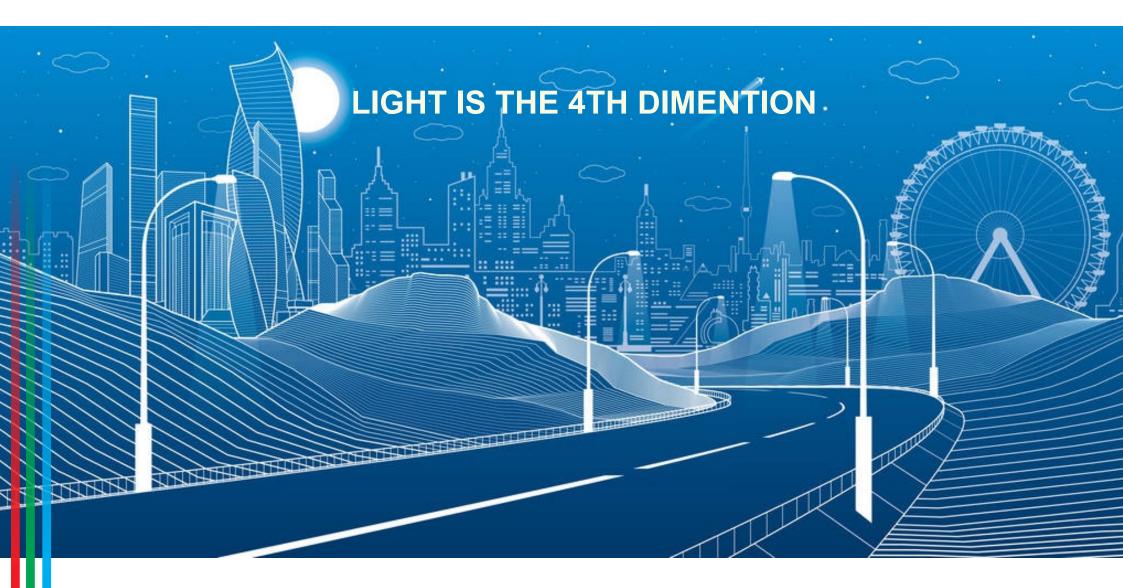


# **Lighting Control System**

Smart G4 2021



with light we can emphasize things, change the look and shape of objects ...

with light we can create illusions also can make space look bigger, longer, narrower ...

with light can control feelings of warmth, safety, happiness, calmness, add beauty, motion ...

## DO YOU KNOW !

# What Can we Change in Light elements !

Can On light, and can Off light or blink it Can Dimm Light intensity Dynamically or constantly Can Change its color as preset or dynamically Can change its Direction and speed of motion DO YOU KNOW !

Can Create shapes of lights

Can Change light spread Dimension

Can Rotate and Mix

Can Mix all the above creating Que and show control



## Most Famous Types of Light Elements

Incandicent (840 Lumins for 60Watts) Neon Lights (Average 40 Lumens for 1 Watt) Flourecent Tubes (1400 Lumens for 25Watts) Compact Flourecent Light - CFL (810 Lumens for 13 Watts) Halogen (900 Lumens for 50 Watts) Cold Cathode (200 Lumens for 5Watts) Mercury vapor lamps (Average 45 Lumens per watt) Metal halide (36,000Lumens for 400Watts) Light Emitting Diode - LED (450 Lumens for 6Watts) High Pressure Sodium (50,000 Lumens for 400Watts) Low pressure Sodium (7800 Lumens for 55 watts) Phosphor-Converted Amber (PCA) LED (140 Lumens for 1 Watt) Narrow-Band Amber (NBA) LED (1460 Lumens for 14Watts)

## Main Applications of light elements

Indoor Direct Lighting Indoor Indirect Lighting Stage lighting control Disco Lighting Underwater Lighting Outdoor Building and Structure Lighting Outdoor Street Lighting Outdoor Landscape Lighting and other...

