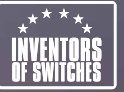


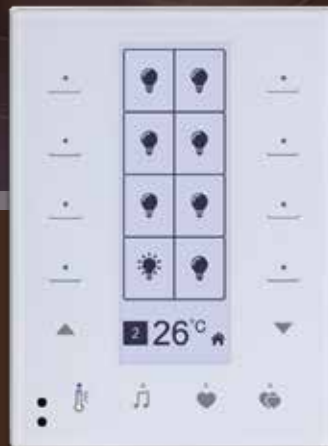
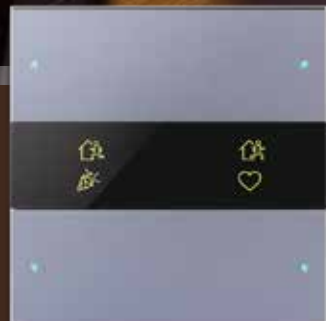


HAVELLS
Crabtree

— Switching solutions since 1918 —



Building & Home Automation Control System



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ABOUT US

Redefining the modern homes with innovation and excellence

Havells is at the forefront of transforming modern living spaces by offering innovative solutions that elevate everyday experiences. With a deep understanding of consumer needs, the company has expanded its footprint across every aspect of home life, creating environment that are not only functional but also comfortable, stylish, and future-ready. To make these solutions accessible, Havells leverages an extensive distribution network encompassing 18,000 dealers, over 1,000 exclusive brand stores, intensifying presence in modern retail, e-commerce and quick commerce.

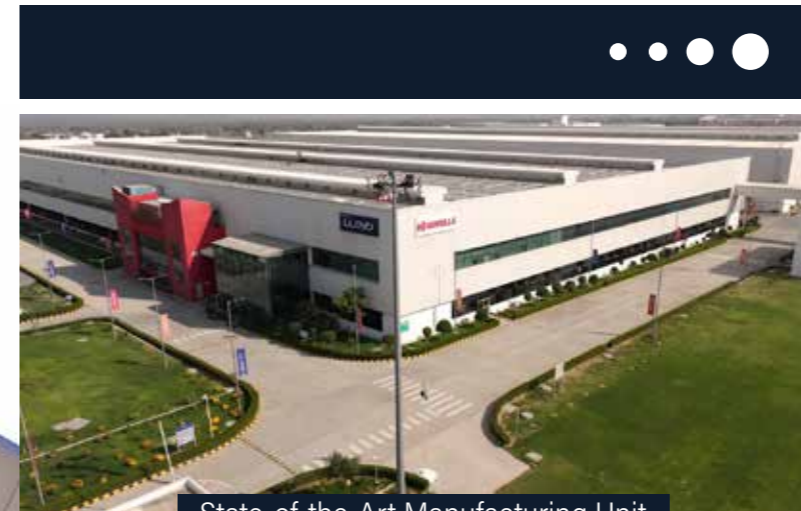
The company's portfolio includes power brands like Havells, Havells Crabtree, Lloyd, REO, Havells Studio, and Standard each designed to cater to the unique demands of today's consumers.

Anchored in the 'Make in India' initiative, Havells operates 16 cutting-edge manufacturing facilities across India, producing 90% of its products in-house. At the forefront of Havells product evolution lies its Customer Experience & Designs (CXD) Studio, where creativity and user-centric design converge. This is complemented by its Centre for Research & Innovation (CRI), supported by four advanced R&D centres, enabling Havells to consistently deliver products that are both functional and visually compelling.

Driven by a commitment to innovation, quality, and design, the company also upholds sustainable practices throughout its operations, including eco-friendly manufacturing processes and energy-efficient product design, contributing to a greener and more sustainable future.



CORPORATE OFFICE, NOIDA



State-of-the-Art Manufacturing Unit



Customer Experience & Design



Industry 4.0 Process



Center For Research & Innovation

16 Manufacturing Units

~18000 Strong Dealer Network

4 Research Centres

48 Offices






Software Platform



On Pro

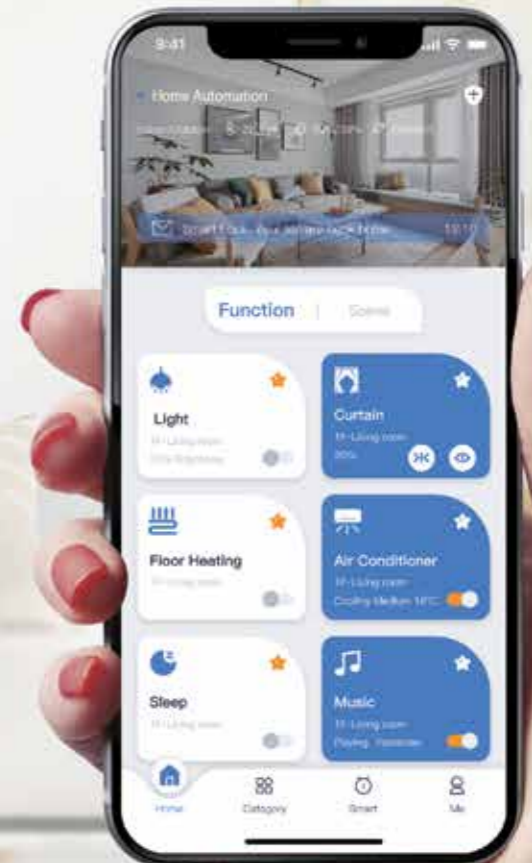
On Pro is a mobile app designed for smart home systems that enable users to control all the connected devices in the house, such as lighting, shading, HVAC, security, etc.

Scene and Automation functions can be defined by end users effortlessly on On Pro app.

-  Curtains
-  Lights
-  Door Lock
-  AC
-  More



Scan to download On Pro



Intuitive user interface

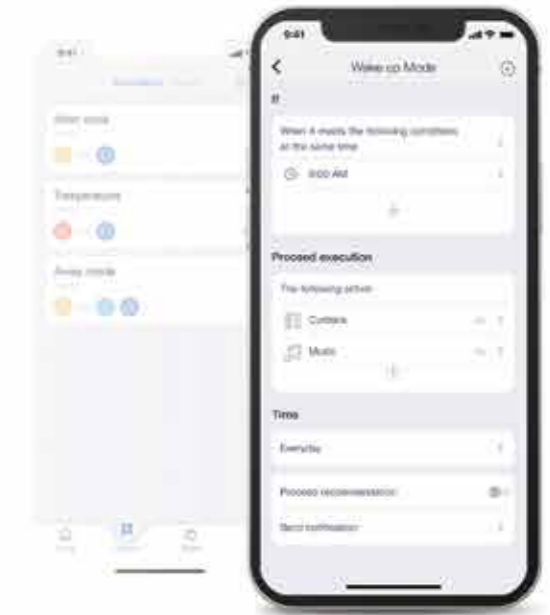
With flat and quasi-physical design, the interface is vivid and easy to understand. For example, users can directly slide the icons to control the brightness of lights, the position of curtains and temperature of AC, etc.



Set the logic of automatic control

Whether time, scene, location, or function, all can be the condition that triggers the task. Set up the automation scene you like in advance, such as Get up Mode. At 8:00 a.m., the shutter will turn on automatically, and the soft background music rings out. Let the sunshine gently wake you up.

