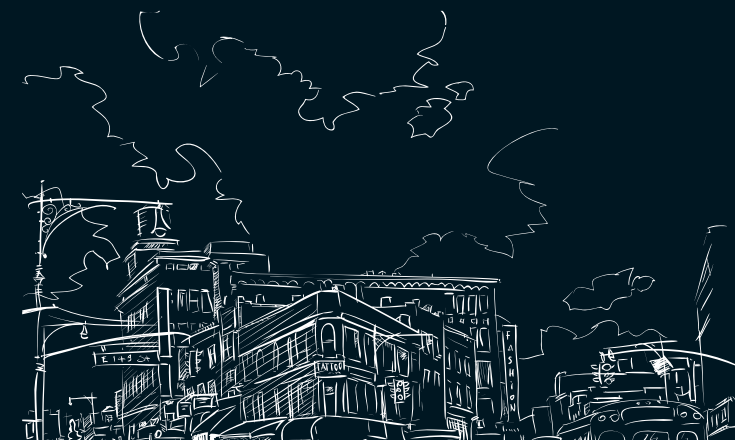




HDL



www.smarttouch.co.nz



Since 1985

PRODUCT CATALOGUE

HDL-BUS KNX/EIB

Lighting · Power · HVAC · BMS · Media · User interface · Communication
· Integration · Power line · Metering · Security and Safety · GRMS

Guangzhou Hedong Electronic Co. , Ltd

Address: No.24 JianZhong Road, Tianhe Development Zone of High & New Technology Estate, Guangzhou 510665, China

Phone: +86 20 85571381

Fax: +86 20 85532477

Website: www.hdlchina.com

E-mail : sales@hdlchina.com.cn

Smart Touch Limited

Address: 20 Glover Street, Ngauranga, Wellington, New Zealand

Phone: +64 4 477 7640

Fax: +64 4 471 2701

Website: www.smarttouch.co.nz

E-mail : info@smarttouch.co.nz

Beijing Great Hall of the People

1995-2012

**Provide over 95% stage lighting control system
and intelligent illuminating control system**

Reconstruction of the indoor illuminating system at the Beijing Great Hall of the People has been carried out over the past ten years. The system now has more than 6000 environment lighting and stage lighting circuits, and more than 20,000 light fixtures, making it the largest scale indoor intelligent illuminating lighting reconstruction project in China.

HDL is one of the main control equipment suppliers and project undertakers for this large-scale project.

The building area of the great hall is 171,800 square meters, which is two or three times the area of common buildings, and has a higher energy consumption. Limited by the energy saving technology and techniques in past years and affected by structure and functions, its energy consumption was higher than that of more common large-scale buildings. With an HDL energy-saving illuminating control system, the great hall of the people can now reach new energy conservation targets and reduce emissions.



BMW WORLD MUSEUM IN GERMANY

**Tradition and innovation
emotion and reason
power and aesthetics
the perfect combination of unique and open**

The BMW Museum Center is a symbol of Munich, Germany. The Museum is located at the side of Olympic Park and it is an energy saving & multi function building. Inside the building, there is a huge exhibition hall for the BMW cars, as well as a dining room, coffee house, club, design studio, gallery and rostrum for young men. Banquets and concerts will be performed here during important festivals.

As the design and construction company for the Intelligent Control System of the BMW Center, Eventa AG Ltd and HDL apply HDL Intelligent Lighting Control System, by using EMS Software and System Program Software to control and manage the whole system. Motion sensors are installed in rest rooms and corridors meaning lights will automatically turn on when movement is sensed; then when the area has been empty for a time, the lights will automatically turn off. This is a concept of energy saving and intelligent control. In other areas, different light scenes are pre-programmed and will change according to current circumstances. Lights and other systems can also be triggered by motion sensors and system designate. This is all controlled by Logic.





