Kosnic

DRC20/DA Multifunction Constant Current DALI 2/PUSH Dimmable LED Driver

Please read these instructions thoroughly before use and retain for future reference.

Safety Information

- Installation must be carried out in accordance with national building and wiring regulations. If you are in any doubt about installing this product, please consult a qualified electrician.
- This product is suitable for connection to a 220-240Vac 50/60Hz supply.
- LED drivers with this symbol are class II IP20 independent control gear and do not require further enclosure. 
- LED drivers without the symbol will rely on the protection of a suitable enclosure to maintain safety.
- For use only with LED modules requiring a constant current supply.
- Install the LED driver in a well-ventilated position and do not cover in insulating material.
- Do not install the LED diver directly above heat sources, such as the LED module, and ensure the rated ambient temperature is not exceeded.
- **The dimming control signal requires a separate pair of wires which should be mains rated and double insulated.**
- Do not cross the input and output wiring as this can cause unwanted induced currents.
- Do not use wiring longer than 2m on the output (secondary) circuit.
- Maximum leading wire length: DALI = 300M, Primary PUSH = 20M
- Do not exceed the output wattage of the LED driver.

Dimming

The LED drivers are DALI 2, Primary PUSH dimmable.

Output Selection

Before installing, select the appropriate LED driver output current, voltage and maximum wattage from the following options by setting the DIP switches under the cover: This can usually be found by referring to the luminaire markings or the output for the standard driver as listed on the datasheet.



Output Current Settings			
DIP Switch	1	2	3
200 mA	-	-	-
250 mA	ON	-	-
300 mA	-	ON	-
350 mA	ON	ON	-
400 mA	-	-	ON
450 mA	ON	-	ON
500 mA	-	ON	ON
550 mA	ON	ON	ON

Output Parameters		
Output Current	Output Voltage	Max. Load
200 mA	3-45 Vdc	9 W
250 mA	3-45 Vdc	11 W
300 mA	3-45 Vdc	14 W
350 mA	3-45 Vdc	16 W
400 mA	3-45 Vdc	18 W
450 mA	3-45 Vdc	20 W
500 mA	3-40 Vdc	20 W
550 mA	3-36 Vdc	20 W

Installation

- Before commencing installation, turn off and isolate the circuit to be worked on by removing the fuse or switching the circuit breaker off at the distribution board.
- When cutting holes, drilling or screwing beware of joists and take care not to damage existing wiring or pipework.
- The mains supply should be connected to the Primary input terminals or wiring leads as follows:
  Blue = Neutral (N), Brown = Live (L)
- The output should be connected to the terminals marked SEC, observing the correct polarity as indicated.
- If being used, DALI dimmer switch wires can be connected to the DA terminals observing the correct polarity as indicated (see wiring diagrams).
- If being used, PUSH dimming retractive switch wires can be connected to the DA terminals. Connect a wire from the Neutral to one DA terminal and connect the Live from the retractive switch to the other DA terminal.
- For more information on dimming control refer to the additional sections below.
- Once all connections and settings are satisfactory, ensure that all electrical connections are tight with no loose strands, tighten the cable grip, replace the terminal cover and reconnect the power supply.

DALI Dimming

- The DALI control signal source cabling should be mains rated (as the DALI signal is not SELV rated) with the following CSA:

Less than 100 metres	0.5 mm^2
100 to 150 metres	0.75 mm^2
150 to 300 metres (max)	1.5 mm^2

- Connect the DA input signal terminals on the driver to the DALI outputs from the DALI dimmer switch or control source, observing installation instructions for the control source.
- The DALI control signal voltage should be between 16V and 22.5V DC with no more than a 2V drop along the cable length. Less than 14V DC is likely to be a problem with the DALI signal.

PUSH Dimming

- The PUSH control cabling should be <20m, mains rated and double insulated.
- Connect a wire from the Neutral supply to one DA terminal and connect a Live via the retractive (non-latching) switch to the other DA terminal.
- On/Off = Short press of the PUSH switch.
- Dimming Up/Down = Long press of the PUSH switch.(1s-8s)
- The dimming direction reverses with each long press of the PUSH switch to enable fine tuning of the light level.
- When switched off and back on the light level will return to its current dimming level.

Kosnic Lighting Ltd, Unit 2, Kennetside, Bone Lane, Newbury, RG14 5PX, UK
Kosnic Lighting France, 2bis Avenue Irene Joliot-Curie, 77700 Bailly-Romainvilliers, France

