Solution

Product List

Product Specification

Brochure

LAMMIN®
莱 明 智 控

2021版
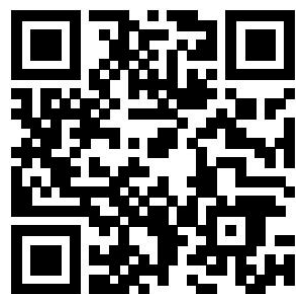
Digital Lighting Control Solution

Lighting Control System/ Intelligent Driver /Power Supply

Product Manual

GuangZhou LAMMIN High-Tech Company

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Profile

Guangzhou LAMMIN Electronics Co., Ltd. founded in 2008, is a high-tech enterprise dedicated to research and development, production, sales of professional intelligent control system and accessories.

Adhering to European technology, our company provides intelligent lighting solutions applied in smart home, public buildings, intelligent hotels, rail transit, intelligent education, hospitals and other fields, providing products and services ranging from intelligent control system of large buildings to the lighting drivers, from engineering design to after-sales maintenance and supporting products.

We provide KNX/EIB. DALI, MODBUS, EnOcean,WIZ protocol intelligent lighting control system, (SCR, 0/1-10V, DALI) dimmable LED power supply, professional dimmer and inductive dimmable intelligent lamps.

Our company, with a strong technical force, undertook the intelligent projects of Ministry of Construction, participated in the compilation of the intelligent industry standard atlas. Our factory passed IS09001 certification, CE, CCC, DALI, KNX and other international and domestic standards certification.

Our products are widely used in Beijing Daxing International Airport, Hangzhou G20 summit venue, South China University of Technology International Campus, Guangzhou Nansha Wanda Plaza, Beijing Xiaoyun Road No. 8, Shenzhen Jingji 100 St. Regis Hotel, Suzhou W Hotel, Amman LULU supermarket and other thousands of domestic and foreign intelligent control projects.

LAMMIN Intelligent Control----------- Change Your Life

Digital Lighting Control Product®

The development of modern LED light source technology makes lighting dimmable and color mixing more convenient. The digital intelligent lighting control system provided by LAMMIN can realize the precise digital control of each lamp, class 4096 no flicker dimming, color and temperature changes, 16 million color change intelligent digital control.

LAMMIN intelligent control system adopts international standard KNX, DALI BUS protocol, which has the advantages of universality and standard, providing comprehensive and rich product system choices for owners and agencies.

LAMMIN digital intelligent lighting control system has the perfect integration of wired and wireless, combined with Signify wireless WIZ product which is convenient for dimming and color change, EnOcean technology passive sensors enables rhythm lighting, color lighting (and dynamic lighting to provide buildings with a healthier, green, environmental protection and energy saving light environment.

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Case Show

▲Suzhou W hotel

▲Hangzhou G20 submit

▲Beijing DAXIN international airport

▲International Campus of South China University of Technology

▲HUAWEI Press Room

▲Hunan Provincial Museum

▲Xi'an Golen Flower

▲Nansha Wanda Plaza in Guangzhou

▲HeTian Airport in Xinjiang

▲Foshan Mobile Information Building

▲Conrad Hotel Xinjiang

▲Ganzhou High-speed Railway West Station

▲Xiamen Southeast Shipping Center

- Beijing National Security Bureau reception Hall
- Beijing Beichizi Political and Legal Committee Office building,
- Beijing Xishiku Church
- Beijing World Trade International Apartment
- Beijing Xinghua Hutong
- Beijing Rongzunbao Apartment
- Beijing Itai Huafu Family Club
- Beijing Rose Garden Villa
- Beijing Purple Lushan Village
- Wancheng Huafu, Beijing
- 8 Xiaoyun Road, Hesheng, Beijing
- Air China VIP Lounge, Beijing Daxing International Airport
- Zhengan Palace Hotel, Beijing
- Shanghai Bay Hotel
- Shanghai Peace Hotel
- Caowang Zen Temple in Shanghai
- Shanghai Disney Hotel
- Shanghai Disney Toy Story Hotel
- Shanghai Jin Jiang International Hotel

▲Beijing No.8 XiaoYun Road

▲Shenzhen Hilton Hotel

▲Beijing Xishiku Church

▲Guoan First City Hotel

- St. Regis 100 Shenzhen
- Hilton Garden Hotel Shenzhen Shajing
- Shenzhen Mission Hills Golf Club
- Kylin Villa, Shenzhen
- Shenzhen Swan Castle
- Shenzhen Waterside Hill Villa
- St. Maurice Villa, Shenzhen
- Novotel Shenzhen
- Nanshan District Government Office Building, Shenzhen
- Shenzhen HuaRun Xingfuli community
- Shenzhen Mangrove Western community
- Shenzhen Oriental Garden
- Langting Hotel, Shenzhen
- Shenzhen Kaisa Water World
- Guangdong Provincial Museum
- Guangzhou Gaoming Country Garden Hotel
- Guangzhou Industrial and Commercial Bank
- Guangzhou Taojing Bay Mansion
- Guangzhou Golden Bay Mansion
- Guangzhou Asian Games press conference hall
- Guangzhou Guangya Middle School Huadu Campu

- Guangzhou South China of Technology International Campus
- Automation Laboratory of Guangdong University of Technology
- South Headquarters of CCCC Group
- Guangzhou Huabiao Peak
- Guangzhou Lijiao City Exhibition Hall
- Guangzhou Longhu Tianyi
- Country Garden Villa, Foshan, Guangdong
- Jiangmen Heshan Yanshan Hotel
- TianJin Yinzhu Apartment
- Tianjin Crowne Plaza
- Tianjin Cultural Center Grand Theater
- Building of Tianjin Public Security Bureau
- Jiali Hotel Taicang Jiangsu
- W Hotel Suzhou
- Nanjing Da Bao 'en Temple
- G20 Hangzhou Summit
- Rainbow Palace Hotel, Hangzhou
- Hangzhou Central Asia landscape lighting
- Jiaxing Cultural Center, Zhejiang

▲Phoenix Hotel, Guangzhou

▲Zhongshan International Trade Hotel

▲Opium War Museum

- Sichuan Zi-ang Jindu International Hotel
- Sheraton Hotel, Sichuan Mianyang
- Chengdu Tengwangge Qingcheng Mountain Hotel
- Chengdu Jinghu Palace
- Intelligent Lighting Laboratory of Chongqing University
- Hilton Chongqing
- DaysInn Hotel Chongqing
- Former residence of Yang Yingong in Chongqing
- Sichuan Yibin Huayi Hotel
- TEEMALL Guangzhou
- Conference Hall of Guangdong Agricultural Bank
- Guangzhou Blue Party KTV
- Ramada Foshan Hotel
- Foshan New World Real Estate
- Foshan Southern Power Grid Conference Room
- Guangfu New World Golf Club
- Dongguan Telman Hotel
- Dongguan guangying Summer
- Dongguan Chenglong Shatin Hotel
- Humen Opium War Museum
- Zhuhai Huafa Real Estate Club
- Qinghua International Hotel zhuhai
- Zhuhai Stadium

▲Ganzhou High-speed Railway West Station

▲Guangzhou South China of Technology International Campus

- ➢ Macau Land Hotel Pharaoh's Palace
- ➢ Macau Jewelry Store
- ➢ Tian Yi Square, Zhongshan
- ➢ Zhongshan Kaiyin New Town villa
- ➢ Zhongshan International Trade Hotel
- ➢ Zhongshan Kaiyin New Town villa
- ➢ Qingyuan Evergrande Hotel
- ➢ Qingyuan International Hotel
- ➢ Grand Hotel Zhanjiang
- ➢ Shantou World Trade Villa

▲Guangdong Provincial Museum

▲Mission hills

▲Weihai Economic and Trade Center
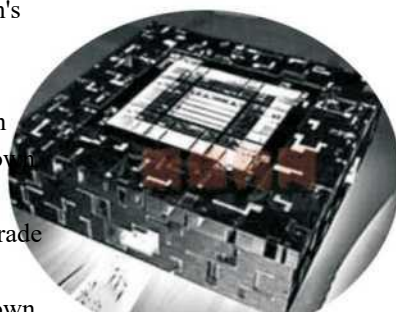
➢Changsha Lushan Villa
➢Four Seasons Hotel Changsha
➢Wuhan Zhi Art Museum
➢Wuhan Qunguang Square
➢Qintai Museum, Wuhan
➢ Wuhan International Expo Center
➢Tangshan Nanhu Hotel
➢Nanhu Purple Swan Villa Hotel
➢Tangshan Langfang Aili Fengshe National Investment Club.
➢Wenzhou No. 1 Sales Office
➢Fuqing Longtian QinXin Manor
➢Buckingham Palace, Fuzhou
➢Fuzhou JinChaoHuang Restaurant
➢Genting Villa, Xiamen
➢Kunming Haigeng International Conference Center
➢Kunming Junfa Center Conference Room
➢Naval Museum in Qingdao
➢ Shandong Weihai International Economic and Trade Exchange Center
➢Mission Hills Golf Hotel hainan
➢Hilton Hainan Wenchang Hotel

➢Dalian Sports Center Media Center
➢Dalian Intercontinental Ocean Hotel
➢Dalian HuaManLou Bar
➢Jilin Evergrande Huafu
➢Changchun Red Society Hotel
➢Jilin Hongshi Hui Hotel
➢Grand Hyatt Changchun
➢Harbin Red Affair Hotel
➢Huafu, Taiyuan, Shanxi Province
➢Xi 'an Eurasian International College
➢Xi 'an Century Golden Flower Shopping Mall
➢Xianyang Stadium in Shanxi province
➢Yue Chun Hotel, Lintong, Shanxi
➢Shanxi University of Science and Technology
➢Ningxia Yinchuan Airport Terminal
➢Xinjiang Yindu Hotel
➢Hami High-speed railway station in Xinjiang
➢Xinjiang Hualing Hotel
➢Xinjiang Northwest Petroleum Building
➢Karamay Cultural and Sports Center of Xinjiang

▲Gratitude temple tower

▲Hami High-speed railway station in Xinjiang

➢Western Pearl Power Plant in Kelamay, Xinjiang
➢Xinjiang Hetan Film Theater
➢Howard Johnson Boyuan Hotel,Mongolia
➢Wanda Plaza in Bozhou, Anhui Province
➢Wanda Plaza in Fuyang, Anhui Province
➢Yaohai Wanda Plaza in Hefei, Anhui
➢Liuzhou Liuan Wanda Plaza
➢Radisson Blu Hotel Liuzhou
➢Nanning Jiangnan Wanda Plaza
➢Guiyang Huaguoshan Art Center
➢Zunyi Southern Power Grid Conference Room
➢Memorial Hall of the 54th Army in Henan province
➢Lanzhou Road and Bridge Corporation Office
➢Xizang Museum of Natural History
➢LULU Mail, Muscat, Amman
➢Phnom Penh Casino, Cambodia
➢The MITT Cargo Terminal, Myanmar

▲ Lulu_Mall

KNX system overview

1. Digital lighting control products

1.1 Building intelligent environmental control system -KNX

KNX BUS is a system independent of manufacturer and application. BUS devices connected to KNX media (the media can be twisted pair, radio frequency, power line or IP/Ethernet), they can exchange information. BUS equipment can control the building management devices such as lighting and shading/window-shades, security system, energy management, heating, ventilation, air conditioning system, signal and monitoring system, the service interface and building control system, remote control, measuring, video/audio control, large household appliances, etc. All of these functions can be controlled, monitored and transmitted in a integrated system.
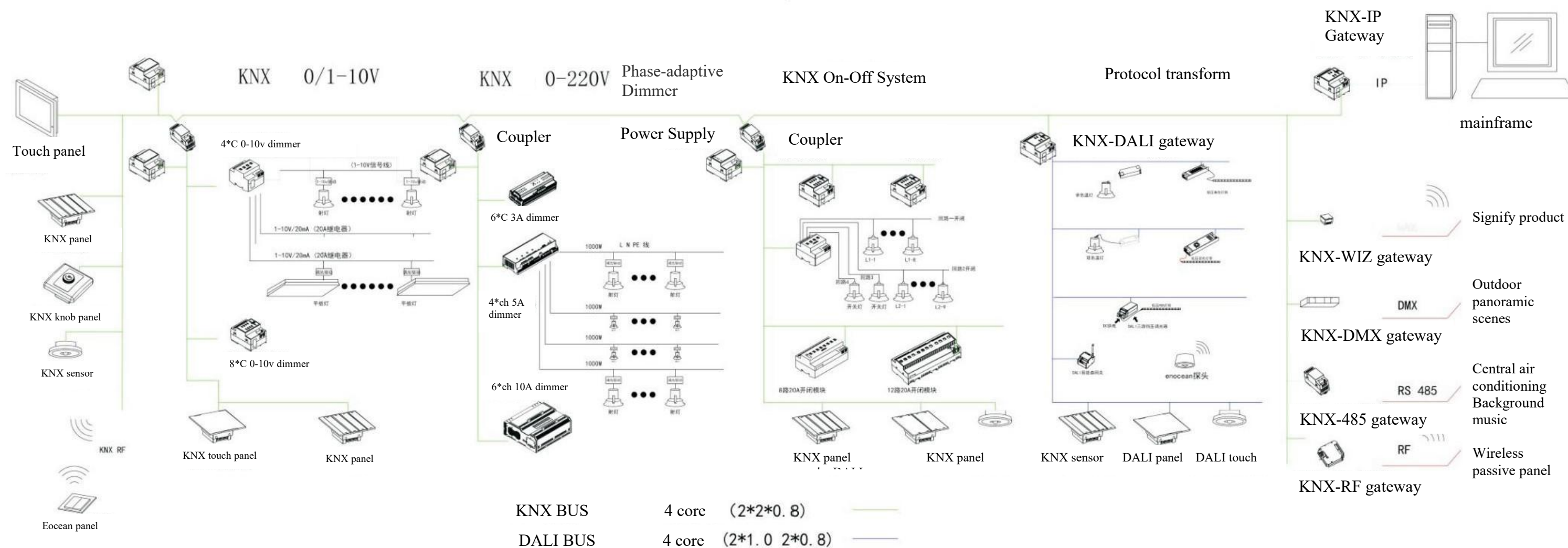
■ KNX switch driver

Product features:

KNX relay adopts standard guide rail and it is installed in the distribution box to open and close the power supply loop. It adopts magnetic hold pulse relay and consumes power only when switching state. Power off can also maintain the original state.

The upper hand dial lever can indicate the open and close state of the relay, or manually move the dial lever to operate the circuit when the BUS fails.

Specific parameters: provide guide rail installation, BUS power supply, 10A/20A current, module with 4 channels, 8 channels and 12 channels

■ **Device-KNX switch driver output series**

LR04AKC   LR04CK   LR08AK   LR06CK   LR08CK   LR12CK

Type	Product Name	Size H*W*D	Order ID
LR04AKC	4channel KNX curtain control	88*72*65	3.10.01.000
LR04CK	4channel 20A KNX switch driver	88*72*65	3.10.02.000
LR08AK	8channel 10A KNX switch driver	88*72*65	3.10.03.000
LR06CK	6channel 20A KNX switch driver	90*144*65	3.10.05.000
LR08CK	8channel 20A KNX switch driver	90*144*65	3.10.06.000
LR12CK	12channel 20A KNX switch driver	88*216*65	3.10.10.000

■ KNX dimmer

Product features:

Guide rail installation, metal shell heat dissipation, 4096 level dimming, built-in KNX database, multiple temperature protection, built-in LED anti-flicker module.