Office Building



Office



Meeting Room



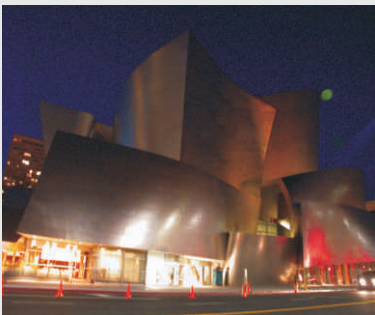
Studio



School Library



Exhibition Center



Shopping Center



Shopping Store



Book Store



Amusement park



Museum



SPA Center



Hotel Room



Hotel Lobby



Auto Show



Show Room



Cinema



Sports Center



Building Outside Lighting



Super Market



Factory



Parking Area



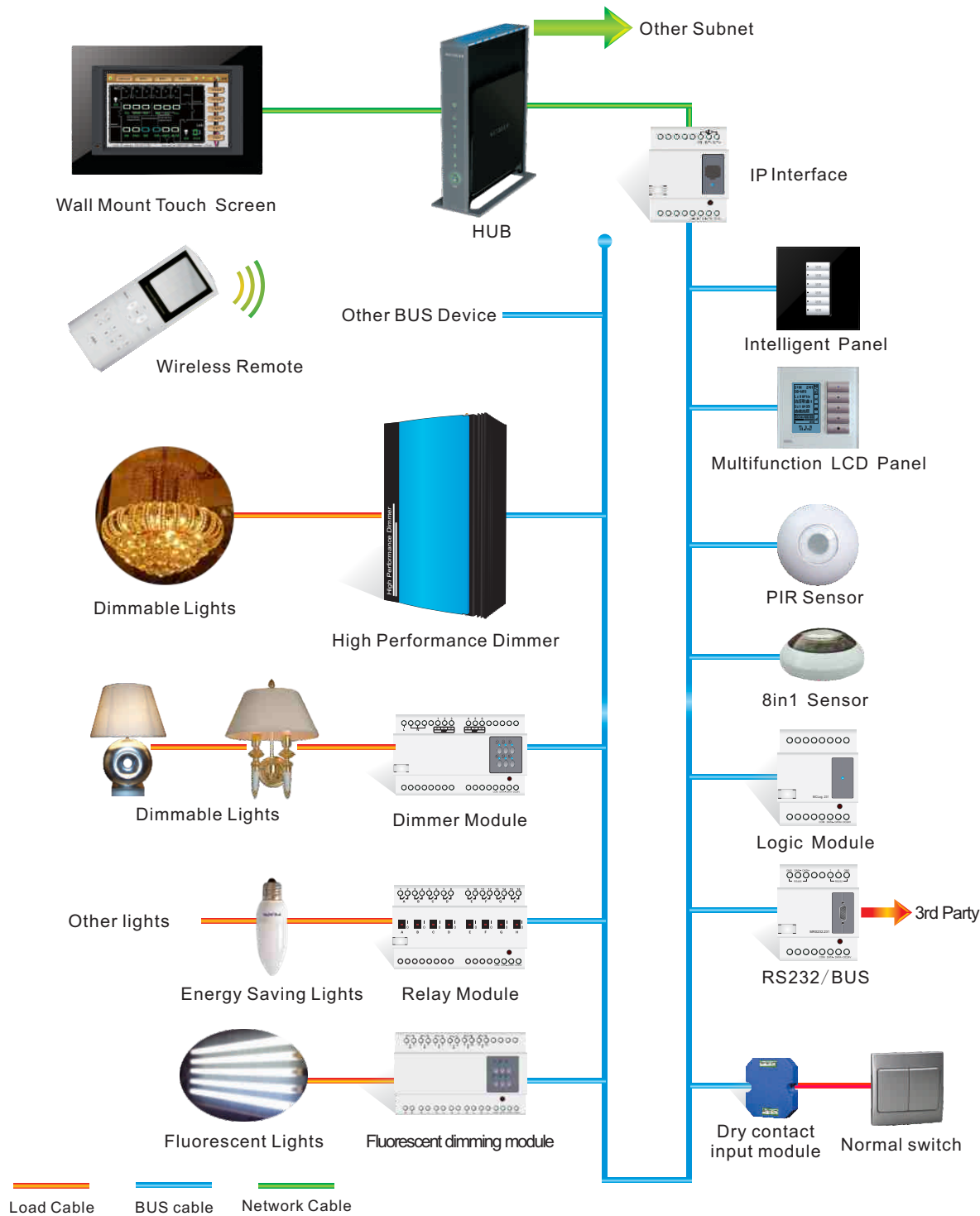
DMX Show



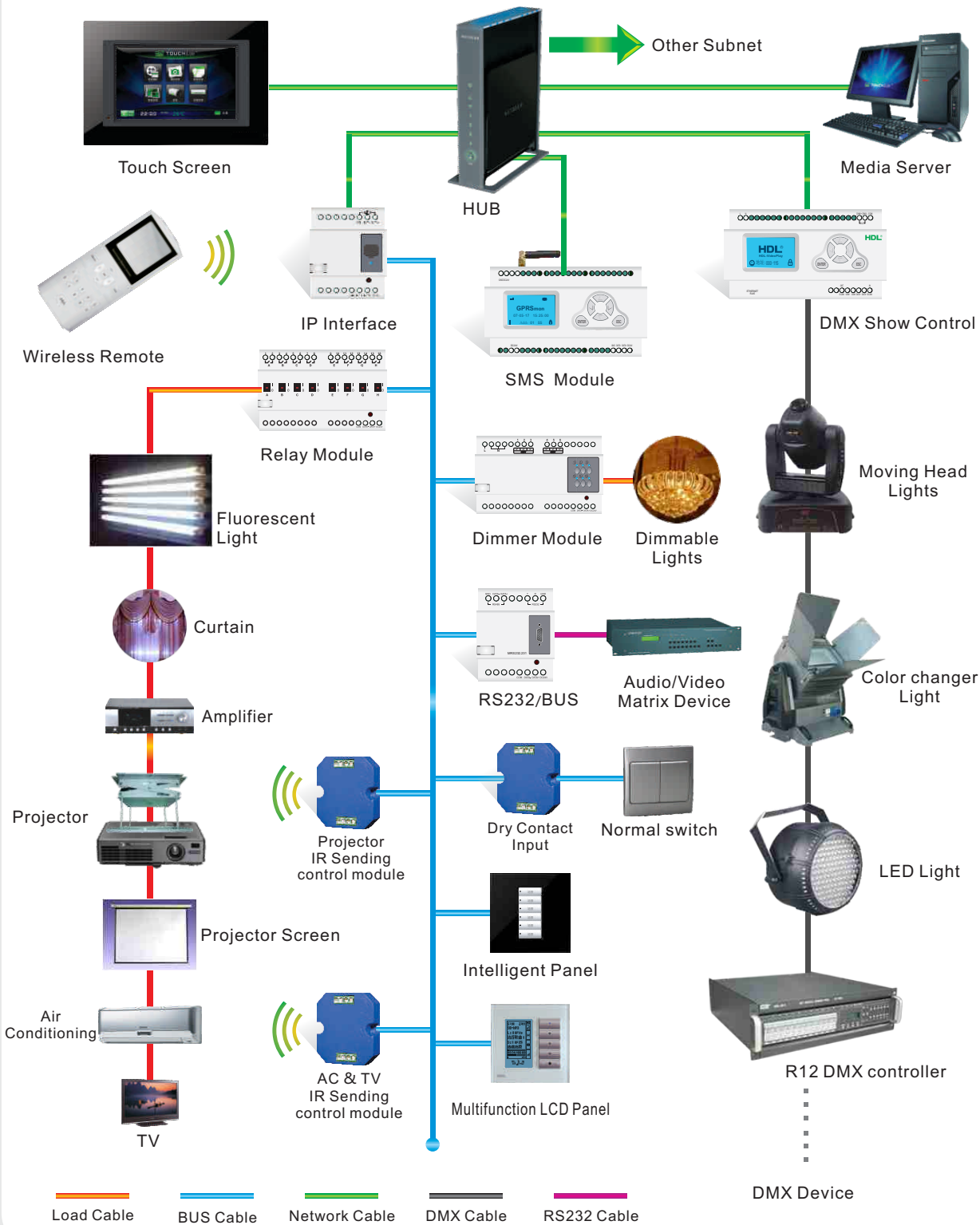
Restaurant



Lighting control solution

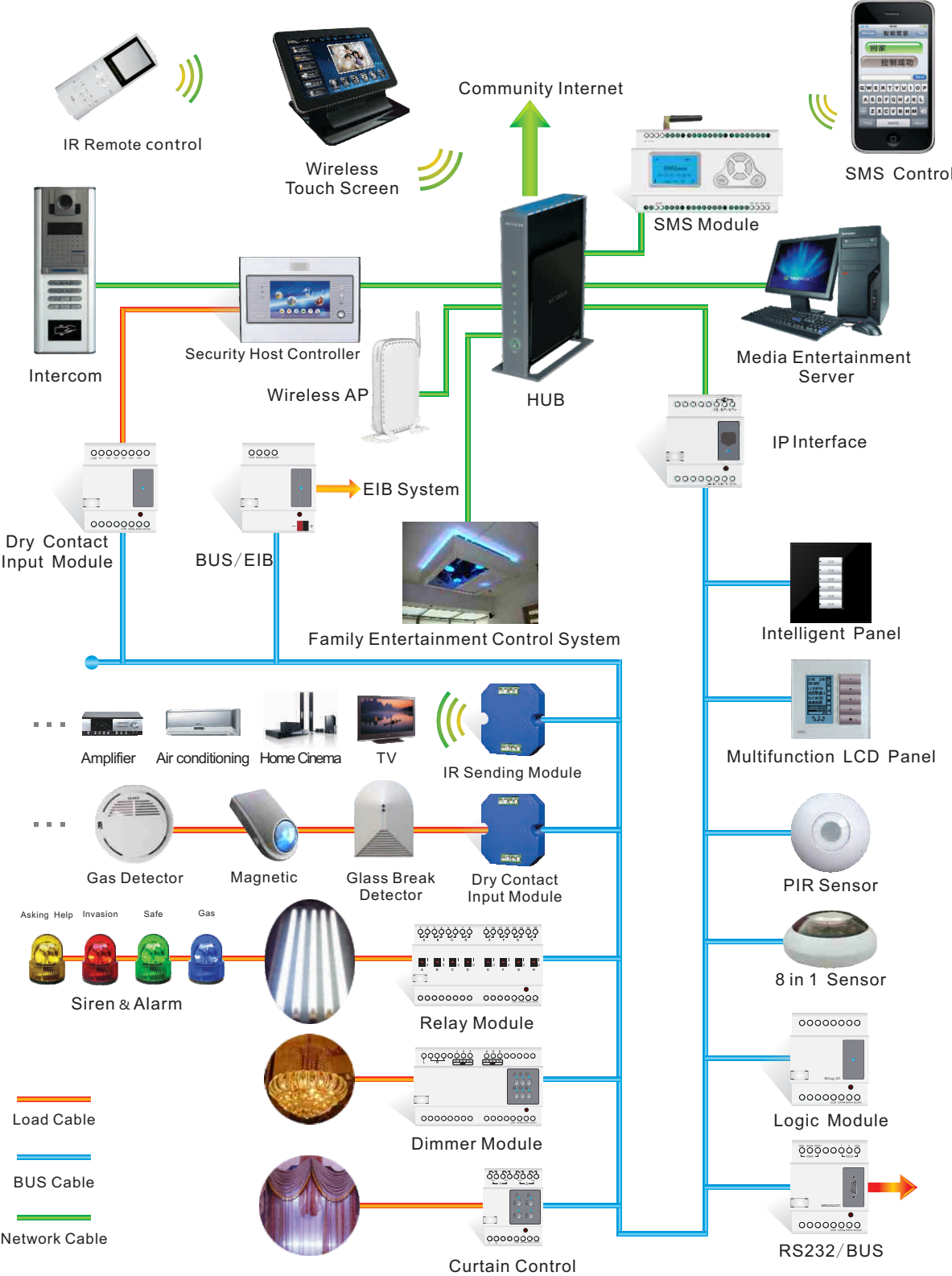


Show Room solution

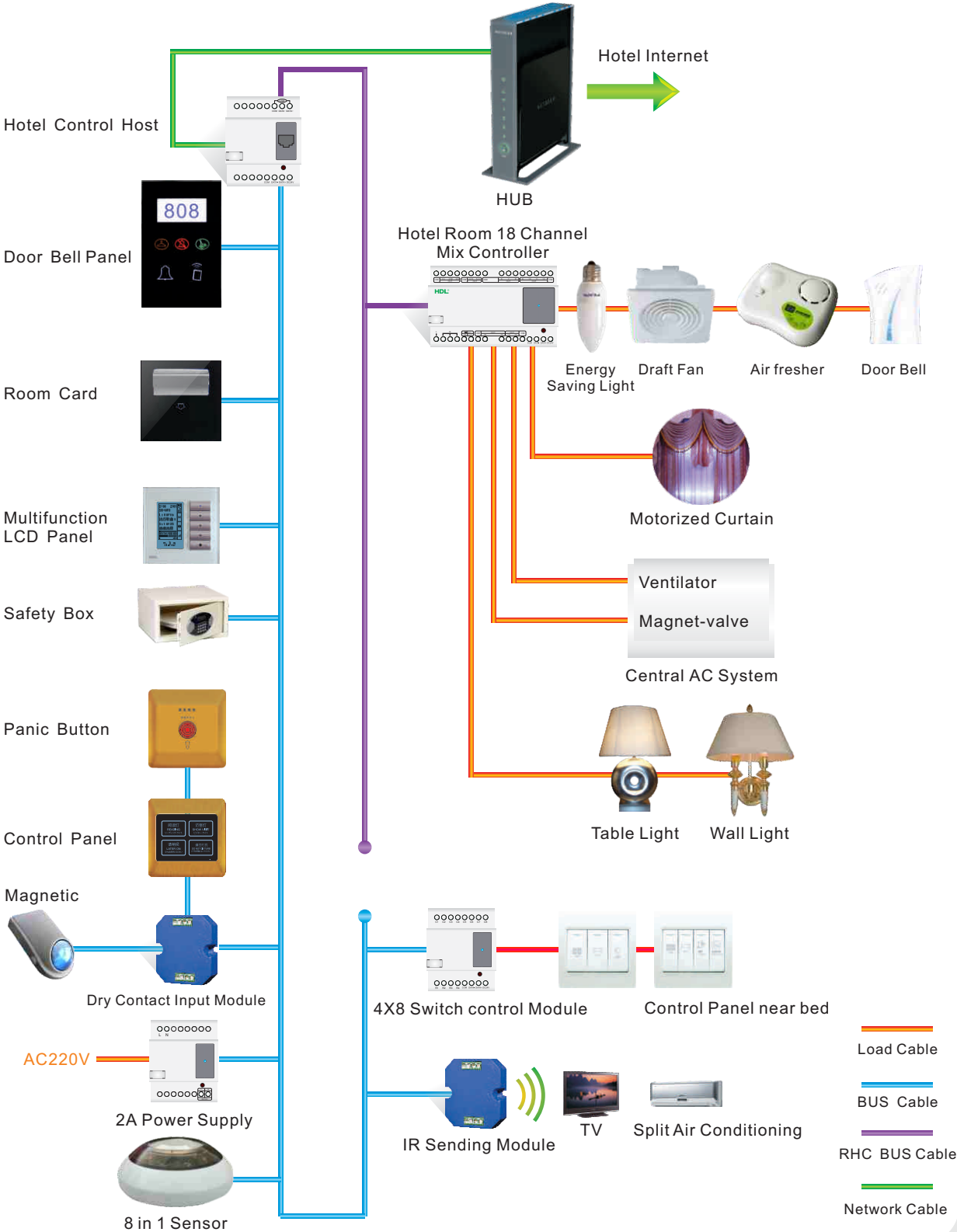




Home Automation solution



Intelligent Hotel solution





Modern

LCD Multifunction

Wall Switch

SB-DLP-MEU

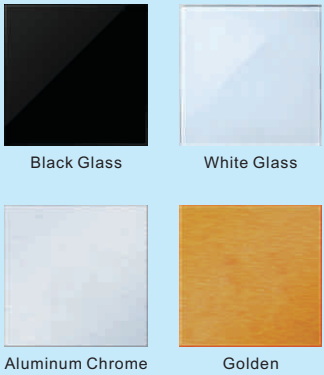
Parameters

- Power supply: DC 24V
- BUS power consumption: 30mA/DC 24V
- Working conditions: Working temp: 0°C~45°C
Relative humidity: 20%~90%
Store temp: -40°C ~ +55°C
Store humidity: 10%~93%
Standard GI box : 86x86(mm)
- Installation:
- Dimensions: 86x86x35(mm)

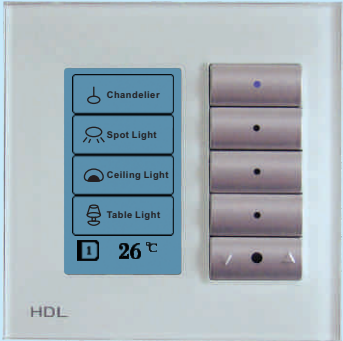
Functions

- IR remote control
- Multi modes for button: single on/off, single on, single off, combination on, combination off, momentary
- Multi control types for button: scene, sequence, timer, universal switch, single channel control, broadcast scene, broadcast channel, curtain
- 1-4 pages for lighting control, page 5 is for air conditioning control, page 6 is for music control, page 7 is for floor heating control
- Clock timer function
- User definable LCD display
- User definable LCD back light and status

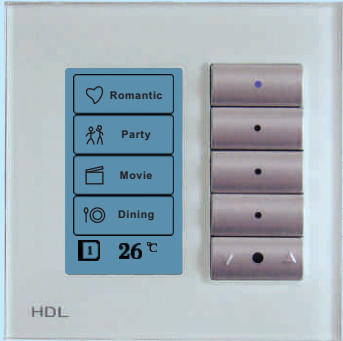
Optional Material



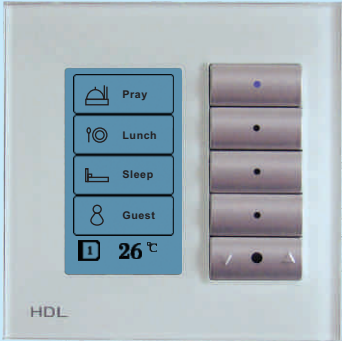
Selectable Interface, Frame



Lighting Control



Living Scene Lighting Control



Culture Lighting Scene Control



Language Selectable



Language Selectable



Meeting Scene Control



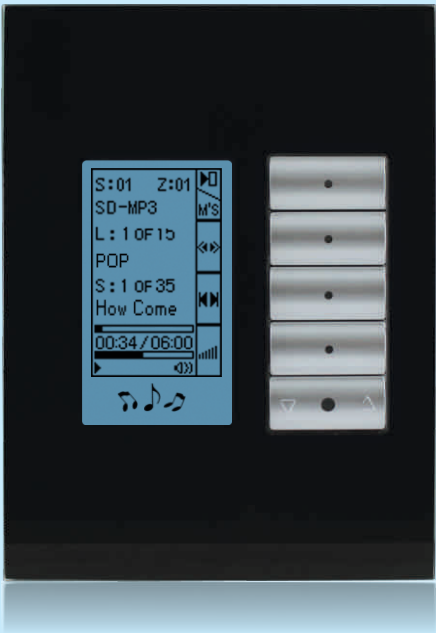
Sports Hall Scene Control



Floor Heating



Air Conditioning



Modern

LCD Multifunction Wall Switch SB-DLP-MUS

Parameters

- Power supply: DC 24V
- BUS power consumption: 30mA/DC 24V
- Working conditions: Working temp: 0°C~45°C
Relative humidity: 20%~90%
Store temp: -40°C ~ +55°C
Store humidity: 10%~93%
- Installation: Standard NZ flush box
- Dimensions: 86x116.2x35(mm)

Functions

- IR remote control
- Multi modes for button: single on/off, single on, single off, combination on, combination off, momentary
- Multi control types for button: scene, sequence, timer, universal switch, single, channel control, broadcast scene, broadcast channel, curtain
- 1-4 pages for lighting control, page 5 is for air conditioning control, page 6 is for music control, page 7 is for floor heating control
- Clock timer function
- User definable LCD display
- User definable LCD back light and status



Modern

New LCD Multifunction Wall Switch SB-DLP4-MEU

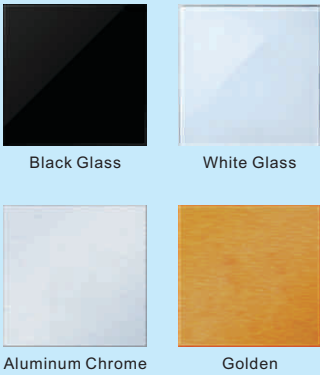
Parameters

- Power supply: DC 24V
- BUS power consumption: 30mA/DC 24V
- Working conditions: Working temp: 0°C~45°C
Relative humidity: 20%~90%
Store temp: -40°C ~ +55°C
Store humidity: 10%~93%
- Installation: Standard GI box: 86x86(mm)
- Dimensions: 95x95x35(mm)

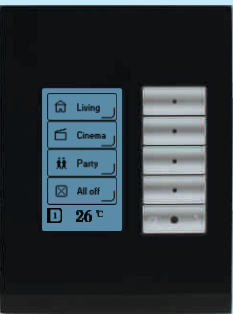
Functions

- IR remote control
- Multi modes for button: single on/off, single on, single off, combination on, combination off, momentary
- Multi control types for button: scene, sequence, timer, universal switch, single channel control, broadcast scene, broadcast channel, curtain
- 1-4 pages for lighting control, page 5 is for air conditioning control, page 6 is for music control
- Clock timer function
- User definable LCD display
- User definable LCD back light and status

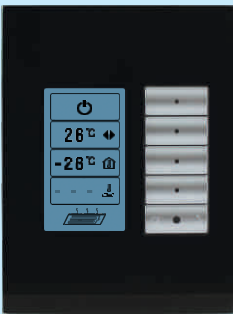
Optional Material



Selectable Interface, Frame



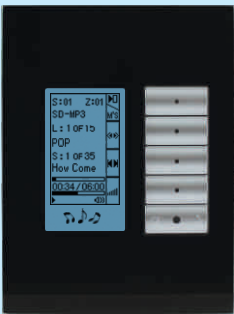
Scene control



Floor Heating



Air Conditioning



Background Music



Modern Intelligent Panel SB-WS6-UK

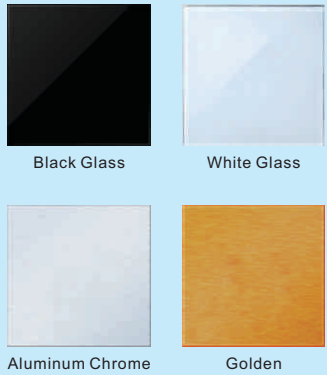
Parameters

- Power supply: DC24V
- BUS power consumption: 15mA/DC24V
- Working conditions:
 - Working temp: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Store temp: -40°C~+55°C
 - Store relative humidity: 10%~93%
- Signal interface: HDL-BUS
- Model: 1-6 button
- Installation: standard GI box 86x86(mm)

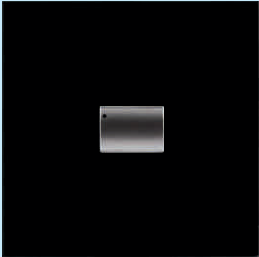
Features

- Infrared receiver
- Key mode:
 - single on/off, single on, single off, multi on, etc
- Key control mode:
 - scene, sequence, universal switch, broadcast channel, broadcast scene, single channel control

