UDA-12A

a010119



DAL

- Support DALI-2, Push DIM dimming mode.
- In accordance with DALI standard protocol IEC 62386-102, IEC 62386-207 and in compliance with DALI products from other international incorporation.
- PWM digital dimming, standard DALI logarithmic dimming curve.
- DALI address will be automatically assigned by DALI master, 1 DALI address.
- Universal AC input / Full range, High PF, High efficiency, Flicker Free.
- Standby power input<0.5W, meets the requirements of ERP certification.
- Multi-current & wide voltage, suitable for different power LEDs.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- Class II design, SELV safety ultra-low voltage.
- Suitable for indoor LED lighting application.
- 5 Year, 50,000hr warranty.



















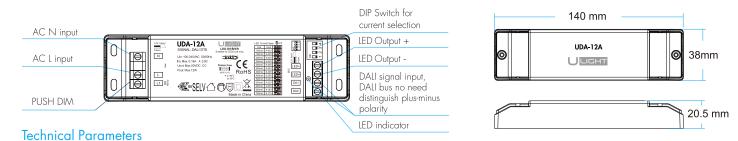






- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

Mechanical Structures and Installations



| | Output Voltage | 10~42VDC |
|-------------------|-----------------------------|---|
| Output | Max Output Voltage | 50VDC |
| | Output Current | 100-700mA |
| | Output Power | Max.12W |
| | Dimming Range | 0~100%, dimming depth: 0.1% |
| | PWM Frequency | 3600Hz |
| | Current Accuracy | 100mA gear ± 10%, the rest of the gear ± 5% |
| | Ripple & Noise | <5%(Maximum current non dimming state) |
| Input | Input Voltage Range | 100~240VAC |
| | Frequency Range | 50/60Hz |
| | Efficiency(TYP) | >80% (350mA at full load) |
| | Input Current | ≤0.15A/115VAC, ≤0.08A/230VAC |
| | Power Factor | >0.95/115VAC, >0.9/230VAC |
| | THD | <12% / 230VAC(at full load) |
| | Anti Surge | LN:1.5KV |
| | Inrush Current | Cold start8A, 135us duration(50% peak) / 230VAC |
| | Leakage Current | < 0.6mA/230VAC |
| | Standby Power/No Load Power | <0.5W(DIMMING OFF) |
| D | DALI dimming | Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA |
| Dimming Interface | Push DIM dimming | Voltage range: 100-240V 47/63Hz |
| | Over Load Power | Current decrease or Hiccup, recovers automatically after fault condition is removed |
| Protection | Short Circuit | Output short-circuit, intermittently shut down output; Long time short-circuit, the system will completely shut down the LED output, you need to manually power on restart activation |
| | Over Temperature | Current decrease when PCB temp>100°C, recovers automatically after fault condition is removed |
| | Woking Temperature | -20°C~50°C |
| Environment | T-case Max | 90°C |
| | Working Humidity | 20%~90%RH, non-condensing |
| | Storage Temp/Humidity | -40°C~80°C, 10%~95%RH |
| | Temperature Coefficient | ±0.03%/°C (0-50%) |
| | Vibration Resistance | 10-500Hz, 2G, 6min/cycle, X,Y,Zaxes/2min |
| Safety&EMC | Security Specifications | CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015 |
| | Withstand Voltage | I/PO/P: 3750VAC |
| | Insulation Resistance | I/PO/P: 100M/500VDC/25° C /70%RHΩ |
| | EMC Emission | CEEMC:EN55015,EN61000-3-2,EN61000-3-3 |
| | EMC Immunity | CE-EMC: EN61000-4-2,3,4,5thunderbolt1KV],6,11 |
| | Certications | CE. DAU 2.0 |

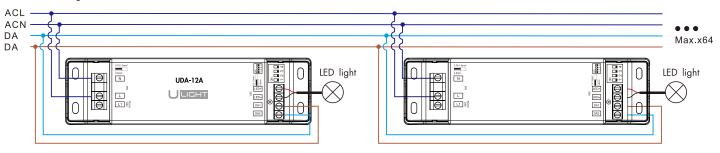




| 1 2 3 4 | | | | | | | | | | | | | |
|----------------|----------|-----------|----------|------------|------------------|------------|---------|--------------------|----------|---------|---------|---------------------|----------------|
| Output Voltage | 9-42V | 9-42V | 9-42V | 9-42V | 9-40V | 9-34V | 9-30V | 9-26V | 9-24V | 9-22V | 9-20V | 9-18V | 9-1 <i>7</i> V |
| Output Current | 100mA | 150mA | 200mA | 250mA | 300mA | 350mA | 400mA | 450mA | 500mA | 550mA | 600mA | 650mA | 700mA |
| Output Power | 0.9-4.2W | 1.35-6.3W | 1.8-8.4W | 2.25-10.5W | 2. <i>7</i> -12W | 3.15-11.9W | 2.4-12W | 3.6-11. <i>7</i> W | 4.05-12W | 3.3-12W | 4.5-12W | 4.95-11. <i>7</i> W | 5.4.9W |

Wiring Diagram

1. DALI dimming connection



DALI dimming mode

After installation according to the wiring diagram of DALI dimming application,

the dimming power supply receives any DALI command to enter the DALI dimming operating mode.

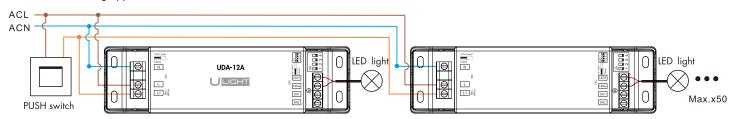
Power-on level

When the driver is in DALI- dimming mode, the factory default level after each power-on is the brightest. (The recommended setting for the default factory power-on level of the DALI-2 driver is the brightest in the DALI-2 standard.)

The power-on level can be set through the DALI configuration tool or DALI application controller during installation, and can be set to memory or fixed any brightness (such as off, darkest, 30%, 50% etc.).

The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.

2. Push DIM dimming application



Switch to the push DIM dimming mode

After installation according to the wiring diagram of pushDIM dimming application, short press the push button 1 times, the driver will automatically switch to the push DIM dimming mode.

Push Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.

• Short press:

Turn on or off light.

• Long press (1-6s):

Press and hold to step-less dimming. With every other long press, the light level goes to the opposite direction.

• Dimming memory:

Light returns to the previous dimming level when switched off and on again, even at power failure.

• Synchronization:

If more than one controller are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.

Installation note

- 1. This product must be installed and adjusted by a qualified professional.
- 2. This product is non-waterproof. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- 3. LED driver should keep a certain distance from the heating stuff(such as the luminaries radiator).
 - The installation interval between the product and the product is recommended to be 15cm, so as not to affect the service life due to poor heat dissipation.
- 4. Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- 5. If a fault occurs, please do not attempt to fix the product by yourself. If you have any questions, please contact us in time.