Specific parameters:

provide 4channel, 6channel, 8channel, 12channel rail type, wall mounted, 3A, 5A, 10A, 20A current dimmer.

■ **Device- KNX AC 0-220V phase-adaptive dimmer - guide rail**

L6293-08K   L6293-04CK

Type	Product Name	Size H*W*D	Order ID
L6793-06XK	6chanel 3A KNX dimmer	90*235*65	3.20.01.000
L6993-04YK	4chanel 5A KNX dimmer	90*235*65	3.20.02.000

■ **Device- KNX AC 0-220V phase-adaptive dimmer - wall-mounted**

LTX0410D   LTX0610D   LTX0810D   LTX1210D   LTX0620D

Type	Product Name	Size H*W*D	Order ID
LTX0410K	4channel 10A KNX dimmable box	250*350*135(wall)	3.21.01.000
LTX0610K	6channel 10A KNX dimmable box	330*350*135(wall)	3.21.03.000
LTX0620K	6channel 20A KNX dimmable box	580*350*135(wall)	3.21.04.000
LTX0810K	8channel 10A KNX dimmable box	505*350*135(wall)	3.21.07.000
LTX1210K	12chanel 10A KNX dimmable box	580*350*135(wall)	3.21.06.000

■ **Device - KNX DC 0/1-10V output**

L6293-08K   L6293-04CK

Type	Product Name	Size H*W*D	Order ID
L6293-08K	8channel 1-10V KNX dimmer	88*72*65	3.30.01.000
L6293-04CK	4channel 1-10V KNX dimmer (20A relay)	88*72*65	3.30.03.000

■ KNX gateway

Product features:

It provides BUS power supply, couplers, IP gateway, debugging interface for KNX intelligent control system, and various gateway products for KNX system and other product systems.

Specific parameters: KNX-DALI , KNX-DMX , KNX-WIZ , KNX-RS485 gateway
KNX timer, APP remote controller and other devices

■ System device（KNX BUS equipment）

LMK-640   L91KK-64   L91KP-ZH   L91KA-IP   LMK103WQT   L91KWB-9

L91K-DMX-1   L91KR-WG   L91KRM-LCG   L91KD-D128   L91RIP-D64

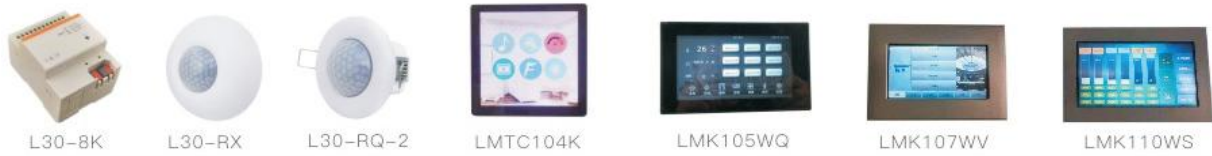| Type	Product Name	Size H*W*D	Order ID
LMK-640	KNX BUS power supply	88*72*65	3.40.01.000
L91KK-64	KNX BUS coupler	88*36*65	3.40.02.000
L91KP-ZH	KNX-IP rooter	88*72*65	3.40.04.000
L91KA-IP	KNX-APP IP remote controller	88*126*65	3.40.05.000
LMK103WQT	Astronomical clock timer (customized)	103*137*37	3.40.06.000
L91KWB-9	KNX Bluetooth WIZ gateway	50*50*25	3.30.02.000
L91K-DMX-1	KNX-DMX scene controller	150*230*40	3.30.04.000
L91KR-WG	KNX-485 gateway	88*36*65	3.40.05.000
L91KRM-LCG	KNX-485 gateway	50*50*15	3.40.10.000
L91KD-D128	KNX-DALI gateway	88*72*65	2.40.08.000
L91RIP-D64	KNX multiprotocol gateway	88*72*65	2.40.11.000

■KNX input equipment

Product features:

KNX BUS, database can set a variety of parameters, a variety of panel styles, material selection. The touch screen can be customized.

Specific parameters: ceiling, embedded sensor series, 4 inch, 5 inch, 7 inch, 12 inch touch screen series
KNX-RF passive panel series, G8 panel series, rounded corner panel series

■ Input device (KNX detector and touch screen)

L30-8K   L30-RX   L30-RQ-2   LMTC104K   LMK105WQ   LMK107WV   LMK110WS

Type	Product Name	Size H*W*D	Order ID
L30-8KI	KNX guide rail 8 channel	88*72*65	3.50.04.000
L30-RX	KNX ceiling detector	Φ100*30	3.50.02.000
L30-RQ-2	KNX embedded detector	Φ60*30	3.50.03.000
LMTC104K	4 inch color 86 bottom box	86*86*40	3.51.06.000
LMK105WQ	Color 5 inch touch screen	103*137*37	3.51.05.000
LMK107WV	Color 7 inch touch screen	136*196*39	3.51.02.000
LMK110WS	Color 10 inch touch screen	180*270*48	3.51.03.000

■ Input device (KNX-RF panel)
Product features: wireless passive/self-engergy/built-in magnet

AFZE-1008   LEK86-2   LEK86-4   LEK50-4FG   LEK50-4FR

Type	Product Name	Size H*W*D	Order ID
AFZE-1008	KNX RF wireless receiver	39*39*18	3.52.01.000
LEK86-2	KNX 1-2key passive panel	86*86*40	3.52.04.000
LEK86-4	KNX 2-4key passive panel	86*86*40	3.52.05.000

■ **Input Device(G8 series panel)**

Product features: can be set separately group, scene, single address/long press dimmable, short press switch/single button adjustable. It can be customized ABS/ glass/stainless steel/aluminum alloy material

LZ86G8K-2   LZ86G8K-4   LZ86G8K-6   LMTC104K+LZ86G8K-6

Type	Product Name	Size H*W*D	Order ID
LZ86G8K-2	1-2 key KNX panel	86*86*40	3.63.01.000
LZ86G8K-4	2-4 key KNX panel	86*86*40	3.63.02.000
LZ86G8K-6	3-6 key KNX panel	86*86*40	3.63.03.000
LMTC104K+LZ86G8K-6	color 86 touch panel+ 6 key panel	174*88*40	3.63.04.000

■ **Input Device KNX(Round corner series panel)**

Product features: can be set separately group, scene, single address/long press dimmable, short press switch/single button adjustable

LZ86YJK-4   LZ86YJK-8

Type	Product Name	Size H*W*D	Order ID
LZ86YJK-4	2-4 key KNX panel	86*86*40	3.64.01.000
LZ86YJK-8	3-8 key KNX panel	86*86*40	3.64.02.000

1.2 Area intelligent lighting control system -DALI

DALI- Digital addressable lighting control system

DALI protocol system consists of distributed intelligent modules. Each module has the ability of digital communication and control. It stores address and dimmable scene information. DALI BUS digital communication can carry out with each intelligent module, instruction and transmit state information, and lamp turn on-off, dimmable control, system setting and so on can be realized.

DALI panels, sensors, etc. are connected to two control lines through DALI interface, and each driver is addressed separately by dimmable controller. any lighting equipment on the control line can be operated independently by addressing.

DALI system overview

■ DALI switch driver

Product features:

DALI standard protocol allocates addresses and controls. Each circuit occupies an address. Magnetic holding relay is adopted. Power consumption only when switching state, power off state is maintained, manual dial lever operates open and close

Specific parameters: loop number: single, 4chanel, 8channel, 12channel, 24channel; Power: 10A, 20A cut-off current.

■ Device-DALI switch output

LR01AD   LR01CDL   LR04CD   LR04CDS

LR06CD   LR08CD   LR08CDS   LR12CD   LR02XD-2C

Type	Product Name	Size H*W*D	Order ID
LR01AD	1channel 10A DALI switch driver	48*35*50	2.10.01.000
LR01CDL	1channel20A DALI switch driver	88*36*65	2.10.02.000
LR04CD	4channel20A DALI switch driver	88*72*65	2.10.04.000
LR04CDS	4channel 20A DALI switch driver(with current test)	90*108*64	2.10.05.000
LR06CD	6channel 20A DALI switch driver	90*144*65	2.10.06.000
LR08CD	8channel 20A DALI switch driver	90*144*65	2.10.08.000
LR08CDS	8channel 20A DALI switch driver(with current test)	90*152*65	2.10.10.000
LR12CD	12channel 20A DALI switch driver	88*216*65	2.10.1 1.000
LR02XD-2C	2channel DALI curtain control module	40*155*30	2.10.14.000

■ Switch driver-DALI multiple channel module

LR24AD8A   L6293-04D8I

Type	Product Name	Size H*W*D	Order ID
LR24AD8A	24channel switch 8channel module	180*98*40	2.31.01.000
L6293-04D8I	4channel 0-10v output 4channel relay+8channel output	95*90*40	2.31.02.000

■ DALI dimmer

Product features:
Standard DALI protocol, 0-10V output, SCR and other dimming signals, built-in relay off load, level 4096. Perfect dimming curve, maximum and minimum brightness can be set.

Specific parameters: Number of loops: single, two, four, eight, 12; power: 0-10V output, 2A-20A SCR output dimmer.

■ Device - DALI AC 0-220V phase-adaptive dimmer - Guide rail

L6993-01WD   L6993-04WD   L6993-02YD   L6993-04YD   L6993-02AD   L6993-01CD

Type	Product Name	Size H*W*D	Order ID
L6993-01WD	1channel 2A DALI dimmer	45*122*40	2.20.01.000
L6993-04WD	4channel 2A DALI dimmer	88*126*65	2.20.02.000
L6993-02YD	2channel 5A DALI dimmer	88*126*65	2.20.03.000
L6993-04YD	4channel 5A DALI dimmer	88*216*65	2.20.05.000
L6993-02AD	2channel 10A DALI dimmer	88*216*65	2.20.08.000
L6993-01CD	1channel 20A DALI dimmer	88*216*65	2.20.11.000

■ Device - DALI AC 0-220V phase-adaptive dimmer - wall-mounted

LTX0410D   LTX0610D   LTX0810D   LTX1210D   LTX0620D

Type	Product Name	Size H*W*D	Order ID
LTX0410D	4channel 10A DALI dimmer box	250*350*135（wall）	2.21.02.000
LTX0610D	6channel 10A DALI dimmer box	330*350*135（wall）	2.21.04.000
LTX0810D	8channel 10A DALI dimmer box	505*350*135（wall）	2.21.07.000
LTX1210D	12channel 10A DALI dimmer box	580*350*135（wall）	2.21.06.000
LTX0620D	6channel 20A DALI dimmer box	580*350*135（wall）	2.21.05.000

■ Device - DALI DC 0/1-10V, dimming signal

L6293-01DP   L6293-04DP

Type	Product Name	Size H*W*D	Order ID
L6293-01DP	1channel 1-10V Switch DALI dimmer（AC）	45*140*28	2.30.02.000
L6293-04DP	4channel 1-10V switch DALI	88*126*65	2.30.04.000

■ DALI gateway

Product features:

We provide BUS power supply, protocol gateway, IP gateway, debugging interface, DALI system and other products for DALI intelligent control system.

Specific parameters: KNX-DALI, DALI-DMX, DALI-RS485 , DALI-Modbus, DALI-bluetooth，
DALI-EnOcean, DALI-WIZ, DALI-IP.

■ Device-DALI BUS device

LD-P1   LD-BC16-P4   LD-BC16-P4M   LD-BC100   LD-PC-USB   LD-PC-BL1   LD-DMX-1

L91ED-E32   L91KD-D128   L91IP-D128   L91RIP-D64   LMSZT-256

Type	Product Name	Size H*W*D	Order ID
LD-P1	DALI BUS(guide rail)	88*36*65	2.40.01.000
LD-BC16-P4	DALI-RS485 bi-gateway (16 address）	88*36*65	2.40.02.000
LD-BC16-P4M	DALI-MODBUS bi-gateway (16 address ）	88*36*65	2.40.02.000
LD-BC100	DALI-RS48 bi-gateway （100 address）	54*88*65	2.40.03.000
LD-PC-USB	DALI PC master control includes software	75*70*23	2.40.04.000
LD-PC-BL1	DALI Bluetooth debugger single address	80*55*30	2.40.05.000
LD-DMX-1	DALI-DMX scene controller	174*95*42	2.40.06.000
L91ED-E32	EnOcean - DALI gateway	54*88*65	2.40.07.000
L91KD-D128	KNX-DALI gateway	72*88*65	2.40.08.000
L91IP-D128	IP/2-DALI gateway	72*88*65	2.40.09.000
L91 RIP-D64	KNX Ruizido protocol gateway	72*88*65	2.40.11.000
LMSZT-256	DALI computer graphical control interface	130*130*8	2.40.10.000

DALI

■ DALI inputs device

Product features: DALI dry contact convert DALI BUS command/DC power supply or BUS power supply as option, DC1 2-24V power supply/dial switch group scenarios. DALI body detector/built-in illuminance sensor

■ Device-DALI sensor

Type	Product Name	Size H*W*D	Order ID
L31-D6I	DALI 6channel dry contact	50*50*12	2.50.06.000
L30-6D	DALI 6channel dry contact	40*30*15	2.50.01.000
L31-D8I	DALI 8channel dry contact	50*50*12	2.50.05.000
L31-D2I	detector DALI interface	50*50*12	2.50.02.000
L30-RX	DALI ceiling body detector	Φ100*30	2.50.03.000
L30-RQ-1	DALI embedded body	Φ80*30	2.50.04.000
L31-DSQ	Radar DALI embedded detector	Φ85*65	2.50.07.000
L31-DSX	Radar DALI ceiling detector	110*110*32	2.50.08.000

■ Device-DALI touch panel

Product features:

DALI BUS, use debugging software to configure the group, scene and other parameters, a variety of panel styles, material selection. The touch screen interface style can be customized.

Specific parameters: ceiling/embedded sensor series, 4 inch, 5 inch, 7 inch, 12 inch touch screen series. EnOcean passive panel series, G8 panel series, rounded corner panel series

Type	Product Name	Size H*W*D	Order ID
LMD104WQ	Color 4 inch touch screen	86*86*50	2.51.05.000
LMD107WV	Color 7 inch touch screen	136*196*39	2.51.02.000
LMD1 10WS	Color 10 inch touch screen	180*270*48	2.51.03.000
LMTC104D+LC86G8D	Touch screen+6key DALI panel	174*88*40	2.51.04.000

■ Device-Enocean panel

Product Features: wireless passive, self - energy/built-in magnet

Type	Product Name	Size H*W*D	Order ID
LE86-2	1-2key wireless passive panel	86*86*20	2.52.01.000
LE86-4	2-4key wireless passive panel	86*86*20	2.52.02.000
LE-2/3/4	N key wireless passive panel	N*86*86	2.52.03.000

■ Device-DALI G8 series

Product features: can be set group, scene, single address/long press dimmable, short press switch/single button/DC12-24V power supply. It can be customized ABS/ glass/stainless steel/aluminum alloy material.

