage software, this module can integrate with third party management software

Parameters

- Working voltage: DC15~30V
- Static power consumption: 40mA/DC24V
- Dynamic power consumption: 55mA/DC24V
- Output channel: Can switch four 0-10V dimming channels output to MOSFET tube dimming output
- MOSFET tube output channel: 0.5A
- Protection: Connect a breaker in each channel
- Dimension: 72 x 90 x 66mm

Functions

- The dimming module can switch four 0-10V dimming channels output to MOSFET tube dimming output.
- The dimming module ID supports hardware identification, and adopts dial code control:
- It also can control air conditioners, curtains etc. via modifying the configuration of software and program;
- Inner Bus communication is adopted.

Parameters

- Working voltage: DC15~30V
- Static power consumption: 23mA/DC24V
- Dynamic power consumption: 75mA/DC24V
- Input channel: 2CH mains supply input 2CH emergency supply input
- Output channel: 5 channels
- Relay: 2CH/10A magnetic latching relay 1CH/5A TV8 relay
- Electronic life time of relay: >60000 (Resistance Load)
- Protection: Connect a breaker in each channelm
- Dimension: 72 x 90 x 66mm

Functions

- The relay module ID supports hardware identification, and adopts dial code control;
- COM1, OUT3 and COM3, OUT5 are 2CH magnetic

latching relay; COM2 and OUT4 is a TV8 relay chan-nel, E-L1、E-L2 and E-N are 2CH emergency supply input;

M-L1, M-L2 and M-N are 2CH mains supplyinput;

- L1, N1 and L2, N2 are output channels;
- The relay module has 2 relay channels with emergency

function and 3 universal relay control channels;

- It also can control air conditioners, curtains etc. via modifying the configuration of software and program;
- The relay module can be extended to several module

groups and used in some more sophisticated scenes;

· Inner Bus communication is adopted.

MHD02R18U.232



Parameters

- Working power: DC15-30V
- Static power consumption: 30mA/DC24V
- Dynamic power consumption: 350mA/DC24V
- Relay output: 5A/10A resistive loads
- Dimming output: 2A silicon-controlled rectifier outputs
- Dimension: 144×90×66 (mm)

Functions

• Channel 1 to 5 are normal FCU controls, such as con-trols on cooling, heating and fan speeds. Channel 1,2 and 3 control fan

speed, channel 4,5 are cooling and heating valves

not recommend connect to capacitive load.

- Channel 6 to 13 are ordinary relay outputs. Each channel is 5A rated outputs. The load types are Incandescent lamp, Halogen lamp, Low-voltage halogen lamp, LED lights. It is
- Channel 14 to 18 are ordinary outputs. Each channel is 10A rated outputs. The load types are Incandescent lamp,

Halogen lamp, Low-voltage halogen lamp, LED lights.

It is not recommend connect to capacitive load.

• Channel 19 to 20 are silicon-controlled rectifier outputs.

Each channel is 2A rated output.

· Communication: INNER-Buspro.



Utilizing a wireless mesh IEEE 802.15.4 communication network, the HDL wireless panel range can be installed anywhere in a building without needing a physical connection to the Buspro mainframe. Using frequencies of 780-794 MHz (China), 864-882 MHz (Europe), and 904-928 MHz (North America), the connection can fulfill the long distance communication frequency standard applying in different countries, which ensures efficient and precise data transmission.

Wireless Intelligent Switch

MPL8-RF.18 / MPL8-RF.16

Parameters

- Power supply: DC5V (from wireless power interface)
- Power consumption: 55mA/DC5V
- Wireless transmit power: +10dbm
- · Wireless receive sensitivity: -90dbm
- Installation: Wall mounting
- Dimensions: 86×86×10.5(mm)

Functions

- Built-in temperature sensor.
- Specified pages for AC, floor heating, music, etc.
- Multi key mode: Single on-off, Single on, Single off, Combination on-off, Combination on, Combination off, Double click/single switch, Double click/combination switch, Momentary, Clock, Short/Long press, Short Press/Long jog.
- Multi key control modes: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Curtain switch, GPRS control, Panel control, Security module, Z-audio control
- Supports online upgrading.