Get up Mode:  + 

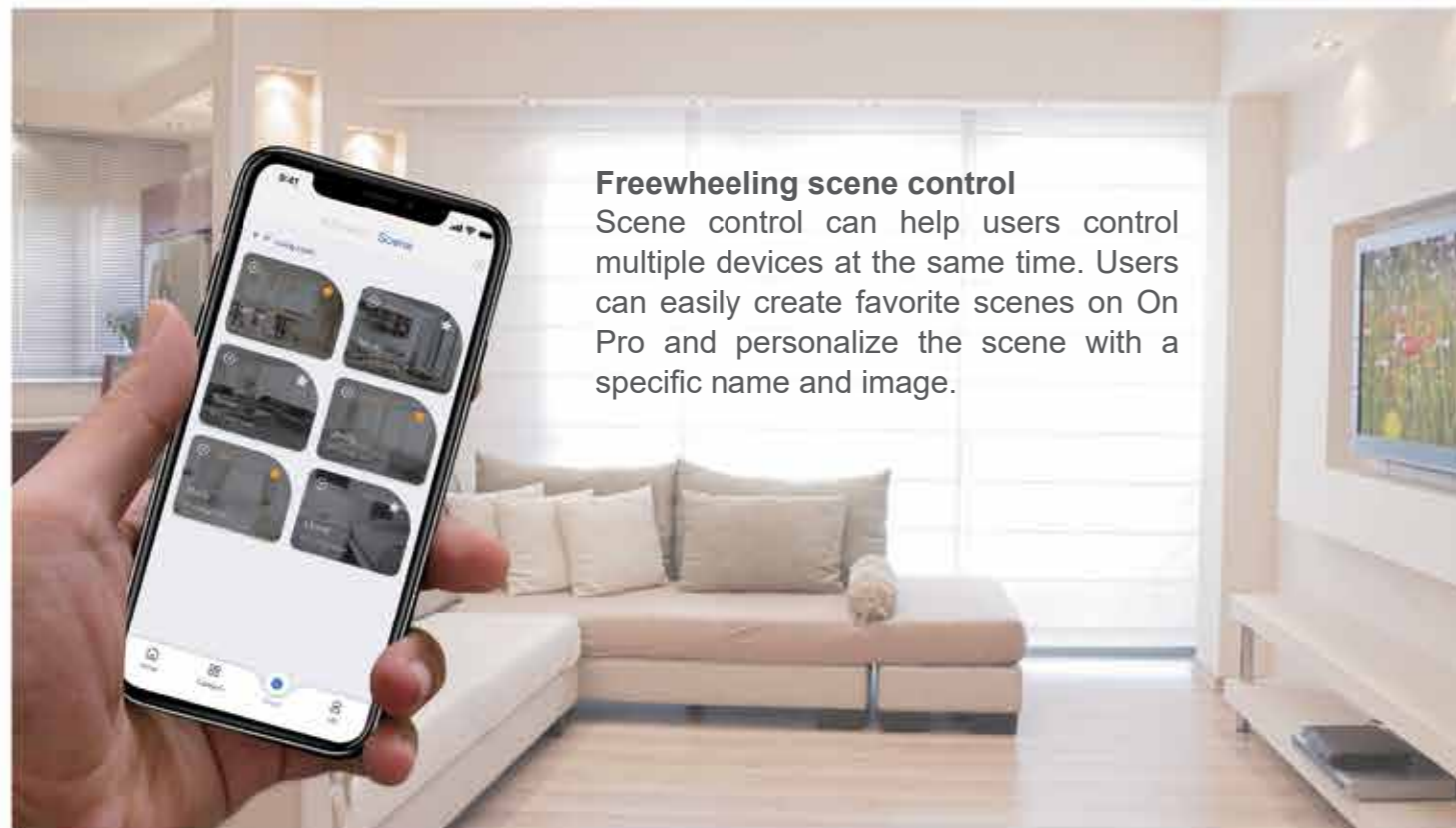


Control various devices intuitively

On Pro enables the control of over ten types of devices, which are categorized into room and function. Each function area is designed like a card for more intuitive and direct control.

Freewheeling scene control

Scene control can help users control multiple devices at the same time. Users can easily create favorite scenes on On Pro and personalize the scene with a specific name and image.



Share your smart home

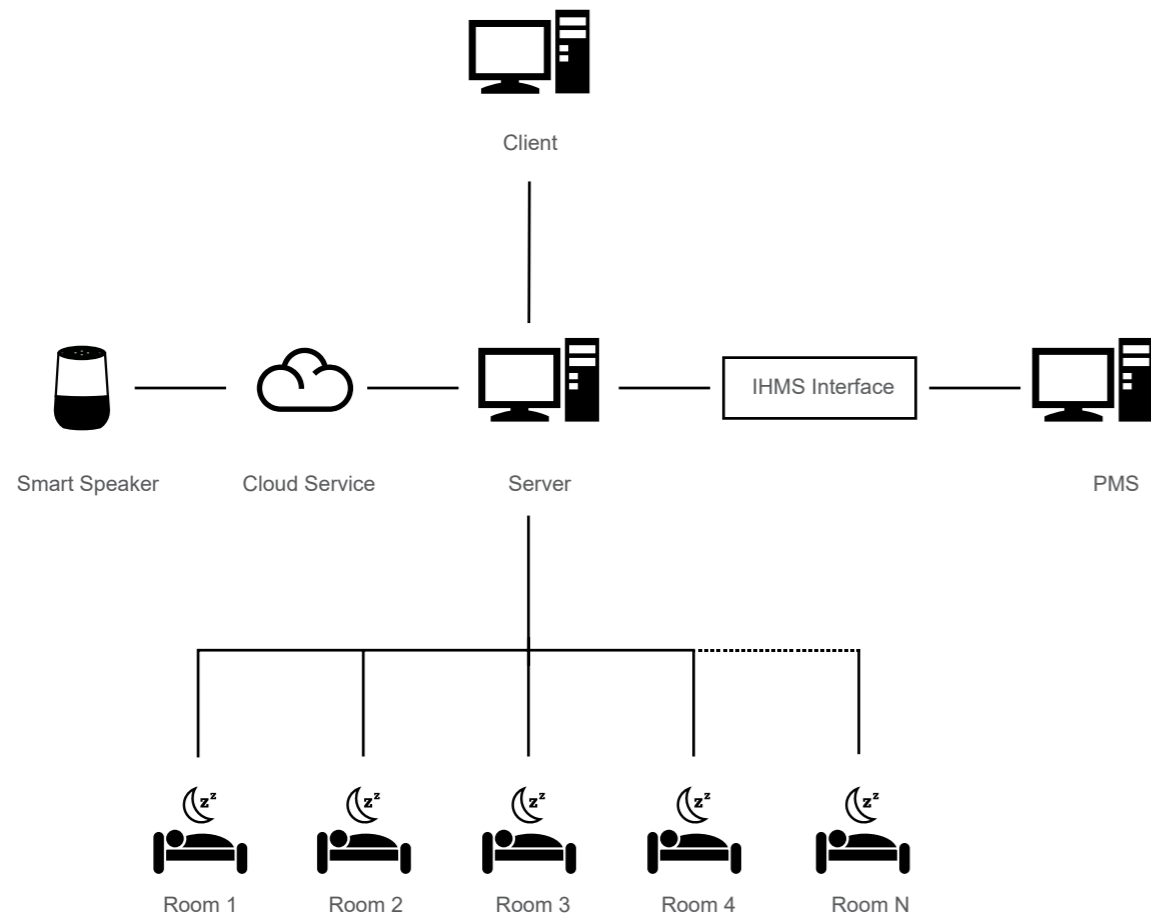
On Pro allows homeowners to invite their family members and friends by adding their accounts. After that, homeowners are free to share the permissions of controlling the space and devices with the new member.



Intelligent Hotel Management System

Intelligent Hotel Management System (IHMS) works with smart hotel system. It enables the hotel to manage its guest rooms, room cards and services on a desktop computer, while allowing guest to control room devices via a wall panel, mobile app or smart speaker.

IHMS consists of the local server, cloud server, client, room cards management tool and APIs.



Topology of Havells Crabtree Intelligent Hotel Management System



Server.

It syncs and updates the data of all connected clients.

Client.

It has a user-friendly interface. Hotel staff can view the room status and proceed service requests.

Cloud Service.

When the cloud service is enabled, hotel guest can control curtains, lights, HVAC and other devices via a mobile app or smart speaker.

It can integrate with PMS via its API.



A powerful and flexible wired control

Buspro is an intelligent control system independently developed by Havells Crabtree, which consists of a backbone network with Ethernet connection and a bi-direction bus network with Havells Crabtree Buspro cables. It can be connected to common devices and allow users to control the devices through wall panels, mobile phones, tablet computers and other terminals, and can also be integrated with other intelligent control systems through protocol docking.

The system functions of Buspro cover lighting, shading, air conditioning, floor heating, home entertainment, safety and security, etc. Suitable for residential, office buildings, urban complexes, large venues, hotels, and other commercial buildings, you can determine the functions and scale of the system according to your own needs.



Advantages

Highly Flexible

Buspro is a distributed system in which each functional modul can share data while remaining relatively independent from each other, so that it is possible to design a customized solution according to the user's needs, and easy to seamlessly connect with other control systems.

Easy Maintenance

As the device information is separately stored in the machine, the entire control system will not be paralyzed if there is a failure of a certain device in the system. Therefore, you can save maintenance costs and increase return on investment.

Wider Application

With modules specifically tailored to meet the demands of each market, and an inherent flexibility and customizability, Buspro can be widely used in the commercial, hospitality, and residential sectors.

CONTROL PANELS / PANEL POWER INTERFACES



Source 7

MGWSIPD-LK.18

ACBAE013 Black
ACBAE014 Blue



Source is a smart panel that enable to effortless control lighting, scenes, shading, HVAC and music. It adopts 17.78 cm LCD screen, equipped with HD camera for indoor communication and stepless knob, built-in Proximity Sensor, Temperature & humidity Sensor and lux Sensor. The panel supports multi-gateway cross-drive control.