Type	Product Name	Size H*W*D	Order ID
LZ86G8D-2	1-2key DALI panel	86*86*40	2.63.01.000
LZ86G8D-4	2-4key DALI panel	86*86*40	2.63.02.000
LZ86G8D-6	3-6key DALI panel	86*86*40	2.63.03.000

■ Device-DALI rounded corner series

Product features: can be set group, scene, single address/long press dimmable/short press switch/single button/DC12-24V power supply

| Type	Product Name	Size H*W*D	Order ID
LZ86YJD-4	2-4key DALI panel	86*86*40	2.64.01.000
LZ86YJD-8	4-8key DALI panel	86*86*40	2.64.02.000

2. Digital lighting control--Dimmer

2.1 High power dimmer, Dimmer amplifier

Leading edge dimmers generally use SCR as dimmable devices, with high adjustment accuracy, impact resistance, strong overload capacity,win the dominant position in the market. It is used in most of the LED phase-adaptive dimmable lamps. It connects 0-10V, DALI, KNX and other protocols.

Different lamp control manufacturers can access the LAMMIN dimmable power amplifier through their own 0-220V, 0-10 V, DALI, 485 protocol products, use high-power leading edge or trailing edge dimmable technology to achieve dimmable power amplification. The dimmable amplification is no need to replace the expensive leading edge dimmer, no need to re-write the program when the dimmer is damaged and replaced, only replace the trailing edge dimmer, general property electricians can maintain, reduce the cost, ensure the security of the dimmer system.

■ **Diagram of dimmable power amplifier**
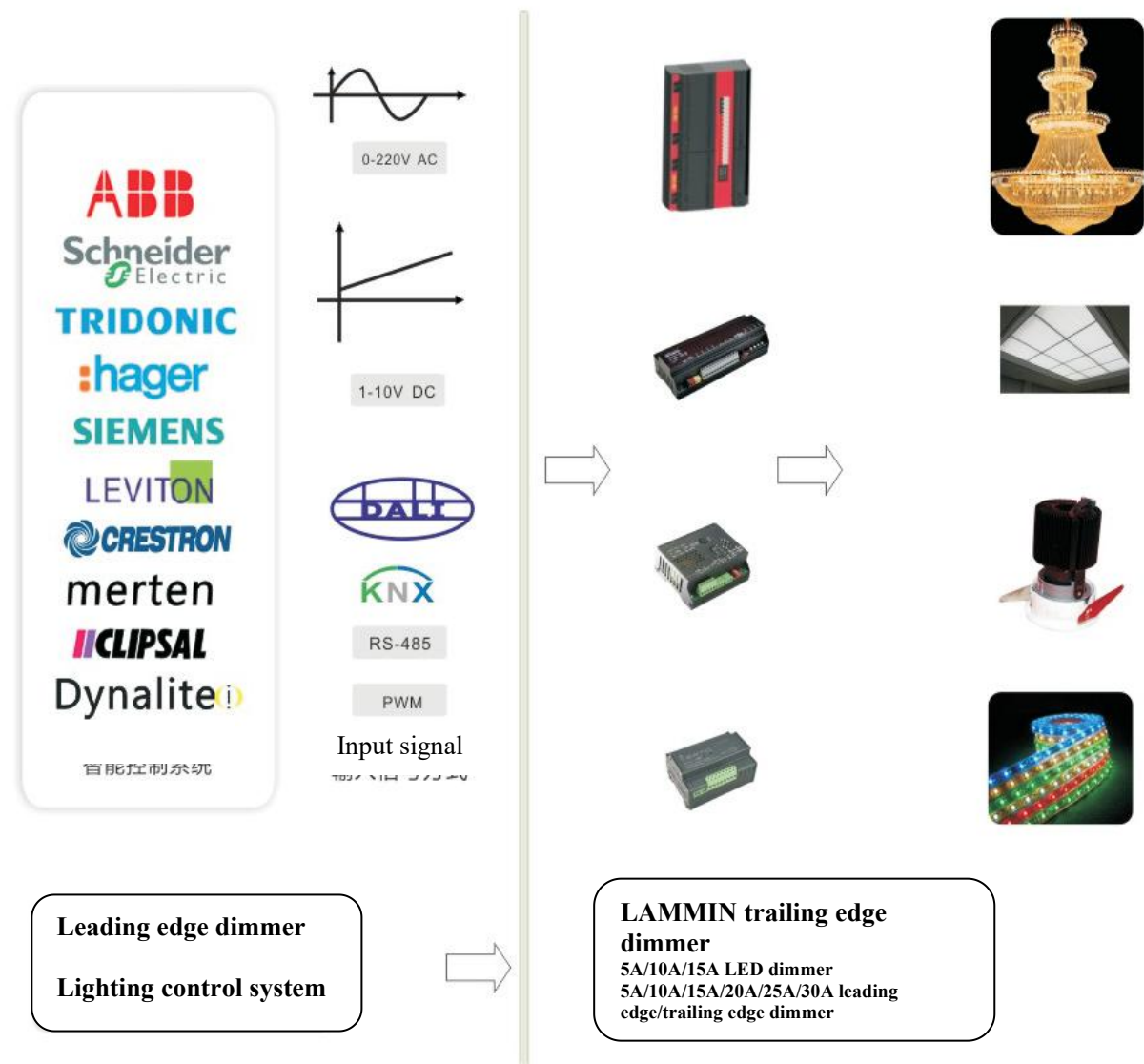
■ **Leading edge dimmer**

Product features:
Manual dimmable button/4096 level dimmable/metal shell heat dissipation/multiple temperature protection circuit/ relay completely power off/ non-flicke suppression module

Specific parameters:single, 2, 3, 4, 6, 8, 12 channel; dimmable current: 2A, 5A, 10A, 15A, 20A current

■ **2A(400W) AC phase-adaptive dimmer**

Type	Product Name	Size H*W*D	Order ID
L6993-01 WD	1channelDALI dimmer	45*120*40	2.20.01.000
L6993-01 WL	1channel1-10Vdimmer	45*120*40	1.01.01.000
L6993-04WL	4channel 1-1 0V dimmer	88*126*65	1.02.01.000
L6993-04WD	4channel DALI dimmer	88*126*65	2.20.02.000

■ **3A(600W)   AC phase-adaptive dimmer**

Type	Product Name	Size H*W*D	Order ID
L6793-06XK	6channel KNX dimmer	92*235*65	3.20.01.000

■ 5A(1000W) AC phase-adaptive dimmer

L6993-01YS L6993-02Y L6993-02YL L6993-02YD L6993-04YL L6993-04YD L6993-04YK

Type	Product Name	Size H*W*D	Order ID
L6993-01YS	1channel 1-10Vor 0-220V dimmer	92*106*50	1.05.01.000
L6993-02Y	2channel 0-220V dimmer	88*126*65	1.05.02.000
L6993-02YL	2channel 1-10V dimmer	88*126*65	1.05.03.000
L6993-02YD	2channel DALI dimmer	88*216*65	2.20.03.000
L6993-04YL	4channel 1-10Vdimmer	88*216*65	1.05.05.000
L6993-04YD	4channel DALI dimmer	88*216*65	2.20.05.000
L6993-04YK	4channel KNX dimmer	92*235*65	3.20.02.000

■ 10A(2000W) AC phase-adaptive dimmer

L6993-01A L6993-02A L6993-02AL L6993-02AD

Type	Product Name	Size H*W*D	Order ID
L6993-01A	1channel 0-220V dimmer	88*180*65	1.10.01.00
L6993-02A	2channel 0-220V dimmer	88*216*65	1.10.02.00
L6993-02AL	2channel 1-10V dimmer	88*216*65	1.10.03.00
L6993-02AD	2channel DALI dimmer	88*216*65	2.20.08.00

■ 15A(3000W) AC phase-adaptive dimmer

L6993-01B L6993-01BL
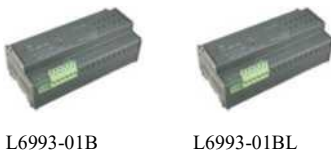
Type	Product Name	Size H*W*D	Order ID
L6993-01B	1channel 0-220V dimmer	88*180*65	1.15.01.000
L6993-01BL	1channel 1-10V dimmer	88*180*65	1.15.02.000

■ 20A(4000W) AC phase-adaptive dimmer

L6993-01C L6993-01CL L6993-01CD

Type	Product Name	Size H*W*D	Order ID
L6993-01C	1channel 0-220V dimmer	88*216*65	1.20.01.000
L6993-01CL	1channel 1-10V dimmer	88*216*65	1.20.02.000
L6993-01CD	1channel DALI dimmer	88*216*65	2.20.1 1.000

调光器

■ Customized wall-mounted high-power dimmer

Product features:

Wall-mounted, built-in air switch/manual pass-through switch/low-end dimmer no flicker/ relay completely power- off/multiple temperature protection/changeable channel card

LTX0410L/LTX0410D/LTX0410K LTX0610L/LTX0610D/LTX0610K LTX0810L/LTX0810D/LTX0810K

LTX1210L/LTX1210D/LTX1210K LTX0320L/LTX0320D LTX0620L/LTX0620D/LTX6210K

Type	Product Name	Size H*W*D	Order ID
LTX0410L/LTX0410D/LTX0410K	4channel 10A dimmer box	250*350*135（wall）	0-10V/DALI/KNX
LTX0610L/LTX0610D/LTX0610K	6channel 10A dimmer box	330*350*1 35（wall）	0-10V/DALI/KNX
LTX0810L/LTX0810D/LTX0810K	8channel 10A dimmer box	505*350*135（wall）	0-10V/DALI/KNX
LTX1210L/LTX1210D/LTX1210K	12channel 10A dimmer box	580*350*135（wall）	0-10V/DALI/KNX
LTX0320L/LTX0320D	3channel 20Adimmer box	330*350*135（wall）	0-10V/DALI
LTX0620L/LTX0620D/LTX6210K	6channel 20A dimmer box	580*350*1 35（wall）	0-10V/DALI/KNX

2.2 LED strip lamp with constant voltage digital dimmable power supply

Product features:

The stabilized voltage supply for LED strip lamp requires that the output voltage value is fixed and does not change with the length of lamp belt, input voltage and other external working conditions. Meanwhile, the maximum output current, working efficiency, output voltage stability , ripple coefficient, EMC compatibility, temperature efficiency, noise, and other parameters of the power supply have specific requirements.

According to the dimmable signal, SCR, 1-10V and DALI constant voltage dimmable power supply can be selected. For dual-color temperature, RGB color lamp belt, optional DALI dimmable power supply.

For hotels and apartments, you can choose the constant voltage power supply, which can achieve perfect dimmable effect without system.

■ **AC/DC,0-10V,DALI, Soft Start，different color temperature dimmable driver wiring diagram 3**
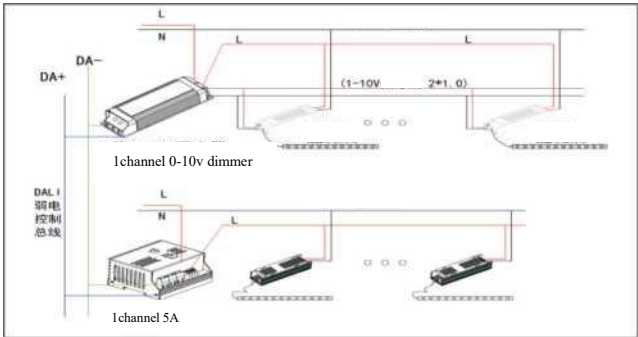