MPL8-RF.18



The HDL-MPL8-RF is a wireless panel which is able to work in conjunction with the wireless power interface. Featuring an improved and customizable LCD display, the HDL-MPL8-RF enables users to find information effortlessly.



Electronic icons

The new HDL-MPL8-RF has an improved LCD screen that is capable of displaying multiple icons, which can then be customized via an extensive up datable icon library. Messages, device status, and percentage information can all be displayed, enabling a user to find information effortlessly.

All in one

In a single HDL-MPL8-RF panel there are seven different pages dedicated to the control of common automation systems. The following systems are included, four pages dedicated to lighting, one page dedicated to HVAC, one page for floor heating, and one page for background music. Each page can hold multiple targets enabling the user to take complete control over all aspects of their automation solutions, with one unifying HDL-MPL8-RFpanel.



Customizable

The HDL-MPL8-RF panel is completely customizable, and has an extensive range of fascia colours, and materials available. This tailoring even extends to the LED button status indicators which have adjustable light intensity levels. The module can also be incorporated into a double panel installation, or can be flush mounted. These customization options allow a user to have their exact requirements not only met, but exceeded.



White Glass



Black Glass

MPL8-RF.16



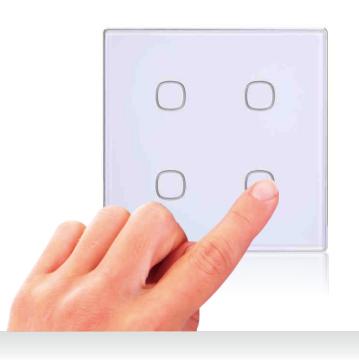
SIDE

HDL $\backslash 73$

Wireless Touch Button Switch

MPT4-RF.18

MPT4-RF.18



Parameters

Power supply: DC5V (from wireless power interface)
Power consumption: 45mA/DC5V
Wireless transmit power: +10dbm
Wireless receive sensitivity: -90dbm
Installation: Wall mounting
• Dimensions: 86×86×10.5(mm)

Functions

Multi Key Mode: Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, double click/single switch, double click/ Combination switch, Momentary, Short/Long Press, Short Press/Long Jog.
 Multi Key control Type: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Curtain switch, GPRS control, Panel control, Broadcast control, Broadcast channel, Security module, Z-audio control
 Adjustable backlight color and intensity
 Supports online upgrading

RGB LED backlight

Each button is illuminated by an RGB LED back light which can change colour or intensity when used for different applications, based on the preference of the user. This customisable button back light ensures that the unit can blend into any situation or environment.

■ The color, icons and pattern of the plate can be customised









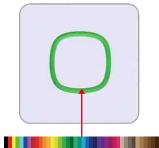
Based on your personal favorites or your requirements











Status without backlight color

0

All RGB color are selectable

Wireless Touch Button Switch

MPT2-RF.18 / MPT2-RF.16 / MPT4-RF.16 / MPT6-RF.16

MPT4-RF.16



MPT2-RF.18



MPT2-RF.16



MPT6-RF.16



Parameters

Power supply: DC5V (from wireless power interface)
Power consumption: 45mA/DC5V
Wireless transmit power: +10dbm
Wireless receive sensitivity: -90dbm
Installation: Wall mounting
• Dimensions: 86×86×10.5(mm)

Functions

- Multi Key Mode: Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, dblclick/single switch, dblclick/ Combination switch, Momentary, Short/Long Press, Short Press/Long Jog.
 Multi Key control Type: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Curtain switch, GPRS control, Panel control, Broadcast control, Broadcast channel, Security module, Z-audio control
 Adjustable backlight color and intensity
- Supports online upgrading