## DO YOU KNOW !



### Lighting Design is an art

Not every person can simply achieve a good lighting design without talent, experience, and study of effects, angles, lenses and more

## Lighting Design controls Feelings

With light alone, can change the mood and feel in the space. like: making person tense or relaxed. enhance visual clarity, make space spacious, or enhance privecy or intimacy



# How to control different types of light

lights have different drivers and technologies some uses communicable type of drivers/conytrollers like: Dali and DMX.

Some uses variable control voltages and can be controlled using Leading and Trainling edge dimmers, 1-10V,

Some can be controlled by changing of current or by impulse

and the rest can be always controlled by simple On/Off

## Smart G4 has those All and more





















We still need this type of heavy dimmers to handle the huge chandeliers in Hotels, to replace old dimmers for maintenance upgrade for very long corridors and circuits with heavy dimmable light loads

From this wall model we have 2channel 20Amps per channel and we have 3 channel 10Amps per channel

These dimmers can be controlled by: RS-232 S-BUS DMX Manual Dry input NO/NC

> Groups, Ques, Scenes, Sequence Channel Fold Circuit

# Wall Dimmer Cabinet



We have 2 Types of DIN Mount Dimmer Modules designed for heavy loads up to 20 Amp per fold

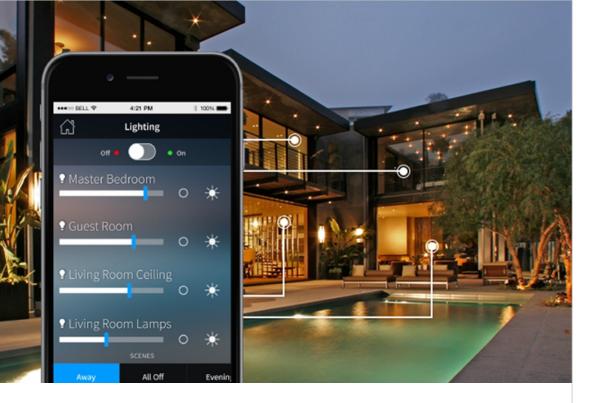
## Models and Loads:

SB-DIM2c20A-WL SB-DIM3c10A-WL 2channel 20A Load 3channel 10A per channel Load



SB-DIM3c10A-WL





Dimmers are devices used to attenuate the intensity of the light fixture This product uses Leading and Trialing edge type of dimming technology such technology utilises mix of triac, and CMOS with sine-wave calculation.

The most affordable type is the Leading edge.

Leading edge type works perfect with incandescent and halogen fixtures also works with some types of LED damnable type fixtures. This type might cause some flickering while its in off position due to some current leakage which requires supressors or change of one of bulbs to halogen or incandescent type to stop the leakage

The Universal Type however fits to most LED technology and has no current leakage yet it is little more costly comparatively

Groups, Ques, Scenes, Sequence Small Size Powerful

# **Dimmer Modules DIN Mount**



SB-DIM8c1A-DN

We have 2 Types of DIN Mount Dimmer Modules That Include Trailing and Leading Edge Types