DALI DC color adjusting

Gently turn on-off switch
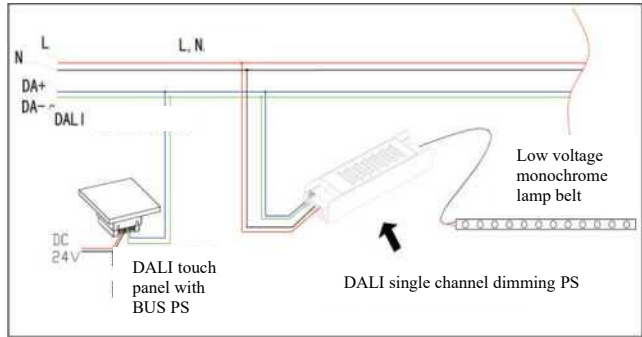
DALI constant voltage
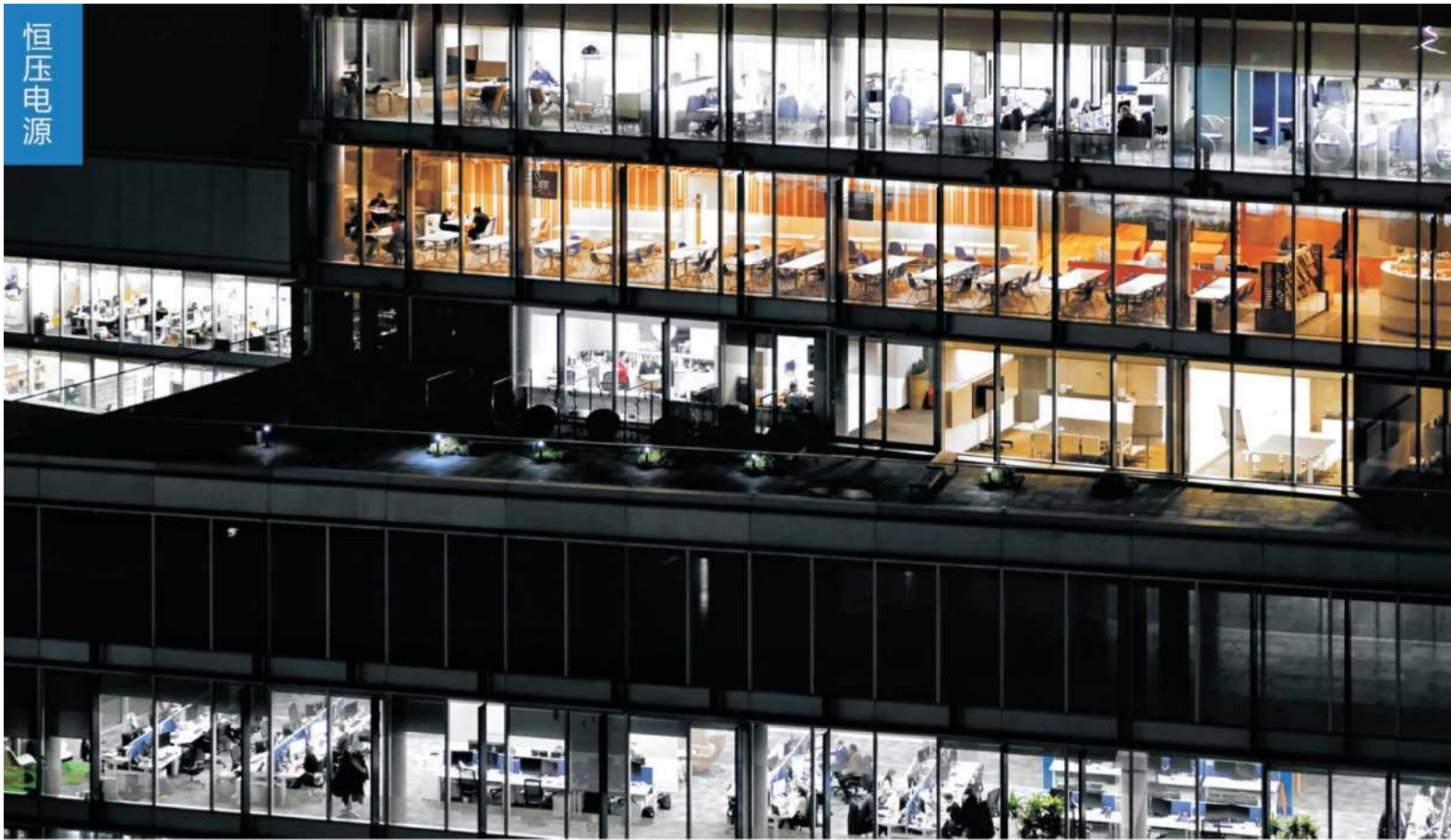monochromatic dimming
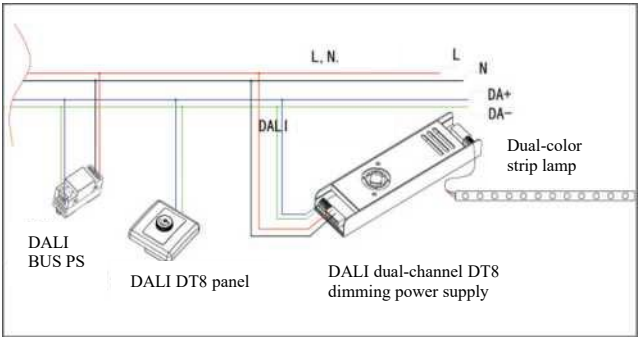
DALI constant voltage
color temperature adjusting
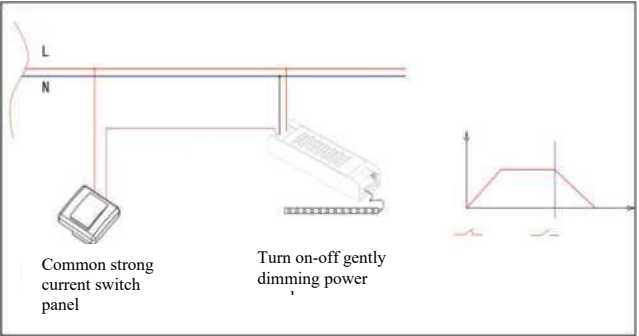
0-10v SCR dimmer
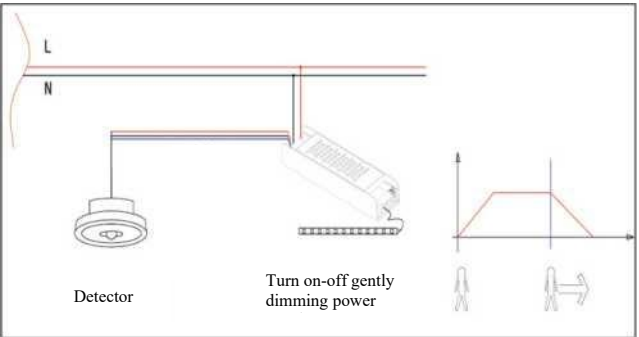
Gently turn on-off detector

■ DALI monochrome constant voltage power supply

Product features:

Input DALI control signal, output high frequency PWM signal, 4096 level dimmable, can be set the maximum and minimum brightness value, dimmable speed, etc.

Specific parameters： DALI signal 12V 24V voltage output, 40W, 100W, 150W, 200W, 300W power etc.

LYH-40-24D LYH-100-24D LYH-150-12/D LYH-150-24/D LYH-200-24/D LYH-300-24/D

Type	Product Name	Size H*W*D	Order ID
LYH-40-24D	DALI 40W constant voltage 24V PS	140*40*26	4.40.02.000
LYH-100-24D	DALI 100W constant voltage 24V PS	195*48*29	4.40.06.000
LYH-150-12/D	DALI 1 50W constant voltage 12V PS	258*49*29	4.40.07.000
LYH-150-24/D	DALI 150W constant voltage 24V PS	258*49*29	4.40.08.000
LYH-200-24/D	DALI 200W constant voltage 24V PS	245*63*27	4.40.10.000
LYH-300-24/D	DALI 300W constant voltage 24V PS	245*63*27	4.40.12.000

■ DALI multichannel constant voltage power supply

AC 220V Power supply/ DALI Dimmable signal Input/ constant voltage output /Dimmable power supply (lamp belt)/ Multi-channel

Product features:

DALI control signal input, multi-channel output, high frequency PWM signal, 4096 level DT8 dimmable, RGB dimmable, DALI master set color temperature, scene, etc.

Specific parameters: DALI signal 12V 24V voltage output, 100W, 150W, 200W, 300W etc

LYH-100-24D2 LYH-150-12D2 LYH-150-24D2 LYH-200-24D2 LYH-300-24D2

Type	Product Name	Size H*W*D	Order ID
LYH-100-24D2	DALI 100W constant voltage 24V DT8 dimmer	195*48*29	4.50.06.000
LYH-150-12D2	DALI 150W constant voltage 12V DT8 dimmer	258*49*29	4.50.07.000
LYH-150-24D2	DALI 150W constant voltage 24V DT8 dimmer	258*49*29	4.50.08.000
LYH-200-24D2	DALI 200W constant voltage 24V DT8 dimmer	245*63*27	4.50.10.000
LYH-300-24D2	DALI 300W constant voltage 24V DT8 dimmer	245*63*27	4.50.12.000

■ DC DALI Input constant voltage Output Dimmable power supply (lamp belt)

L6893-01YD L6893-01AD L6893-01BD L6893-03YD L6893-03AD

Type	Product Name	Size H*W*D	Order ID
L6893-01YD	DALI 1channel 5A constant voltage DC dimmer	155*40*30	4.60.01.000
L6893-01AD	DALI 1channel 10A constant voltage DC dimmer	110*45*29	4.60.02.000
L6893-01BD	DALI 1channel 15A constant voltage DC dimmer	140*45*29	4.60.03.000
L6893-03YD	DALI 3channel 5A constant voltage DC dimmer	155*40*30	4.60.04.000
L6893-03AD	DALI 3channel 10Aconstant voltage DC dimmer	140*45*29	4.60.05.000

■ 0—10VConstant voltage dimmable power supply

Product features:

Input 0-1 0V control signal, output multi-channel, high frequency PWM signal, 1024 level dimmable. 0-10 V

signal terminal is suitable for all varies of 0-10 V control system.

Specific parameters: 0/1-10V signal 12V 24V voltage output, 100W, 150W, 200W, 300W power

■ AC220V power supply /1-10Vdimmable signal input/constant voltage output dimmable power supply

LYH-40-24L   LYH-100-24L   LYH-150-12L   LYH-150-24L   LYH-200-24L   LYH-300-24L

Type	Product Name	Size H*W*D	Order ID
LYH-40-24L	1-10V 40W/24V/dimmable PS	140*40*26	4.20.01.000
LYH-100-24L	1-10V 1 00W/24V/dimmable PS	195*48*29	4.20.02.000
LYH-150-12L	1-10V 1 50W/12V/dimmable PS	258*49*29	4.20.04.000
LYH-150-24L	1-10V 1 50W/24V/dimmable PS	258*49*29	4.20.05.000
LYH-200-24L	1-10V 200W/24V/dimmable PS	245*63*27	4.20.10.000
LYH-300-24L	1-10V 300W/24V/dimmable PS	245*63*27	4.20.12.000

■ DC power supply /1-10V dimmable signal input/constant voltage output dimmable power supply

L6893-01YL   L6893-01AL   L6893-03AL

Type	Product Name	Size H*W*D	Order ID
L6893-01YL	1-10V DC 5A lamp belt dimmer	155*40*30	4.30.01.000
L6893-01AL	1-10V DC 10A lamp belt dimmer	110*45*29	4.30.02.000
L6893-03AL	1-10V DC 3channel RGB lamp belt dimmer	140*45*29	4.30.03.000

■ SCR signal/gently turn on-off /constant voltage power supply

Product features:

Receive SCR dimmable signal, output high frequency PWM dimmable, 1024 level, perfect dimmable curve, no flicker. Gently turn on-off realizes the slow lighting and closing function of the lamp belt through an ordinary strong electricity switch. Perfect dimmable experience without control system.

Specific parameters: SCR signal; 12V 24V voltage output; 80W.100W.150W, 200W variety of power

■ AC220V power supply /SCR dimmable signal input/constant voltage output dimmable power supply


LYH-80-12   LYH-100-24   LYH-150-24   LYH-200-24

Type	Product Name	Size H*W*D	Order ID
LYH-80-12	Phase-adaptive constant voltage PS 80W/12V	188*46*35	4.10.01.000
LYH-100-24	Phase-adaptive constant voltage PS 100W/24V	195*49*29	4.10.02.000
LYH-150-24	Phase-adaptive constant voltage PS 150W/24V	258*49*29	4.10.03.000
LYH-200-24	Phase-adaptive constant voltage PS 200W/24V	288*49*29	4.10.04.000

■ Switch gently turn on-off constant voltage power supply

LYH-150-24S   L6293-02MS

Type	Product Name	Size H*W*D	Order ID
LYH-150-24S	150W/24V/dimmable PS	245*63*27	4.70.01.000
L6293-02MS	2channel switch 1-10Vdimmer	260*48*30	4.70.08.000
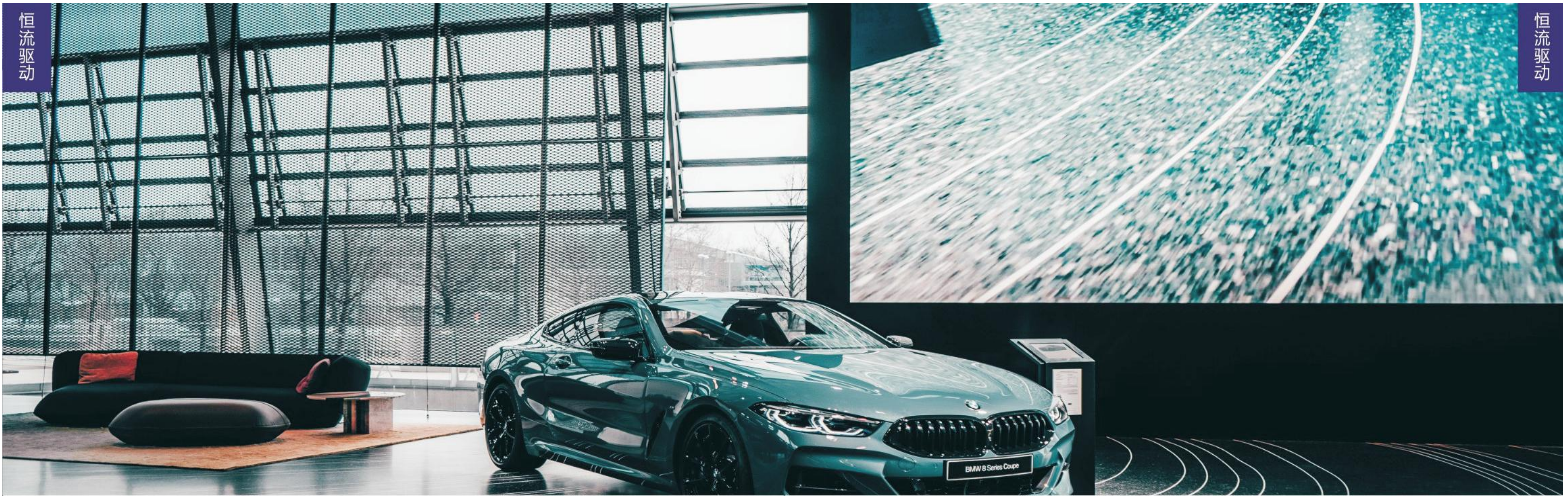
■ LED down lamp digital constant current dimmable driver
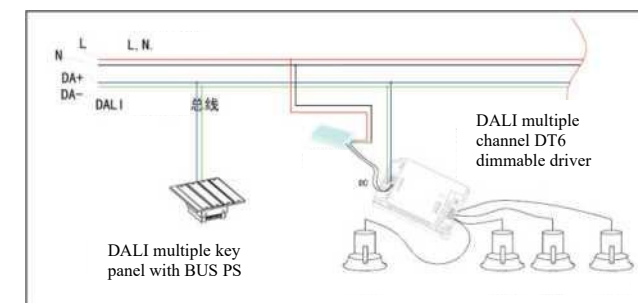
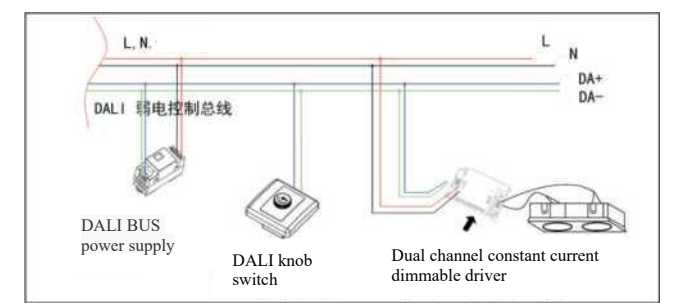### Constant current driver

Product features:

LED down lamp light source is required the output current is stable, does not change with the lamp temperature, input voltage and other external working conditions. In order to ensure the lamp life and efficiency, at the same time, the maximum output current of power supply, work efficiency, ripple coefficient, EMC compatibility, temperature efficiency, noise, and other parameters have specific requirements.

According to the dimmable signal, the SCR, 1-10V and DALI power supply can be selected. For dual-color temperature and lamp, DALI dimmable power supply can be selected.