HDL \75

Wireless iSmart Panel

MPE04R-RF.18

MPT4-RF.18

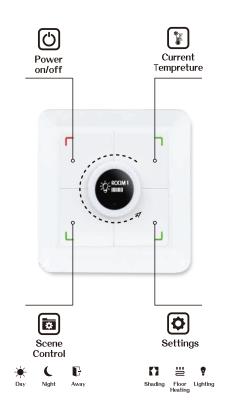


Parameters

- Power supply: DC5V (from wireless power interface)
- Power consumption: 64mA/DC5V
- Wireless transmit power: +10dbm
- · Wireless receive sensitivity: -90dbm
- Installation: wireless power interface, wall box
- Dimensions: 55. 5×55. 5×16.8(mm)

Functions

- Floor heating controller
- Five preset modes: Day, Night, Away, ECO, and Home
- Current temperature display (internal and external)
- Supports five simultaneous control channels,
- Multi key control mode: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Shad-ing control, GPRS control, Panel control, Security module, Z-audio control, Universal control, Link page, DALI area dimmer, RGB control, IR control, Logic
- adjust, Logic scene. Supports dimming
- Adjustable LED indicator adjustment
- Supports online upgrades





Wireless Power Interface (L+N Type)

MPWPID00LN.18/MPWPID00LN.16

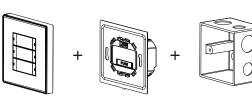


Parameters

- Product name: Fire line and null line for power supply
- Working voltage: AC85-270V 50/60Hz
- The maximum output current: 100mA/5VDC
- Fuse: 2A, aR type
- Dimension: 84×84×39(mm)(EU) 84×114×39(mm)(US)

Functions

- Supply DC5V power for wireless panels
- Power protection



Back box

Panel plate Panel power interface

MPWPID00LN.18 / MPWPID00LN.16





Wireless power interface, which is used the fire line and null line to provide power. And it should work with wireless panel. There are two sizes, EU and US.

HDL*\77

3CH Wireless Dimming Power Interface

MPWPID03L.18 / MPWPID03L.16 / MPWPID03LN.18 / MPWPID03LN.16

MPWPID03L.18 / MPWPID03L.16





Parameters

• Working voltage: AC85-270V 50/60Hz
• Output channel: 3 channels
• Output current: 1st channel ≤ 1.2A2nd and 3rd channel total current≤2A
• Fuse: 6A, aR type
• Dimension: 84×84×39(mm)(EU) 84×116×39(mm)(US)

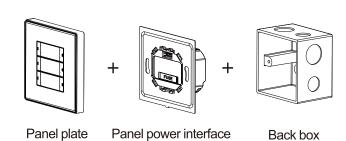
MPWPID03LN.18 / MPWPID03LN.16





Functions

Supply DC5V power for wireless panels.
1st channel is MOSFET dimming 2nd and 3rd are TRIAC dimming/switch
Short circuit protection
Over heating protection



1CH Wireless Switch Power Interface. Sensor

MPWPIR01T.18 / MPWPIR01T.16

Parameters

Working voltage: AC85-270V 50/60Hz
Output channel: 1CH relay
Output current: 16A 250VAC
• Fuse: 2A, aR type
• Dimension: 84×84×39(mm)(EU) 84×116×39(mm)(US)

Functions

Supply DC5V power for wireless panels
• 1CH relay output
Measure the temperature (This is the proprietary function for
MPWPIR01T.18)
Power protection

MPWPIR01T.18 / MPWPIR01T.16



3CH Wireless Switch Power Interface

HDL-MPWPIR03.18/HDL-MPWPIR03.16

Parameters

	Working voltage: AC85-270V 50/60Hz
	Output channel: 3CH relay
	Output current: 3A 250VAC(resistive load) 2A 250VAC(capacitive load)
	Mechanical life time of relay: 1×10 ⁷ times
	• Electronic life time of relay: 1×10 ⁵ times
	• Fuse: 10A
	• Dimension: 84×84×39(mm)(EU) 84×116×39(mm)(US)

Functions

Supply DC5V power for wireless panels
3 relay output channel
Power protection

MPWPIR03.18 / MPWPIR03.16



HDL*\79

Wireless Ceiling Mount Ultrasonic & PIR Sensor

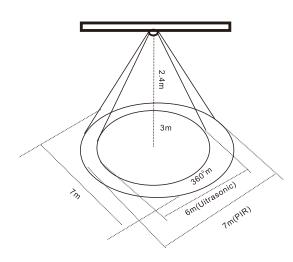
MSPU05-RF.1C

MSPU05-RF.1C



This module is both a PIR and ultrasonic sensor utilizing wireless communication protocols.