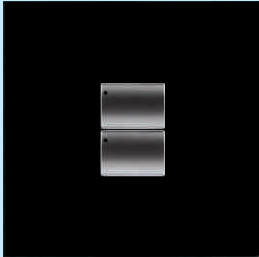
Optional Material



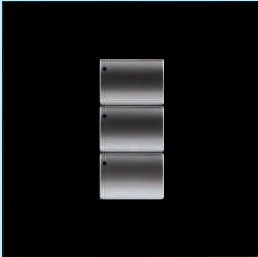
Selectable Button Qty



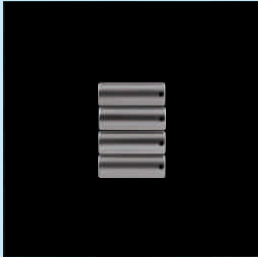
SB-WS1M-UK



SB-WS2M-UK

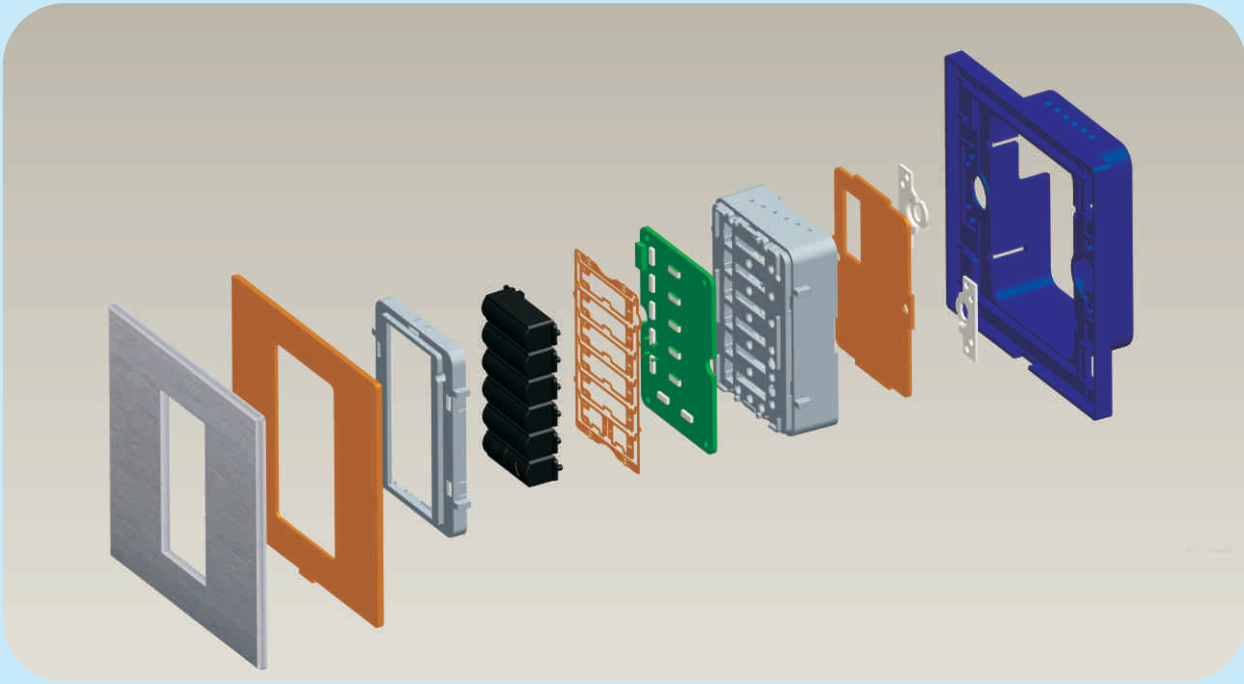


SB-WS3M-UK

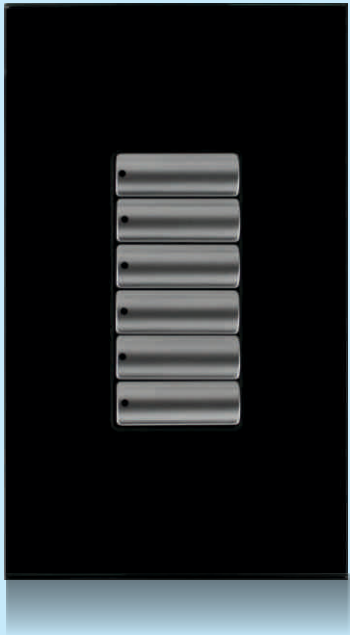


SB-WS4-UK

Schematic Diagram of Modern Panel



Modern Intelligent Panel SB-WS6-US



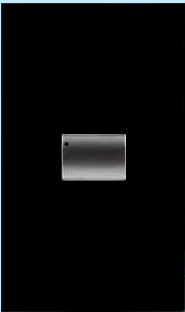
Parameters

- Power supply: DC24V
- BUS power consumption: 15mA/DC24V
- Working conditions:
 - Working temp: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Store temp: -40°C~+55°C
 - Store relative humidity: 10%~93%
- Signal interface: HDL-BUS
- Model: 1-6 button
- Dimensions: 69.5x116.5x35(mm)

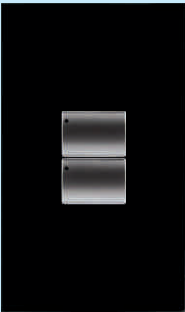
Features

- Infrared receiver
- Key mode:
 - single on/off, single on, single off, multi on, etc
- Key control mode:
 - scene, sequence, universal switch, broadcast channel, broadcast scene, single channel control

Selectable Button Qty



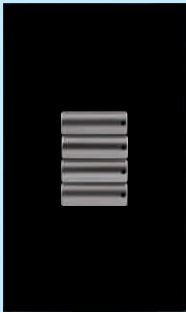
SB-WS1M-US



SB-WS2M-US



SB-WS3M-US



SB-WS4-US



Z-Audio Digital Background Music Streaming Server SB-Z-AUDIO

Parameters

- Power supply: DC±24V
- Signal interface: HDL-BUS, RJ45, SD card, RCA audio, audio output
- Audio input voltage: 0.7vpp
- Input impedance: 50KΩ
- Output impedance: RL=8Ω RR=8Ω
- Output power: 20Wx2
- Total harmonic distortion: <0.05%
- Signal to noise ratio: 97dB
- Frequency response: 22Hz-20KHz
- Length of file name: ≤25 byte
- Music file format: Mp3
- Communication protocol: HDL-Bus, FTP data exchange, UDP data exchange
- Volume of SD card: ≤8G
- Working conditions
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Dimensions: 224×126×39 (mm)

Functions

- External input
- Internal SD card
- FM radio
- FTP server
- RS485 Bus communication





1 Channel 20A Power Amplifier
SB-WL-B0120

Parameters

- Power supply: AC220V±10%
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Protection: needs exterior protection switch
- 1 channel output for dimming
- Current: 20A
- Wall mount
- Dimensions: 288x200x100 (mm)

Features

- Dimmable power amplifier
- AC0~220V power input
- DC0~10V control signal input



2Channel 10A Power Amplifier
SB-WL-B0210

Parameters

- Power supply: AC220V±10%
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Protection: needs exterior protection switch
- 2 channel output for dimming
- Current: 10A
- Wall mount
- Dimensions: 288x200x100 (mm)

Features

- Dimmable power amplifier
- AC0~220V power input
- DC0~10V control signal input



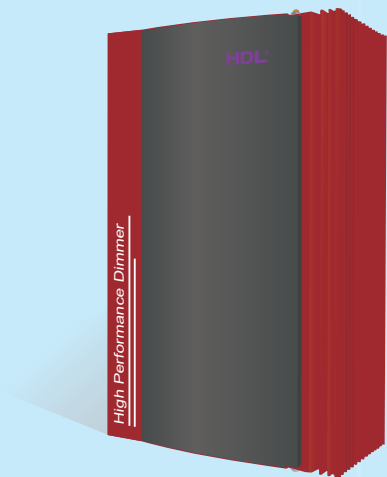
Room Mix Controller
SB-DN-RMIX10

Parameters

- Power supply: AC220V ±10%
- BUS power consumption: Built-In power supply
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channels:
 - 2 channels for dimming (300W per channel)
 - 4 channels for relay (5A)
 - 2 channels for fluorescent dimming (0~10V/20mA)
 - 2 channels for curtain (5A)
- Protection: needs exterior MCB
- Installation: standard 35 mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- Multi-channels for output: dimming control, on/off control, fluorescent lights dimming and curtain control
- 4 buttons on module for manual scene control
- Module reset function
- Low, high and maximum limit can be set for each channel
- Needs exterior protection switch
- Interface: HDL-BUS/0~10V output



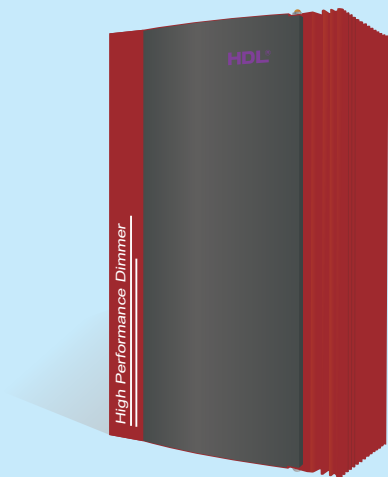
12 Channel 10A, High performance intelligent dimmer
SB-WL-D1210

Parameters

- Power supply: 3 phase (L1, L2, L3, N, PE)
- Power input: AC 220V±10%
- BUS power consumption: 250mA/DC24V
- Working Conditions: Working temp: 0°C~45°C
Working relative humidity: 20%~90%
Store temp: -40°C~+55°C
Store relative humidity: 10%~93%
- Output channel: 12 channel dimming
- Current in each channel: 10A, total less than 120A
- Protection: Short and overload protection
- Installation: Wall mount
- Dimensions: 600x290x162(mm)

Features

- 10 bit dimming accuracy
- Hardware bypass function
- Up to 12 separate areas
- Up to 99 scenes in each area, run time adjustable
- Up to 99 sequences, 99 steps in each sequence
- Each sequence has an interval time of up to 60mins
- There are four types of sequence:
 - Forward/Backward/Random/Forward & Backward
- Low, high or maximum thresholds are available to suit the different loads in each channel
- Emergency bypass in each channel
- Provides 250mA(DC24V) current to BUS
- Remark information provided in each scene, area, channel and sequence
- Remote program and management function
- Can be restored to previous scene or designated scene
- 16A/1P protection switch in each channel



6 Channel 20A, High performance intelligent dimmer
SB-WL-D0620

Parameters

- Power supply: 3 phase (L1, L2, L3, N, PE)
- Power input: AC 220V±10%
- BUS power supply: 250mA/DC24V
- Working conditions: Working temp: 0°C~45°C
Working relative humidity: 20%~90%
Store temp: -40°C~+55°C
Store relative humidity: 10%~93%
- Output channel: 6 channel dimming
- Current in each channel: 20A, total less than 120A
- Protection: Short and overload protection
- Installation: Wall mounted
- Dimensions: 600x290x162(mm)

Features

- 10 bit dimming accuracy
- Hardware bypass function
- Up to 6 separate areas
- Up to 99 scenes in each area, run time adjustable
- Up to 99 sequences, 99 steps in each sequence
- Each sequence has an interval time of up to 60mins
- There are four types of sequence:
 - Forward/Backward/Random/Forward & Backward
- Low, high or maximum thresholds are available to suit the different loads in each channel
- Emergency bypass in each channel
- Provides 250mA(DC24V) current to BUS
- Remark information provided in each scene, area, channel and sequence
- Remote program and management function
- Can be restored to previous scene or designated scene
- 16A/1P protection switch in each channel



6 Channel 10A High Performance Dimmer

SB-WL-D0610

Parameters

- Power supply: 3 phase (L1, L2, L3, N, PE)
- Power input: AC 220V±10%
- BUS power consumption: 400mA/DC24V
- Working conditions: Working temp: 0°C~45°C
Working relative humidity: 20%~90%
Store temp: -40°C~+55°C
Store relative humidity: 10%~93%
- Output channel: 6 channel dimming
- Current in each channel: 10A, total less than 60A
- Protection: Short and overload protection
- Installation: Wall mounted
- Dimensions: 600x290x162(mm)

Features

- 10 bit dimming accuracy
- Hardware bypass function
- Up to 6 separate areas
- Up to 99 scenes in each area, run time adjustable
- Up to 99 sequences, 99 steps in each sequence
- Each sequence has an interval time of up to 60mins
- There are four running modes: forward, backward, random, forward & backward
- Low, high or maximum thresholds available to suit the different loads in each channel
- Emergency bypass in each channel
- Provides 400mA(DC24V) current to Bus
- Remark information provided in each scene, area, channel and sequence
- Remote program and management functions
- Can be restored to previous scene or designated scene
- 16A/1P protection switch in each channel



6 Channel 2A Dimmer

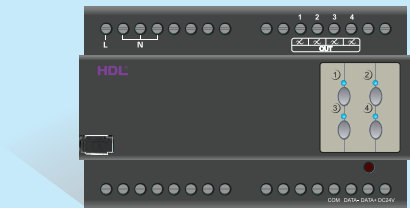
SB-DN-D0602

Parameters

- Power supply: AC220V
- BUS power consumption: 35mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 6 channels for dimming
- Output current in each channel: 2A, 6 channels current total is 10A
- Protection: needs exterior MCB
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- LED lights to indicate the current channel status
- Scene Controller
- Up to 6 separate areas
- Each area has 12 scenes, maximum run time: 60mins
- Up to 6 sequences, 12 steps for each sequence
- Up to 60 minutes of interval between each step
- There are 4 running modes: forward, backward, random, forward & backward
- Low, high or maximum thresholds available in each channel to suit the different loads
- Has remote program and management functions
- Can return to the previous scene or designated scene after power on
- Bypass function is available in each channel



4 Channel 3A Dimmer

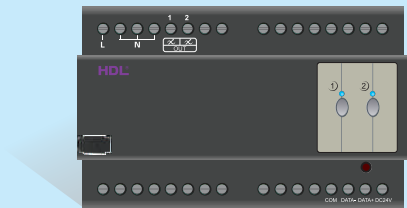
SB-DN-D0403

Parameters

- Power supply: AC220V
- BUS power consumption: 30mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 4 channels for dimming
- Output current in each channel: 3A, 4 channels current total is 10A
- Protection: needs exterior MCB
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- LED lights to indicate the current channel status
- Scene Controller
- Up to 4 separate areas
- Each area has 12 scenes, maximum run time: 60mins
- Up to 6 sequences, 12 steps for each sequence
- Up to 60 minutes of interval between each step
- There are 4 running modes: forward, backward, random, forward & backward
- Low, high or maximum thresholds available in each channel to suit the different loads
- Has remote program and management functions
- Can return to the previous scene or designated scene after power on
- Bypass function is available in each channel



2 Channel 6A Dimmer

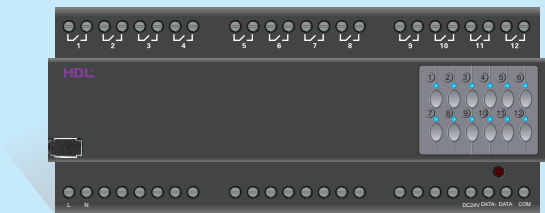
SB-DN-D0206

Parameters

- Power supply: AC220V
- BUS power consumption: 25mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 2 channels for dimming
- Output current in each channel: 6A, 2 channels current total is 10A
- Protection: needs exterior MCB
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- LED lights to indicate the current channel status
- Scene Controller
- Up to 2 separate areas
- Each area has 12 scenes, maximum run time: 60mins
- Up to 6 sequences, 12 steps for each sequence
- Up to 60 minutes of interval between each step
- There are 4 running modes: forward, backward, random, forward & backward
- Low, high or maximum thresholds available in each channel to suit the different loads
- Has remote program and management functions
- Can return to the previous scene or designated scene after power on
- Bypass function is available in each channel



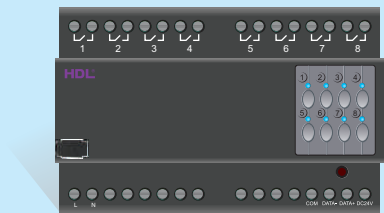
12 Channel 10A Relay Module
SB-DN-R1210

Parameters

- Power supply: DC24V
- Power consumption:
 - Static BUS power consumption: 15mA/DC24V
 - Dynamic BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 12 relay channels
- Current in each channel: 10A
- Life time for relay unit: more than 60,000 times
- Protection: needs exterior protection switch
- Installation: standard 35mm DIN Rail
- Capacity load of relay: <50uF
- Dimensions: 216x88x66 (mm)
- With scene controller