For hotels and apartments, you can choose gently turn on-off constant current driver, which can realize perfect dimmable experience without control system.
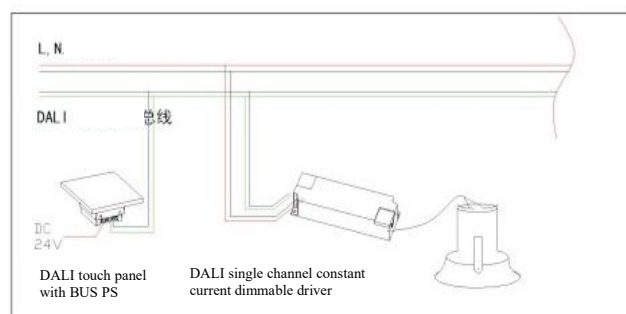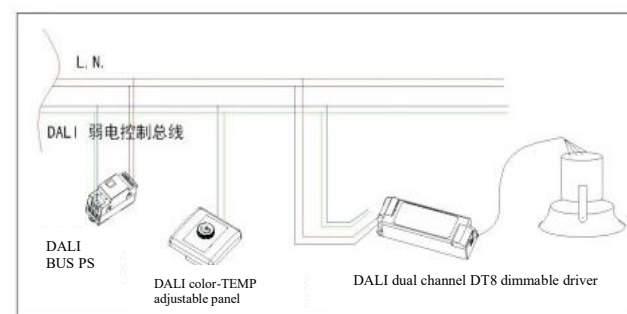
DALI multiple channel dimmer (DC)

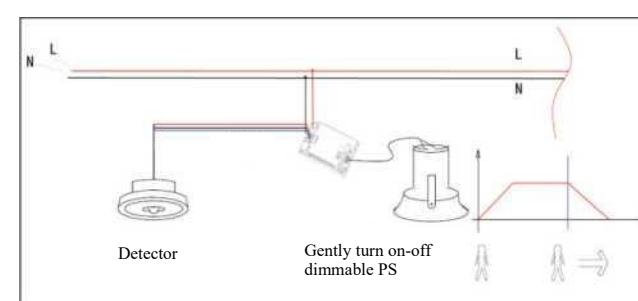DALI single/dual address constant current two channel dimmer
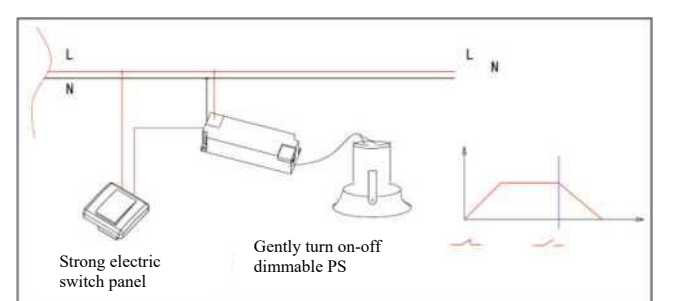
■ System diagram

DALI constant current dimmer

DALI constant current DT8 dimmable driver

Gently turn on-off switch

Gently turn on-off detector

■ DALI monochrome constant current dimmable driver

Product features:

Input DALI control signal, output dimming constant current, 4096 level dimming, DALI system set the maximum and minimum brightness value, dimming speed, etc.

Specific parameters: DALI signal 12W, 15W, 30W, 40W, 50W and other powers.

■ **AC 220V power supply /DALI dimming signal input/constant current output dimmable driver/down light single channel**

LM-DEQ6W1 5/LM-DEQ1 5W35   LM-DEQ1 8W45/LM-DEQ25W60   LM-DEQ30W75/LM-DEQ50W1 20

LM-DMQ31W25   LM-DMQ12W30   LM-DMQ30W75   LM-DQ30W75   LM-DQ45W110

Type	Product Name	Size H*W*D	Order ID
LM-DEQ6W15 LM-DEQ15W35	DALI 6W-15W dimmable driver	42*90*24	5.30.01.000
LM-DEQ18W45 LM-DEQ25W60	DALI 18W-25W dimmable driver	42*100*26	5.30.02.000
LM-DEQ30W75 LM-DEQ50W120	DALI 30W-45W dimmable driver	46*140*30	5.30.03.000
LM-DMQ31W25	DALI 30W dimmable driver	60*160*37	5.30.04.000
LM-DMQ12W30	DALI 6W-10W-12W dimmable driver	42*120*25	5.30.05.000
LM-DMQ30W75	DALI 15W-20W-30W dimmable driver	45*140*29	45*140*29
LM-DQ30W75	DALI 30W-45W dimmable driver	65*102*30	65*102*30
LM-DQ45W110	DALI 30W-45W dimmable driver	78*122*30	5.30.12.000

■ Dual color constant current driver

Product features: Input DALI control signal, output multi-channel constant current dimming, 4096 level DT8 dimming , DALI system set the color temperature, scene, etc.

Specific parameters: DC output,DALI dual-channel, 3-channel, 4-channel, AC input, 15W, 30W, 50W dual-color.

■ **AC 220V power supply /DALI dimming signal input/constant current output dimmable driver/down light multiple channel**

LM-DQ20W50D2 LM-DMQ12W30D2   LM-DMQ30W70D2

Type	Product Name	Size H*W*D	Order ID
LM-DQ20W50D2	2*20W	78*122*30	5.50.01.000
LM-DMQ12W30D2	6W-10W-12W	44*133*27	5.50.02.000
LM-DMQ30W70D2	15W-20W-30W	44*165*27	5.50.03.000

■ **DC power supply/DALI dimming signal input/multi-channel constant current output dimmable driver**

L6893-02D/***   L6893-03D/***   L6893-04D/***

Type	Product Name	Size	Order ID
L6893-02D/***	2channel DALI constant curent dimmable driver	65*102*30	5.40.02.000
L6893-03D/***	3channel DALI constant curent dimmable driver	78*122*30	5.40.03.000
L6893-04D/***	4channel DALI constant curent dimmable driver	78*122*30	5.40.04.000

■ **0—10V constant current drive**

Product features:

Input 0-10V control signal, output dimming constant current signal, 1024 level dimming , 0-10V signal is suitable for all various of 0-10V control system.

Specific parameters: 0/1-10V 15W, 18W, 40W, 50W, 31W (high voltage)

■ **AC220V power supply/1-10V dimming signal input/constant current output dimmable driver**

LM-FEQ6W15/LM-FEQ15W35   LM-FEQ18W45/LM-FEQ25W60   LM-FEQ35W85/LM-FEQ45W110

LM-FEQ50W120   LM-FMQ12W30   LM-FMQ30W75   LM-FMQ31W25   LM-FQ45W110

Type	Product Name	Size H*W*D	Order ID
LM-FEQ6W15 LM-FEQ15W35	1-10V 6W-15W dimmable driver	42*90*24	5.20.01.000
LM-FEQ18W45 LM-FEQ25W60	1-10V 18W-25W dimmable driver	42*100*26	5.20.09.000
LM-FEQ35W85 LM-FEQ45W1 10	1-10V 35W-45W dimmable driver	42*120*29	5.20.14.000
LM-FEQ50W1 20	1-10V 50W dimmable driver	45*140*29	5.20.19.000
LM-FMQ1 2W30	1-10V 6W-10W-12W dimmable driver	42*120*25	5.20.20.000
LM-FMQ30W75	1-10V 15W-20W-30W dimmable	45*140*29	5.20.21.000
LM-FMQ31 W25	1-10V 30W dimmable driver	60*160*37	5.20.1 1.000

■ **SCR signal/gently turn on-off/constant current driver**

Product features:

Receive SCR dimming signal, output high frequency PWM dimming signal, 1024 level, perfect dimming curve, no flicker. Gently turn on-off through a common switch to realize the function of slow light down, slow off. Perfect dimming experience without control system.

Specific parameters: SCR signal 8W, 12W, 24W, 30W, 50W and other powers

■ **AC 220V power supply/SCR dimming signal input/constant current output dimmable driver**


LM-TEP6W1 5/LM-TEP1 2W30   LM-TEP1 5W35/LM-TEP24W60   LM-TEQ25W60/LM-TEQ40W1 00

LM-TEQ50W120   LM-TMQ12W30   LM-TMQ15W35   LM-TMQ25W60   LM-TMQ35W85

Type	Product Name	Size H*W*D	Order ID
LM-TEP6W15 LM-TEP1 2W30	Phase-adaptive CC driver 6W-12W	32*88*21	5.10.01.000
LM-TEP15W35 LM-TEP24W60	Phase-adaptive CC driver 15W-24W	45*115*26	5.10.09.000
LM-TEQ25W60 LM-TEQ40W100	Phase-adaptive CC driver 25W-40W	45*140*26	5.10.15.000
LM-TEQ50W120	Phase-adaptive CC driver 50W	45*140*26	5.10.20.000
LM-TMQ12W30	Phase-adaptive CC driver 6-12W	42*90*24	5.10.21.000
LM-TMQ15W35	Phase-adaptive CC driver 15W	42*90*24	5.10.22.000
LM-TMQ25W60	Phase-adaptive CC driver 15-25W	40*110*25	5.10.23.000
LM-TMQ35W85	Phase-adaptive CC driver 20-35W	40*130*25	5.10.24.000

■ **AC power supply/switch slow turn on-off/gently turn on-off constant current driver**

LM-SMQ12W30   LM-SMQ22W52   L6293-02MS

Type	Product Name	Size H*W*D	Order ID
LM-SMQ12W30	Gently Turn on-off 6W-10W-12W	42*120*25	5.60.01.000
LM-SMQ22W52	Gently Turn on-off 7W-20W	65*102*30	5.60.03.000
L6293-02MS	Dual channel switch1 -10V dimmer	260*48*30	4.70.08.000
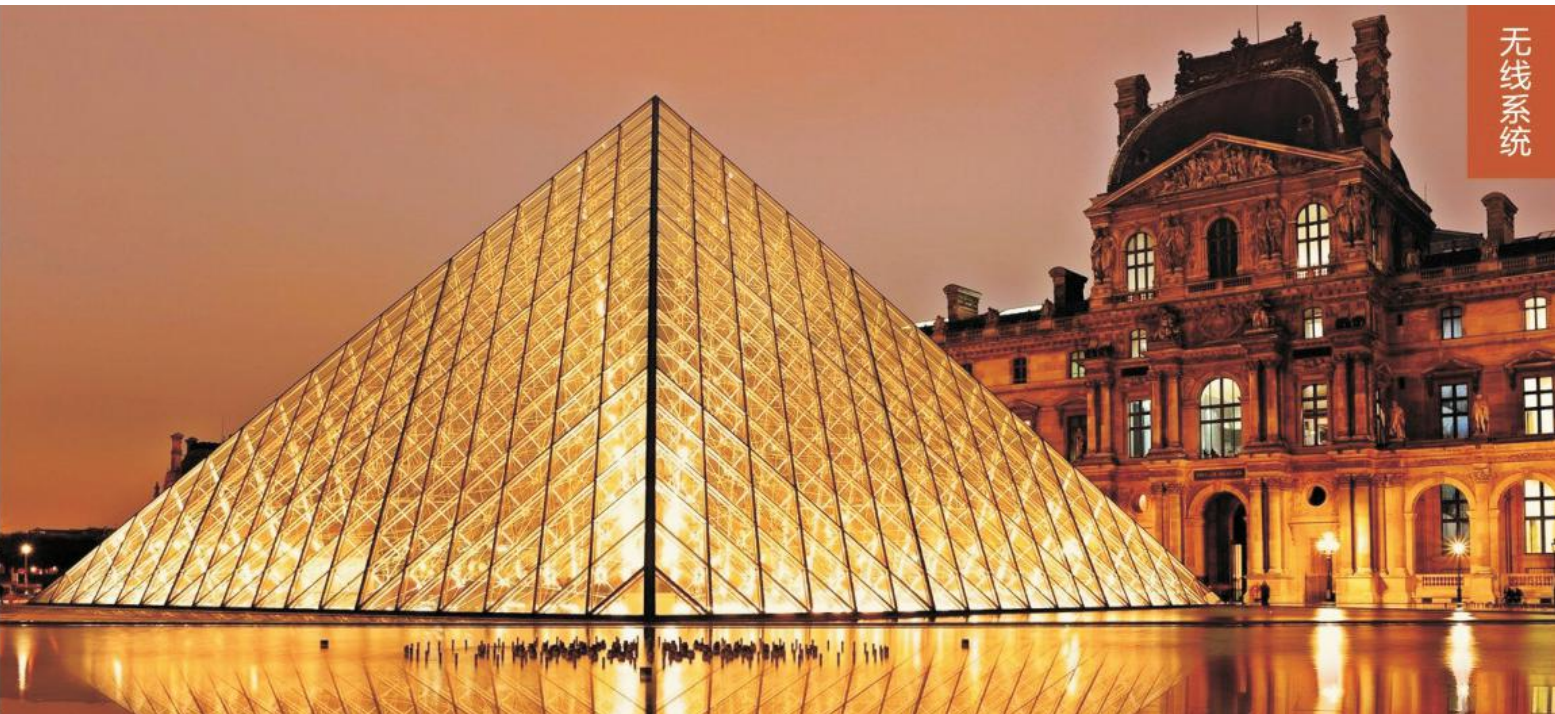
3. Wireless protocol lighting control products

Intelligent light wireless communication protocols include wifi, Bluetooth, RF 433, ZigBee, etc.

WiFi Protocol   IEEE 802.1 1 b/g/n/ac

WiFi adopts 2.4/5G frequency band and is directly connected to the Internet. It is mainly used for high-speed data transmission. The power consumption of WiFi module is relatively high, and it is easy to be blocked when there are many devices.

Bluetooth Protocol   IEEE 802.15.1

BLE module, data transparent transmission, support Bluetooth protocol 4.0 or above, can maintain the same communication range while reducing power consumption and cost, strong compatibility, small size and high integration. It is used for intelligent products which interconnect with mobile phones. The latest BLE mesh can support group network and expand the number of nodes.

RF 433   RF433

The significant advantage of 433MHz is the strong penetration of wireless signals and broadcasting farther. However, the disadvantage is that the data transfer rate is only 9600bps, so 433Mhz technology is suitable for low volume data transfer. The reliability and stability of it are inferior to Zigbee technology. 433MHZ system security confidentiality is weak, easy to be attacked, be deciphered.

Zigbee Protocol   EEE 802.15.4

ZigBee has advantages of short transmission distance, low power consumption, low cost, low data rate, Ad-hoc networking and simple protocol. Protocols designed for Mesh networks are used in home automation, such as switches, sensors, lights, and security. While earlier standards were inconsistent, the latest Zigbee 3.0 offers significant improvements in interoperability and compatibilities

3.1 Passive and self-engery EnOcean Product

Wireless passive communication technology with ultra-low power consumption for collecting energy

Enocean Alliance is an international organization based on EnOcean technology, whose product modules feature high quality wireless communication, energy collection and conversion, and ultra-low power consumption. Its communication protocol is very simple and adopts communication mechanism without handshaking. Compared with other wireless communication technologies such as ZigBee, it has lower power consumption and higher efficiency. EnOcean can colletct amounts of energy from nature, making them battery-free and maintenance-free.