Dimension:
(219.2×102×25.6) mm (without power interface)
(219.2×102×54.8) mm (with power interface)
Housing material: PC
Installation: Wall box
Protection Type: (Conform to EN 60529) IP 20

Protocol: [WIFI](#) [LINK](#)

Features and Specifications

- Stepless knob assures accurate positioning
- Enabling indoor communication between different rooms
- Capable of working as a gateway
- Available in Buspro, KNX, Buspro wireless, WiFi and RJ 45



MPWS2R1ETH-BP.18
ACBAF007

Source-Buspro Power Interface

- Power supply for Source 7
- 2CH relay output
- Network connection through communication interface
- Compatible with Buspro & Zigbee gateway functions

Granite Series



Granite Display

MPTL4C.48

ACBAA074

Granite Display is a high-end and multi-function control panel for home automation. With 10.16 cm LCD screen and full-screen touch control, it is convenient for the users to control lighting, curtain, scene, air conditioning, floor heating, music and fresh air in an intuitive way.

Working voltage: 12 V~30 V DC
 Working current: 120 mA / 24 V DC
 Installation: Wall box

Features and Specifications

- Built-in temperature and humidity sensor, proximity sensor
- Support screen lock
- Adjustable LCD backlight brightness
- LCD screen wakes up automatically
- Support sleep mode;
- Support online upgrade.



Granite 4.3



Granite Display



Granite



Granite 4.3

MPL43C.46

ACBAE009

Granite 10.92 cm is a multi-function control panel with 10.92 cm LCD screen and full-screen touch control. There are dedicated pages for lighting, curtain, scene, air conditioning, floor heating, music and fresh air. And users can also quickly access the most frequently used functionality or scenes by the short-cut buttons on the home screen.

Working voltage: 12 V~30 V DC
Working current: 120 mA / 24 V DC
Installation: Wall box

Features and Specifications

- Built-in temperature probe, can automatically obtain the temperature information
- Support LED backlight and indicator
- Adjustable color and brightness of LCD backlight
- Customizable icon
- Combination button mutual exclusion function is available;
- Support Havells Crabtree Buspro online upgrades

Granite 4/6 Buttons

MP4C.48

ACBAD005 Silver 4B

ACBAD004 Grey 4B

ACBAD012 Silver 6B

ACBAD018 Grey 6B



Granite is a series of multi-functional push-button panels with aluminum plate for home automation, used to control lighting, curtain and scene. It is available to two sizes, EU size with 4 buttons and US size with 6 buttons.

Working voltage: 12 V~30 V DC
Working current: 13 mA / 24 V DC
Installation: Wall box

Features and Specifications

- Built-in temperature probe, can automatically obtain the temperature information
- Support LED backlight and indicator
- Adjustable color and brightness of LCD backlight
- Customizable icon
- Combination button mutual exclusion function is available
- Support Buspro online upgrades



Enviro

MPTLC43.46-A

ACBAE003 Black
ACBAE004 White



Enviro Touch Screen is a high-end and multi-function control panel for home automation. With 10.92 cm color capacitive LCD screen and touch control, it is convenient for the users to control lighting, scene, curtain, music, air conditioning, floor heating and others in an intuitive way.

Working voltage: 12 V~30 V DC
Working current: 85 mA / 24 V DC
Installation: Wall box

Features and Specifications

- Built-in temperature sensor and proximity sensor
- Built-in IR receiver and real-time clock
- Adjustable LCD backlight
- LCD screen wakes up automatically
- Customizable UI
- Support online upgrade

Tile Display

MPL35C.48-Tile 48

ACBAE011



Tile Display is a multi-function control panel for home automation. With 8.89 cm LCD screen and full-screen touch control, it is convenient for the users to control lighting, curtain, scene, air conditioning, floor heating, music and fresh air in an intuitive way. Tile Display can be combined with other panels in the Tile series for more functionality but with a consistent look.

Working voltage: 12 V~30 V DC
Working current: 100 mA / 24 V DC
Installation: Wall box

Features and Specifications

- Built-in temperature, humidity sensor and proximity sensor
- Adjustable LCD screen backlight brightness
- Support screen lock
- LCD screen wakes up automatically
- Support sleep mode
- Support online upgrade



Tile



Tile is a series of smart control panels in EU standard. You can use just one unit if it meets your requirement, or combine multiple units to serve more functionalities in a specific area, but only metal panels are available to install multiple units in a vertical direction. It is able to keep the walls in a consistent and beautiful look while meeting various requirements of functionalities.

Features and Specifications

- Built-in temperature and proximity sensor
- Icons and text support laser labelling
- Maximum sensing distance: 15 cm
- Support online upgrade
- Support easy programming

ACBAV008 (White)
ACBAA010 (Grey)



MP1B/Tile.48

ACBAV009 (White)
ACBAA015 (Grey)



MP2B/Tile.48

ACBAA075 (White)
ACBAV012 (Grey)



MP4B/Tile.48

ACBAA014 (White)
ACBAV015 (Grey)



MP4B-A/Tile.48

Tile Series Push-button Panel

Tile Series Push-button Panel contains 1/2/4 - button panels, both plastic and metal versions. The mechanical structure of the keys is upgraded to give you firmer push feedback while being quieter. Tile Series Push-button Panels are all-round panels for whole-home automation control, enabling controls of lighting, curtains, scenes, music, etc.

Features and Specifications

- Adjustable RGB icon backlight
- Customizable button icons
- Button lock function
- Working voltage: 12 V ~ 30 V DC



Tile Series Climate Panel (Thermostat)

MPL40E/TILE.48



ACBAV013 -White
ACBAA027 - Grey



Tile Series Climate Panel is divided into a segment code LCD screen and four pushbuttons. It can offer comprehensive monitoring of environment measurements and enable controls of air conditioning, floor heating and ventilation system. There are different pages for air conditioning, floor heating and ventilation system, and each can be used to control 1 channel.

Features and Specifications

- Adjustable brightness of LCD screen and RGB icon backlight
- Support parental controls
- Adjustable RGB icon backlight
- Working voltage: 12 V ~ 30 V DC



MP1-W-CARD/TILE.48



MP1-USB-TYPEC/TILE.48-1



MP2-W-USB/TILE.48



MP3-S-TR/TILE.48



MP1-E-A/TILE.48

Tile Series Card Holder Panel, USB 2.0 and Type-C Socket, Dual USB Charger Wall Outlet, Dry Contact Push Switch and Emergency Button Panels



DLP

MPL8.46-A

ACBAB010 (White)

ACBAB008 (Black)



DLP is a series of smart control panels with physical buttons and mono-color LCD display for home automation both in EU and US standard. With 8 control buttons and 2 page buttons, the panel has 4 general pages for lighting, curtains, etc. and dedicated pages for AC, floor heating and background music.

Working voltage: 12 V~30 V DC
Working current: 30 mA / 24 V DC
Installation: Wall box

Features and Specifications

- Built-in temperature sensor
- Icon for Key Buttons can be changed
- Support 147 languages
- Customizable icons or captions
- Support online upgrade

DLP Touch

MPTL14.46-A

ACBAX011 (White)

ACBAB013 (Black)



DLP Touch is designed to offer you a quick and simple touch-control experience. With the mono-color LCD in the middle, you can have the icons or text customized. It has 8 control buttons, 2 page buttons and 4 shortcut buttons, which is convenient for users to control lights, curtains, AC, floor heating, background music, etc.

Working voltage: 12 V~30 V DC
Working current: 45 mA / 24 V DC
Installation: Wall box

Features and Specifications

- Built-in temperature sensor and proximity sensor
- Customizable icons and captions
- RGB button indicator and voice prompt are available
- Adjustable LCD backlight
- LCD screen wakes up automatically
- Support online upgrade



Intelligent Hotel Door Bell

MHB.1010

ACBAO008 (Black)

ACBAO015 (White)

It is a door bell touch panel which is installed outside the room by the door. Through the control panel or other devices, it can display customer's requirements, for example, Please Wait, Clean Room, or DND, etc.

Features and Specifications

- Room number display. Information display (Please Wait, Need Cleaning, DND, etc.) in different colors.
- Support Havells Crabtree Buspro online update.



RF Intelligent Door Bell and Access Reader

MHBRE.1010

ACBAO011

It is a door bell touch panel which is installed outside the room by the door. It can control the panel to indicate your requirements via the door bell panel, such as Laundry, DND and Clean Room.

Features and Specifications

- Show room numbers, indicate the information of Laundry, DND and Clean Room
- With 2 dry contacts
- Open the Door by RF card & history record function
- Support Havells Crabtree Buspro online update



RF Card Reader

MHIC.48

ACBAO009

It is designed to control the master card energy gaining and hotel guest room facility using. It has built-in MIFARE RF card reader and can recognize different types of card, including guest card, waiter card, cleaner card, mender card and administrator card.