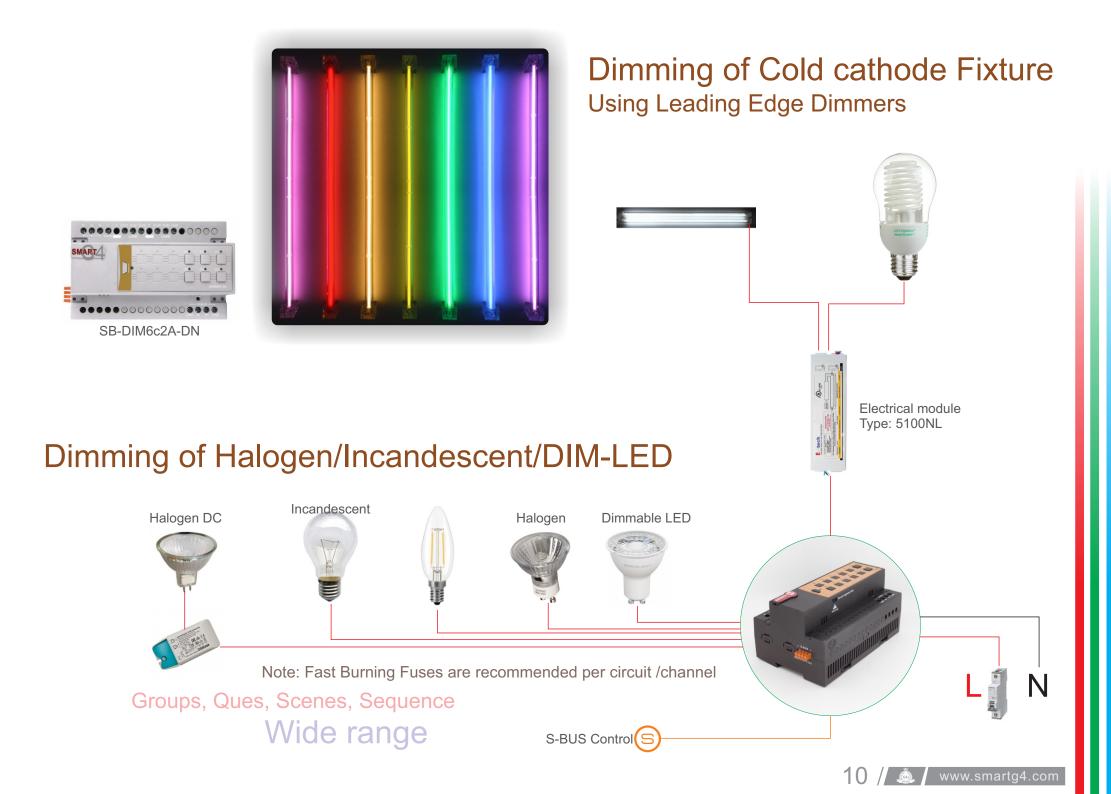
### Models and Loads:

| SB-DIM1C9A-DN | 1channel 9A Load (L.E.T)          |  |
|---------------|-----------------------------------|--|
| SB-DIM2C6A-DN | 2channel 6A per channel Load (LE) |  |
| SB-DIM4C3A-DN | 4channel 3A per channel Load (LE) |  |
| SB-DIM6C2A-DN | 6channel 2A per channel Load (LE) |  |
| SB-DIM8C1A-DN | 8channel 1.2A per ch. Load (LE)   |  |
|               |                                   |  |

SB-UDIM4C2A-DN

4channel 2A per channel Load Universal Dimmer Dual Tech (LE+TE)











## S-bus LED driver and Booster



SS-LEDBoost-DC

This is RGBW Driver for Constant voltage LED Also Amplifier 10A per channel Cascadable

The LED Driver can be used for color mixing of millions of color combinations and can record presets

Also, It can be used for 4 Channel LED control of one color or one CDC LED light circuit



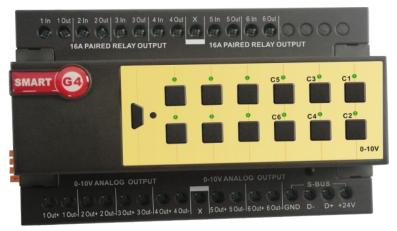




64000 Addressable Lights in one Network and 254 Networks



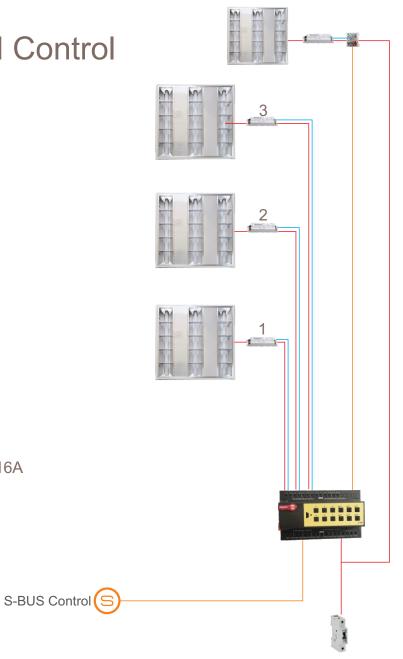
## Office lighting Standard centralized Control