■ **EnOcean convert DALI、485 gateway**

Product features:

Enocean unidirectional conversion/output RS485/DALI signals at the same time/single key can send multiple commands /DC 12-30V power supply

L91ED-E32

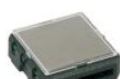| Type	Product Name	Size H*W*D	Order ID
L91ED-E32	EnOcean convert DALI/485 gateway	54*88*65	2.40.07.000

■ **EnOcean device**

| 1-2key panel 2-4 key panel | Wireless door magnetic | Light TEMP and humidity sensor | Light infrared sensor | Waterproof 2-4key panel |

3.2 wifi/Bluetooth control products

Intelligent wireless lighting control system based on wifi/ Bluetooth

WIZ system profile

WIZ is an open Internet of things lighting platform for all lighting manufacturers. It helps users realize intelligent connected lighting. WIZ is directly connected to Wi-Fi and it can be easily controlled by WiZAPP. In addition, it can also be connected to smart genie and home assistant, so as to achieve speech control. The whole house is fully equipped with lighting and controlled by WIZ to meet multiple daily needs. From white light to warm yellow light, Philips WIZ offers a wealth of intelligent "light recipes" for everyday life. Just create a schedule on WiZAPP and choose the desired lighting mode, lighting can automatically switch on time to make home life in an orderly, efficient and comfortable
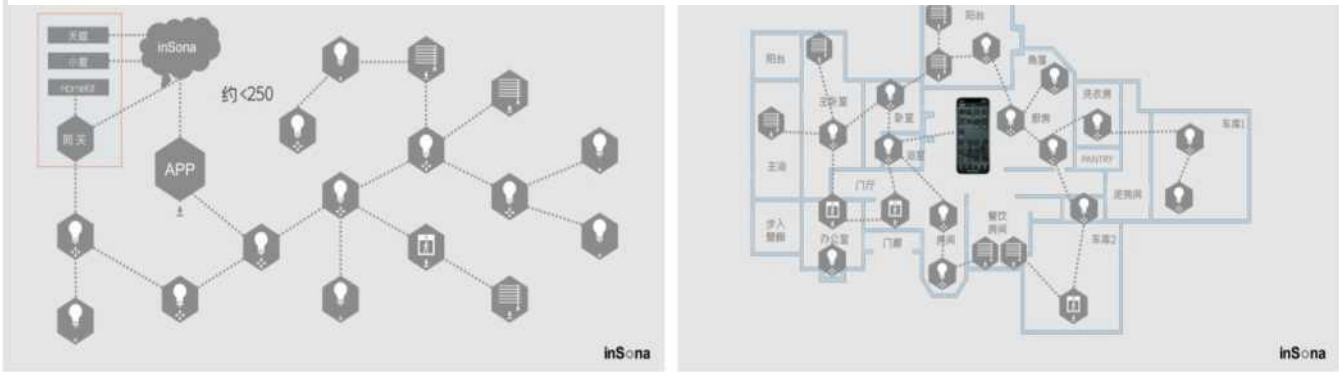

■ WIZ protocol system device

Type	Product Name	Size H*W*D	Order ID
L91 KWB-9	KNX-WIZ conventer	50*50*25	3.30.02.000
L6893-02BWB	WIZ DC CV 2channel dimmer	155*46*20	6.20.01.000
L6893-05BWB	WIZ DC CV 5 channel dimmer	155*46*20	6.20.02.000
LYH-200-24WB5	WIZ 200W AC 5 channel 24V PS	50*307*30	4.71.02.000
LM-40WB-9D	WIZ 9key dry contact module	50*50*1 2	2.50.05.000
L86QB-8WB	WIZ 8key DC panel	86*86*40	6.20.03.000
L86QB-8WBPN	WIZ 8key Zero fire PS panel	86*86*40	6.20.04.000
L86QB-8WBPL	WIZ 8key single fire PS panel	86*86*40	6.20.05.000
LR01 AWB1	WIZ switch driver（AC 1channel 10A）	48*35*50	6.20.06.000
LM-WBQ30W75D2	WIZ dual CC drive30W	165*44*27	5.70.01.000

3.3 Bluetooth inteligent wireless lighting system

Due to the popularization of Bluetooth, the smart home system controlled by Bluetooth has inherent advantages over other technologies, and it has low power consumption, fast transmission, long distance and other features. With the further development of wireless Bluetooth technology, continuous expansion of product scale, increasingly mature technology and price decline, Bluetooth technology is gradually applied to the industrial field and family. Wireless Bluetooth can be used flexibly in smart home information network because of its particularity and advantages.


■ WIZ protocol product

Type	Product Name	Size H*W*D	Order ID
LYH-200-24B5	BT 200W 2channel 24V dimmer	63*245*27	6.30.01.000

# 4. Digital control system application

■ Smart home system

LAMMIN smart home system integrates wired and wireless, which is more flexible than wired and more stable than wireless. LAMMIN smart home system realizes seamless linkage between light curtain, air conditioner, doors and windows, and security in multiple scenarios. It also combines 36 dynamic light formulas of Philips WIZ and rhythmic lighting technology, making your life more healthy and colorful.
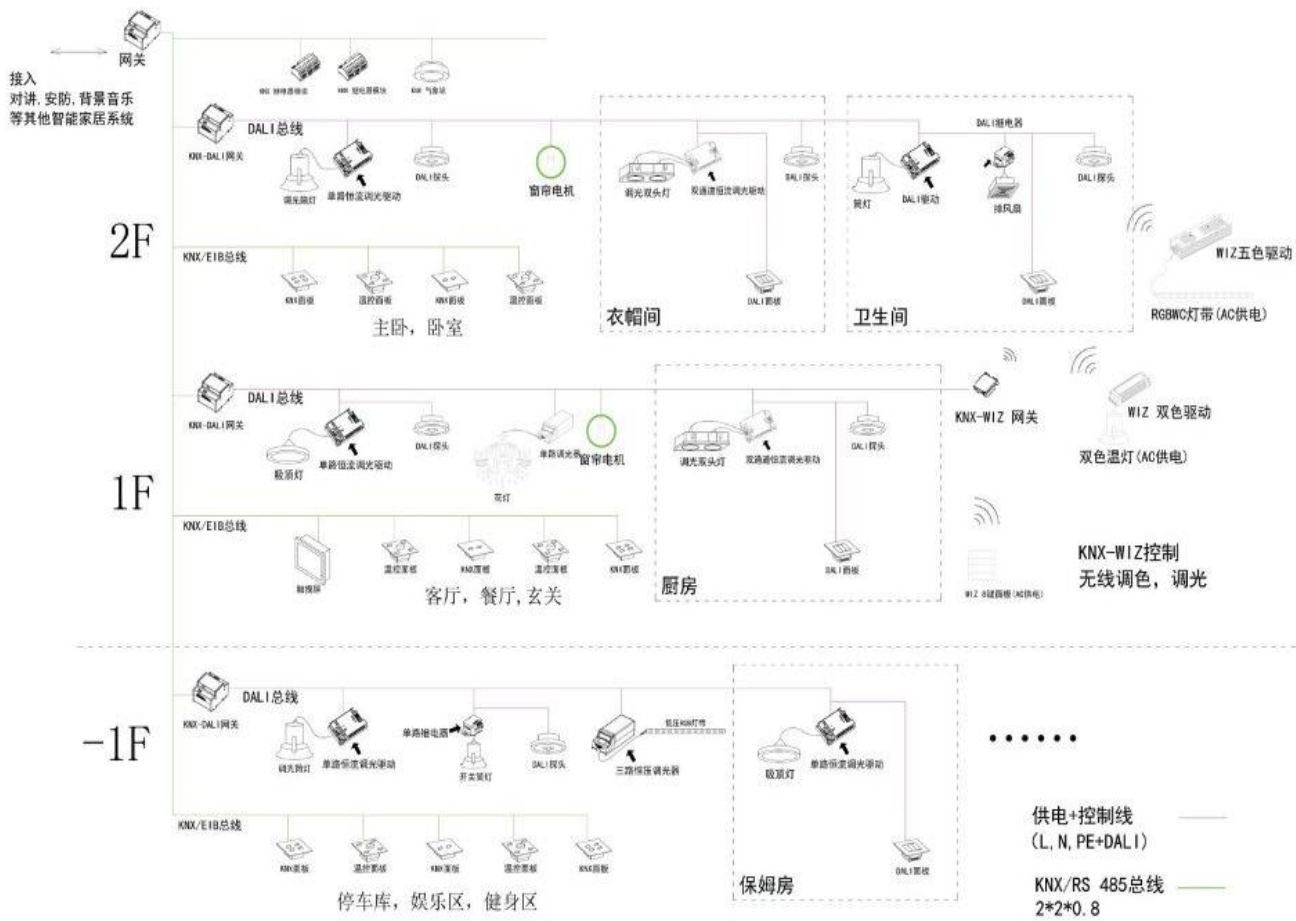
■ Hotel room lighting project

Traditional hotel guest room uses the smallest loop system control unit, which needs to lead to the power distribution box separately, so each lighting circuit will have dozens of lines into distribution box. The distribution box size is larger and the cost of wire materials and components of labor cost is very high. Because the traditional RCU integrated control is on a circuit board, any device hardware will result in the failure of the overall control function.

LAMMN intelligent control system uses a smaller distribution box, each light of lamps and lanterns having its own address, tree structure cabling layout may apply. and only a few lines are needed, the lighting designer can control brightness of any lamps and lanterns, multipoint control panel, one key to realize slowly turn on-off, The construction is simple and fast, greatly save the cost of materials and labor costs, when renovation and decoration, no matter how the designer to change the room layout, increase the light circuit, the original strong and weak electrical wiring need not change.
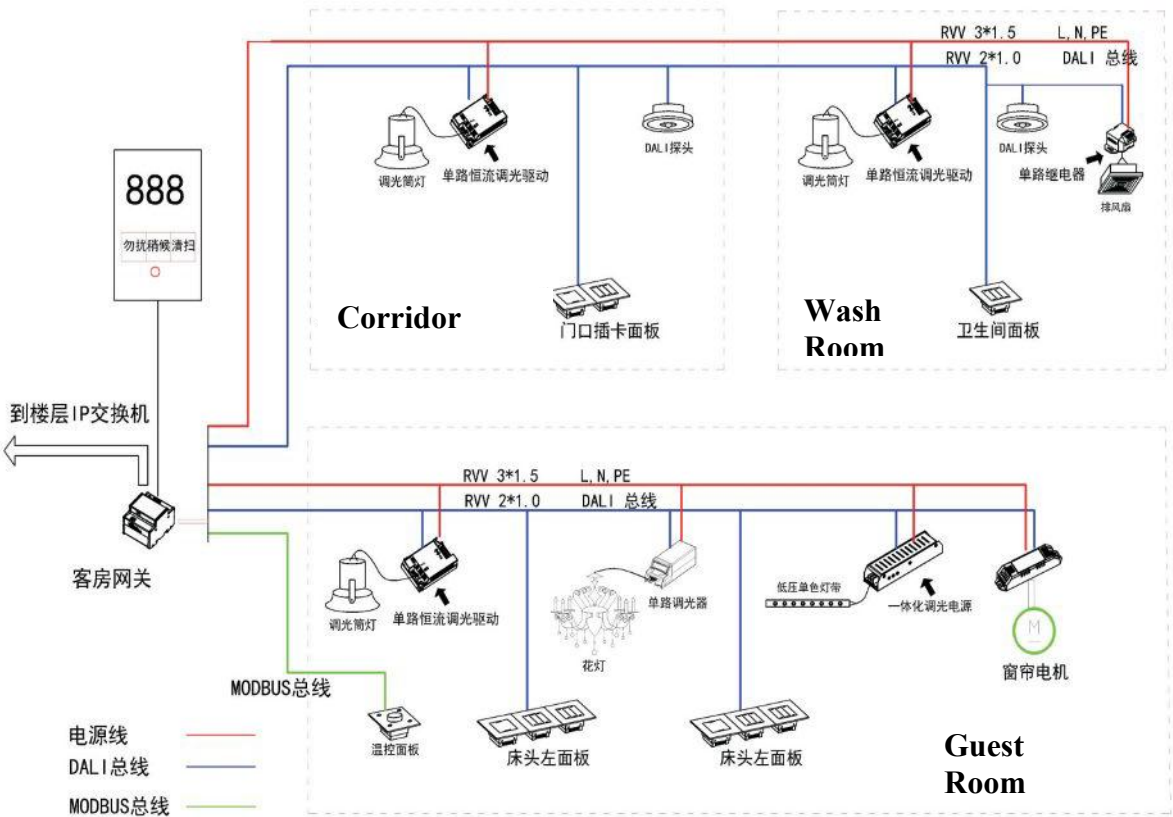
**Guest room DALI System diagram**

■The Museum lighting project

LAMMIN intelligent lighting system provides flexible wiring mode. Wiring structure can greatly reduce the wiring cost of large area exhibition hall, and can control the brightness and color temperature of single lamp flexibly. Mobile phone or iPad can be used to control each lamp or scene, debugging free design, so that ordinary electricians can easily configure the group, set the switch to change the scene, digital lamp drive so that each lamp can accurately control the light and color, to meet the designers, the continuous pursuit of perfect lighting effect.
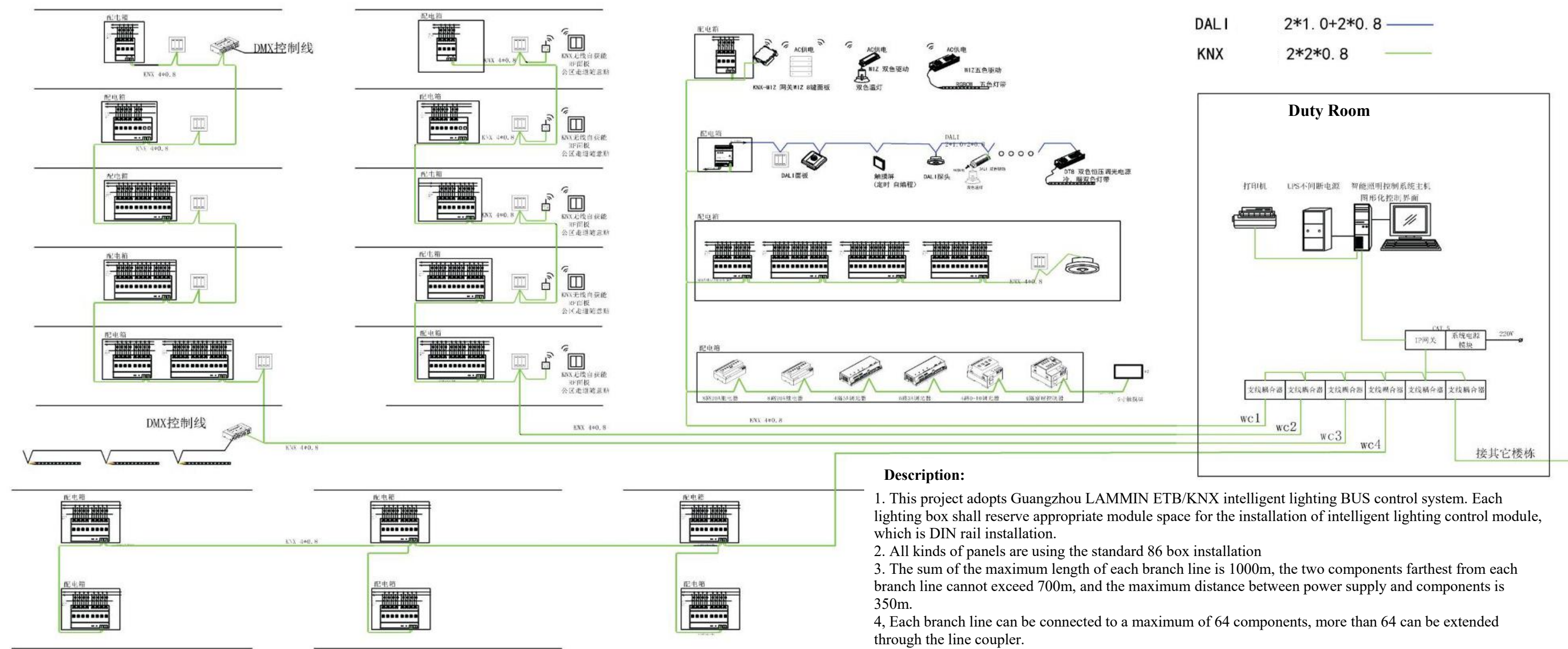