Features

- 12 relay channels
- Maximum 12 separate areas with up to 24 scenes in each area; maximum run time of each scene is 60mins
- Each channel has light protection delay: 0~60mins
- Each channel has a switch on delay time of 0~25secs
- Bypass function is available for each channel
- Remote program and management functions
- Can return to previous scene or designated scene once the system restarts
- LED lights to show each channel
- 2 sequences in each area



8 Channel 10A Relay Module
SB-DN-R0810

Parameters

- Power supply: DC24V
- Power consumption:
 - Static BUS power consumption: 15mA/DC24V
 - Dynamic BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 8 relay channels
- Current in each channel: 10A
- Life time for relay unit: more than 60,000 times
- Protection: needs exterior protection switch
- Installation: standard 35mm DIN Rail
- Capacity load of relay: <50uF
- Dimensions: 144x88x66 (mm)
- With scene controller

Features

- 8 relay channels
- Maximum 8 separate areas with up to 16 scenes in each area; maximum run time of each scene is 60mins
- Each channel has light protection delay: 0~60mins
- Each channel has a switch on delay time of 0~25secs
- Bypass function available for each channel
- Remote program and management functions
- Can return to previous scene or designated scene once the system restarts
- LED lights to show each channel
- 2 sequences in each area



4 Channel 10A Relay Module
SB-DN-R0410

Parameters

- Power supply: DC24V
- Power consumption:
 - Static BUS power consumption: 15mA/DC24V
 - Dynamic BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 4 relay channels
- Current in each channel: 10A
- Life time for relay unit: more than 60,000 times
- Protection: needs exterior protection switch
- Installation: standard 35mm DIN Rail
- Capacity load of relay: <50uF
- Dimensions: 72x88x66 (mm)
- With scene controller

Features

- 4 relay channels
- Maximum 4 separate areas with up to 8 scenes in each; maximum run time of each scene is 60mins
- Each channel has light protection delay: 0~60mins
- Each channel has a switch on delay time of 0~25secs
- Bypass function available for each channel
- Remote program and management functions
- Can return to the previous scene or designated scene once the system restarts
- LED lights to show each channel
- 2 sequences in each area



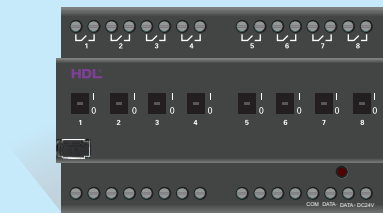
4 Channel 16A Relay Module
SB-DN-R0416

Parameters

- Power supply: DC24V
- Power consumption:
 - Static BUS power consumption: 15mA/DC24V
 - Dynamic BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 4 relay channels
- Current in each channel: 16A
- Life time for relay unit: more than 60,000 times
- Protection: needs exterior protection switch
- Installation: standard 35mm DIN Rail
- Capacity load of relay unit: <300uF
- Dimensions: 72x88x66(mm)

Features

- 4 relay channels
- Bypass function available for each channel
- Each channel has a switch on delay time of 0~25secs
- Area: maximum 4 separate areas
- Scenes: 8 scenes in each area, maximum run time of each scene is 60mins
- Sequences: 2 sequences in each area, maximum 12 steps in each sequence
- Can return to previous scene or designated scene once the system restarts
- Current detect function is also available



8 Channel 16A Relay Module

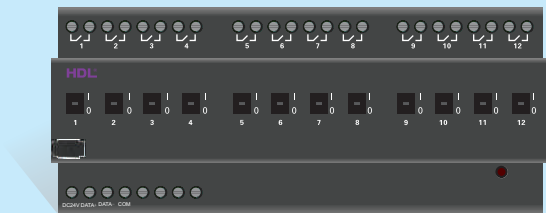
SB-DN-R0816

Parameters

- Power supply: DC24V
- Power consumption:
 - Static BUS power consumption: 15mA/DC24V
 - Dynamic BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 8 relay channels
- Current in each channel: 16A
- Life time for relay unit: more than 60,000 times
- Protection: needs exterior protection switch
- Installation: standard 35mm DIN Rail
- Capacity load of relay unit: <300uF
- Dimensions: 144x88x66(mm)

Features

- 8 relay channels
- Bypass function available for each channel
- Each channel has a switch on delay time of 0~25secs
- Areas: maximum 8 separate areas
- Scenes: 16 scenes in each area, max running time of each scene is 60mins
- Sequences: 2 sequences in each area, max 12 steps in each sequence
- Can return to the previous scene or designated scene after the system restarts
- Current detect function is also available



12 Channel 16A Relay Module

SB-DN-R1216

Parameters

- Power supply: DC24V
- Power consumption:
 - Static BUS power consumption: 15mA/DC24V
 - Dynamic BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Output channel: 12 relay channels
- Current in each channel: 16A
- Life time for relay unit: more than 60,000 times
- Protection: needs exterior protection switch
- Installation: standard 35mm DIN Rail
- Capacity load of relay unit: <300uF
- Dimensions: 216x88x66(mm)

Features

- 12 relay channels
- Bypass function available for each channel
- Each channel has a switch on delay time of 0~25secs
- Areas: maximum 12 separate areas
- Scenes: 24 scenes in each area, max running time of each scene is 60mins
- Sequences: 2 sequences in each area, max 12 steps in each sequence
- Can return to the previous scene or designated scene after the system restarts
- Current detect function is also available



6 Channel 16A 0-10V Output Module

SB-DN-6B0-10V

Parameters

- Power supply: DC24V
- BUS power consumption: 30mA/DC24V
- Current in each channel: 16A
- Capacity load of relay unit: <300uF
- Power consumption for module: 2W
- Control DC maximum current: 100mA
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- 6 relay channels
- 6 channels for 0~10V analog signal output
- Bypass function available for each channel
- LED lights available to show each channel
- Maximum 6 separate areas; up to 12 scenes in each with a maximum run time of 60mins per scene
- Can return to the previous scene or designated scene once the system restarts
- Remote program and management functions available
- Low, high or maximum thresholds are available to suit the different loads in each channel



6 Channel 10A 0-10V Output Module

HDL-MRDA0610.232

Parameters

- Power supply: DC24V
- BUS power consumption: 30mA/DC24V
- Current in each channel: 10A
- Capacity load of relay unit: <300uF
- Power consumption for module: 2W
- Control DC maximum current: 100mA
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- 6 relay channels
- 6 channels for 0~10V analog signal output
- Bypass function available for each channel
- LED lights available to show each channel
- Maximum 6 separate areas; up to 12 scenes in each with a maximum run time of 60mins per scene
- Can return to the previous scene or designated scene once the system restarts
- Remote program and management functions available
- Low, high or maximum thresholds are available to suit the different loads in each channel



3 Channel 650mA LED Driver
SB-LED650mA

Parameters

- Power supply: DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Power consumption of module: <2W
- Output channel: RGB 3 channels
- Current in each channel: 650mA
- Signal interface: DMX512 (1990)
- Dimensions: 96x58.5x22.5 (mm)

Features

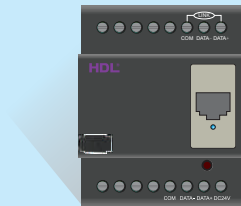
- 3 channels for LED lights, maximum 650mA
- Voltage for LED driver: DC10-30V
- Control signal: DMX512 (1990)



3 Channel 4A LED Driver
SB-WM-LED0304

Parameters

- Power supply: AC220V±10%
- Frequency: 50~60HZ
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Signal interface: DMX512 (1990)
- Output channel: RGB 3 channels (DC24V/4A)
- Controlled light type: RGB LED light
- Installation: wall mount
- Dimensions: 310x230x87 (mm)



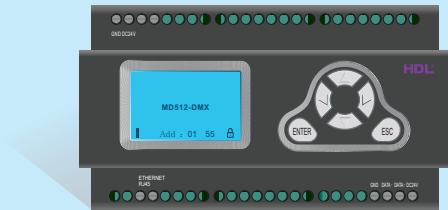
DMX 48 Scene Controller
SB-DN-48DMX

Parameters

- Power supply: DC24V
- BUS power consumption: 40mA/DC24V
- Working Conditions
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)
- Built-In Ethernet RJ45 interface

Features

- Maximum 48 DMX areas
- Maximum 99 scenes in each area, maximum run time is 60mins per scene
- Maximum 99 sequences with 99 steps per sequence, maximum interval between each step is 60mins
- 4 running modes for each sequence: forward, backward, random, bounce
- DMX512 standard output
- HDL-BUS DMX output
- Remote program and management functions available
- Low, high and maximum thresholds are available for each channel to fit different loads
- Data switcher function: between HDL-Bus and Ethernet
- Intelligent data communication
- Can return to the previous scene or designated scene when system restarts
- Interface: HDL-Bus, RJ45, DMX512



DMX 512 Scene Controller
SB-DN-512DMX

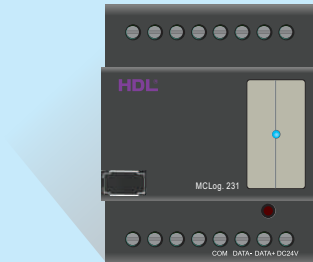
Parameters

- Power supply: DC24V
- BUS power consumption: 200mA/DC24V
- Working conditions
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- User interface:
 - 128x64 LCD Lattice Graphic
 - 6 button for keyboard
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)
- Built-In Ethernet RJ45 interface

Features

- Up to 500 scenes can be pre-programed with a maximum run time of 0.1s~60mins per scene
- Signal output: DMX512
- Data switcher function: 2 way for HDL-BUS and Ethernet
- Maximum 99 show sequences with up to 255 steps for each, maximum run time is 0.1s~60mins per step
- Four modes for each show sequence: forward, backward, random, bounce
- Intelligent data communication
- Software reset function, no need to turn off the power
- Electrical password locker is available for illegal modification
- DMX512 Signal output (1990 Version)
- Remote program and management functions available
- DMX512 patching function available

Logic Module
SB-DN-Logic960



Parameters

- Power supply: DC24V
- BUS power consumption: 15mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)

Features

- Editable events list in 'Daily' mode
- Maximum 12 modes each day
- In each mode, 4 Logic blocks can be used: And / Or / Nand / Nor
- Logic inputs: time, status of module, exterior inputs, universal switch, etc
- Remote program and management functions also available



2 Channel Curtain Controller
SB-DN-2Motor

Parameters

- Power supply: DC24V
- BUS power consumption: 35mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Controllable curtain:
 - 2 curtains can be controlled
- Motor type: capacitive single phase
- Maximum current in each channel: 10A
- Life time for relay unit: more than 60,000 times
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)

Features

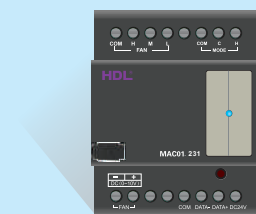
- 2 channels for curtain control
- Modes: forward, backward and stop
- Delay time for 'forward' and 'backward' is available



HDL-BUS/RS232 Converter
SB-DN-RS232N

Parameters

- Power supply: DC24V
- BUS power consumption: 15mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Interface: HDL-BUS, RS232
- Dimensions: 72x88x66 (mm)



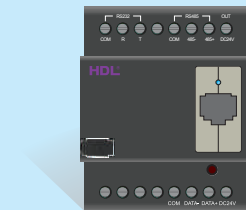
Air Conditioning Controller
SB-DN-HVAC

Parameters

- Power supply: DC24V
- BUS power consumption: 35mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)

Features

- Output: 5 relay channels, 5A per channel
- Fan Speed: high/medium/low
- Mode: cooling/heating
- 0~10V output control for VAV



Pro-version RS232 Data exchange Module
SB-DN-232IP-Pro

Parameters

- Power supply: DC15-30V
- BUS power consumption: 85mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Interface: HDL-BUS, Rs232, RS485
- Dimensions: 72x88x66 (mm)



DMX Recorder
SB-DN-DMX

Parameters

- Power supply: DC24V
- BUS power consumption: 200mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- User interface:
 - 128x64 LCD Lattice Graphic
 - 6 button for keyboard
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)
- Built-In Ethernet Rj45 interface

Features

- Memory: 256MB
- PC remote operation:
 - Download program
 - Play program
 - Delete program
- Interface: HDL-BUS, RJ45
- Operation on module:
 - Record
 - Play: single or repeat
 - Delete
- Program can be played from panel and switch
- DMX output can be NET-DMX
- DMX512 protocol
- Password function available
- IP function available
- Can check the memory details



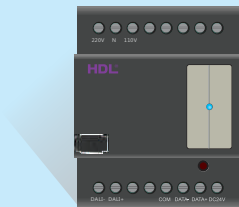
SMS Module
SB-DN-SMS/IP

Parameters

- Power supply: DC24V
- BUS power consumption: 500mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- User interface:
 - 128x64 LCD of Lattice Graphic
 - 6 button for keyboard
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- SMS control: 99 x 49 targets
- Status check function available
- Ability to alarm security system via SMS or phone
- Adjustable LED back light
- Multi-Control targets available
- Can be reset without powering off
- Remote program and management functions available
- Works with timer and Logic, for security enable and disable
- SMS, HDL-Bus and Ethernet data transmission
- Intelligent data transfer, less data streaming
- Manual control by sending little character to system



48 Channel DALI Controller

SB-DN-DALI48

Parameters

- Power supply: AC220V±10%
- BUS power consumption: built-in power supply
- Working conditions
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Signal interface: HDL-BUS, DALI, RJ45
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)

Features

- Signal conversion between HDL-BUS and DALI
- Other DALI devices can also be controlled
- With scene controller
- 48 separate areas (maximum)
- Available functions include low and high threshold, system failed, DALI device restore
- Remote program and management functions available
- Can return to the previous scene or designated scene once the system restarts



IR Emitter with Current Sensor

SB-IR-EM

Parameters

- Power supply: DC24V
- Power consumption: 12mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Interface: HDL-BUS
- Maximum infrared codes: 253
- Sending carrier wave frequency: 38KHz
- Dimensions: 49x31x12 (mm)
- Current detect function available



4 Zone Dry Contact Input Module

SB-DRY-4Z

Parameters

- Power supply: DC12~30V
- BUS power consumption: 20mA/DC24V
- Output signal: HDL-BUS
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Dimensions: 49x31x12 (mm)

Features

- 4 channels for dry contact input
- Control targets: scene, sequence, timer, universal switch, single channel regulate



Temperature and humidity sensor

SB-CMS-THL

Parameters

- Power supply: DC24V
- BUS consumption: 25mA/DC24V
- Output signal: HDL-BUS signal
- Working conditions:
 - Working temperature: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: ceiling mount
- Dimensions: 80mmx25mm