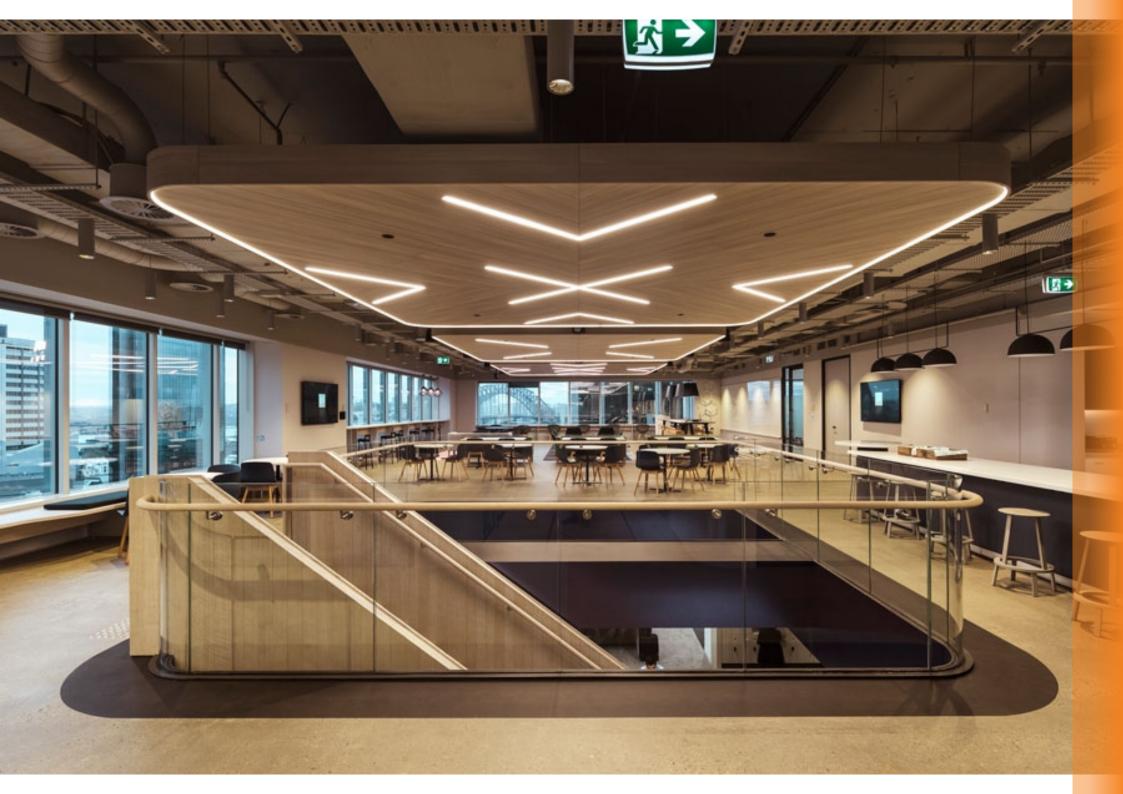
SB-6B0-10V-DN

In the standard Ballast Control method requires separate wiring for each addressable channel from central DB where the Controllers are located

This Device has 6 addressable 0-10V channels and 6 relays each is 16A it is cascadable and can mix with the SB-1B0-1v-TC as to be needed.