Touch panel

Enocean detector

Enocean panel
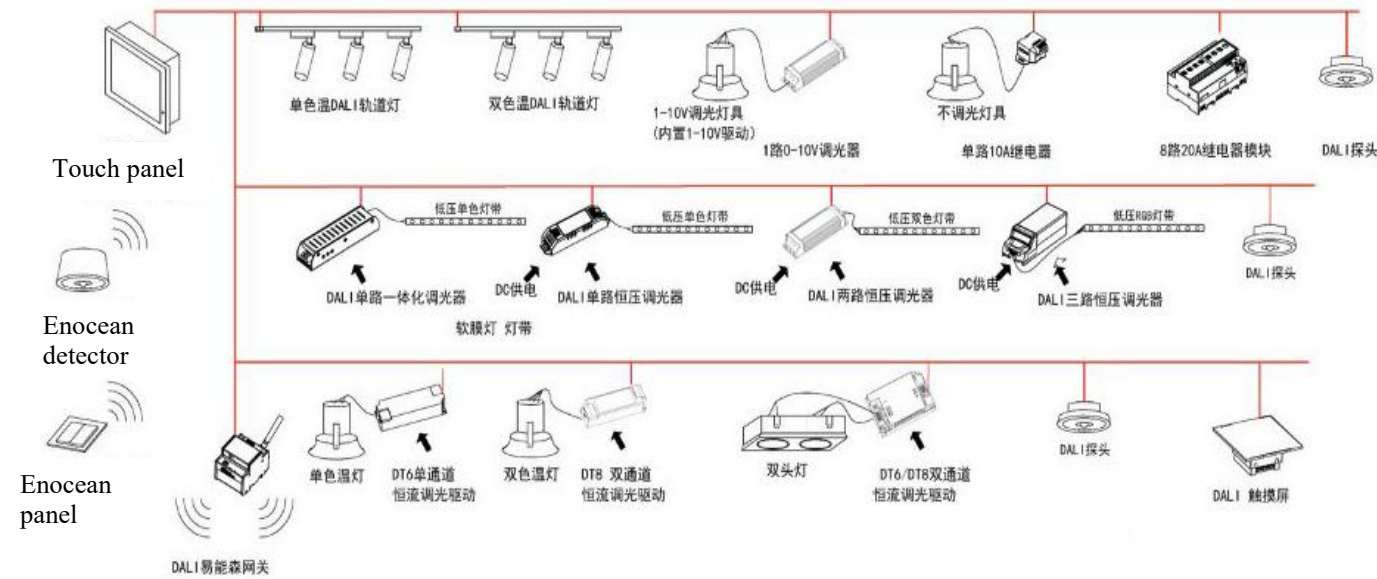
■ Intelligent education lighting project

• BUS intelligent lighting solutions that meet international standards

• Brightness constant illumination control, arbitrary topology wiring, multi-point lighting control in classrooms doors,

• Platform/central control system control, class, projection, lunch break and other lighting scene changes.

• Constant illumination control function to reduce the impact of brightness changes when study.

• Different time, color temperature change control, provide a more comfortable environment

• After school time, human body induction control, energy saving reliable.

• Guard control centralized control of all classroom lighting in the building for easy management.

• Wall panel is weak voltage, student safety is guaranteed.

Classroom1

Classroom2
…
….
Classroom N

Centralized control
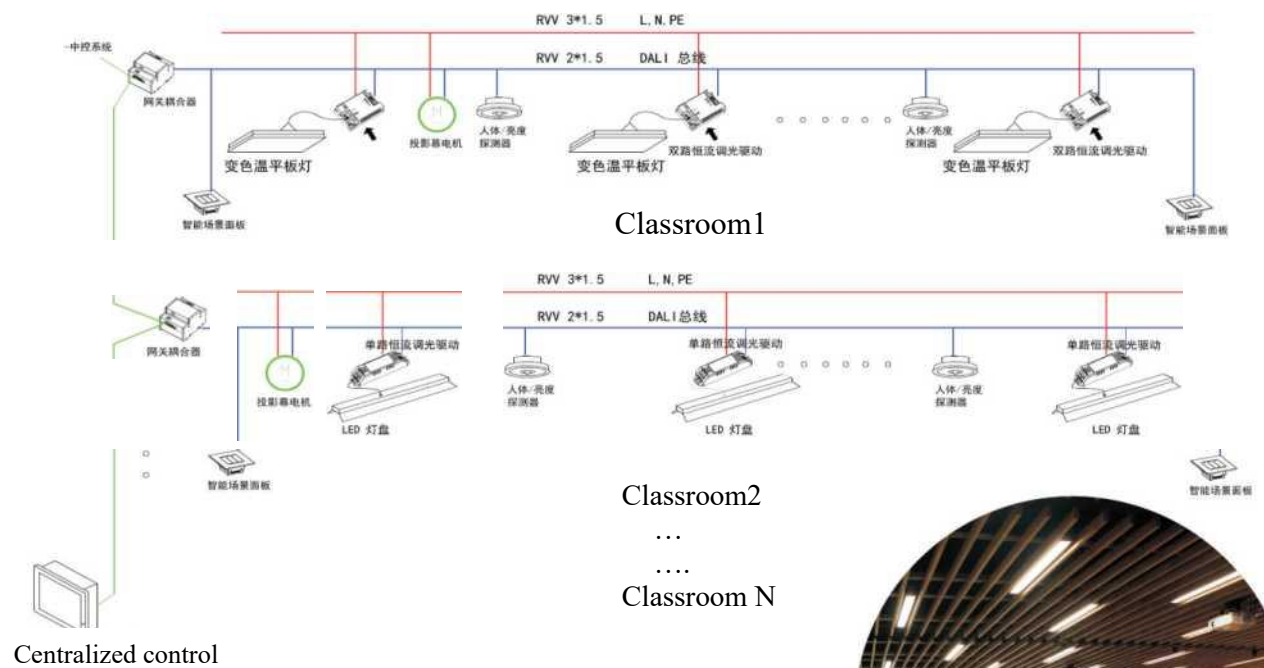
Lighting project for public areas

• Solved the flexible increasing problem of intelligent lighting panels in public areas.

• Wired plus wireless more flexible and reliable, intelligent networking, convenient and flexible

• The system adopts distributed BUS structure, which can be closed and divided to ensure independent and reliable operation of each floor

• Power distribution boxes in the floor can be connected in a star or tree topology.

• The system adopts international standard industrial Ethernet, KNX, DALI, MODBUS and other international standard protocols to ensure the standardized interchangeability of products.

Duty Room

| DALI | 2*1.0+2*0.8 |
| KNX | 2*2*0.8 |

Description:

1. This project adopts Guangzhou LAMMIN ETB/KNX intelligent lighting BUS control system. Each lighting box shall reserve appropriate module space for the installation of intelligent lighting control module, which is DIN rail installation.

2. All kinds of panels are using the standard 86 box installation

3. The sum of the maximum length of each branch line is 1000m, the two components farthest from each branch line cannot exceed 700m, and the maximum distance between power supply and components is 350m.

4, Each branch line can be connected to a maximum of 64 components, more than 64 can be extended through the line coupler.

5. The BUS adopts 4* 0.8 cable, which is connect to the host location of the intelligent lighting control system through 20 pipes along the trunk cable of the building.

6. The system is connected with the intelligent lighting control host through the network. The intelligent lighting control host can monitor all equipment and can integrate with BA or other systems through the EIB gateway. Each control system host has its own UPS power supply.

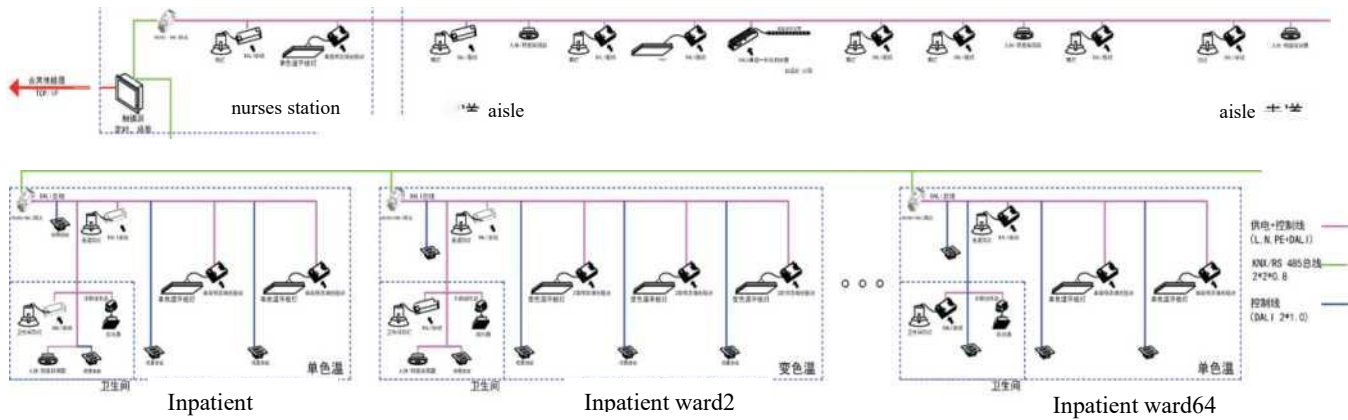## ■ Intelligent hospital lighting control project

1. Lobby lighting control in public area of hospital

The public area of the hospital is the area where a large number of patients and medical staff walk and stay. The lighting system runs automatically, brightness switch and different lighting scenes. The lighting in the lobby can be automatically adjusted according to the indoor and outdoor illumination. Turn off the main lights at night, through the infrared sensor, to reach the effect of slowly light and slowly off. In the nurse station, duty room and other places, set up buttons, touch screen, etc., staff can manually switch to different scenes.

2. Inpatient Ward lighting control

The brightness and color temperature of the lights in the ward can be controlled to maintain a constant illumination and a circadian color temperature. The night light mode is automatically switched to provide basic illumination for patients and medical staff to get up at night. The bedside scene can switch different scenes to meet the lighting requirements of doctors on ward rounds without affecting the rest of other beds.

Bathroom body sensor, when no person, maintain basic illumination; when someone, slowly lit to provide adequate illumination without manual operate the switch. People leave, slowly dimming, for energy saving and rest.


■ Chain restaurant intelligent lighting control project

1. The lighting of the restaurant is automatically managed by the system and the lighting scene is automatically adjusted according to presetting.

2. Combined with the illumination sensor, can automatically adjust the switch and brightness of the lamp in the restaurant according to the indoor and outdoor illumination.

3. VIP experience can be created through dynamic flow welcome mode.

4. Preset magic PARTY mode, for guests to fun.

5. Intelligent switch, arbitrary wiring structure, each lamp can be controlled independently, saving strong wires, multi-point control, timing dimming field control, iPad control, convenient energy saving.

6. Data such as lighting opening time and energy consumption of each store can be uploaded to the headquarters database to realize big data analysis, reduce carbon emissions, and compare turnover so that the senior management can make prefer decisions.
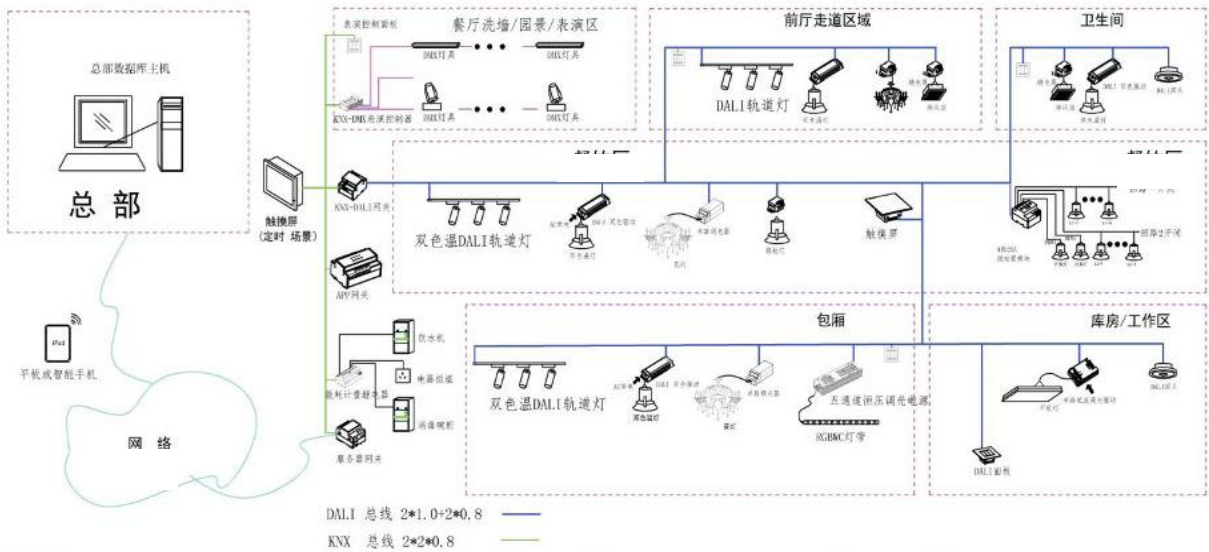
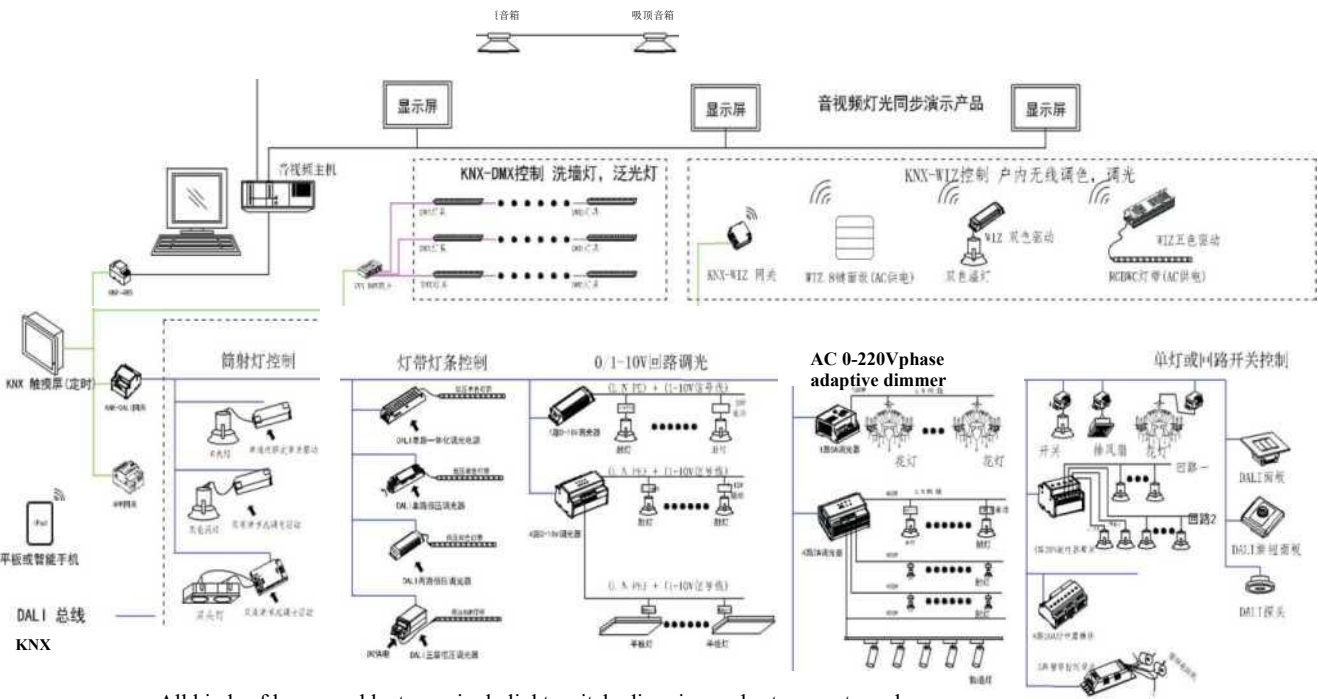## ■ Intelligent lighting control project for clothing commercial stores

1. The lighting of the store is automatically managed by the system, and the lighting scene is automatically adjusted according to the setting. The opening number of lights will be automatically reduced when the flow of people is reduce and free time.