Features and Specifications

- Support master card energy gaining & power management
- Support ID recognition, scene control in accordance with various types of card
- Supported card types: Guest card, waiter card, cleaner card, mender card and administrator card
- Support Buspro online update



RF Intelligent Door Bell

MPTB01RF.48

(ACBAO012)

It is a doorbell product with touch panel, which is the matching product of Buspro control system. It is installed by the hotel room door and has the functions of doorbell and unlocking through swiping RF card.

Features and Specifications

- Optional backlight RGB colors
- Display requirement of cleaning room
- 1-99 targets can be controlled when user touch the door bell
- 1-49 targets can be controlled when user swipe the card
- The touch sensitivity can be adjusted
- Support upgrade from Buspro



RF Card Reader & Master Control US/EU

MPTB01RF.48

ACBAO001

It is a doorbell product with touch panel, which is the matching product of Havells Crabtree control system. It is installed by the hotel room door and has the functions of doorbell and unlocking through swiping RF card.

Features and Specifications

- Optional backlight RGB colors
- Display requirement of cleaning room
- 1-99 targets can be controlled when user touch the door bell
- 1-49 targets can be controlled when user swipe the card
- The touch sensitivity can be adjusted
- Support upgrade from Buspro





Panel Power Interface EU

MPLPI.48-A

ACBAF005

Provide DC power and communicates with panel switch, and supports different EU types of panels and sensors.

- Working voltage is 12 V~30 V DC
- Havells Crabtree Buspro interface supported (CAT5E or dedicated Havells Crabtree Buspro cable required)
- The panel power interface should be installed on the wall box



Panel Power Interface US

MPLPI.46-A

ACBAF004

Provide DC power and communicates with panel switch, and supports different US types of panels and sensors.

- Working voltage is 12 V~30 V DC
- Havells Crabtree Buspro interface supported (CAT5E or dedicated Havells Crabtree Buspro cable required)
- The panel power interface should be installed on the wall box



Tile Power Interface -With 2CH 10 A Relay

MPR0210/TILE.48

ACBAA088

It is a standard panel power interface with relay channels. The power interface has an independent device ID address, including 10 A relay channels.

- Working voltage is 15 V~30 V DC
- Working current is 24 mA / 24 V DC
- With independent programming button and programming indicator
- Short press the programming button to realize all relay channels on/off
- Provide power and communication interface for Havells Crabtree Tile series panel



Power Interface-With 2CH 10 A Relay

MPR0210-S.40

ACBAA090

It is a standard panel power interface with relay channels. The power interface has an independent device ID address, including 10 A relay channels.

- Working voltage is 15 V~30 V DC
- working current is 24 mA / 24 V DC
- With independent programming button and programming indicator
- Short press the programming button to realize all relay channels on/off
- Provide power and communication interface for Havells Crabtree standard panel



Power Interface-With 3CH 10 A Relay

MPR0310-S.40

ACBAA089

It is a standard panel power interface with relay channels. The power interface has an independent device ID address, including 10 A relay channels.

- Working voltage is 15 V~30 V DC
- Working current is 24 mA / 24 V DC
- With independent programming button and programming indicator
- Short press the programming button to realize all relay channels on/off
- Provide power and communication interface for Havells Crabtree standard panel



Tile Power Interface -With 3CH 10 A Relay

MPR0310/TILE.48

ACBAA087

It is a standard panel power interface with relay channels. The power interface has an independent device ID address, including 10 A relay channels.

- Working voltage is 15 V~30 V DC
- Working current is 24 mA / 24 V DC
- With independent programming button and programming indicator
- Short press the programming button to realize all relay channels on/off
- Provide power and communication interface for Havells Crabtree Tile series panel

GATEWAYS / DRY CONTACT MODULES



Buspro Link Gateway

MGWIP.430

ACBAT007

It is a product designed based on Linux system hardware platform. It supports Havells Crabtree Buspro Setup Tool, Mention Studio, ON Pro, Cloud server, etc. integrating scene, logic, security, clock, server automatic prompt upgrade and other functions.

Working voltage: 15 V~30 V DC
Working current: 70 mA / 24 V DC
Communication protocol: Havells Crabtree Buspro, Ethernet, RS485
Installation: 35 mm DIN rail installation

Features and Specifications

- Real-time update of device status and device control
- The server application automatically prompts for upgrade
- Supported protocol: http \ tcp \ udp \ mqtt; Support intranet communication, remote access
- System detection, device status report
- Support backup upload and download of APP, Cloud, debugging software
- Drive management of third-party products
- Data backup and data recovery function



1 Port Programming Gateway

MBUS01IP.431

ACBAT001

It enables bidirectional data exchange between Buspro and Ethernet.

- Support local control (default), p2p control, and remote control
- Up to 4 devices (iPad, iPhone, Touchlife, Buspro Setup Tool, etc.) connection supported for remote control
- Smart data exchange for reducing data traffic
- Communication: Buspro, IP network
- Working voltage: 12 V~30 V DC
- Working current: 40 mA / 24 V DC



RS232/RS485 Gateway

MRS232U.431

ACBAD001

This device enables the two-way communication between RS485 / RS232 interface devices and Buspro system devices.

- Input command number up to 99 ASCII code number contained in each command up to 33
- Working voltage: 15 V~30 V DC
- Working current: 15 mA / 24 V DC
- There are standard version and special version and the special version supports clock function



Buspro Gateway (Home Kit Version)

MGWIP.430

ACBAT008

It is a product designed based on Linux system hardware platform. It supports Buspro Setup Tool, Mention Studio, ON Pro, Cloud server, etc., integrating scene, logic, security, clock, server automatic prompt upgrade and other functions.

With Apple HomeKit, it supports the following functions currently: switch, dimming, CCT, RGB, curtain motor, curtain panel (Apple only support open and close).

Working voltage: 15 V~30 V DC
 Working current: 70 mA / 24 V DC
 Communication protocol, Buspro, Ethernet, RS485
 Installation: 35 mm DIN rail installation

Features and Specifications

- Real-time update of device status and device control
- The server application automatically prompts for upgrade
- Supported protocol: http \ tcp \ udp \ mqtt; Support intranet communication, remote access
- System detection, device status report
- Support backup upload and download of APP, Cloud, debugging software; Drive management of third-party products
- Data backup and data recovery function.



HDL-BUS and KNX-EIB Interface Converter

MCEIB.231

ACBAT004

It is a gateway between Buspro and KNX/EIB, 2-way Bridge Converter, to give full 2-way communication and make Buspro as Family Member within the KNX Environment.

- Various data point format supported
- Controls up to 254 targets
- Buspro working voltage: 15 V~30 V DC
- Buspro working current: 5 mA / 24 V DC
- KNX/EIB working voltage: 21 V~30 V DC
- KNX/EIB working current: 6 mA / 30 V DC



24-Zone Dry Contact Module

MS24.232

ACBAA051

It is a sensor signal input module, which supports up to 24 dry contact inputs.

- Both mechanical switches and combination
- switches can set 49 control targets
- Security function should be used in conjunction with the security module
- Working voltage: 12 V~30 V DC
- Working current: 12 mA / 24 V DC



8-Zone Dry Contact Module

MSD08A.40

ACBAA022

It supports 8-channel dry contact input with vandal-proof function.

- Supported switch mode: Switch mode, Dimup/down, Dim up or Dim down
- Vandal-proof (One parallel contacted 1 kQ resistor required)
- Security function (Security module required)
- Working voltage: 12 V~30 V DC
- Working current: 15 mA / 24 V DC



4-Zone Dry Contact Module with Temp. Sensor

MSD04TA.40

ACBAA016

It has 4 input channels and 4 output channels. Input signal supports dry contact, temperature signal and dry contact status display via LED indicators.

- 4-channel dry contact input with vandal proof
- Supported switch mode: Switch mode, Dim up/down, Dim up or Dim down
- Security function (Security module required)
- Temperature alarm: when the temperature exceeds preset range/ value, alarm will be triggered
- Working voltage: 12 V~30 V DC
- Working current: 10 mA / 24 V DC





3CH 10 A Flush-mounted Switching Actuator

MRCU.433

ACBAA035

It is a smart relay executive module installed in the wall box of the Chinese standard panel. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices.

- With three 10 A TV 8 relay control channels
- With 7 dry contact switch signal input channels, 7 LED switch signal output channels
- With programming button and programming indicator
- Working voltage: 15 V ~28 V DC
- Working current: 96 mA / 24 V DC



1CH 16 A Flush-mounted Switching Actuator (EU)

MPR0116-E.40

ACBAA085

It is a smart relay executive module installed in the wall box of the European standard panel. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices.