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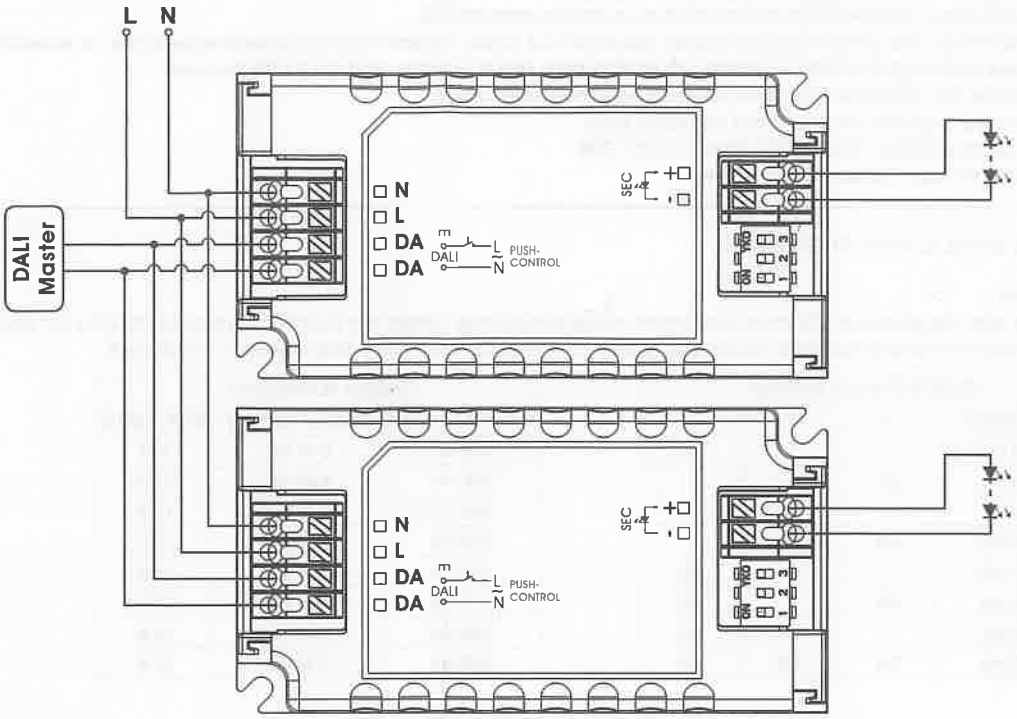
Synchronisation

Up to 20 drivers can be connected to the same PUSH switch and synchronised as follows:

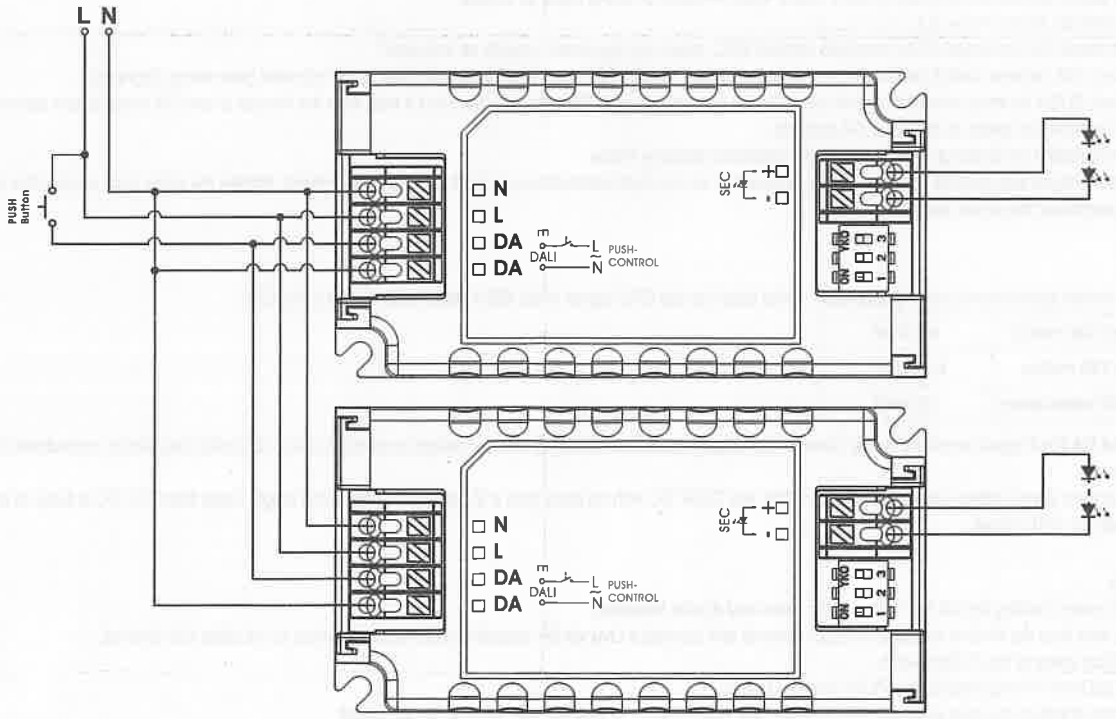
- Connect all drivers.
- Long press the PUSH switch for more than 15 seconds so all are at 100%.
- Short press the PUSH switch to turn off.
- The LED drivers should now be resynchronised.

Wiring Diagrams

DALI Dimming



Primary PUSH Dimming



L'élimination du produit et des matériaux d'emballage doit être conforme au décret français No. 2021-835 (France uniquement)

The Waste Electrical & Electronic Equipment Regulations (WEEE) require that products bearing this symbol must not be disposed of with household waste as they may contain substances harmful to the environment. The Local Authority can provide advice on recycling.

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