Features

- Temperature sensor, LUX sensor, humidity sensor, 2 dry contact inputs, 2 external inputs (7 input conditions in total)
- 2 Logic relations: OR / AND
- Up to 24 Logic functions; each Logic function can have 7 input conditions and 20 target outputs
- Can be used with security module
- On-site simulation function
- RS485 BUS communication



Air quality sensor

SB-CMS-LA

Parameters

- Power supply: DC24V
- BUS consumption: 25mA/DC24V
- Output signal: HDL-BUS signal
- Working conditions:
 - Working temperature: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: ceiling mount
- Dimensions: 80mmx25mm

Features

- LUX sensor, air quality sensor, 2 dry contact inputs, 2 external inputs (6 input conditions in total)
- 2 Logic relations: OR / AND
- Up to 24 Logic functions; each Logic function can have 6 input conditions and 20 target outputs
- Can be used with security module
- On-site simulation function
- RS485 BUS communication



12in1 (Multi function Sensor)

SB-CMS-12IN1

Parameters

- Power supply: DC24V
- BUS power consumption: 150mA/DC24V
- Working conditions:
 - Working temperature: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Interface: HDL-BUS
- Installation: ceiling mount
- Dimensions: 108x34 (mm)

Features

- PIR motion sensor
- Ultrasonic motion sensor
- LUX sensor
- Temperature sensor
- 2 dry contact inputs
- IR receiver
- IR Emitter
- 2 channels, 5A relay outputs
- Constant LUX control
- Security
- Easy setting
- Logic

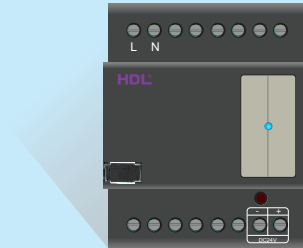


Infrared Learner

SB-IR-Learn

Parameters

- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Dimensions: 98x70x38 (mm)
- USB interface
- For learning infrared codes
- Sending learned IR codes for test

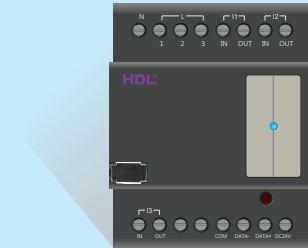


DC24V 750mA Power Supply

SB-DN-PS750

Parameters

- Power supply: AC220V±10%
- Frequency: 50~60HZ
- Power supply to BUS: 750mA
- Output voltage: DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)



Power Meter Module

SB-DN-PM0301

Parameters

- Power input: DC24V
- BUS power consumption: 20mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)

Features

- Real time monitoring of voltage and current of A/B/C phase
- Reports electrical degree value (kWh) of each circuit
- HDL-BUS interface
- Use with current transformer, 3 types available: 50A/5A, 100A/5A, 200A/5A
- Monitored by HDL-BUS software



Infrared Motion Sensor

SB-CMS-PIR

Parameters

- Power supply: DC24V
- BUS power consumption: 12mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Detection range: 5x5 meters
- Detection angle: 110°
- Interface: HDL-BUS
- Adjust detection distance by software
- Dimensions: 80x28 (mm)



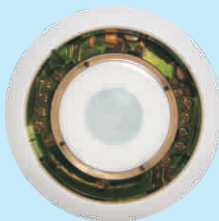
Current Transformer
SB-CUR50A: 50A/5A
SB-CUR100A: 100A/5A
SB-CUR200A: 200A/5A



Wall Mount Infrared Motion Sensor
SB-WMS-PIR

Parameters

- Power supply: DC12~30V
- BUS power consumption: 15mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Detection range: 12 meters
- Detection angle: 110°
- Interface: HDL-BUS
- Adjustable detection distance (by software)
- Installation: wall mount
- Dimensions: 103.6x60.2x60 (mm)



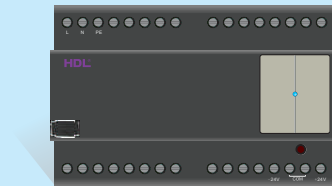
8 In 1 Sensor
SB-CMS-8in1

Parameters

- Power supply: DC12~30V
- BUS power consumption: 12mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Interface: HDL-BUS
- Dimensions: 80x39.2 (mm)

Features

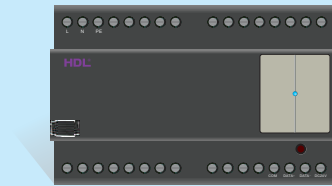
- Built-in IR motion detector and LUX sensor
- 2 channels for dry contact input
- Maximum 32 Logic block
- Maximum 5 inputs for the Logic verdict
- Maximum 10 control targets for each Logic block
- Infrared receiving function available
- Infrared sending function available



1200mA Din Rail Power Supply Module
SB-DN-PS1200

Parameters

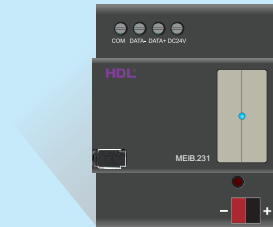
- Power supply: AC 220V±10%
- Frequency: 50-60HZ
- Output current: 1200mA
- Output voltage: DC24V
- Working conditions:
 - Working temperature: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)



2400mA Din Rail Power Supply Module
SB-DN-PS2400

Parameters

- Power supply: AC 220V±10%
- Frequency: 50-60HZ
- Output current: 2400mA
- Output voltage: DC24V
- Working conditions:
 - Working temperature: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Installation: standard 35mm DIN Rail
- Dimensions: 144x88x66 (mm)



EIB/HDL-BUS Convertor
SB-DN-EIB

Parameters

- Power supply: DC24V
- BUS power consumption: 15mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Interface: HDL-BUS
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)

Features

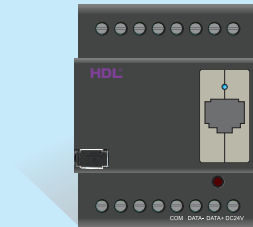
- 2 way data signal conversion for HDL-BUS and EIB
- 2 way function conversion for HDL-BUS; single channel dimming, EIB standard dimming and on/off
- 2 way for control targets, maximum 75 devices



Infrared Remote
SB-HHR-D

Features

- Battery powered
- Transmitting distance: 10m
- Use with wall panel switches with IR
- Dimensions: 126x65.5x15 (mm)



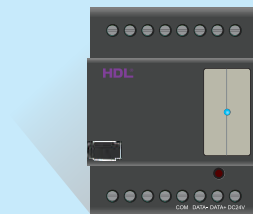
IP Interface
SB-DN-1IP

Parameters

- Power supply: DC12~30V
- BUS power consumption: 40mA/DC24V
- Working conditions:
 - Working temperature: 0°C~45°C
 - Working relative humidity: 20%~90%
 - Storage temperature: -40°C~+55°C
 - Storage relative humidity: 10%~93%
- Available for 1 subnet for BUS products
- Interface: HDL-BUS, RJ45
- Installation: standard 35mm DIN Rail
- Dimensions: 72x88x66 (mm)

Features

- 2 way data communication between HDL-BUS and TCP/IP
- Reset function - no power off required
- Intelligent data transfer
- Remote program function available



Advanced Security Controller
SB-DN-SEC250K

Features

- Supports up to 250,000 zones
- 24 hour zones: fire, gas, panic, silent panic, current, freeze alarm
- All security modes have: vacation, away, night, night with guest, day, OFF
- Auto arming / disarming
- All type of sensors: NC, NO, analog
- Dial out, SMS, alert, sends you SMS

7" Touch Screen

Intelligent
Control Terminal
SB-WL-TS7



Parameters

- Power supply: DC24V
 - BUS power consumption: 200mA/DC24V
 - Working conditions:
 - Working temperature: 0°C~40°C
 - Working relative humidity: 20%~90%
 - Store temperature: -40°C~+55°C
 - Store relative humidity: 10%~93%
 - Installation: flush mount
- CPU: 400MHz
 - FLASH ROM: 64M
 - SDRAM: 64M
 - Timer: built-in RTC real timer
 - Operation System: WinCE 4.2Net
 - Ethernet Interface: RJ45
 - USB Port and SD Card Port
 - Dimensions: 207.5x150.9x32.9(mm)



Lighting Control



Picture Browser



Room Select



Appliance Control - TV



Appliance Control - Air Conditioning



Scene Control



Movie Play Control



Music Play Control



Security Control



10" wireless

Touch Screen
Intelligent
Control Terminal
SB-MBL-TS10-CE

Parameters

- Working voltage: DC18V
- Power consumption in BUS: 600Ma/DC18V
- CPU: 667MHz
- Flash Rom: 256M NandFlash
- SDRAM: 128M DDR

Functions

- Hand held wireless
- 10" colour touch screen
- Ethernet communication
- Control TV, DVD, AC, scene, etc
- Embedded timer



Lighting Control



Picture Browser



Room Select



Appliance Control - TV



Appliance Control - Air Conditioning



Scene Control



Movie Play Control



Music Play Control

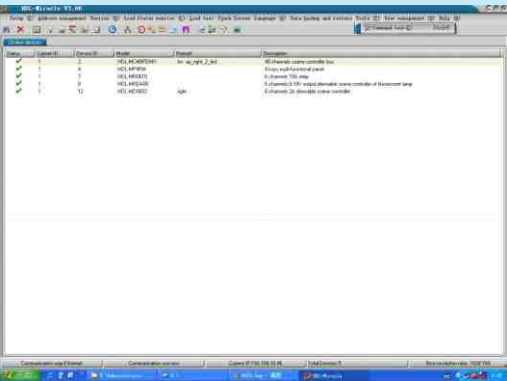


Security Control



HDL-BUS System Program Software
SB-SW-Pack

Description
HDL-Bus software is the programming software for all HDL-Bus products



iRidium home intelligent control software (for iPhone)
iRidium home intelligent control software (for iPad)

Product specification
iRidium applications can run on Apple® products iPad, iPhone or iPod Touch and Windows XP/7 (Android coming soon).

iRidium turns your computer into an interactive remote control for your HDL home automation system and all of your Android/visual equipment.

The iRidium application is highly configurable, allowing the installer to create a customised interface that is unique and dynamic.



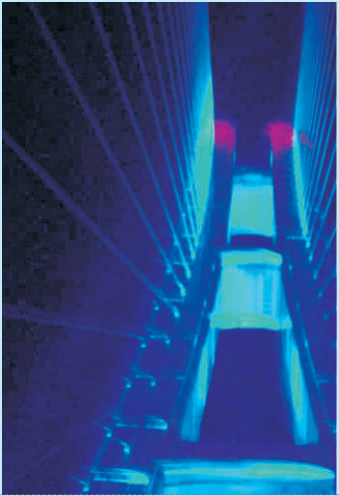
HDL-iLife home intelligent control software (for iPhone)
HDL-iLife home intelligent control software (for iPad)

Product specification
iLife is the HDL application for iPad and iPhone.

A simple setup ensures the installer can configure this application without undue time.

Features include:

- Room by Room Control
- Lights
- Scenes
- Air Conditioning
- TV
- DVD
- Audio





KNX-DLP

Multifunction LCD Switch

HDL-M/DLP05.1

Description

HDL KNX/EIB multi page- and function LCD panels fully comply with European safety standards and the KNX association protocol.

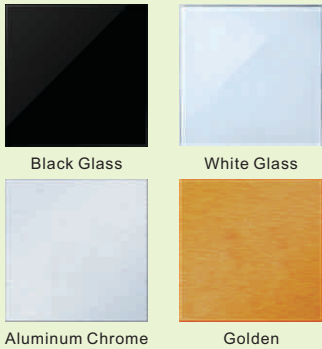
These elegant panels have high-resolution dot matrix LCD displays, rubber keys with moderate intensity and background lights. Choose between different colours and finishes, and your own user-friendly graphics. There are simple-to-use multi control pages for: lighting control, curtain control, heating control, clock, air conditioning, background music and streaming. With a built-in mini infrared receiver and the ability to send a variety of data information, the panels will control KNX devices.

HDL provides application solutions for Smart Home and Building Control. Our ambition is to become a leading Global supplier by delivering products which protect the Environment and conserve Energy to enhance a high quality, intelligent lifestyle.

Additional Functions

- Adjustable back light
- Night mode
- Infrared remote control
- Remote lock for key
- Remote control
- Delay control

Optional Material

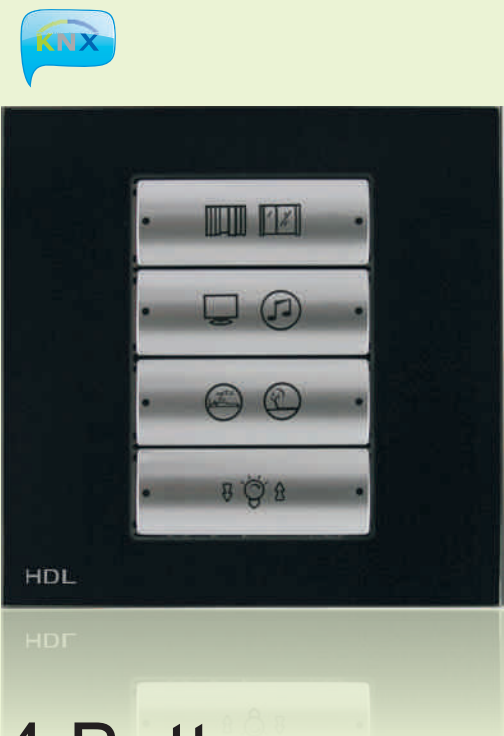


Parameters

- Working voltage: 21-30 V DC
- Static current: < 25 mA
- Infrared receive function

Features

- Switch control
- Dimming control
- Curtain control
- Shutter control
- Scene control
- Sequence control
- Percentage control (absolute value for dimming)
- String control
- Combination control
- Heating control
- Air conditioning control
- Timer control
- Background music control



4 Button

Multifunction Switch

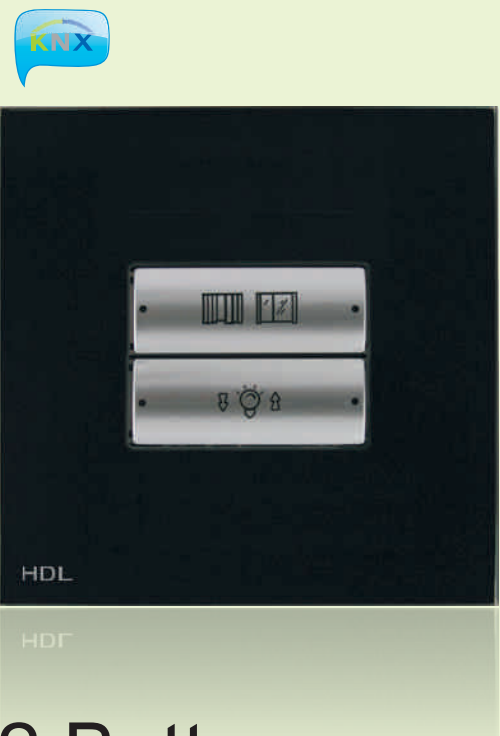
HDL-M/P04.1

Parameters

- Working voltage: 21-30 V DC
- Static current: < 25 mA
- Infrared receive function

Additional Functions

- Adjustable back light
- Night mode
- Infrared remote control
- Remote lock for key
- Remote control
- Delay control



2 Button

Multifunction Switch

HDL-M/P02.1

Features

- Switch control
- Dimming control
- Curtain control
- Shutter control
- Scene control
- Sequence control
- Percentage control (absolute value for dimming)
- String control
- Combination control
- Heating control
- Air conditioning control
- Timer control
- Background music control



HDL KNX/EIB-Bus Features

- Main function
- Statistical functions for run time of channel
- Channel status response
- 1-on/off status can be set when power down or power up
- Timer function
- Scene control
- Threshold function
- Curtain control function
- Logic function: AND, OR, XOR, GATE
- Heating function: PWM control output

HDL / KNX-EIB Bus relay series products fully comply with European safety standards and protocols for high power switching KNX equipment, featuring an internal 50A high current magnetic relay, zero power consumption and long life.