- With one 16 A relay control channel
- With 4 dry contact switch signal input channels, 4 LED switch signal output channels
- With programming button and programming indicator
- Working voltage: 15 V ~ 28 V DC
- Working current: 95 mA / 24 V DC



2CH 10 A Flush-mounted Switching Actuator (EU)

MPR0210-E.40

ACBAA084

It is a smart relay executive module installed in the wall box of the European standard panel. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices.

- With two 10 A relay control channel (s)
- With 4 dry contact switch signal input channels, 4 LED switch signal output channels
- With programming button and programming indicator
- Working voltage: 15 V ~28 V DC
- Working current: 65 mA / 24 V DC



4CH 10 A High Power Switch Actuator

MR0410.431

ACBAA046

The actuator has 4 channels (10 A for each channel) and 16 A magnetic latching relay.

- Up to 4 separate zones
- 8 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 4 steps for each sequence
- Light protection delay, 0 s-25 s of bulk power-on time and manual switch for each channel
- Working voltage: 15 V~30 V DC
- Working current: 40 mA / 24 V DC
- Input voltage: 20 V / 240 V AC (50 Hz / 60 Hz)



16CH 10 A High Power Switch Actuator

MR1610.433

ACBAA008

The actuator has 16 channels (10 A for each channel) and 16 A magnetic latching relay.

- Up to 16 separate zones
- 32 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 16 steps for each sequence
- Light protection delay, 0 s-25 s of bulk power-on time and manual switch for each channel
- Working voltage: 15 V~30 V DC
- Working current: 40 mA / 24 V DC
- Input voltage: 20 V / 240 V AC (50 Hz / 60 Hz)



8CH 10 A High Power Switch Actuator

MR0810.432

ACBAA009

The actuator has 8 channels (10 A for each channel) and 16 A magnetic latching relay.

- Up to 8 separate zones
- 16 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 8 steps for each sequence
- Light protection delay, 0 s-25 s of bulk power-on time and manual switch for each channel
- Working voltage: 15 V~30 V DC
- Working current: 40 mA / 24 V DC
- Input voltage: 20 V / 240 V AC (50 Hz / 60 Hz)



4CH 16 A High Power Switch Actuator

MR0416C.431

ACBAA011

The actuator has 4 channels and 50 A magnetic latching relay and has manual control switches.

- Up to 4 separate zones
- 8 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 4 steps for each sequence
- Light protection delay and mass turn-on delay for each channel
- Channel current, used time of load and alarm status of each channel can be detected
- Electronic life time of relay: > 60000 (Resistance load)
- Working voltage: 24 V~30 V DC
- Input voltage: 120 V / 240 V AC (50 Hz / 60 Hz)



12CH 10 A High Power Switch Actuator

MR1210.433

ACBAA007

The actuator has 12 channels (10 A for each channel) and 16 A magnetic latching relay.

- Up to 12 separate zones
- 24 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 12 steps for each sequence
- Light protection delay, 0 s-25 s of bulk power-on time and manual switch for each channel
- Working voltage: 15 V~30 V DC
- Working current: 40 mA / 24 V DC
- Input voltage: 20 V / 240 V AC (50 Hz / 60 Hz)



8CH 16 A High Power Switch Actuator

MR0816C.232

ACBAA047

The actuator has 8 channels and 50 A magnetic latching relay and has manual control switches.

- Up to 8 separate zones
- 16 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 8 steps for each sequence
- Light protection delay and mass turn-on delay for each channel
- Channel current, used time of load and alarm status of each channel can be detected
- Electronic life time of relay: > 60000 (Resistance load)
- Working voltage: 24 V~30 V DC
- Input voltage: 120 V / 240 V AC (50 Hz / 60 Hz)



6CH 10 A 0 V-10 V Ballast Dimming Actuator

MRDA0610.432

ACBAA044

It has 6-channel relay outputs and it is applicable for switch control. It has 6-channel for 0 V - 10 V analog signal outputs (supports input and output), which can control the 0 V - 10 V dimmable fluorescent tube and 0 V - 10 V LED light, etc.

- Up to 6 separate zones, up to 12 scenes in each zone
- Up to 6 sequences, each sequence has 12 steps, running time for each step is 60 minutes
- Bypass button for manual control is available to each channel
- Working voltage: 15 V~30 V DC
- Working current: 30 mA / 24 V DC
0 V - 10 V output: 6CH / 50 mA (Total current is less than 100 mA).



DALI-2 Gateway

MC64-DALI2.431

ACBAA042

With built-in DALI power supply, DALI-2 gateway supports both Havells Crabtree Buspro protocol and DALI protocol.

Parameters

Working voltage: 15 V~30 V DC

Working current: ≤15 mA DC

Input voltage: 100 V - 240 V AC (50 Hz / 60 Hz)

- 20% faster data upload and download
- 5 times greater ballast management efficiency compared to DALI gateway
- Support color temperature control
- Support the DALI2 protocol and ensures compatibility with several brands of DALI-2 drivers, such as LTECH, TRIDONIC, EUCHIPS and LEEDARSON;
- Up to 64 DALI drivers supported, low limit and high limit settable for each channel
- Up to 16 separate zones, zone dimming supported
- Auto status recall for scene settings after reboot
- Short circuit protection for DALI wires.



2CH 6 A Leading Edge Dimming Actuator

MD0206.432

ACBAA001

It supports AC 220 V and AC 110 V power input. It has 2 output channels and each channel has a bypass button for manual control. Fuse protection is available for each channel, 10 A fuse of each channel for protection (aR type).

- Up to 2 separate zones; up to 12 scenes for each zone
- Up to 6 sequences and each sequence has 12 steps
- 4 dimming curves with 512 dimming accuracy
- Dimming mode: TRIAC, minimum load 40 W
- Working voltage: 15 V~30 V DC
- Working current: 28 mA / 24 V DC



4CH 3 A Leading Edge Dimming Actuator

MD0403.432

ACBAA019

It supports AC 220 V and AC 110 V power input. It has 4 output channels and each channel has a bypass button for manual control. Fuse protection is available for each channel, 8 A fuse of each channel for protection (aR type).

- Up to 4 separate zones; up to 12 scenes for each zone
- Up to 6 sequences and each sequence has 12 steps
- 4 dimming curves with 512 dimming accuracy
- Dimming mode: TRIAC, minimum load 40 W
- Working voltage: 15 V~30 V DC
- Working current: 28 mA / 24 V DC



6CH 2 A Leading Edge Dimming Actuator

MD0602.432

ACBAA005

It supports AC 220 V and AC 110 V power input. It has 6 output channels and each channel has a bypass button for manual control. Fuse protection is available for each channel, 4 A fuse of each channel for protection (aR type).

- Up to 6 separate zones; up to 12 scenes for each zone
- Up to 6 sequences and each sequence has 12 steps
- 4 dimming curves with 512 dimming accuracy
- Dimming mode: TRIAC, minimum load 40 W
- Working voltage: 15 V~30 V DC
- Working current: 28 mA / 24 V DC



2CH 3 A MOSFET Dimming Actuator

MDT0203.532

ACBAA004

MOSFET trailing edge dimming mode supports for each channel, which is applicable to dimming control of different types, for example, incandescent light, halogen light, dimmable LED light, dimmable LED driver, etc.

- Up to 2 separate zones, and up to 12 scenes can be set for each zone
- Up to 6 sequences, and 12 steps for each sequence
- Short circuit protection, instant overvoltage protection and overheat protection
- 4 dimming curves;
- Working current: 26 mA / 24 V DC
- Total output current: 6 A Max



6CH 1.5 A MOSFET Dimming Actuator

MDT06015.533

ACBAA002

MOSFET trailing edge dimming mode supported for each channel, which is applicable to dimming control of different types, for example, incandescent light, halogen light, dimmable LED light, dimmable LED driver, etc.

- Up to 2 separate zones, and up to 12 scenes can be set for each zone
- Up to 6 sequences, and 12 steps for each sequence
- Short circuit protection, instant overvoltage protection and overheat protection
- 4 dimming curves;
- Working current: 40 mA / 24 V DC
- Total output current: 9 A Max



4CH 1.5 A MOSFET Dimming Actuator

MDT04015.532

ACBAA003

MOSFET trailing edge dimming mode supports for each channel, which is applicable to dimming control of different types, for example, incandescent light, halogen light, dimmable LED light, dimmable LED driver, etc.

- Up to 2 separate zones, and up to 12 scenes can be set for each zone
- Up to 6 sequences, and 12 steps for each sequence
- Short circuit protection, instant overvoltage protection and overheat protection
- 4 dimming curves;
- Working current: 35 mA / 24 V DC
- Total output current: 6 A Max



Traic Constant Current Module

MCR01A.40

ACBAA055

It provides the minimum current for TRIAC dimmer, eliminates or decreases the glitter of capacitive loads, for example, LED lights, electronic transformers, etc.