Several logic inputs can be used to control multiple targets, and the module can be connected to other security modules.



Detection range

Parameters

- Working power: AC220V
- Detection range: 6m (Installation height: 3m)
- Communication: Wireless
- Installation: Ceiling mount
- Dimension: Ø95*37(mm)

Functions

- Built-in Temperature sensor, PIR sensor, LUX sensor, Ultrasonic sensor, as well as Universal switch, Dry contact and logic control totally 8 logic input conditions
- With 24 logic blocks, each logic block have 8 input and 20 output commands; Each logic block has two universal switch inputs, can totally set 48 universal switches
- Variety Control includes scene switch, sequence switch, universal switch, signal channel adjust, audio, curtain, GPRS panel control, background music control, etc
- Two logic relationships: OR, AND
- Adjustable infrared sensitivity, sensitivity range:1-100
- Adjustable ultrasonic sensitivity, sensitivity range:1-100
- Security function, to be used with the security module.
- Supports wireless online upgrading.

Parameters

• Working voltage: 3V 1400mAh (From battery)

Wireless PIR & Lux Sensor

• Working current: 21mA

MSPU03-BRF.10

- Standby current: 24µA
- Indoor communication distance: ≤30m
- RSSI Received Signal Strengt Indication: > -80dbm
- (China) WPAN: 780-786MHz
- (Europe) SRD: 864-870MHz
- (North America) ISM: 904-928MHz
- Default password : HDL-SecurityKey0
- Dimension 54x54x51.5(mm)

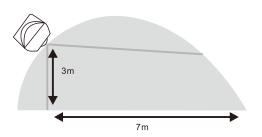
Functions

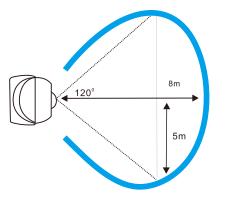
- Build in PIR sensor, LUX sensor, Temperature sensor
- LUX detection: detect current brightness
- Temperature detection: detect current temperature
- Battery energy detection: detect current battery energy
- Broadcast function: can broadcast its status, such as:movement,
 brightness, temperature, battery energy, you can select from the
 configuration.
- Target type: invalid, scene, sequence, universal switch, single channel lighting control, curtain switch, GPRS control, broadcast scene, broadcast channel, security, z-audio control.
- Can adjust the detection range.
- Supports IEEE.802.15.4
- Supports online upgrading
- Supports easy programming

MSPU03-BRF.10



This omnidirectional mini sensor is fully portable and able to detect motion, light intensity, and temperature. Ideal for solutions which require a truly flexible detection ability, the sensor can be placed in practically any location. Once a location for the sensor is selected, the adjustable socket ensures an optimum field of detection.





Detection range

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Wireless IR Emitter

MIR01R-RF.10

MIR01R-RF.10



Wireless IR Emitter, adopt HDL wireless communication way, download IR codes are saved in database or that learning by IR leaner via HDL Buspro programming software, sach as to control the IR equipments such as AC, TV, Fan and so on.

Buspro / Wireless Gateway

MBUS/GW-RF.40

Parameters

Working power: 5V DC (From USB)	
Working current: 20mA	
• IR emission carrier frequency: 38KHz	
• IR Control distance (channel 1): 5m	
• Indoor communication distance: ≤30m (Barrier free)	
RSSI Received Signal Strength Indication: >-80dbm	
• China (WPAN): 780MHz to 786MHz	
• Europe (SRD): 864MHz to 870MHz	
North America (ISM): 904MHz to 928MHz	
Default PSK: HDL-SecurityKey0	
• Dimensions: Φ120x37(mm)	

