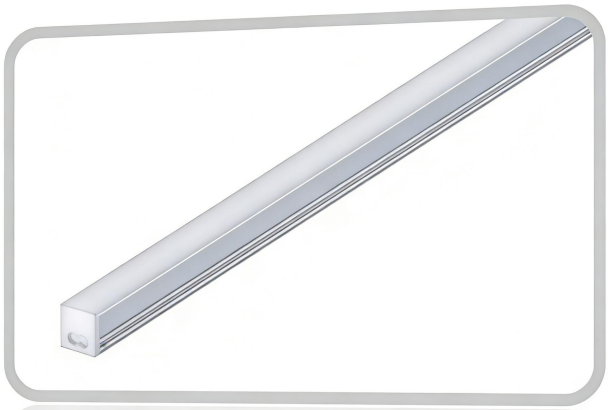
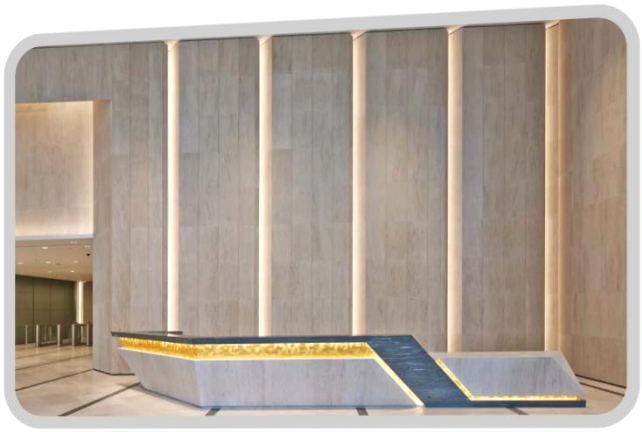
Model No : CA31D04.11



DMX Zigbee 0/1-10V DALI Bluetooth APP control CASAMBI TRIAC DIM RoHS CE



Features:

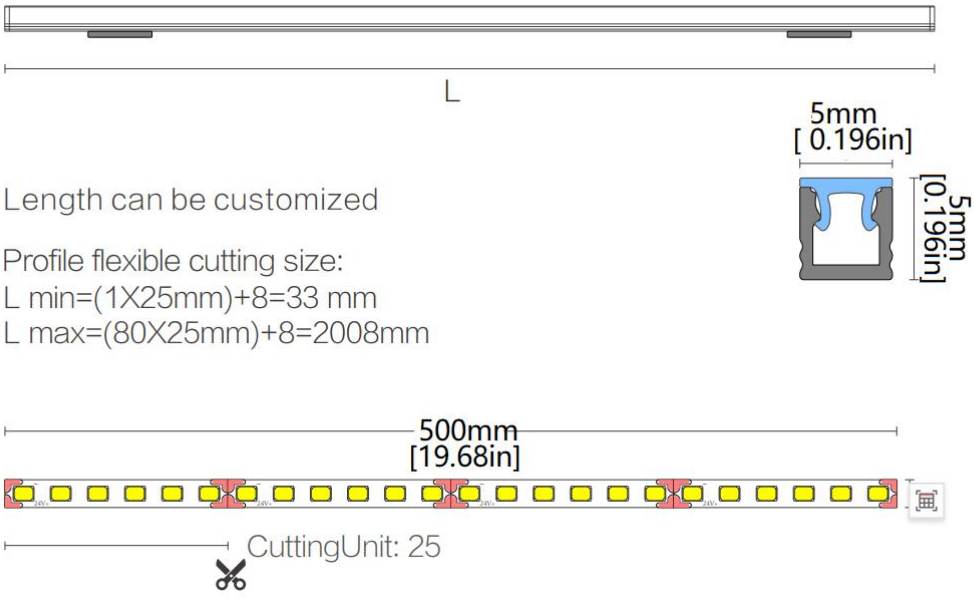
- 5×5mm ultra-slim design enables space-saving integration.
- Energy-Saving High-Brightness LEDs
- PC diffuser cover for uniform soft lighting.
- Magnetic or Adhesive Mount — Easy Install.