- 1 channel for load
- 22 mA constant current
- Work in conjunction with TRIAC dimmer
- Parallel connected when working with the lamp
- Input voltage: 0 V ~ 240 V AC
- Frequency: 50 Hz - 60 Hz



1CH 1 A Flush-mounted Dimming Actuator (EU)

MPD0101-E.40 ACBAA086

A smart dimming executive module installed in the wall box of the European standard panel, can be worked with the corresponding dry contact panel.

- With one 1 A MOSFET trailing/leading edge dimming control channel
- With 4 dry contact switch signal input channels;
- 4 LED switch signal output channels
- With programming button and programming indicator
- Working voltage: 15 V~28 V DC
- Working current: 48 mA / 24 V DC



48CH DMX Scene Controller

MC48IP-DMX.431 ACBAQ001

MOSFET trailing edge dimming mode supports for each channel, which is applicable to dimming control of different types, for example, incandescent light, halogen light, dimmable LED light, dimmable LED driver, etc.

- 48-channel, up to 48 separate areas
- Up to 99 scenes
- Up to 99 sequences supported
- Working voltage: 12 V~30 V DC
- Working current: 40 mA / 24 V DC
- RJ45 connection
- RJ45-TCP/IP network interface.



2CH Motorized Curtain Control Module

MW02.431 ACBAK001

It is specially designed for controlling curtains (shutters) through the controlling of AC motor.

- Hardware/software interlock for motor protection
- Curtain working time settable
- Control/Inching control of shutter
- Working voltage: 15 V~30 V DC
- Working current: 35 mA / 24 V DC
- Electronic life time of relay: 60000 (Resistance load).



Curtain Motor

MWC1-BP.10 ACBAK005

Open / close / stop / open or close at specific percentage, and support "Touch Start" by default.

- Auto pause and modification while detecting obstacles;
- Automatically complete the preset travel
- Compatible with commissioning software and mobile APP;
- Motor input voltage: 100 V - 240 V AC, 50 Hz /60 Hz
- Motor rated consumption: 22 W
- Motor rotate speed: 90 revolutions per minute
- Motor sound level: 30 dBm at silent mode



Air Conditioning Control Module

MAC01.431

ACBAA024

Designed to control centralized HVAC systems in conjunction with air conditioner panel. Master-slave mode supported, one master module can control 8 slave modules.

- Smart control of fan speed and modes
- Up to 4 digital temperature sensors DS18B20 supported;
- 0 V -10 V DC output for fan speed control
- Working voltage: 15 V~30 V DC
- Working current: 95 mA / 24V DC
- Maximum current of each channel: 5 A
- Electronic life time of relay: > 60000



4CH Electric Fan Controller

MFAN04.432

ACBAA065

It is specially designed fan control module, smart control of fan speed level is supported through controlling via smart control panel.

- Support four fans simultaneously
- 9 fan speeds for each channel
- Working voltage: 18 V~30 V DC
- Working current: 81 mA / 24 V DC
- Rated load: 4CH, 80 W / CH Max.
- Electronic life time of relay: > 60000 actuations.



4CH IR Emitter with Current Detection

MIRC04.40

ACBAV004

Transmit the IR codes to control IR devices, for example, air conditioner, TV, fan, projector, Set-Top Box, DVD, etc. It also supports current detection for devices.

- Support 24 devices and 100 IR codes
- Current detection
- Support up to 99 UV switches.
- Working voltage: 30 mA / 24 V DC
- Sending carrier wave frequency: 38 kHz
- IR control distance: 5 m



Infrared Code Learner

MIR01L.01

ACBAA025

Learn various key commands (for example, AC, TV, DVD, satellite receiver, audio & video device, etc.)

- 2.0 USB Interface, driver free and easy to use
- Range of carrier wave frequency: 38 k Hz \pm 20 %



Logic Automation Module

MCLog.431

ACBAS001

Used for controlling a series of targets. The logic conditions enable date and timing information input, universal switch status, and external inputs.

- Up to 12 logic groups can be set, each logic group Have 20 logic blocks
- Each logic block has 4 input Pins and 20 output control targets;
- Built-in real-time clock
- Working voltage: 15 V~30 V DC
- Working current: 15 mA / 24 V DC.



Security Command Module

MSM.431

ACBAS003

It can protect the 8 different areas and enable the creation of zone security areas. Sends real time SMS notifications if a security device is triggered.

- Multiple security modes: away, holiday, timing, etc.
- Multiple alarm modes: invade, fire, temperature, emergency, etc.
- Support review alarm history record
- Multi-level security protection
- Working voltage: 15 V ~ 30 V DC
- Working current: 15 mA / 24 V DC



HomePlay Network Player

MZBOX-A50B.30

ACBAV002

Able to turn any pair of speakers to a wireless HiFi multiroom audio system, play music from a range of streaming services as well as smartphone, tablet, flash drivers and NAS.

- Multi format support
- Simultaneous multi source multi room streaming
- Fully compatible with Havells Crabtree room scenes and sequences
- Support music playback via connecting external audio devices
- Wireless Connectivity: Supports 802.11 a/b/g/n standards
- Wired Connectivity: Single 10/100 M RJ-45 jack.

Hotel Room Controllers



RCU Room Control Unit

MHRCU.433

ACBAA035

Up to 48 channels and 99 scenes. It supports hotel host control, mix module control, 24-channel dry contacts, doorbell status display and LED output.

- Light protection delay and mass turn-on delay for each channel
- Activate corresponding scene according to card master after identification
- Monitors and controls air conditioners, curtains, lightings, room status, etc.
- Bidirectional data exchange between HDL Buspro and Ethernet
- The RCU Room Control Unit has a RJ45 port
- Working current: 300 mA / 24 V DC.



Hotel Room Control Host

MHC48IP.431

ACBAM002

Up to 48 channels and 99 scenes, it can be used in conjunction with the mix control module, other relay and dimming modules without scene controller, etc.

- Light protection delay and mass turn-on delay for each channel
- Activate corresponding scene according to card master after identification
- Monitor and control air conditioners, curtains, lightings, room status, etc.
- Support connecting to devices in RS485 communication
- The RCU Room Control Unit has a RJ45 port
- Working current: 30 mA / 24 V DC

SENSORS





Ceiling Mount 8-in-1 Sensor

MSP08M.4C ACBAJ002

Built-in PIR sensor, lux sensor, 2 dry contact inputs and 2 universal switches.

- With constant brightness control
- 12 logic blocks and each block contains 10 object outputs
- IR emission function of remote control code
- Working voltage: 18 V ~ 30 V DC
- Working current: 30 mA / 24 V DC
- Detection range: Φ 6m
- IR emission distance: 4 m
- Illumination sensing range: 0 lux - 500 lux



Ceiling Mount 7-in-1 Sensor

MSP07M.4CT ACBAJ005

Built-in PIR sensor, temperature sensor, lux sensor, 2 dry contact inputs and 2 universal switches.

- 24 logical blocks and each block contains 10 object outputs
- Constant lux function
- Working voltage: 18 V ~ 30 V DC
- Working current: 25 mA / 24 V DC
- Detection range: Φ 6 m
- Temperature detection range: 20 V~60 V
- Illumination sensing range: 0 lux - 500 lux



Ceiling Mount Indoor Microwave Sensor

MSW01.4C ACBAJ005

Contain lux sensor, microwave sensor, temperature sensor, dry contact and universal switch.

- 24 logic blocks and each block can control 20 object outputs
- Support security function
- Working voltage: 12 V ~ 30 V DC;
- Working current: 32 mA / 24 V DC;
- Temperature detection range: - 40 °C ~ 60 °C;
- Illumination detection range: 0 lux ~ 5000 lux
- Microwave detection range : Major axis direction: Φ 10 m, Minor axis direction: Φ 5 m



Ceiling Mount Ultrasonic Sensor

MSPU03.4C ACBAJ003

Contain ultrasonic sensor and lux sensor and universal switch.

- 24 logic blocks in total, each logic block has 20 output targets
- Security function (security module required)
- Working voltage: 18 V ~ 30 V DC
- Working current: 30 mA / 24 V DC
- Detection range: Φ 6 m
- Illumination sensing range: 0 lux - 500 lux



Wall Mount Outdoor Microwave Sensor

MSOUT.4W ACBAJ006

It contains lux sensor, microwave movement sensor, humidity sensor, temperature sensor, dry contact and universal switch.