These relays are widely used in airports, metro, parks, building facades, roads, entertainment, public roads, industrial lighting control and other fields where switch control is needed.

HDL provides solutions in Smart Home and Building Control applications throughout the World; aiming to be a leading Global supplier with products that protect the Environment and conserve energy to enhance a high quality, intelligent lifestyle.



4 Channel 16A Relay Module

HDL-M/R04.16.1

Parameters

- Working voltage (power consumption): 21-30V DC
- Dynamic current: <15mA
- Static current: <5mA
- Dynamic power consumption: <450mW
- Static power consumption: <150mW
- Output current: 16A
- Maximum output current: 20A
- Rated voltage: 250V AC(50/60Hz)
- Output channel: 4 relay channels
- Electrical life time: >10000



8 Channel 16A Relay Module

HDL-M/R08.16.1

Parameters

- Working voltage (power consumption): 21-30V DC
- Dynamic current: <15mA
- Static current: <5mA
- Dynamic power consumption: <450mW
- Static power consumption: <150mW
- Output current: 16A
- Maximum output current: 20A
- Rated voltage: 250V AC(50/60Hz)
- Output channel: 8 relay channels
- Electrical life time: >10000



12 Channel 16A Relay Module

HDL-M/R12.16.1

Parameter

- Working voltage (power consumption): 21-30V DC
- Dynamic current: <5mA
- Static current: <15mA
- Dynamic power consumption: <450mW
- Static power consumption: <150mW
- Output current: 16A
- Maximum output current: 20A
- Rated voltage: 250V AC(50/60Hz)
- Output channel: 12 relay channels
- Electrical life time: >10000



HDL KNX/EIB-BUS

Features

- Statistics total ON time
- Status response
- Power down or power on status setup
- Status remains after power on
- Staircase light function
- Flashing light function
- Scene control
- Threshold control
- Curtain control
- On delay, Off delay, protection delay
- Logic relation: AND, OR, XOR, GATE
- Heating control
- PWM output

HDL KNX / EIB series products for actuators fully comply with European safety standards and KNX association protocol. To be used as a high power on/off control device. Featuring zero power consumption and long life time, as well as an internal 16A high current relay unit.

The KNX / EIB actuators can be used in a variety of applications such as airports, train stations, sports centers, parks, building walls, public areas, streets, and other areas which need on/off and lighting control.

HDL provides solutions for Smart Home and Building Control applications throughout the World; aiming to be a leading Global supplier with products that protect the Environment and conserve energy to enhance a high quality, intelligent lifestyle.



4 Channel 10A Relay Module

HDL-M/R04.10.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Dynamic power consumption: < 450 mW
- Static power consumption: < 150 mW
- Output current: 10A
- Max output current: 20A
- Rated voltage: 250V AC (50/60 Hz)
- Electrical life time: > 100000



8 Channel 10A Relay Module

HDL-M/R08.10.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Dynamic power consumption: < 450 mW
- Static power consumption: < 150 mW
- Output current: 10A
- Max output current: 20A
- Rated voltage: 250V AC (50/60 Hz)
- Electrical life time: > 100000



12 Channel 10A Relay Module

HDL-M/R12.10.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Dynamic power consumption: < 450 mW
- Static power consumption: < 150 mW
- Output current: 10A
- Max output current: 20A
- Rated voltage: 250V AC (50/60 Hz)
- Electrical life time: > 100000



HDL KNX/EIB-BUS Features

- Statistics total ON time
- Status response
- Power down or power on status setup
- Short protection
- Overload protection
- Over temperature protection
- Read temperature
- Over temperature alarm
- Staircase light
- Flashing function
- Scene control, scene dimming
- Sequence control
- Threshold switch
- Heating control: PWM output



HDL KNX / EIB trailing-edge technology dimmers fully comply with European safety standards and the KNX association protocol. We use 20A MOSFET Copper dimming technology embedded with high performance EMC filters, complying with the requirements of EMC Europe. The products feature short circuit, overload, and overheat protection.

The dimmers can be used for dimming ordinary incandescent lamps, high pressure halogen lamps, low voltage halogen lamps and other light sources such as dimmable ballasts. We offer four types of dimmers:

- 6 channel/250W per channel
- 4 channel/400W per channel
- 2 channel/800W per channel
- 1 channel/1600W per channel

The KNX / EIB dimmers can be used in a variety of applications such as to control lighting in residential homes, hotels, supermarkets, offices, commercial buildings, etc.

HDL provides solutions for Smart Home and Building Control. Our ambition is to become a leading Global supplier by delivering products which protect the Environment and conserve energy to enhance a high quality, intelligent lifestyle.



1 Channel 6A Intelligent Dimmer

HDL-M/D01.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Output current: 1 Ch/6A
- Rated voltage: 220-250V AC (50/60 Hz)



2 Channel 3A Intelligent Dimmer

HDL-M/D02.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Output current: 2 Ch/3A
- Rated voltage: 220-250V AC (50/60 Hz)



4 Channel 1.5A Intelligent Dimmer

HDL-M/D04.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Output current: 4 Ch/1.5A
- Rated voltage: 220-250V AC (50/60 Hz)



6 Channel 1A Intelligent Dimmer

HDL-M/D06.1

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA
- Output current: 6 Ch/1A
- Rated voltage: 220-250V AC (50/60 Hz)



HDL KNX/EIB-BUS

Features

- Master & slave control
- Switch control
- Absolute valve for dimming
- Curtain & shutter control
- Intelligent alarm function
- Percentage control
- Sequence control
- Scene control
- String control
- Logic control
- Status report for motion
- Temperature compensation
- Temperature report
- LUX report
- Dry contact status report



HDL-M/HS05.1
Multifunction Sensor

Parameters

- Working voltage: 21-30 V DC
- Dynamic current: < 15 mA
- Static current: < 5 mA

Description

HDL KNX / EIB multi-function motion sensors fully comply with European safety standards and the KNX association protocol. The combination of multifunction movement detection with temperature and LUX detection, master & slave control, Logic control, and much more, gives these sensors the ability to send a variety of data information to control different KNX devices.

HDL KNX / EIB sensors may be used for many different applications in combination with other KNX devices.

HDL provides application solutions for Smart Home and Building Control. Our ambition is to become a leading Global supplier by delivering products which protect the Environment and conserve energy to enhance a high quality, intelligent lifestyle.



HDL KNX/EIB-BUS

Features

- Plays 24 programs
- Records 24 programs
- Up to 7 hours record time
- Play or record mode can be selected
- Output signal: DMX512-1990
- Network DMX output selection: HDL-NET/ART NET
- Selectable channels: max 48
- Selectable channels in one scene: max 48
- Intelligent sequence control
- Switch control, absolute value dimming, relative value dimming
- Channel status response
- Data exchange between DMX and EIB



HDL-M/DMX512.1
DMX Recorder

Parameters

- DMX512 signal in a 1990 version
- Working voltage: 21-30 V DC
- Dynamic current: < 6 mA
- Static current: < 5 mA

Description

HDL KNX / EIB series DMX recorders fully comply with European safety standards and KNX association protocol. This is a DMX control device for entertainment which can record and play back the DMX program from the KNX software or KNX wall panels. The maximum recording time is up to 4 hours; it also supports the setting and play back of the DMX scenes.

The DMX recorder can be used in a variety of applications such as: LED colour change control, computer light and moving head light control, laser and other DMX light control.

HDL provides application solutions for the Smart Home and Building Control applications throughout the World; aiming to be a leading Global supplier with products that protect the Environment and conserve energy to enhance a high quality, intelligent lifestyle.



HDL KNX/EIB-BUS

Features

- Blind operation mode
- Curtain operation mode
- Manual operation
- Priority setup
- Status can be set when power down or power up
- Forced position operation
- Limit position control
- Status response for position
- Status for operation
- Scene control
- Safety control
- Automatic control

HDL KNX / EIB series products for curtain controllers fully comply with European safety standards and KNX association protocol. Used as a motorised control device of which the main features are zero power consumption and a long life time, as well as an internal 16A high current relay unit.

The KNX / EIB curtain controllers can be used in a variety of applications such as airports, metro stations, sports centers, parks, building walls, public areas, streets, and other areas where motorised curtain controls are needed.

HDL provides application solutions for the Smart Home and Building Control applications throughout the World; aiming to be a leading Global supplier with products that protect the Environment and conserve energy to enhance a high quality, intelligent lifestyle.



2 Channel Curtain Controller

HDL-M/W02.1

Parameters

- Working voltage (power consumption): 21-30V DC
- Communication: KNX/EIB
- Dynamic current: <12mA
- Static current: <5mA
- Dynamic power dissipation: <450mW
- Static power consumption: <150mW
- Relay output current: 10A
- Rated voltage: 250V AC(50/60Hz)
- Output channel: 4 relays, two channels
- Channel electrical life: >100000



4 Channel Curtain Controller

HDL-M/W04.1

Parameter

- Working voltage (power consumption): 21-30V DC
- Communication: KNX/EIB
- Dynamic current: <12mA
- Static current: <5mA
- Dynamic power dissipation: <450mW
- Static power consumption: <150mW
- Relay output current: 10A
- Rated voltage: 250V AC(50/60Hz)
- Output channel: 8 relays, four channels
- Channel electrical life: >100000



6 Channel Curtain Controller

HDL-M/W06.1

Parameter

- Working voltage (power consumption): 21-30V DC
- Communication: KNX/EIB
- Dynamic current: <12mA
- Static current: <5mA
- Dynamic power dissipation: <450mW
- Static power consumption: <150mW
- Relay output current: 10A
- Rated voltage: 250V AC(50/60Hz)
- Output channel: 12 relays, six channels
- Channel electrical life: >100000



6 Channel 0-10V Ballast Dimmer
HDL-M/DA6.10.1

Parameters

- Working voltage (power consumption): 21-30VDC
- Dynamic current: <15mA
- Static current: <6mA
- Dimming output: DC0-10V/CH
- Dimming output current: 20mA/CH
- Relay channel current: 10A/CH
- Shut off way: pulsed with the lock relay shut off
- Rated voltage: 220~250V AC(50/60Hz)
- Electrical life time: >100000

Features

- Statistics total ON time
- Status response
- Status recovery
- Upper limit
- Lower limit
- Staircase light
- Flashing light
- Scene control
- Scene dimming
- Sequence control
- Threshold switch
- Heating actuator (PWM)



960mA Power Supply for EIB BUS
HDL-M/P960.1

Parameters

- Input supply: 220-250V AC(50/60Hz)
- KNX/EIB output voltage: 21-30V DC
- KNX/EIB output current: 960mA
- Power loss: <2W
- Power on time: <1s

Features

- Short circuit protection
- Green LED: output normal
- Red LED: overload(I>Imax)
- Reset: push button to reset Bus



4 Dry Contact Signal Input Module
HDL-M/S04.1

Parameters

- Working voltage (power consumption): 21-30V DC
- Communication: KNX/EIB
- Dynamic current: <25mA
- Static current: <5mA
- Output voltage: 0-10V DC
- Output current: 3mA
- Input sensors: switch/temperature sensor

Features

Switch/temperature sensor input

- Switch controller
- Switch/dimming controller
- Shutter controller
- Flexible controller
- Scene controller
- Sequence controller
- Percentage controller
- Threshold controller
- String controller
- Forced controller
- Counter controller
- Combination controller
- LED status indication

Logics combination

- Switch controller
- Alarm controller
- Shutter controller
- Scene controller
- Sequence controller
- Percentage controller
- Threshold controller
- String controller
- LED status indication

Dimming

- Statistics total ON time
- Status response
- Status recovery
- Staircase light
- Flashing light
- Scene control
- Scene dimming
- Sequence control
- Threshold switch
- Heating actuator(PWM)



HVAC Control Module
HDL-M/FCU07.10.1

Parameters

- Working voltage (power consumption): 21-30V DC
- Communication: KNX/EIB
- Dynamic current: <20mA
- Static current: <5mA
- Dynamic power dissipation: <450mW
- Static power consumption: <150mW
- Relay output current: 10A
- Rated voltage: 250V AC(50/60Hz)
- Channel electrical life: >100000


Features


- 5 channel 10A relay outputs
- 2 channel 0-10V DC outputs
- Fan speed: high, medium, low
- HVAC working mode: heating, cooling
- HVAC operation mode: standby mode, comfort mode, night mode, frost protection
- Fan speed and valve status report
- 7 local temperature sampling
- BUS temperature sampling
- Local temperature report
- 7 floor heating output channels
- 5 control mode each floor heating channel
- 7 independent output channels
- Channel statistics total ON time
- Channel state response
- Channel state after bus voltage failure and recovery
- Staircase light
- Delay
- PWM control output





Hotel Rooms Intelligent Control System


Energy Saving Concept
User Friendly Control
Good for Management


- **Intelligent ID Identify**


The guest or the chambermaid is automatically identified by ID card providing simultaneous security and energy savings.
- **Motorised Curtain Control**


Controlled by wall mount panel & switch, enjoy the intelligent control way of life.
- **Service Information**

Service Reminder:
DND, clean, service customise, check out reminder
Customer Room Reminder:
Simplifies the maid's work, and the guest will not be disturbed
Waiting Mode:
When another guest comes they will be advised to wait a moment
- **User Friendly Lighting Control**

Controlled using switch & panel; making it easy to control the lights to make the room comfortable for the guest.
- **Security**

