DALI Constant Voltage Driver (DT6 Dimming)

Instruction Manual



MQLET6-1C24-150.10

Before using this product, please read this manual carefully and keep it properly!

Document Version：C

◇◆ Overview

DALI Constant Voltage Driver(DT6 Dimming) (Model: MQLET6-1C24-150.10 hereinafter referred to as "the product" or "the device") is a **DT6 dimming, constant voltage output 24V, maximum output power 150W** DALI-2 drive.

Note: The pictures and illustrations provided in this instruction manual are for reference purposes only, and the actual product may differ.

Key Functions:

1.1-channel output, maximum output current is 6.25A

2.Can control the LED strip light switching, dimming

3.Conforms to DALI-2 certification standards, DALI DT6 devices

4.Comfortable dimming effect, smooth depth dimming

5.Fault feedback mechanism, short circuit, overload, over-voltage protection

6.IP20 rating for indoor LED lighting applications

Adaptation lamps and lanterns instructions:

1.this driver is only applicable to LED strip light products

2.check the strip nameplate rated voltage of 24V

3.check the strip nameplate rated power of 1 metre how many watts

4.the total wattage of the length of the strip can not exceed 150W.

◇◆ Appearance

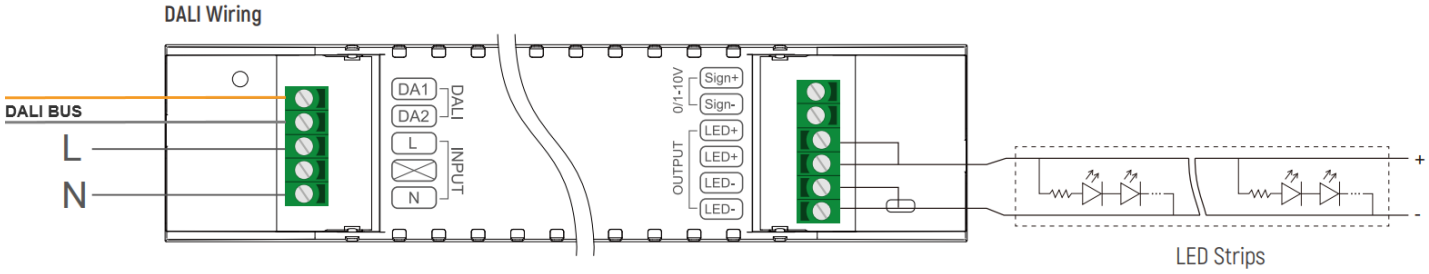


Figure 1

◇◆ Technical Data

Output	LED Channel	1
	DC Voltage	24V
	Current	Max. 6.25A
	Rated Power	Max.150W

	Voltage Tolerance	±5%
	Ripple Voitage	±3%
	No load output voltage	Max.25.2V
Input	Voltage Range	220-240VAC
	Frequency Range	50/60Hz
	Power Factor(Typ.)	> 0.95 @ 230VAC full load
	Total HarmonicDistortion	THD ≤10% (@full load / 230VAC)
	Efficiency (Typ.)	> 92% @ 230VAC full load
	AC Current (Typ.)	0.75A @ 230VAC
	Standby Power Consumption	<1W
	No-load Power Consumption	<1W
	Inrush Current (Typ.)	Max. 50A at 230VAC; 100μs duration
	Anti Surge	L-N:2KV
Control	Dimming Interface	DALI Device Type 6 (DALI consumption < 2mA)/ AC Push / 0/1-10V
	Dimming Range	0.3%-100%@ Max current
	Dimming Method	PWM
	Dimming Curve	Linear/ Logarithmic (default)
Protection	Short Circuit	Yes, remove the fault conditions and re-power the device.
	Over Current	Yes, remove the fault conditions and re-power the device.
	Over Temperature	Yes, remove the fault conditions and re-power the device.
Environment	Working Temp.	-25℃ ~ +50℃
	Max. Case Temp.	Tc=80℃
	Working Humidity	20% ~ 90% RH non-condensing
	Storage Temp. & Humidity	-40℃ ~ +80℃, 10% ~ 95% RH non-condensing
Safety & EMC	Safety Standards	EN61347，GB19510
	Withstand Voltage	I/P-O/P: 3.0KVAC
	EMC Emission	EN55015, EN61000-3-2
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11
Others	Lifetime	50,000h@230VAC @tc:75℃

◇◆ Specifications

Dimensions (W X H X D)	**295*40*32mm（See Figure 2)**
Net weight	470g±5%/PCS

Housing material	Nylon, PC
Installation	Flat surface placement, screw fixing
IP degree (compliant with EN 60529)	IP20
Approved	RoHS、CE、CCC