- 24 logic blocks and each block can control 20 object outputs;
- Support security function and Tamper-proof function;
- Working voltage: 12 V ~ 30 V DC
- Working current: 31 mA / 24 V DC
- Temperature detection range: - 40 °C ~ 60 °C
- Illumination detection range: 0 lux ~ 15000 lux
- Humidity detection range 20~95 % RH
- Microwave detection range: Φ 30 m

INFRASTRUCTURE DEVICES / ACCESSORIES



750 mA Power Supply Module

MSP750.431

ACBAA013



It provides 24 V DC voltage, 750 mA current with 2 connection types. The total current can reach 750 mA

Short circuit and over current protection
Ripple Wave: Less than 150 mV Input voltage
AC 100 V-240 V (50 Hz / 60 Hz).

2400 mA Power Supply Module

MSP2400.232

ACBAU002



It provides 24 V DC voltage and 2400 mA current to the Buspro system.

Short circuit and over current protection
Power Supply: 24 V DC Input voltage
AC 100 V - 240 V (50 Hz / 60 Hz).

BUS 6 Lines

MBC06.431

ACBAU003



It has 6 bus terminals and can connect up to 12 devices with hand-in-hand wiring to complete the simple connection.

6 Ports Switch

MBR06.431

ACBAV006



Work with 1 Port Programming Gateway to expand device connection and is convenient for wiring.

- Data filtering;
- Data checking;
- 6 bus cables supported, up to 63 devices connection supported for each bus cable.
- Working voltage: 12 V ~ 30 V DC
- Working current: 15 mA /24 V DC

Communication Cable

MCL04P, MCL08P, MCL12P, MCL16P

ACKAU001



Supports all module types, including dimmers, sensors, user interfaces, relays, actuators, and controllers.

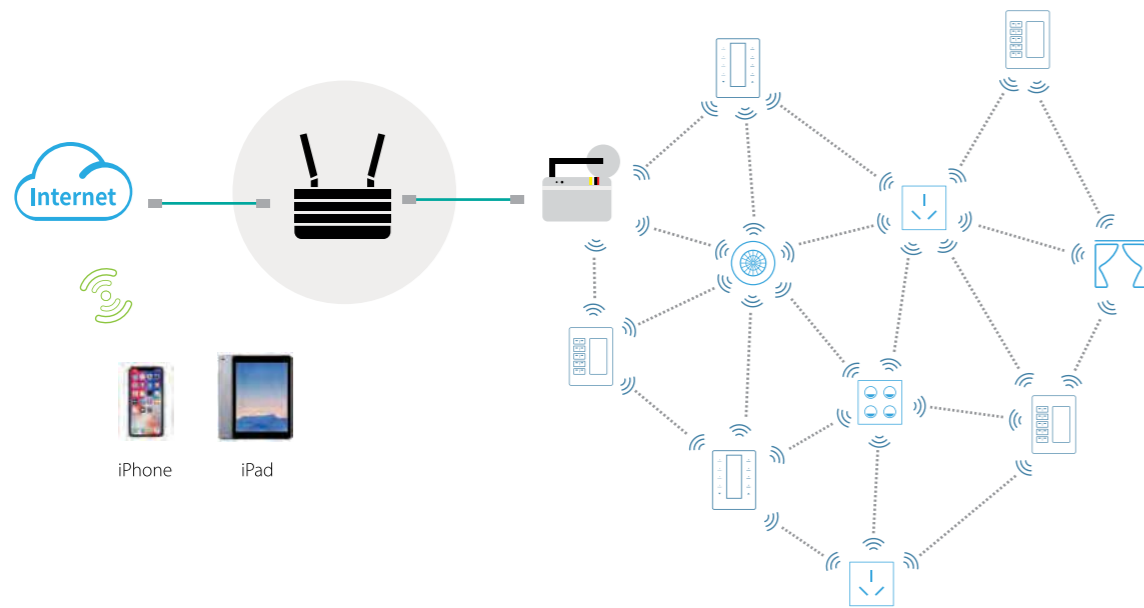
- 4 core shielded cable: red, black, white, yellow
- Strong signal transmission capability
- Strong anti-jamming capability
- Convenient for wiring connection
- Recommended connection: hand in hand



A simple wireless smart automation system

Same as Havells Crabtree Buspro, Buspro Wireless can connect with conventional devices, but no system communication wiring is required. You can simply install the system by replacing the original non-smart switches with Havells Crabtree smart panels. Therefore, it can be used in new buildings and especially suitable for renovation projects of existing buildings.

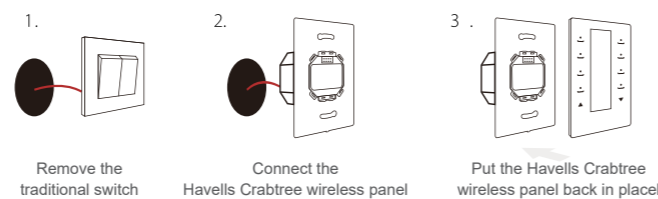
Buspro Wireless harnesses the power of mesh topology to connect every device. Every device in the system can both receive and forward signals. Devices have multiple signal input sources, so if one of the signal inputs fails, they can still receive signals from another device. In this way, users don't have to worry about signal problems.



Advantages

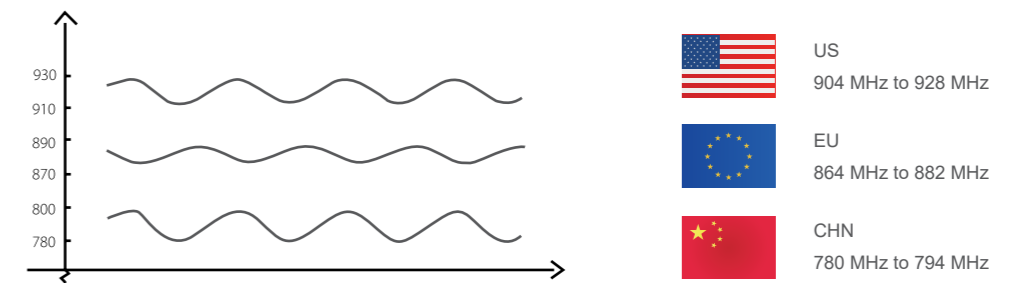
🔧 Easy-to-install:

Buspro Wireless is a distributed smart system developed by Havells Crabtree. To install Buspro Wireless, you just simply replace the original non-smart keypad with the one from Havells Crabtree. As no wiring is required, it is suitable for both new buildings as well as existing ones.



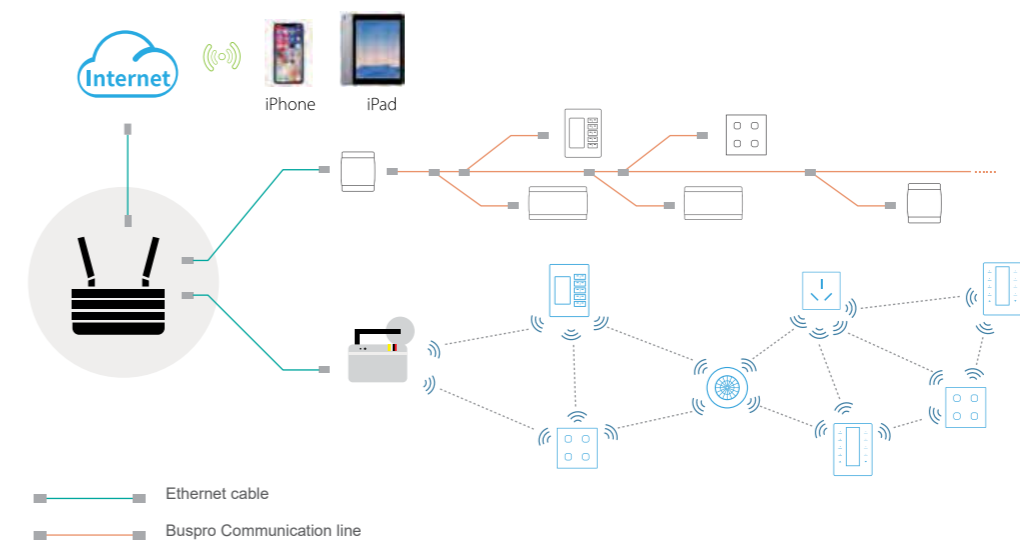
🔗 Stable and Dependable

It runs on sub-giga Hertz frequency. That means it doesn't have to jam with mobile phones, laptops and other wireless devices running on the 2.4 GHz bandwidth. It adopts the robust mesh topology. That is every device in the system can receive and transmit signals. A reliable path is always available for communication.