Normal/RAL series:9002/9006/9011
Custom Colour &Finish

Application:

- Cabinet Lighting (functional)
- Under-Cabinet (task/ambient)
- Stair & Handrail (safety + decor)
- Ambient Accents (TV/bed/warmth)

Dimensions:



Physical

Housing Material	6063 AviationGrade Aluminum
Lens Material	PC Opal
End Cap Material	PC
Gasket Material	Silicone
Surface Finish	Silver anodised
Weight	/

Electrical and Control

Voltage	DC 24V
Wattage	MAX 8W/M
Control	0-10V / DMX / DALI / ON / OFF
Inrush Current (Peak)	Meets NEMA-410 requirements (Based on voltage and control specifications, consult factory for details)

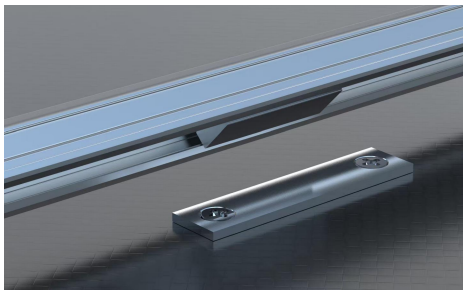
Environmental

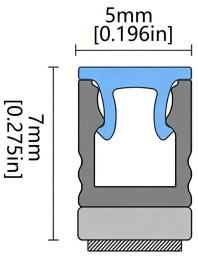
Storage Temperature	-40 °C to 85 °C
Start-up Temperature	-40 °C to 50 °C
Operating Temperature	For 32.8 W/m fixtures: -40 °C to 50 °C For 72.18 W/m fixtures, CE Certification: -40 °C to 40 °C
Ingress Protection Rating	IP40 (No water, splash or drip protection. For use only in dry indoor environments without liquid exposure).Consult factory for details
Impact Resistance Rating	/

Accessories

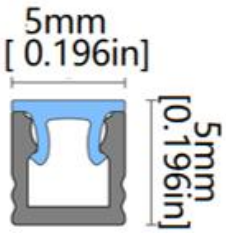
Cables	SYP Male Header SYP Female Header