Functions

Drive the LED transmitting tube directly
• 3 IR emission channels
Supports 10 devices and 100 learning IR codes.
Supports for many remote controller types, find the brand which
you need, through the test to choose the right one.
Can update IR codes from database, also can update IR codes
that learning by HDL IR learner.
Sequence function, to call the sequence by universal switch, the
UV switch number is 201-208.
Temperature detect and broadcasting functions
Build in time chip, time and clock function
Supports IEEE.802.15.4
Supports online upgrading
Supports easy programming

Parameters

• Input voltage: 85~260VAC, 50/60Hz
Power consumption: 1.15W
Output: 24VDC 100mA
Wireless transmission power: +10dbm
Wireless sensitivity: -90dbm
• Indoor communication distance: ≤30m (barrier free)
• RSSI received signal strength indication: > -80dbm
• Dimension: 48.2x43.6x21.3 (mm)

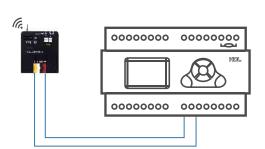
MBUS/GW-RF.40



The HDL-MBUS/GW-RF.40 is a wireless converter enabling Buspro wired devices to be incorporated in to a Buspro wireless network.

Functions

Supports IEEE.802.15.4
Provides power to HDL Buspro devices, while enabling them to be connected to a Buspro wireless network.
Online upgrades are supported for both the HDL-MBUS/GW-RF.40, and the module it is connected to.
Supports easy programming



HDL \83

Wireless Gateway Module

MCIP-RF02.10

MCIP-RF02.10



As a wireless gateway module the MCIP-RF02.10 can support RJ45, HDL-Buspro, and RF, and create a meshed network using standard IEEE 802.15.4. The frequency can then be selected from between 780-794, 864-882, and 904-928 MHz. The module is also able to create a transmission bridge between devices, extending the RF scope. Via the on board buttons RF parameter setting is enabled.

Wireless Central Frequency

- (China) WPAN: 780MHz-794MHz
- (Europe) SRD: 864MHz-882MHz
- (North America) ISM: 904MHz-928MHz

Parameters

- Working power: 12~30VDC
- Communication: RJ45,HDL Buspro, Wireless
- Wireless transmit power: +10dbm
- Wireless receive sensitivity: -90dbm
- Communication distance indoor: 50m (barrier free)
- Work mode: Mesh mode, bridge mode
- BUS Terminal: 0.75-0.85mm Diameter Single Core
- Additional function: RF433MHz receiving

Triple communication interfaces

The wireless MCIP-RF02.10 Gateway supports three essential communication types, RJ45, HDL-Buspro, and RF. These communication methods allow a user to control the wireless system via a pad or smart phone, while maintaining conventional wired system functionality.





HDL-BUS



RJ45

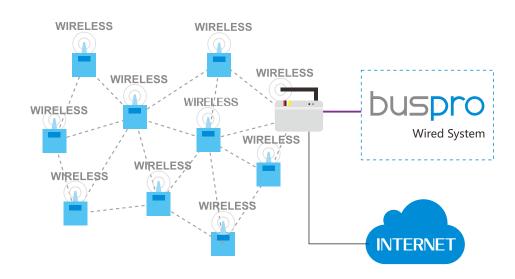
WIRELESS

Dual Working Modes

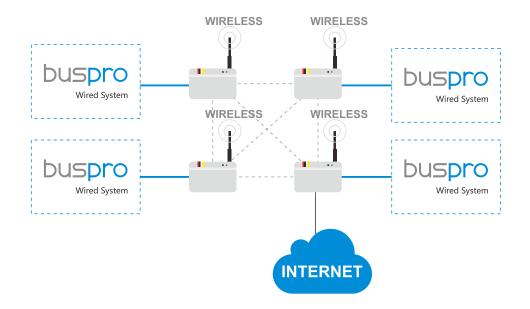
With two working modes the gateway is suitable for any automation solution. the first mode is the mesh network mode; this mode enables all the wireless devices active on the network to connect to each other. The mesh also supports wired system integration through the RJ45 and HDL Buspro ports.