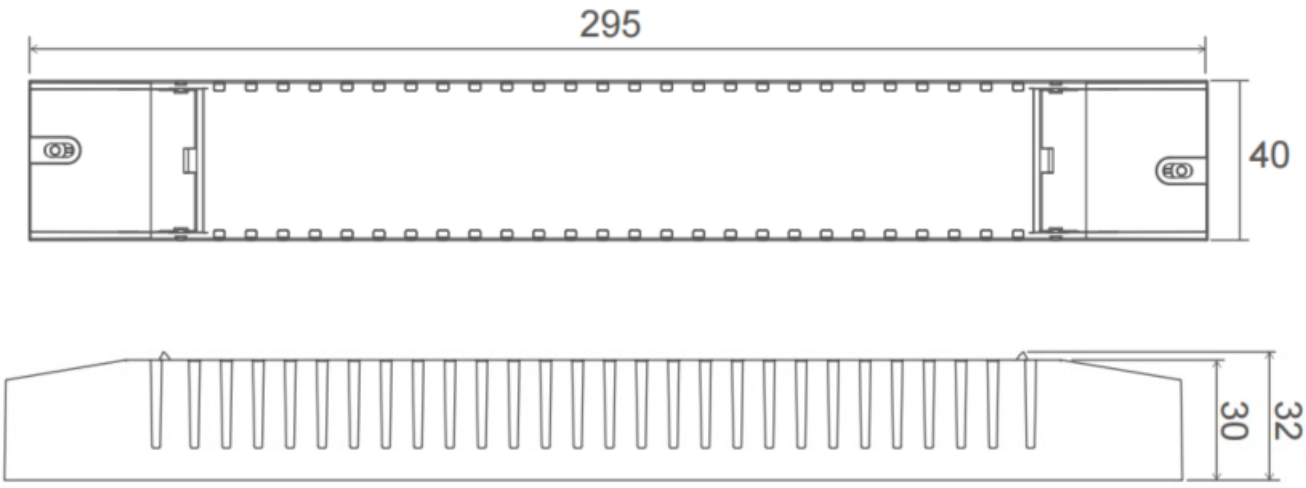


Figure 2

◇◆ Safety Precaution

Danger:

- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

Warning:

- The installation and commissioning of this equipment must be carried out in accordance with the instructions. The electric construction shall comply with local laws and safety regulations.
- The device can be placed on a flat surface or mounted with screws. HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this datasheet.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.

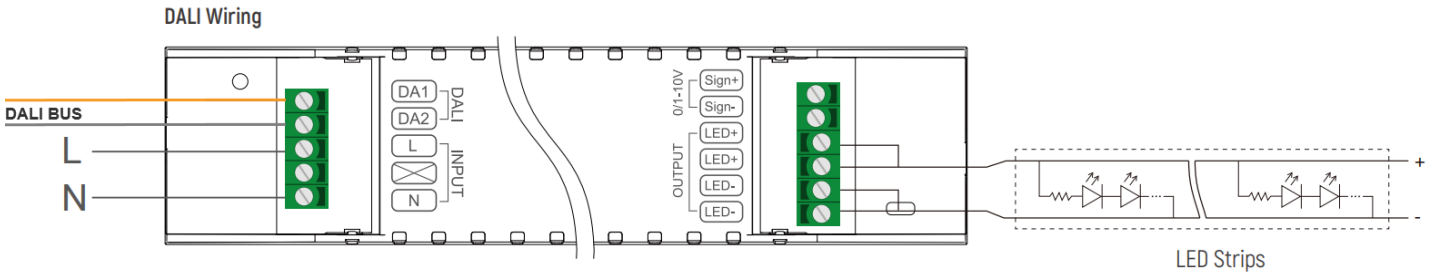
Caution:

- Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.
- Do not use corrosive liquid to wipe the device body, especially the interface, so to avoid damage to the device.
- Before performing any maintenance or cleaning procedures on the device, it is imperative to disconnect the device from all voltage sources. This precautionary measure is necessary in order to prevent electric leakage and the risk of electric shock.