2. Flexible control of single light brightness, color temperature, color, highlight area, with the changing of season, weather, color temperature, color, etc., to provide different scene experience.

3. Lighting in the dressing room can simulate the different scenes, such as summer, winter and party to increase customers' s desire to promote product sales.

4. Create VIP experience by create dynamic water welcome mode through light inductors

5. Intelligent switch, flexible wiring structure, each lamp can be controlled independently, saving strong wires, multi-point control, customized timing dimming scene control, iPad control, convenient energy saving.

6. Store window interior and other lights can be unified settings by headquarters, distributed to each store, with different model clothing, dynamic change, the changing lighting effect, more to attract the customers, promote sales.

7. Data such as light switch, energy consumption and fitting room flow of each store can be uploaded to the headquarters database to realize big data analysis, and the strategic management can make prefer decisions.

Guangzhou Shore
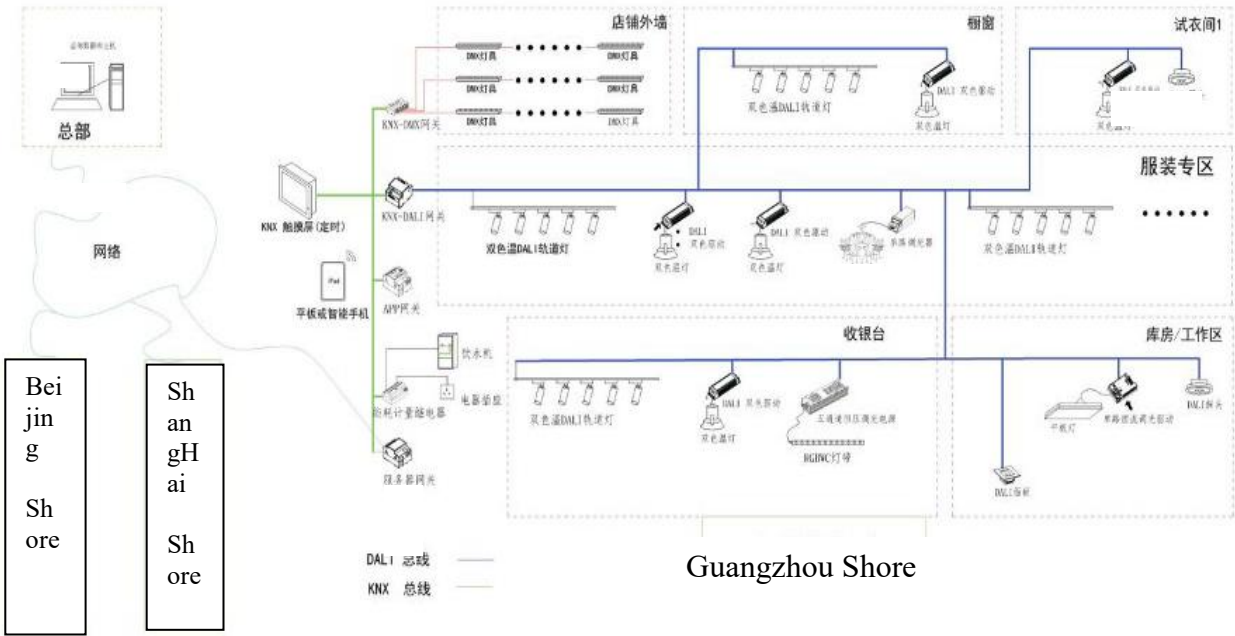
■ Intelligent control scheme for high-end lamp shop

Distributed, single lamp control, wired and wireless, wall switch and mobile PAD control

1. The basic lighting is automatically managed by control system, and the lighting scene is automatically switched on and off according to the running time.

2. Exhibition hall lamps, can be automatic cycle, slowly light in turn, turn on in sequence, dynamic change to attract customers.

3. Wall switch, LCD screen and iPad can control the lights, or one button to open the same type of multi-display lamps.

4. Advantage: no need to change the line, easy to add more lamps and lanterns, save wiring, arbitrary grouping, convenient expansion.

5. Can control 0/1-10V, DMX, DALI and other different protocol lamps, can connct with all kinds of central control system.

6. Can link music, video, synchronous demonstration of dynamic lighting, switch different lighting groups, dimming, color, turn off.

All kinds of lamps and lanterns single light switch, dimming, color temperature change, color change, cycle control, audio and video synchronization

■ Intelligent lighting control project for high-speed railway station and subway station

There is no natural light in subway stations, and lighting needs to be turned on for a long time. Classification of operating periods of subway stations (passenger flow-time) according to different passenger flows, subway stations can be roughly divided into outage, transit, trough, valley and peak hours, and each time period has different requirements for illumination.

Station lighting control system, can be on different partitions intensification of lighting control and regional single lamp control, reduce the energy consumption of lighting, convenient for management and maintenance, metro field area is large, lamps and lanterns is maintained need staff to the site view, now through dynamic test of DALI, it can detect the status of lamps and lanterns, point - to - point operation and maintenance, greatly reducing labor costs.

1. Entrance and Exit

The subway entrance and exit can use DALI illumination sensor to detect whether the external natural light is sufficient. When the external natural light is sufficient, the light in the outdoor area will be turned off automatically. When the natural light is insufficient, the light will be turned on automatically to provide services.

2. Advertising areas

Advertising area: The brightness of the advertising lamp can be used to dim the brightness of the nearby area lighting, so that the illumination of the area is consistent with other areas for energy saving. Add DALI sensor to linkage advertising light box.

3. Subway Station hall

Platform Screen Door area: when the train comes into the station, it is linked to MODBUS signal of the vehicle. The platform screen door light belt follows the train to the station and adjusts the illumination to remind the passengers. When the train leaves the station, the light belt will be dimmed automatically to save energy.

Passenger Rest area: the lights can be dimmed when no one in. By infrared sensor, when someone sits down, the lights in this area can be automatically turned on. It can switch different color temperature lighting according to different time to achieve healthy lighting with circadian rhythm.

Station hall layer
Platform layer

Station hall layer
Platform layer

调光辅助
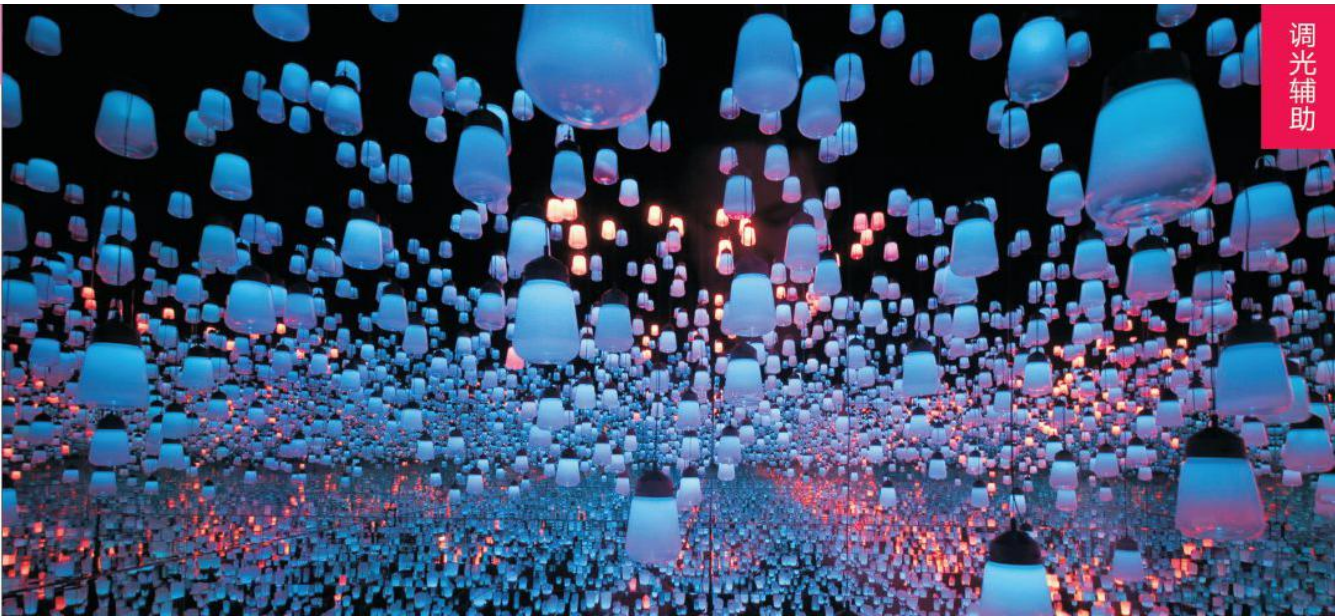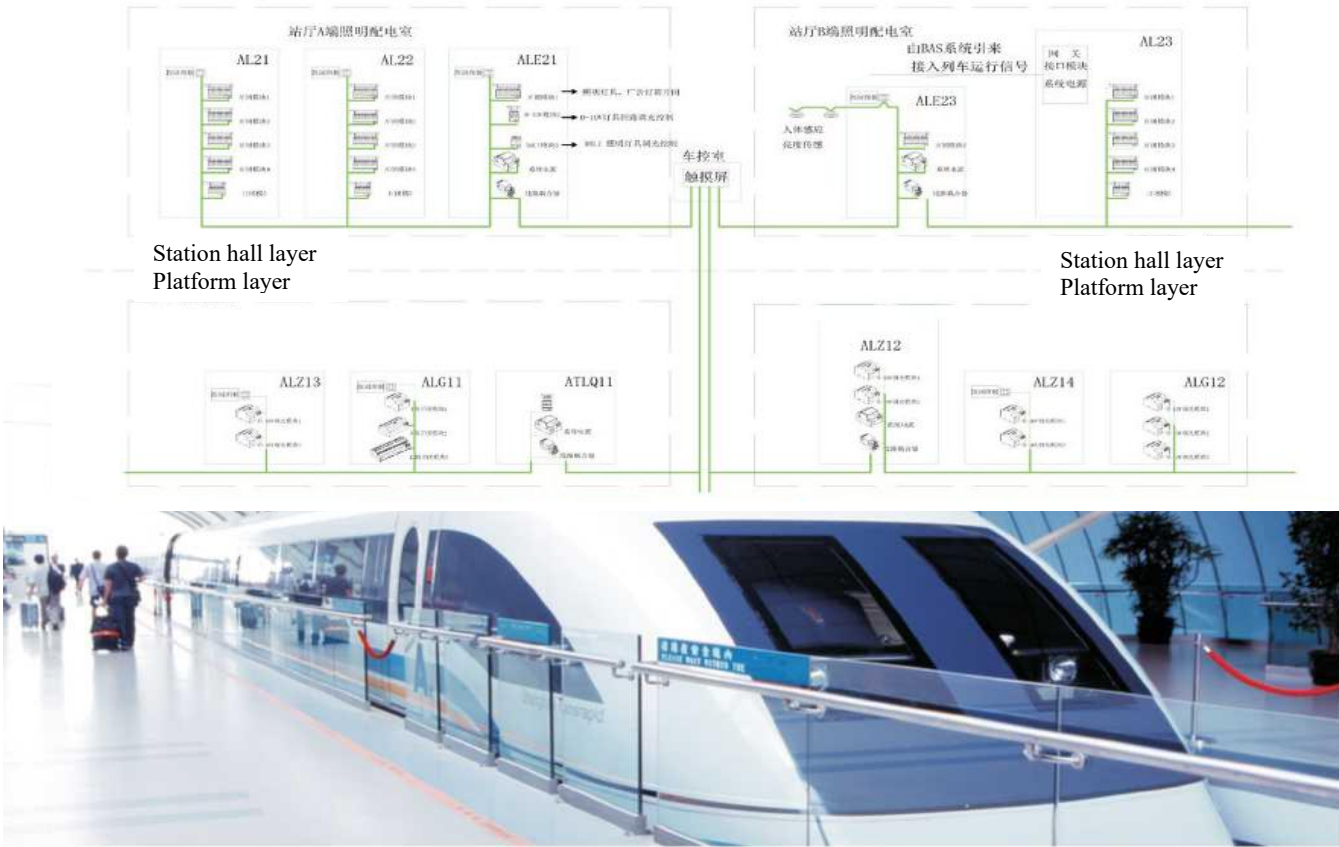
5. Dimming auxiliary products

Product features:

Provide DALI, 0-10 V, SCR dimming signal test tools, amplifiers, converters and other professional dimming auxiliary products for lamp manufacturers, lamp shops, lighting engineering business.

Specific parameters: DALI, 0-10V dimming signal generator, SCR to 0-10V signal converter, 0-10V signal amplifier, SCR flicker suppression module.

Type	Product Name	Size H*W*D	Order ID
LMCS-DALI-AP	DALI/1-10Vdimmable driver test box	135*230*57	2.70.01.000
L6293-08LL	8channel 0-10V amplify	126*88*65	1.09.03.000
DDP-R1205	DALI BUS extender/coupler	140*45*28	2.40.1 1.000
L9393-01	0-220V input/0-10V output converter with relay	46*170*40	1.09.01.000
LLP5100NLA	LED dimmer flicker absorption module	58*40*22	1.09.02.000
BVV2*1.0+2*0.8	DALI BUS cable	Φ18	2.70.02.000
QJL-D5	5 DALI BUS terminal	50*25*20	2.70.03.000
LMCS-DALI-B	DALI PS automatic tester	290*230*50	2.70.04.000