The second mode is bridge mode; the function of this mode is to act as a transmission bridge. This enables multiple gateways and their associated wired devices to communicate with each other wirelessly. The scope of the system can then be further extended via RF.

■ Mesh network working mode



■ Bridge working mode



HDL \85

Wireless 1 Channel Motorized Curtain

MASTER

The module is a wireless motorized curtain controller, which supports

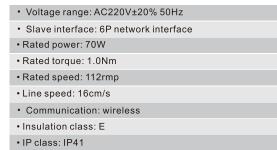
both master and slave modules. The unit utilizes standard IEEE 802.15.4 wireless communication protocols, with frequencies of 780-794, 864-882, and 904-928 $\dot{\text{M}}\text{Hz}.$ The new generation clutch and planetary reducer gears, enable the controller to operate at a barely audible 40db.

MWM70-RF.12

MWM70-RF.12





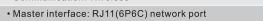




• Power supply: AC220V
Communication: Wireless
Master interface: RJ11(6P6C) network port

Bus working voltage: DC12V
• BUS Power Consumption: 33mA/DC 12V
Power supply: Provide from master

Voltage range: AC220V±20% 50Hz
Slave interface: 6P network interface
Rated power: 70W
Rated torque: 1.0Nm
Rated speed: 112rmp
• Line speed: 16cm/s
Communication: wireless
• Insulation class: E
• IP class: IP41



Special parameters for SLAVE

Bus working voltage: DC12V
BUS Power Consumption: 33mA/DC 12V
Power supply: Provide from master
Slave interface: RJ11(6P6C)network port

Technical Specifications

- Direct-powered by 220V AC, Maximum pulling force 8Kg(one motor), maximum curtain weight 50Kg (one motor), 80Kg (2 motors).
- Built-in new generation clutch, precise planetary reducer, noise level 40dB.
- · Percentage control enabled.
- · Drag and run enabled.
- Integrated with multiple user interfaces, HDL panel, iLife on iPad, Touchlife on Android pad, Touchlife on 7-inch touch screen.
- · Suitable for all small to medium-scale curtain applications, linear and arched, one- and two-side opening.
- Recommended maximum track length 12m; refer to load curves below











Functions

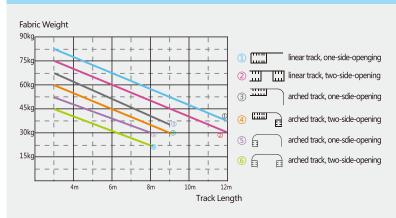
Over LOAD protection. The curtain will stop in case of external disturbance Supports the following control commands: Open, Close, Stop and Percentage Included additional pieces to adjust the curtains to the supports Easy programming for control panels and switches Supports manual mode when the power off Motor running mode: forward or reverse Pulse coding for position control

Over HEAT protection. In case of high temperature, the motor will switch off temporarily The position of the curtain can be measured and displayed in user interfaces Optional function of automatic calibration when power on Trigger manually the Open and Close of the curtain Solid and robust structure with modern style Supported Master and Slave mode Extremely silence working mode

Load curves(one-motor type)



Load curves(two-motor type)



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1/2CH Relay

MPR01-RF.18 / MPR02-RF.18 / MPC01-RF.18

1CH Trailing Dimmer / 4 CH Dry Contact Input

MPD01-RF.18/MPS04-RF.18/MPDA04-RF.18

MPR01-RF.18

MPR02-RF.18

MPD01-RF.18

MPS04-RF.18



Parameters

- Input voltage: AC85-265V
- Output current: 10A (Resistive load), 5A (Capacitive load)
- Power consumption: Max. 1.7W
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm
- Communication distance indoor: ≤30m (barrier free)
- Installation: Wall box
- Dimensions: 44x36x17(mm)



Parameters

- Input voltage: AC85-265V
- Output current: 3A (Resistive load), 2A (Capacitive load)
- Power consumption: 1.45W max.Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm
- Communication distance indoor: ≤30m (barrier free)
- Installation: Wall box
- Dimensions: 44x36x17(mm)