Groups, Ques, Scenes, Sequence Manual Override





With LED technology today, DALI Ready Light fixtures became the best option for dimming and light element control

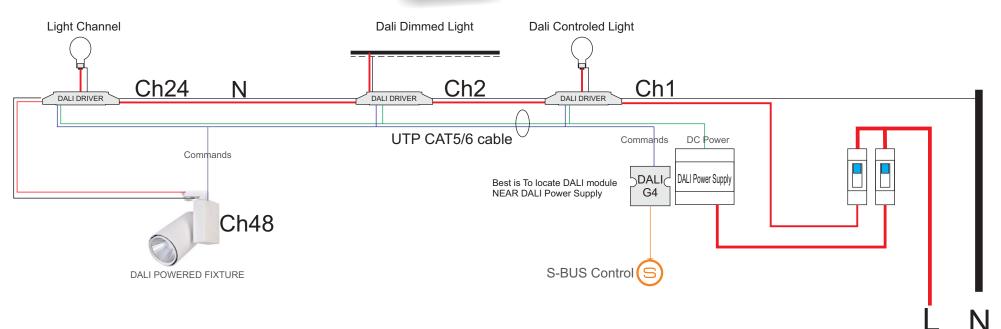
Smart G4 Dali Bridge with 48 Channels per module became the optimum solution for today's lighting control needs.

Dali48 By Smart G4 is affordable powerful and very small in size





SB-Dali48-DN



Groups, Ques, Scenes, Sequence Mini Size, 48 Channels Ready per module



## UPB PCS X10 Bridge

Using our RS-232 UPB/PCS Bridge you can mix wishfully between S-BUS ability and the flexibility of UPB/PCS/X10 in USA and Canada regions

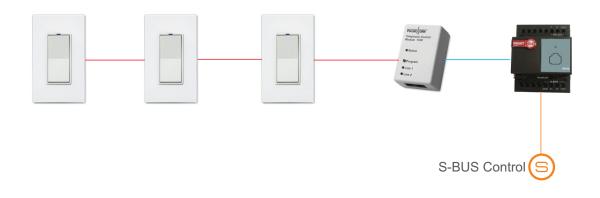
a single bridge can link all devices connected to the UPB/PCS Powerline Loop. That includes Sockets, Bulbs, Switches, motor controllers and Other.

Simple bridge for direct and simple installation





SB-PCSBridge-DN







# DMX Stage Lighting Control



SB-DMX48-DN

#### DMX is best for

Musical fountains, Facade Lighting, Structural Lighting, Intelligent Building Lighting, Indoor complex Lighting, Disco Lighting, Stage and Ball Room Lighting, and more

## Groups, Ques, Scenes, Sequence Show Control



Smart G4 DMX Bridge is a state of art solution to enable the best of both DMX fixtures and G4 control abilities.

Adding Smart-BUS Show control Software, they sky is the limit in creating breath taking show







These relay actuator modules are very powerful and flexible. Each channel is fully isolated and universal

Can work as momentary, toggle, group, switchover, etc.

One module can accept: 12VDC on any channel (Example channel 1) 24VDC on any channel (Example channel 2) 48VAC on any channel (Example channel 3) 110VAC on any channel (Example channel 4) 220VAC on any channel (Example channel 5) 3Phase any 3 channels (Example channel 6+7+8) Switch over on 2 channels (Example channel 9 and 10)

## **Relay Modules DIN Mount**



We have several configurations of Relays for DIN Mount Type Actuator Modules

#### Models and Loads:

| SB-RLY12c10A-DN | 12channel 10A Load per channel |
|-----------------|--------------------------------|
| SB-RLY8c16A-DN  | 8channel 16A Load per channel  |
| SB-RLY6c16A-DN  | 6channel 16A Load per channel  |
| SB-RLY4c20A-DN  | 4channel 20A Load per channel  |

# Flexible Powerful Multiusage



These I/O actuator modules are very powerful and flexible. Each channel is fully isolated and universal

Can work as momentary, toggle, group, switch-over, etc.

Each ESR Module has built in 24 Dry contact ports which can be used with any normal dumb switch, Magnetic reed, Motion sensors, or other NO/NC device.