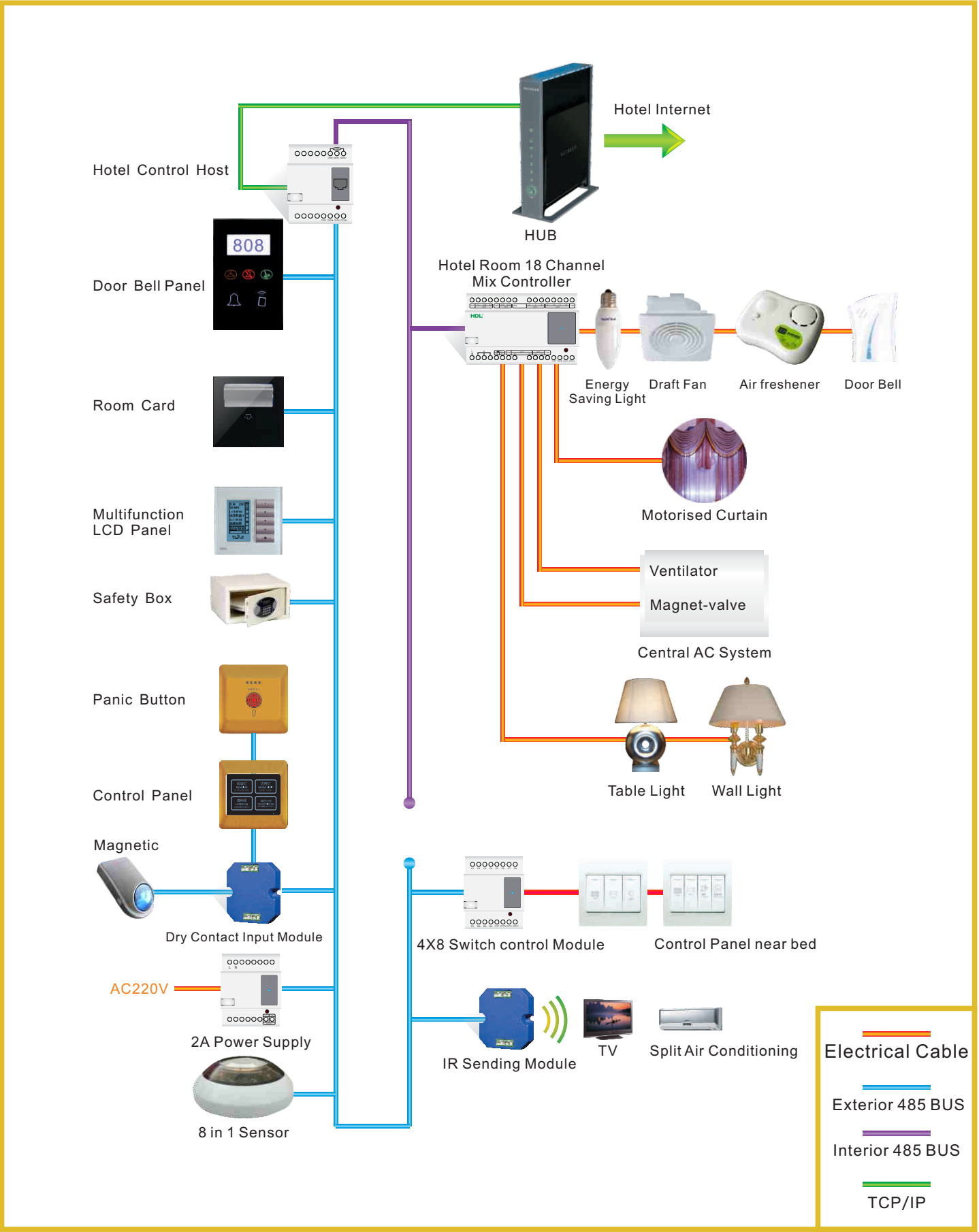
Emergency, asking for help:
When there is an emergency situation in a particular hotel room, the maid will know right away
System Breakdown Reminder:
When there is a system breakdown, a reminder will appear so management can attend to the problem immediately
Safety:
Inside the system, all control unit use lower power, DC24V, to enhance safety
- **Temperature Control**

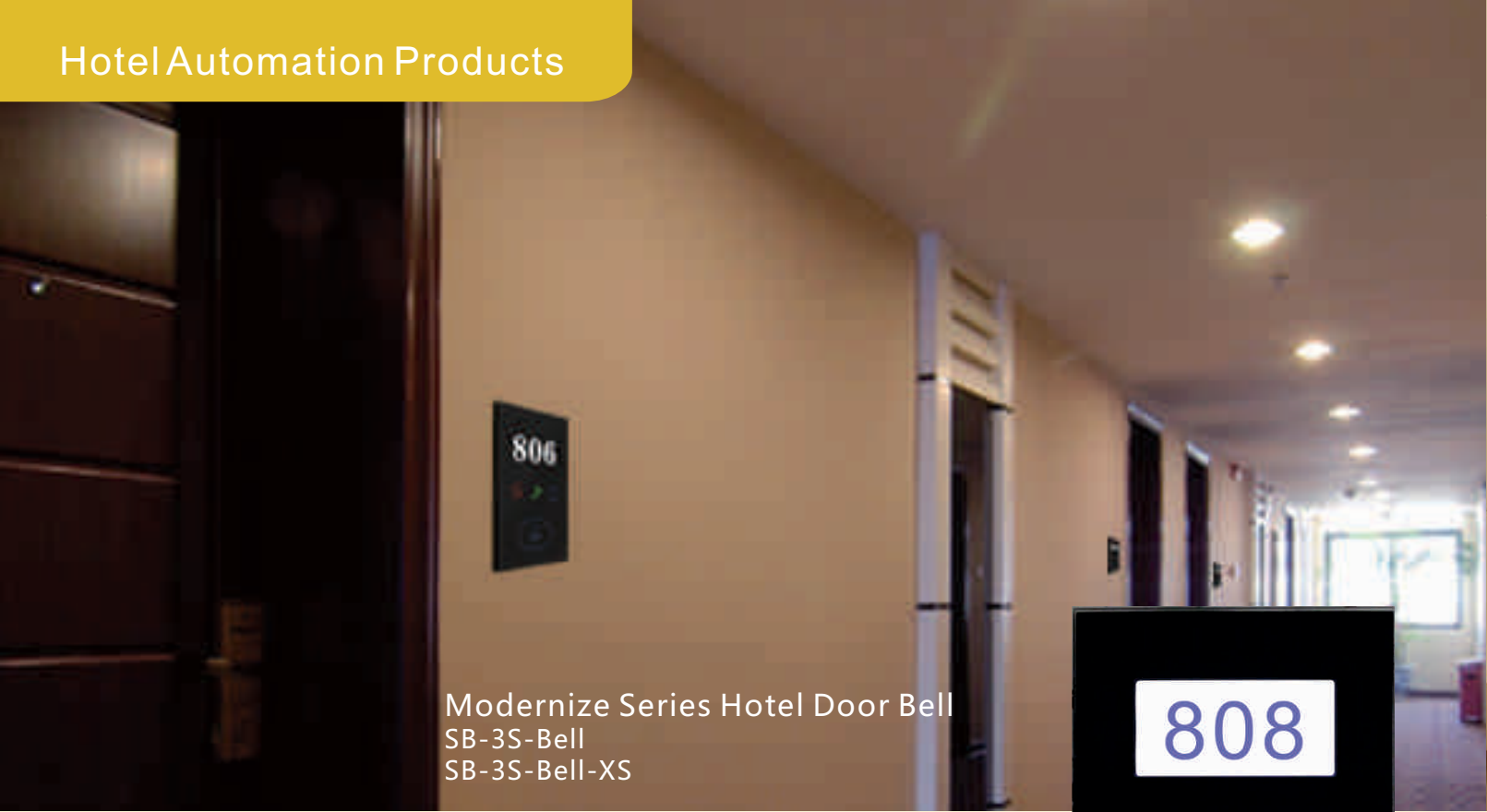
Easily controlled by panel & switch; saving energy and making the hotel room comfortable for the guest.
- **Motion Detect**

Controlled logically: the room is occupied so the lights turn on, the room is empty so the lights turn off.
- **Network Management**

Room Status:
The software gives you the ability to see if someone is in the room at any one time
Check out Request:
One key check out request; check out documents will be ready immediately saving time for the guest
Servant Status:
Use the software to keep track of staff, e.g. waiters, chambermaids, etc
Remote Control:
When the guest checks in, lights & air conditioning will automatically be turned on before the guest enters the room
Failure Detect:
The status of all equipment inside the hotel can be monitored by system software
History Check:
Provide a history report of devices, rooms, etc
Room Central Control:
Based on TCP/IP network, more stability and good for management
Manage Date Sharing:
System can be easily integrated with hotel software

System schematic diagram





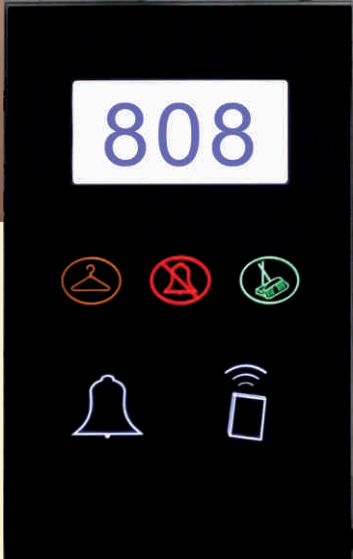
Modernize Series Hotel Door Bell
SB-3S-Bell
SB-3S-Bell-XS

■ Parameters

Power supply:	DC12~30V
BUS power consumption :	25mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout:	105mm x 170mm x 40mm
Back box size:	94mm x 159mm x 30mm

■ Features

- Shows the room numbers
- Do Not Disturb indication
- Clean mode indication
- Wait mode indication
- Supports RF card (SB-3S-Bell-XS)



Modernize Series Hotel Multifunction panel
SB-DLP5-GRMS

■ Parameters

Power supply:	DC12~30V
BUS power consumption:	15mA/DC24V
Working conditions	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Installation:	GI 86mmX86mm back box
Layout size:	86.4mm×86.4mm×35mm

■ Features

- IR: IR receiving function of each button on the panel
- Key mode: single on/off, single on, single off, combination on, combination off, momentary
- Control mode: scene, sequence, timer, universal switch, single channel control, broadcast scene, broadcast channel, curtain control
- LCD display: shows different picture or language
- LCD back light: adjustable LED brightness
- Remote program and management functions
- Ability to set a password to make panels tamper proof
- 4 function key buttons, 1 page change button



Modernize Series RF Hotel Master Card
SB-RF-MSTR

■ Parameters

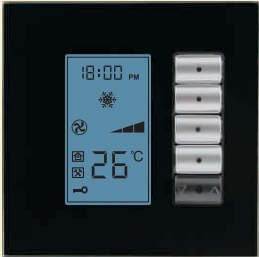
Power supply:	DC12~30V
BUS power consumption:	15mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout:	86mm x 86mm x 9mm
Installation:	GI 86mm×86mm back box

■ Features

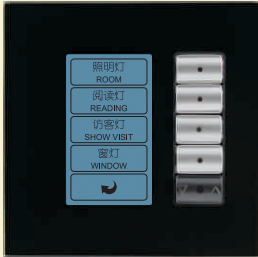
- For use with door bell panel (SB-3S-Bell)
- Can be used as Master Card or identification
- RF card



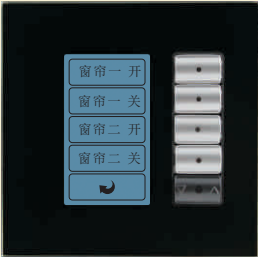
■ Operation Interface



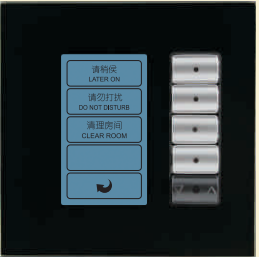
Air Conditioning Control



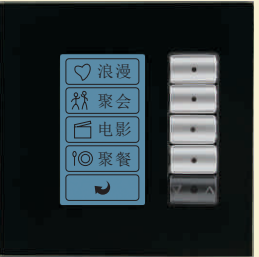
Lighting Control



Curtain Control



System Service



Scene Control



Modernize Series Intelligent Panel
SB-WS3m-UK

Parameters

Power supply:	DC12~30V
Power consumption in BUS:	15mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Installation:	GI 86mm×86mm back box
Layout size:	86.4mm×86.4mm×35mm

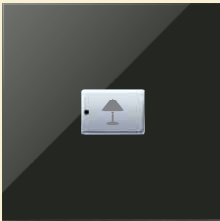
Features

- IR: IR receiving function of the key button
- Key control mode: scene, sequence, timer channel, universal switch, single channel control, broadcast scene, broadcast channel, curtain control
- LED back light: adjustable LED brightness
- Key mode: single on/off, single on, single off, combination on, combination off, momentary
- ID setting: ID can be changed by software
- Remote control and management functions



Different Button Combinations

SB-WS1m-UK



SB-WS2m-UK



SB-WS3m-UK



SB-WS6-UK



Selectable Material for Panel



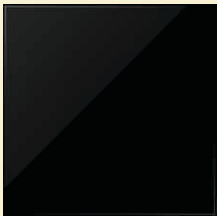
Silver Aluminium



Golden Aluminium



White Glass



Black Glass



Touch Series Hotel Room Door Bell Panel
SB-3S-Bell-Edge

Parameters

Power supply:	DC12~30V
Power consumption in BUS:	25mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout:	86mm x 86mm x 9mm
Back box size:	86mm x 86mm back box

Features

- Shows the room numbers
- Do Not Disturb indication
- Clean mode indication
- Wait mode indication



Touch Series Hotel Master Card
SB-RF-MSTR-Edge

Parameters

Power supply:	DC12~30V
Power consumption in BUS:	15mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout:	86mm x 86mm x 9mm
Installation:	GI 86mm×86mm back box

Features

- Use with door bell panel
- Can be used as Master Card and identification
- Two types: by touch or with RF card





Touch Series Hotel Room Control Panel
SB-WS4-Edge

■ Parameters

Power supply:	DC12~30V
Power consumption in BUS:	15mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout size:	86mm x 86mm x 9mm
Installation:	GI 86mm×86mm back box

■ Features

· Control modes	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
· Control types	Scene Sequence Timer	Universal switch Single channel Curtain	Broadcast scene Broadcast channel