Mounting methods



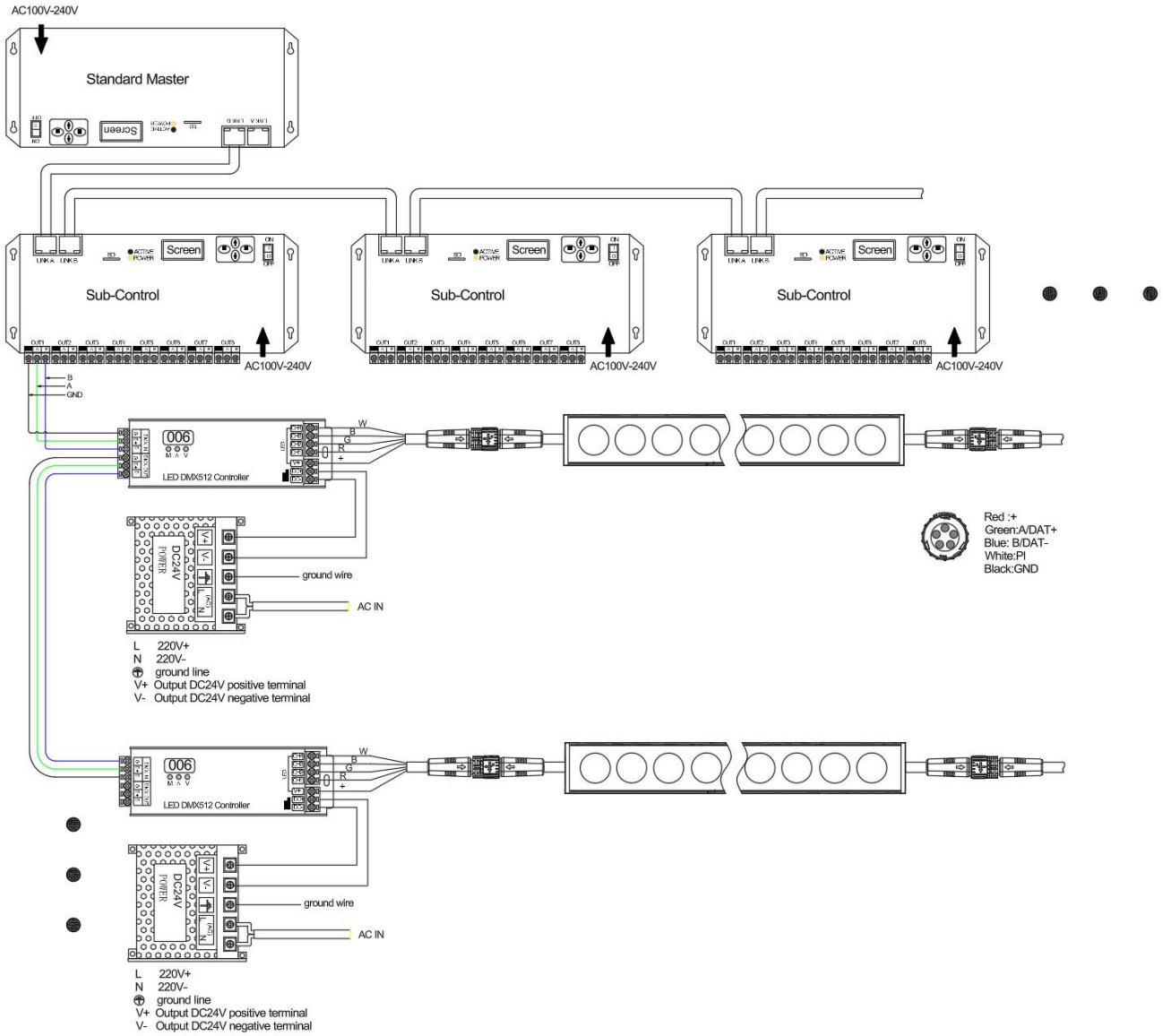


Magnet ffxing（2 pcs per LED fixture）



3M Tape ffxing

Description of DMX512 Lamp Power Supply/Controller Connection (Lamp External Decoder Scheme)



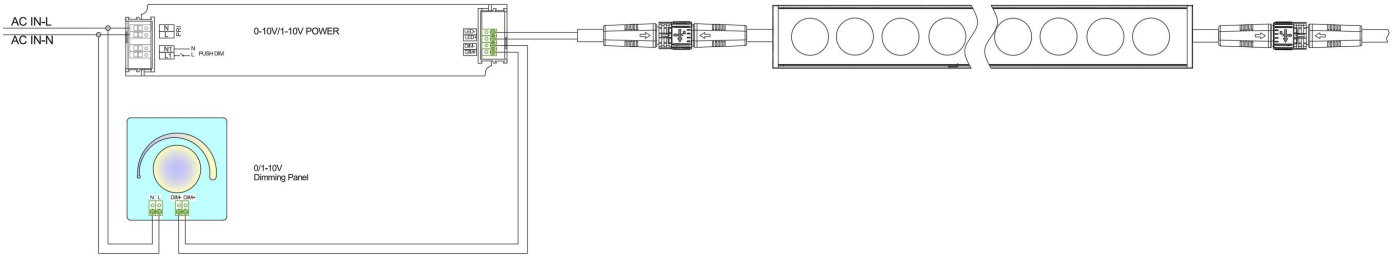
connected in series.

2. The decoder is connected with the driving power supply:
Read the instructions of the decoder and the driving power supply carefully, and confirm that the control protocol matches (PWM or 0-10V). Connect the control output (such as PWM+, PWM-) of the decoder to the dimming input (such as DIM+DIM-) of the driving power supply. The polarity must be correct.

3. The driving power supply is connected with the lamp:
Connect the DC output (V+, V-) of the driving power supply to the input terminal of the lamp. Attention should be paid to the voltage and polarity, the reverse connection will damage the LED.