Parameters

- Input voltage: AC85-265V
- Output current: Max. 1.5A
- Power consumption: Max. 0.7W
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm

• Communication distance indoor: ≤30m (barrier free)

- Installation: Wall box
- Dimensions: 44x36x20.2(mm)



Parameters

- Input voltage: AC85-265V
- Power consumption: Max. 0.3W
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm
- Communication distance indoor: ≤30m (barrier free)
- Installation: Wall box
- Dimensions: 44x36x17(mm)

MPC01-RF.18



Parameters

- Input voltage: AC85-265V, 50/60HZ
- Output current: 5A
- Power consumption: 1.45W max.
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm
- Communication distance indoor: ≤30m (barrier free)
- Installation: Wall box
- Dimensions: 44x36x17(mm)

MPDA04-RF.18



Parameters

- Input voltage: AC85-265V , 50/60HZ
- Power consumption: 2.7W Max.
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: +90dbm
- Communication distance indoor: ≤30m (barrier free)
- Installation: Wall box
- Dimensions: 44x36x17(mm)

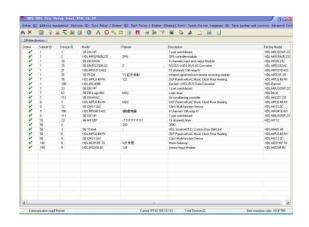
HDL Buspro System Program Software

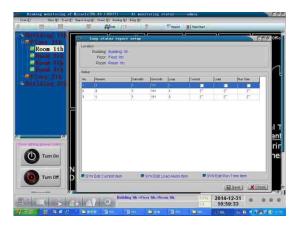
HDL Buspro Graphic Monitor Software



Description

• HDL Buspro Software is a flexible and powerful design tools, it is to be used for parameters setting for all HDL Busproducts







Description

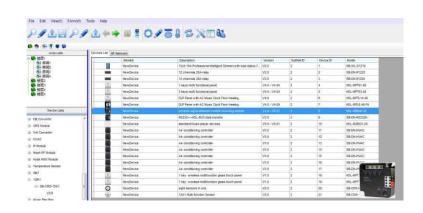
- HDL Buspro System Graphics Supervisory Control Software is the powerful
 and convenient graphical software, It graphically monitoring and control over
 the lighting circuit, it have run statistics with data, status for alarm, timer control,
 scene control, dimming controls, and hyperlink.
- Optional types: MSCS.100, MSCS.200, MSCS.500, MSCS.1500, MSCS.NL.
- Number of monitored objects: 100 controlled point, 200 controlled point, 500 controlled point, 1500 controlled point, and infinite controlled point.

HDL Buspro Easy Setup Tool



Description

 HDL Buspro Easy Setup tool is an easy functional design tool, which can program for all of HDL Buspro online or offline devices and meet all requirements of the systems engineering design.
 Meanwhile, it also supports the import and export of project data, enabling flexible data sharing.



Functions

- Easy for program and operate based on graphic icon.
- User-defined material, show the reality picture about the Hotel Room
- "SOS" Safety Box Protection" and many other functions, all lamps to centralized for management features
- Energy saving control function and Monitor for Air-conditioning
- Intelligent ID identify, more safety for customers, and reducing
- the energy consumption for hotel
- Date back up and restore function
- Curtain status for graphic display and control
- Dynamic fan graphic effects control



Intelligent Hotel Room Management Software



Description

 HDL Buspro Hotel Room Intelligent System Manage Software can be monitor to hotel room status and information, the database management, will safety and reliability.

To management and control the hotel room entrances guard system, central air conditioning system, the intelligent light system, and the service system, room status will various intuitive ways of interacting dynamically to displayed, real-time to reflect room state, guest needs, services and equipment, assist in hotel room equipments, internal resource for real-time control of the integrated management and control system.

The system uses modular design, has energy-saving, efficiency, and offers personalized service to customer, raising the level of hotel management and the hotel images.

HDL* \91