Touch Series Hotel Radio Control Panel
SB-FM-Edge

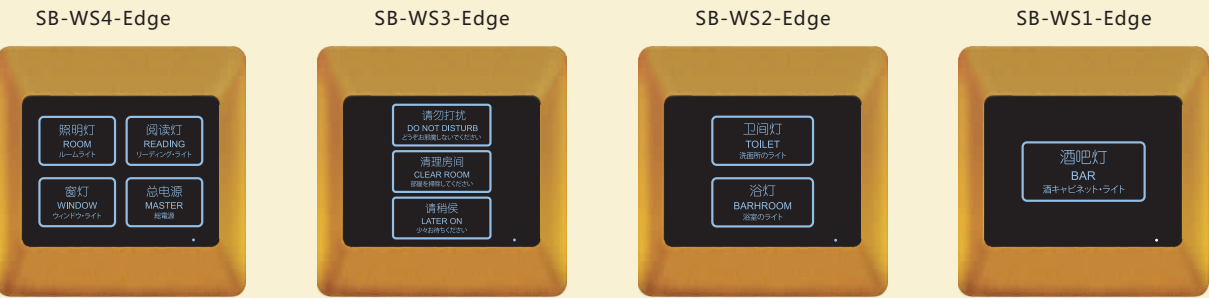
■ Parameters

Power supply:	DC12~30V
Power consumption in BUS:	15mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout size:	86mm x 86mm x 9mm
Installation:	GI 86mm×86mm back box

■ Features

- Up to 16 different radio station channels
- Volume buttons
- Radio channel selection

■ Selectable Panel Style



Touch Series Hotel Room Air Conditioning Control Panel
SB-AC-Edge

■ Parameters

Power supply:	DC12~30V
Power consumption in BUS:	15mA/DC24V
Working conditions:	Working temperature: 0°C~40°C Working relative humidity: 20%~90% Storage temperature: -40°C~+55°C Storage relative humidity: 10%~93%
Signal interface:	HDL-BUS
Layout size:	86mm x 86mm x 9mm
Installation:	GI 86mm×86mm back box

■ Features

- Use with mix room controller
- Controls temperature, speed, mode, on/off
- Displays indoor temperature and time
- Remote control and management functions



Adjustable Colour

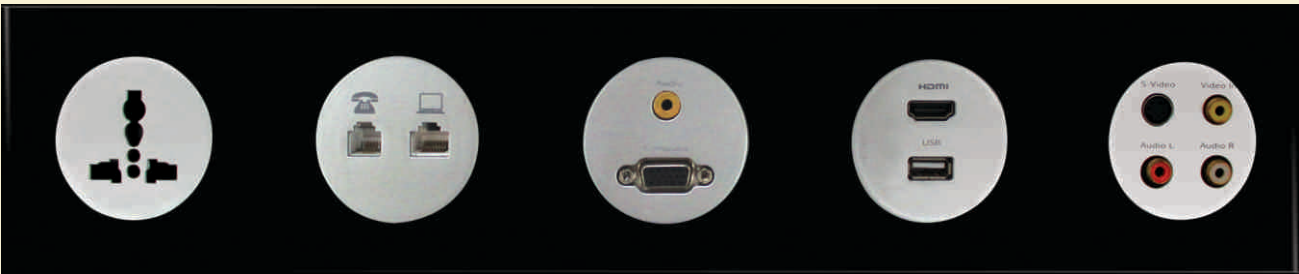


Golden Aluminium Copper Aluminium Champagne Aluminium Silver Aluminium Dark Silver Aluminium



Smart Hotel

Modernize Series Hotel Room Multifunction Panel (Multi Media Connector)
SB-MMS5-Black



Modernize Series Hotel Room Multifunction Panel (Multi Media Connector)
SB-MMS5-White



Modernize Series Hotel Room Multifunction Panel (Multi Media Connector)
SB-MMS3-Black



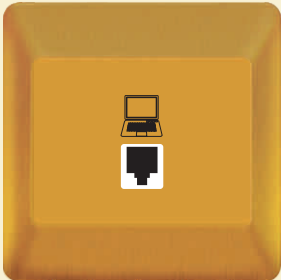
SB-MMS3-White



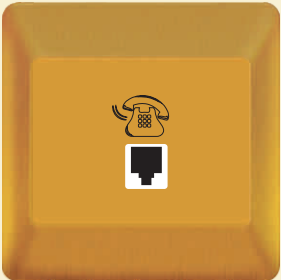
Power Socket
SB-PS-10A



Data Outlet
SB-PC-1P



Telephone Outlet
SB-TEL-1P



Panic Button Panel
SB-EM-1P





24 zone dry contact input module
SB-DRY-24Z

Parameters

Power supply: DC24V
BUS power consumption: 10mA/DC24V
Working conditions:
- Working temperature: 0°C~45°C
- Working relative humidity: 20%~90%
- Storage temperature: -40°C~+55°C
- Storage relative humidity: 10%~93%
Installation: standard 35mm DIN rail mount
Dimensions: 144x88x66 (mm)

Features

- 24 channels dry contact input
- Switch types include: mechanical switch, single on, single off, single on/off, combination on, combination off, combination on/off, invalid switch (both mechanical switch and combination switch can set maximum 49 targets)
- Control target type: scenes, sequences, universal switches, single channel adjustment, broadcast scene, broadcast channel, curtain control, panel control, GPRS function, etc
- RS485 BUS communication

Hotel Room Intelligent System Manage Software
SB-SW-GRMS

Description

“Hotel Room Intelligent System Manage Software” is monitoring and programming software for the Smart-Hotel system. Controls devices such as door access, air conditioning, lighting, music, service, curtains, etc. This software creates stability and high efficiency, and is easy to manage and program.

Features

- Easy to program and operate using graphic icons
- User-defined; shows an accurate picture of the hotel room
- “SOS”, “Safety Box Protection” and many other functions
- Air conditioning energy saving control function
- Intelligent ID identify; safer for the guest
- Date back up and restore function
- All controlled devices can be viewed using the graphic icon



Software Interface



Hotel Room



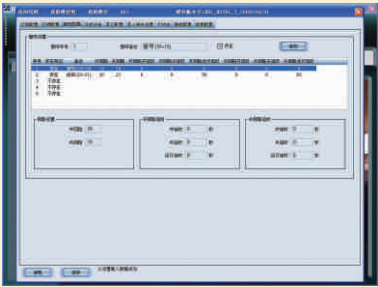
Check Room Number



Configure Lighting System



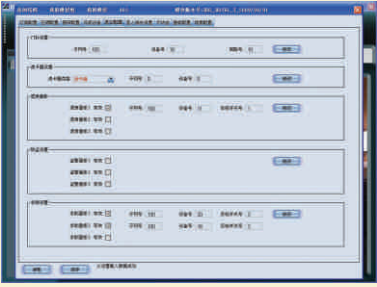
Manage Air Conditioning



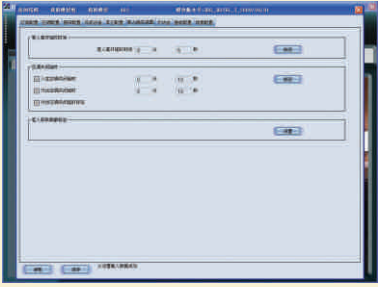
Manage Curtain Control



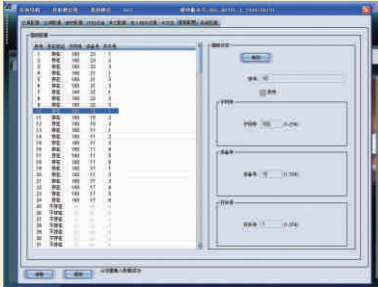
Fan and Central Air Conditioning



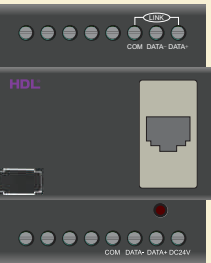
Configure Other Information



Manage Unique Customer Information



Switch Configure Manage



Hotel Room
Control Host
SB-DN-48HNET

Parameters

Power supply: DC12~30V
Power consumption in BUS: 40mA/DC24V
Working conditions:
- Working temperature: 0°C~40°C
- Working relative humidity: 20%~90%
- Storage temperature: -40°C~+55°C
- Storage relative humidity: 10%~93%
Installation: standard 35(mm) DIN Rail
Layout size: 72(mm)x88(mm)x66(mm)

Features

- 1 separate area
- 99 scenes, maximum 255 seconds for each scene
- High limit, low limit, threshold for each channel
- Delay time for channel protection: 0-60mins
- Delay time for channel start: 0-25secs
- Local program and test function
- Remote program and management functions
- Designate scene after device restarts
- BUS switchboard function: 2 way data transfer between HDL-BUS and Ethernet
- Ethernet interface embedded



Multi Function
Output Module
SB-DN-HMIX18

Parameters

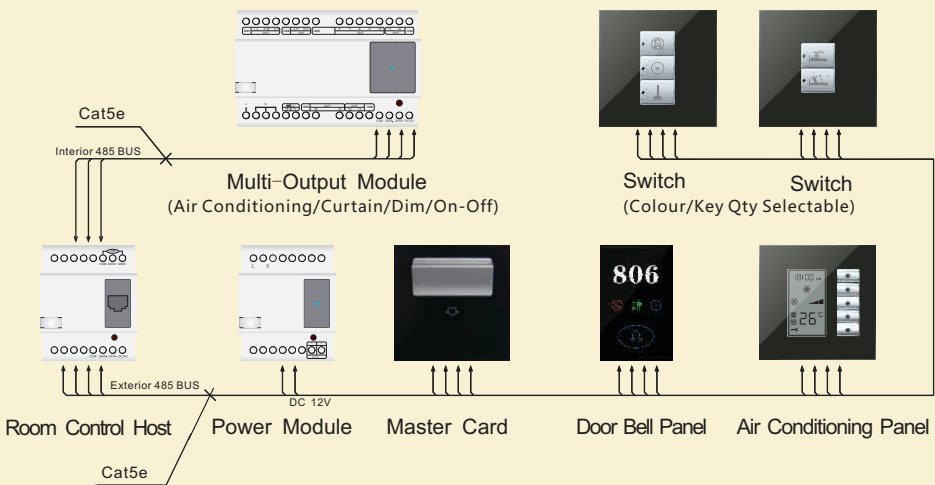
Power supply: DC15~30V
Power consumption in BUS: 260mA/DC24V
Working conditions:
- Working temperature: 0°C~40°C
- Working relative humidity: 20%~90%
- Storage temperature: -40°C~+55°C
- Storage relative humidity: 10%~93%
Signal interface: RS485 connected with interior BUS of room host
Installation: standard 35(mm)DIN Rail
Layout size: 144x88x66 (mm)

Features

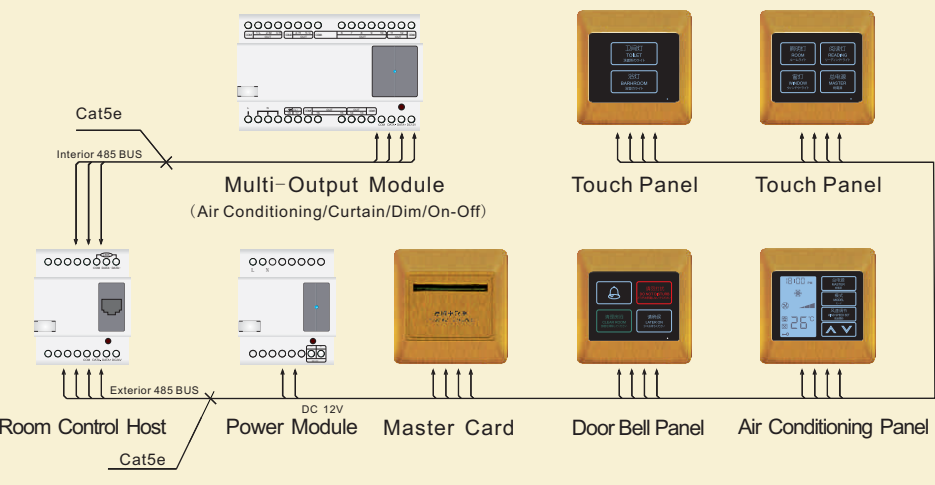
- Channel 1-5:
1. to be used as relay channel, 10A per channel
2. to be used as air condition control channel
channel 1-3 connect as low/med/high mode
channel 4-5 connect as cool/heat mode
- Channel 6-16: relay channel, 10A per channel
- Channel 17-18: dimming channel, 2A per channel



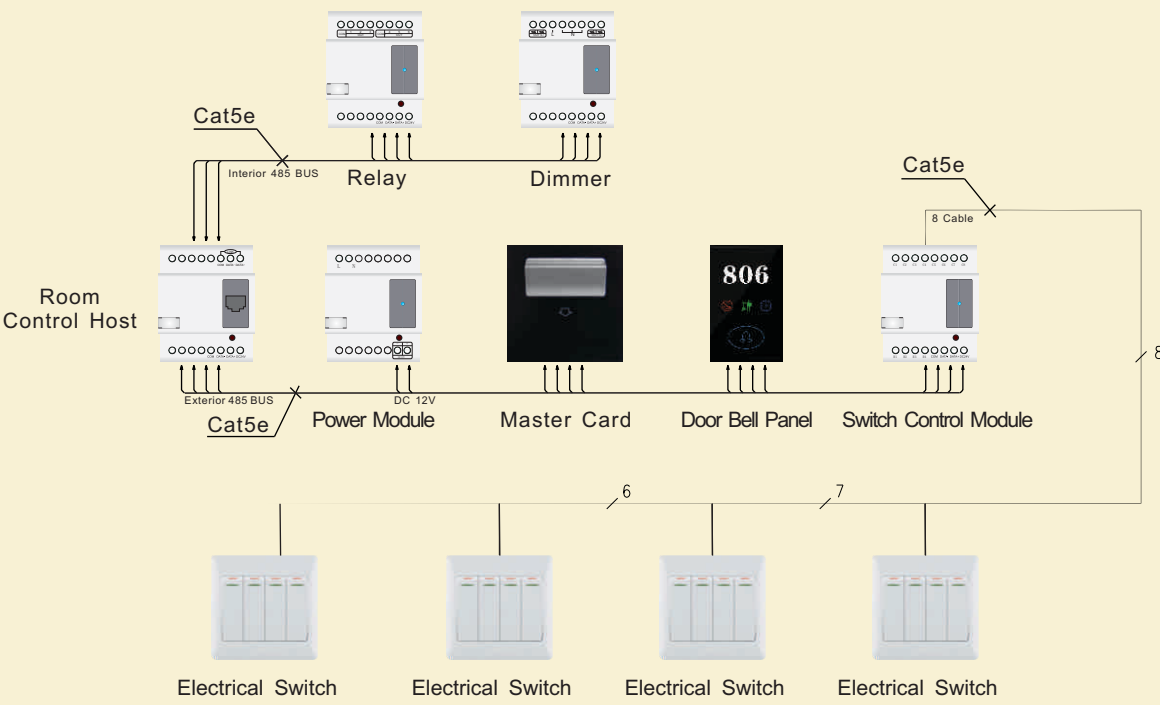
Application 1



Application 2



Application 3



Application 4