Smart Group also Created Harness of 2 types to compliment and organize the dry contact cabling as elegant option that can be added on





SB-ESR24-DN

# I/O Actuator Modules DIN Mount



SB-ESR16p+DN

We have several configurations of I/O Actuators DIN Mount Type with built in Dry Contact ports

#### **Powerful Models and Loads:**

| SB-ESR8P+DN  | 8channel 10A Load per channel  |
|--------------|--------------------------------|
| SB-ESR16P+DN | 16channel 10A Load per channel |

# Control I/O Models and Loads (require contactors):

SB-ESR10-DN SB-ESR24-DN 10channel 1A Load per channel 24channel 1A Load per channel

Every module of the above has 24Z dry input ports

## Compact Size Loaded Multi-usage





This gladiator module comes in 2 configuration half module size = 8channels full module size = 16channels It is perfect for lighting of full apartment with HVAC it has also Built in 0-10V and ttemperature sensors, logic and timeclock with 24 universal dry contact input ports makes it the complete solution for full apartment or even townhouse floor

## **Gladiator Modules DIN Mount**



| SB-Gladiator8+DN  | 8channel 10A Load per channel  |
|-------------------|--------------------------------|
| SB-Gladiator16+DN | 16channel 10A Load per channel |

Every module of the above has 24Z dry input ports Gladiator Models have also Logic and Time clock inside

## All in one complete solution



# **MIX Modules DIN Mount**





SB-MIX24-DN

One Module is all you need for your full suite of master bedroom or even for small apartment

The Mix 24 has 4 channels of dimmers and 20 Relay actuators The Mix Z-Beast23 has 3 Dimmers and 11 Actuators with HVAC and Temperature sensor, as well as heavy relay for Boiler/WH

Adding 24Z Dry input module to this mix module makes it a complete flexible solution with dimming and easy switches



SB-MIX23-DN SB-ZoneBeast23-DN

# Affordable Luxury



# MIX mini Modules fits in Back Box

Semi DIY Series



SB-2D1R-TC





SB-1D1R1F-TC





SB-3R-UN

The smart G4 Trail Click modules has selective variety of Relays, dimmers and mix between all this is to fit retro-needs as stable semi-DIY

I want it stable

Just pull control cable within the electrical conduits without rewiring anything in the apartment

Simply insert this module inside the back box and enjoy easy stable automation.

## **Trail Click Series 2A**

SB-1D2R-TC1Dimmer+2 RelaysSB-2D1R-TC2Dimmers+1 RelaySB-1D1R1F-TC1Dimmer+1 Relay+1 FanSB-2R-TC2 RelaysSB-3R-TC3 Relays

Mini Series (contact your installer strictly) SB-3R-UN SB-2R-UN Reto

SB-2R-TC



SB-3R-TC

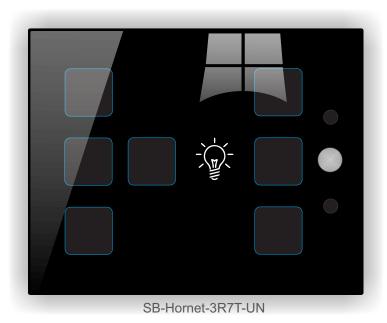






## Mini-Hornet Universal Panels Semi DIY Series

#### I want it stable I want it Luxurious

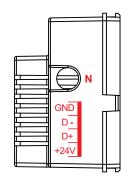


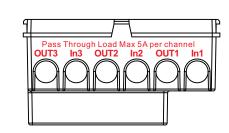
This Mini-Hornet Touch panel fits any wall-back-box universally

It comes ready with 3channels for lighting, built in Occupancy Sensor, IR receiver and emitter and many more

This is the perfect stable, safe no-radiation, solution for semi DIY where no need to rewire any electrical again. Just pull a control cable within the same electrical conduit. As easy as that.















# Multiple Lighting Control Ways

With Smart G4 System Lights can be controlled in many ways: By Wall Switches and Panels (See our user Interface Catalogue) By IR hand held Remotes BY SMS messaging By Telegram Chatting By Software on PC

By apps on Tablets and smart-Phones

By Motion trigger

By Scheduling Triggered by events Logically By third party hardware Based on Temperature By Biometric recognition and many More