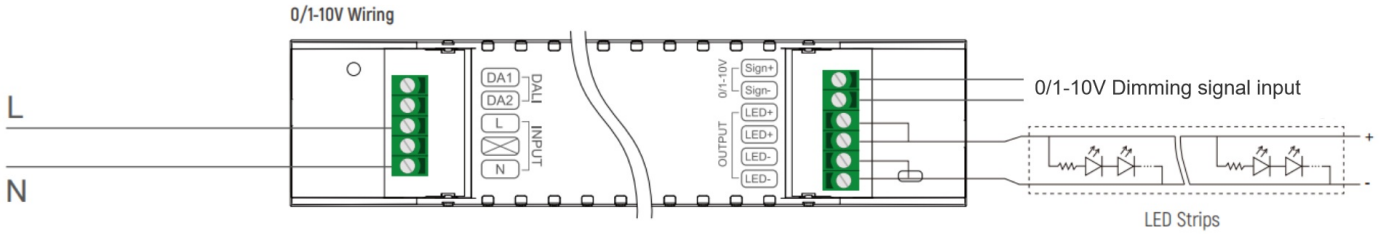
- Physical connection cables: special cables for electricians.
- For DALI connection, a hand-in-hand connection is recommended.
- After all of the cables are terminated, check for correct and good terminations.
- There are no polar requirements for DALI.
- Overrange is not allowed.
- Please use the device in accordance with the technical specifications.

◇◆ Wiring

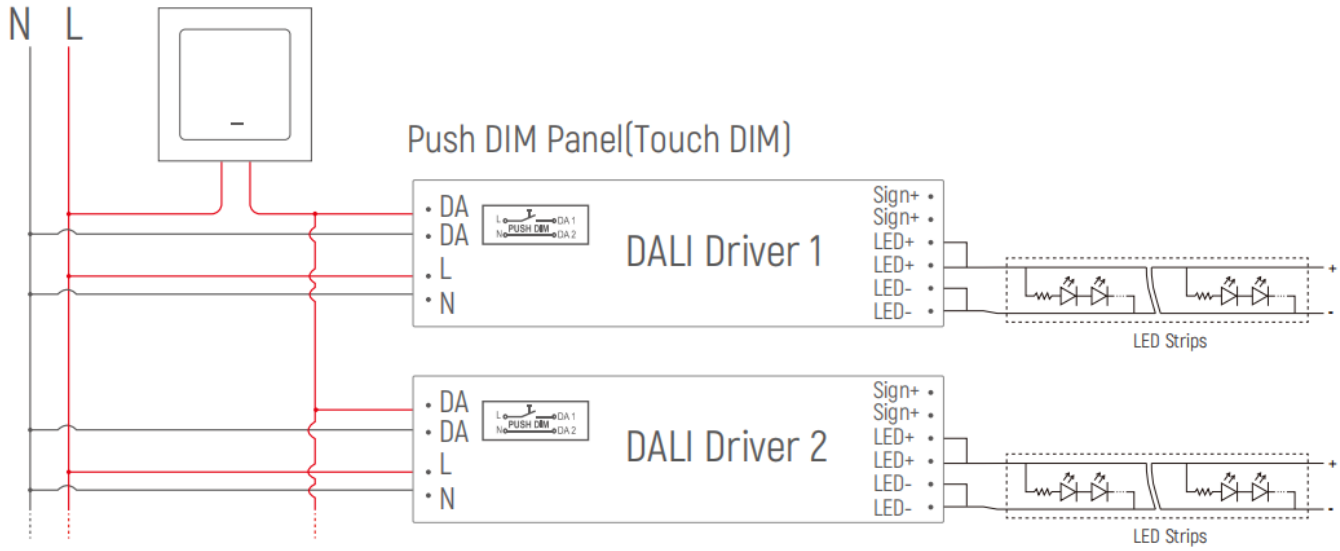
1.With DALI BUS



2.With 0/1~10V dimming



3.With PUSH dimmer



Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

AC Push Function

1. Press the Push DIM (Touch DIM) switch for 8s or more,the driver can be controlled via Push DIM switch.
2. Short press the Touch DIM switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Touch DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

◇◆ Installation

1.This product needs to be installed and commissioned by qualified personnel.
2.This product is not waterproof, please do not expose this product to humid environment.
3.Please make sure that the output voltage of the LED power supply meets the voltage range of this product.
4.Please make sure that the wire diameter is sufficient for the load connection of the LED fixture, and ensure that the wiring is secure.
5.Please disconnect the mains power supply from the circuit breaker before operating the wiring.
6.Ensure all wiring is correct before energising for commissioning to avoid damage to the luminaire due to incorrect wiring.
7.If a fault occurs, do not repair it privately, if in doubt contact the supplier.

◇◆ Disassembly

WARNING: Before disassembling, please cut off the power supply, and strictly prohibit operation with electricity.

◇◆ Operation

1. Use with controllers

For use with Buspro-DALI Controller or KNX-DALI Controller.
The DALI controller automatically assigns a DALI address code, one DALI address code can control the output of one device, please refer to the instruction manual of the DALI controller for details.

◇◆ Packing List

- DALI Constant Voltage Driver(DT6 Dimming)*1

Note: After unpacking, please check if the product and the parts are complete.

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Update History

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	August 8, 2024

◇◆ Troubleshooting

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