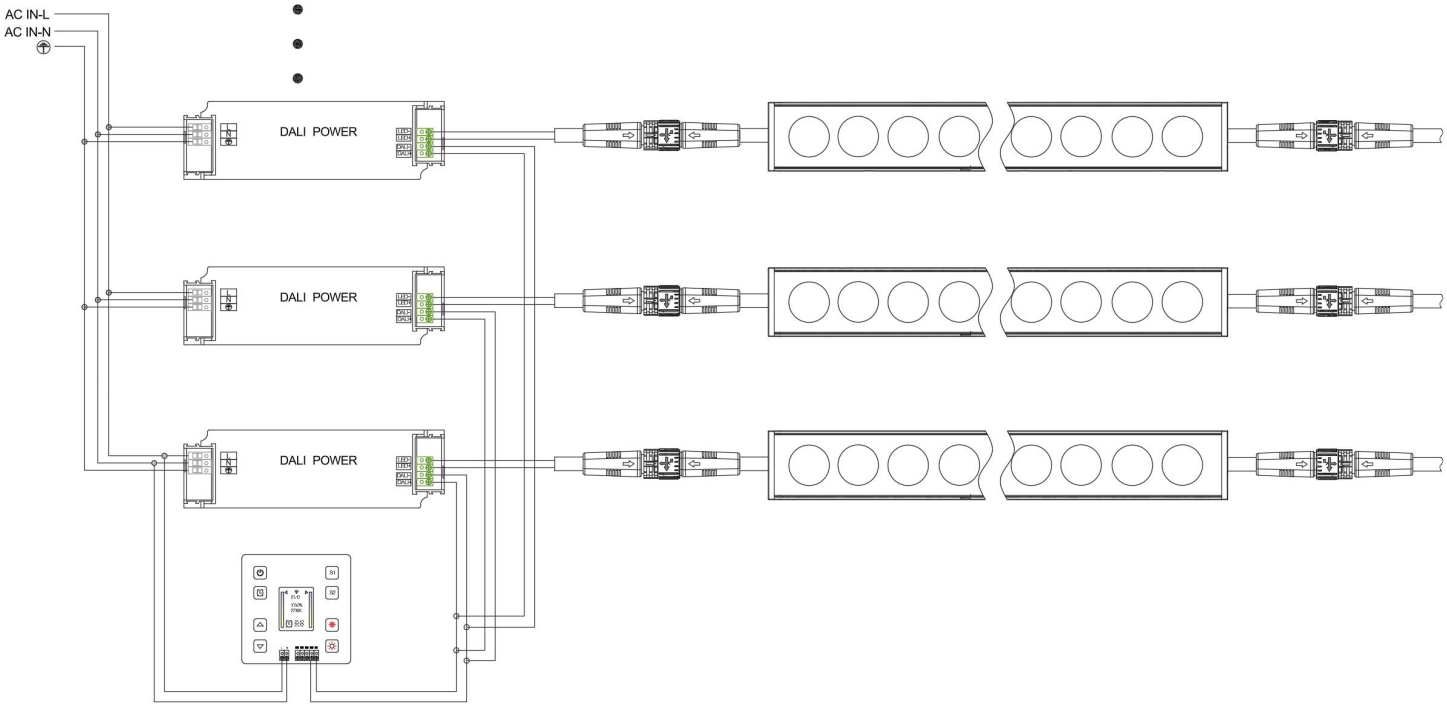
4. Power supply:
High-voltage part: Connect the input terminals (L, N, PE) of the driving power supply to the mains correctly. Make sure the grounding is good.
Weak current part: Provide the required working voltage (such as DC12V) for the decoder itself. Note that this power supply is isolated from the control signal.

0/1-10V Lamp Power Supply/Dimmer Connection Description



1. The signal line is separated from the power line
It is absolutely forbidden to arrange the dimming signal line (V+/-) and the AC power line (L/N) in the same conduit or trunking, nor to use the same set of multi-core cables. The electromagnetic interference of AC power supply will seriously interfere with the weak 0-10V DC signal, resulting in flickering, jitter or uneven dimming of lights.
Best practice: Using shielded twisted pair as dimming light and grounding the shielding layer at one end of the driver can effectively suppress interference.
2. Distinguish between 0-10V and 1-10V:
When buying drives and controllers, you need to confirm their specifications. They can be used together, but their behaviors are different:
1-10V controller +0-10V driver: When the dimming knob is adjusted to the lowest level, the voltage is 1V, and the lamp will not be completely turned off, and it will remain about 10% dim.
When the dimming knob is adjusted to the lowest voltage, the driver will judge that the signal is lost, and the lamp 0-10V controller +1-10V driver: may be completely turned off or flicker.
. When designing, if "off to off" is needed, 1-10V system should be selected.
3. Load capacity and wiring distance:
The output channel of each dimming controller has the maximum load capacity (for example, the minimum load current is 0.1mA and the maximum load current is 2mA). How many drivers can a controller take depends on whether the sum of the input currents of all drivers' DIM ports can exceed the controller capacity. The signal line should not be too long, and it is recommended not to exceed 50 meters. Too long will lead to line voltage drop, so that the actual voltage reaching the driver is lower than the output voltage of the controller, which will affect the dimming consistency.
4. Common ground problem
In some complex systems, if the DIM- terminal potentials of multiple drivers are inconsistent, it may cause interference. This problem can be avoided by ensuring that all signal loops use the dimming controller with isolation function well.
5. Power-on sequence:
The system should follow the correct power-on sequence: first turn on the main power supply, so that the driver and controller can get power, and then perform dimming operation. A sudden full voltage signal may impact the driver.
6. Compatibility and testing:
Different brands of drives and controllers may have subtle compatibility problems. Before the installation of large-scale projects, samples must be tested and inspected. Prove the smoothness, minimum brightness and flicker of dimming curve.

Wiring diagram of DALI digital lighting system



1. Laying bus: use twisted pair to connect DALI+ and DALI- terminals of all equipment (well connection).
2. Connect the power supply: Connect the only DALI system power supply to the bus.
3. Access control: connect the controller, panel and sensor to the bus.
4. Connect the driver with the load: connect the AC power supply (L,N) and DALI bus for each driver, and connect the lamps with its output.
5. Power-on debugging: Use DALI debugging software to allocate short url for each device, and group and set the scene.