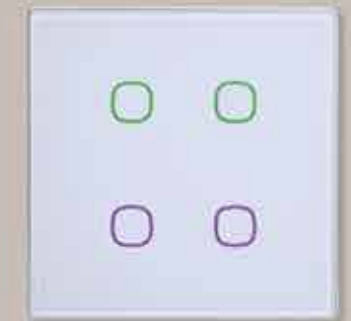


🌐 Seamless Wired and Wireless Linkage

It can work with the wired Buspro system in the same project. The feature allows us to fully use the advantages of wired and wireless system, and makes the system more applicable.



INFRASTRUCTURE DEVICES / ACCESSORIES



iTouch 4 Button

MPT4-RF.18-A

ACWAX004

A series of multi-functional touch control panels for home automation in EU standard. The while EU standard has only 4 buttons. iTouch is enclosed by a fine aluminum frame, and always used to control lighting, curtain, AC, scene, music, etc.

Features and Specifications

- Touch button with RGB backlight
- Adjustable RGB indicator color and brightness
- Customizable button icons
- Support online upgrade

Working voltage: 5 V DC
Working current: 45 mA / 5 V DC

Color: ○ White ● Black



DLP Display Keypad

MPL8-RF.18-A

ACWAB001



DLP is a series of smart control panels with physical buttons and mono-color LCD display for home automation both in EU and US standard. With 8 control buttons and 2 page buttons, the panel has 4 general pages for lighting, curtains, etc. and dedicated pages for AC, floor heating and background music.

Working voltage: 5 V DC
Working current: 45 mA / 5 V DC

Color: ○ White ● Black

Features and Specifications

- Built-in temperature sensor
- Icon for Key Buttons can be changed
- Support 147 languages
- Customizable icons or captions
- Support online upgrade



Wireless Power Interface EU (L+N Type)

MPWPID00LN.18-A

ACWAT008

Used in conjunction with the wireless panel and provides working voltage for wireless panel.

- Input voltage: AC 100 V - 240 V (50 Hz / 60 Hz)
- Maximum output current: 100 mA / 5 V DC
- Fuse: 2 A, aR type:
- Overheat protection for power interface chip.



3CH Wireless Dimming Power Interface EU (L+N Type)

MPWPID03LN.18-A

ACWAT003

Used in conjunction with the wireless panel and provides working voltage for wireless panel. The power interface supports dimming and switch control.

- Provide DC 5 V working voltage for wireless panels
- 1st channel is for MOSFET dimming, 2nd and 3rd channel are for TRIAC dimming/switch
- Short circuit protection and overheat protection
Input voltage : AC 100 V-240 V (50 Hz / 60 Hz)
- Fuse : 6 A, aR type



3CH Wireless Switch Power Interface EU (L+N Type)

MPWPIR03.18-A

ACWAT005

Used in conjunction with the wireless panel and provides working voltage for wireless panel. The power interface supports 3CH relay output.

- Input voltage: AC 100V - 240 V (50 Hz / 60 Hz)
- Output current: 3 A / CH (resistive load); 2 A / CH (capacitive load)
- Mechanical and Electronic life time of relay, 1×105 times.
- Fuse: 10 A, aR type.
- Power protection for power interface chip.



GATEWAYS / DRY CONTACT MODULES



Wireless Mesh Gateway

MCIP-RF02.10

ACWAT001

A gateway based on MESH technology including three communication interfaces: RJ45, Havells Crabtree Buspro, RF. It has three communication interfaces: RS485, Ethernet or RF.

- Mesh mode supported
- Bridge (transparent transmission) mode supported;
- Encrypted wireless data transmission
- Internal 433 M wireless module, supports Havells Crabtree remote control
- Working voltage: 12 V ~ 30 V DC
- Indoor communication distance: ≤ 50 m (barrier free)
- Wireless transmitted power: +10 dBm



CONTROLLERS / ACTUATORS



1CH Wireless Dimming Actuator

MPD01-RF.28

ACWAT009

Contain 1-channel MOSFET dimming control and 4-channel dry contact. Working with wireless gateway, the actuator can be used for controlling different targets.

- 1CH MOSFET dimming output with output current less than 1 A
- Available with 4 default dimming curves
- Users can also customize the dimming curves
- 4CH dry contact can be used for dimming and switching;
- Input voltage: AC 100 V - 240 V (50 Hz / 60 Hz)
- Maximum output current : 1A
- Power consumption: 1 W max

4CH Wireless 0~10V Dimming Actuator

MPDA04-RF.28

ACWBF001

With connection to electronic ballasts and working with wireless gateway, the actuator can be used for LED dimming.

- Available with 4 default dimming curves. Users can also customize the dimming curves
- Support 4CH dry contact inputs and 4CH 0-10 V DC dimming outputs;
- Input voltage: AC 100 V - 240 V (50 Hz / 60 Hz)
- Current of each 0-10 V DC output channel: 0-30 mA
- Power consumption : 2.7 W max

1CH Wireless Switching Actuator

MPR01-RF.28

ACWAT010

Contain 1-channel relay output and 4-channel dry contact.

- Support such functions as switch-on delay, switch-off delay and protection delay;
- 4CH dry contact can be used for dimming and switching
- Input voltage: AC 100 V - 240 V (50 Hz / 60 Hz)
- Output current: 10 A (Resistive load): 5 A (Capacitive load)
- Power consumption : 1.7 W max

SENSORS



2CH Wireless Switching Actuator

MPR02-RF.28

ACWAT011

Contain 2-channel relay output and 4-channel dry contact.

- Support such functions as switch-on delay, switch-off delay and protection delay;
- 4CH dry contact can be used for controlling targets like dimming;
- Input voltage: AC 100 V - 240 V (50 Hz /60 Hz)
- Output current: 5 A (Resistive load); 2.5 A (Capacitive load)
- Power consumption: 1.45 W max.



1CH Wireless Curtain Actuator

MPC01-RF.28

ACWAT012

Contain 1-channel curtain control and 4-channel dry contact.

- Open/close and stop/step control;
- 4CH dry contact can be used for dimming and switching;
- Input voltage: AC 100 V - 240 V(50 Hz / 60 Hz)
- Output channel: 5 A
- Power consumption: 1.45 W max



Wireless Ceiling Mount Ultrasonic & PIR Sensor

MSPU05-RF.1C

ACWAJ001

8 logic conditions including PIR sensor, luminance sensor, ultrasonic sensor, manual button, ultrasonic, universal switch, etc.

- Support 1 channel 5 A relay output
- 24 logic blocks, each of which can be set to 20 target
- Security protection (security module required);
- Working current: 5 mA / 220 V DC
- Brightness detection range: 0 lux ~ 300 lux
- PIR detection range in diameter: 7 m
- Ultrasonic detection range in diameter: 3 m



Wireless PIR & Sensor

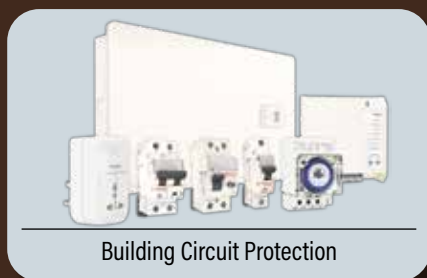
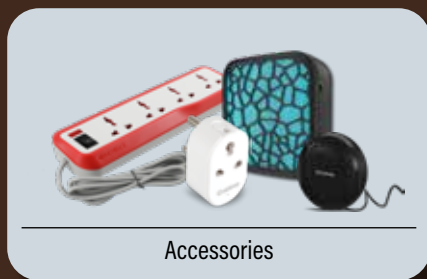
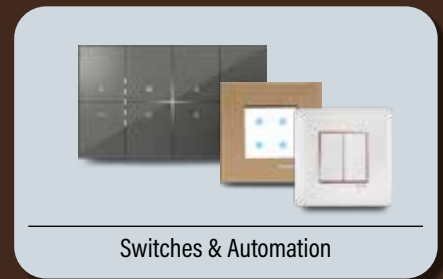
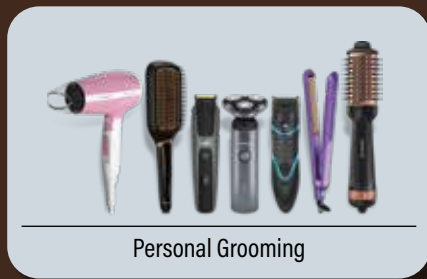
MSPU03-BRF.10

ACWAJ002

Built-in infrared motion sensor, illuminance sensor, temperature sensor.

- Brightness detection and temperature detection
- Battery level detection
- Timing broadcast function
- Adjustable sensing area
- Working voltage: 3 V 1400 mAh
- Working current: 21 mA
- Standby current: 24 μ A
- PIR detection range in diameter : 7 m

Wide range of innovative products in Havells categories



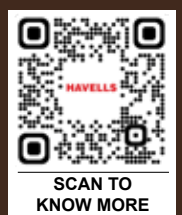
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