

Radiar AFD1/4

4 Child DALI Controller



INSTALLATION AND QUICK START SHEET

WARNING AND GUIDELINES!!!

Read and follow all safety instructions!!

DO NOT INSTALL DAMAGED PRODUCT! This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

WARNING : TURN THE POWER OFF AT THE CIRCUIT BREAKER BEFORE WIRING

Do's	Don'ts
Installation should be performed by a qualified electrician	Don't use outdoors
Installation shall be in accordance with all applicable local and NEC codes	Avoid input voltage exceeding maximum rating
Turn the power OFF at circuit breakers before wiring	Don't disassemble the products
Observe the correct polarity of output terminal	
Place devices as far away as possible from metallic materials	
Devices work best in when there is a clear LOS between them	
When placing devices inside metallic boxes, please ensure the antenna comes out of the boxes	

WARNING: Risk of Product Damage

- Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment should be worn during all installation or servicing of the unit
- Do not stretch or use cable sets that are too short or are of insufficient length
- Do not modify the product
- Do not mount near gas or electric heater
- Do not change or alter internal wiring or installation circuitry
- Do not use product for anything other than its intended use

WARNING - Risk of Electric Shock

- Verify that supply voltage is correct by comparing it with the product information
- Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements
- All wiring connections should be capped with UL approved recognized wire connectors
- All unused wiring must be capped

Specifications		Remarks
Input Voltage	90-277VAC	Rated Input voltage
Input Current	65mA	-
Inrush current	4A	-
Surge Protection	4kV	-
Standby current	7.71mA	-
Connection Distance (Device to Device)	45m(147.6ft)	Vary depending on the installation environment
Frequency	50/60Hz	-
Tx Power	8dBm	With 150mm external wire antenna
Rx Sensitivity	-95dBm	-
Dimming Range	0-100%	1000 steps resolution
Operating Temperature	-20 to 50°C(-4 to 120°F)	
Relative Humidity	20-85%	Non condensing
Dimensions	1.7 x 1.4 x 0.8in (45.1 x 35.1 x 20.2mm)	L x W x H

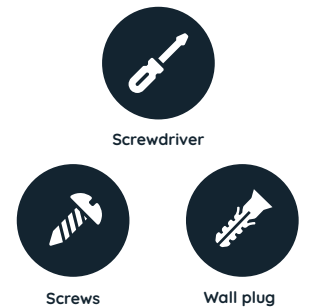
PRODUCT OVERVIEW

Radiar AFD1/4 is a DALI controller and operates on 90-277VAC input voltage range. It can be connected to 4 DALI LED drivers. This device also has a 12VDC auxiliary output to power the sensors.

It is a part of Lumos Controls ecosystem, which includes controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards.



REQUIRED TOOLS & SUPPLIES



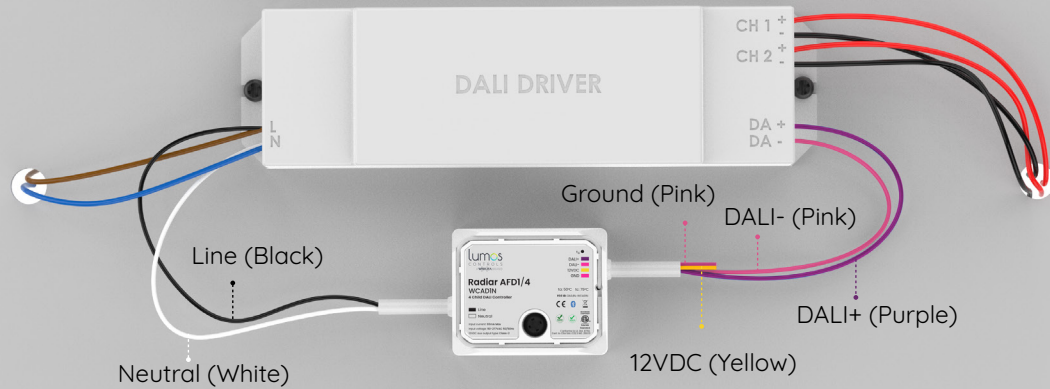
INSTALLATION INSTRUCTIONS

INSTALLATION STEPS

- Turn OFF the power before wiring and installing the device
- The controller with a compact formfactor can be installed anywhere within the light fixtures, or within junction boxes. The screw hole available on the controller can be used to fix it firmly.
- To power the controller, connect the AC Line and Neutral wires from the mains supply to the Line (Black color), and Neutral (White color) of the controller.
- To control DALI drivers, connect the DALI lines to the DALI+ (Purple color) and DALI- (Pink color) wires in the controller.
- 12VDC (Yellow color) and GND (Pink color) can be used to power 12VDC sensor.

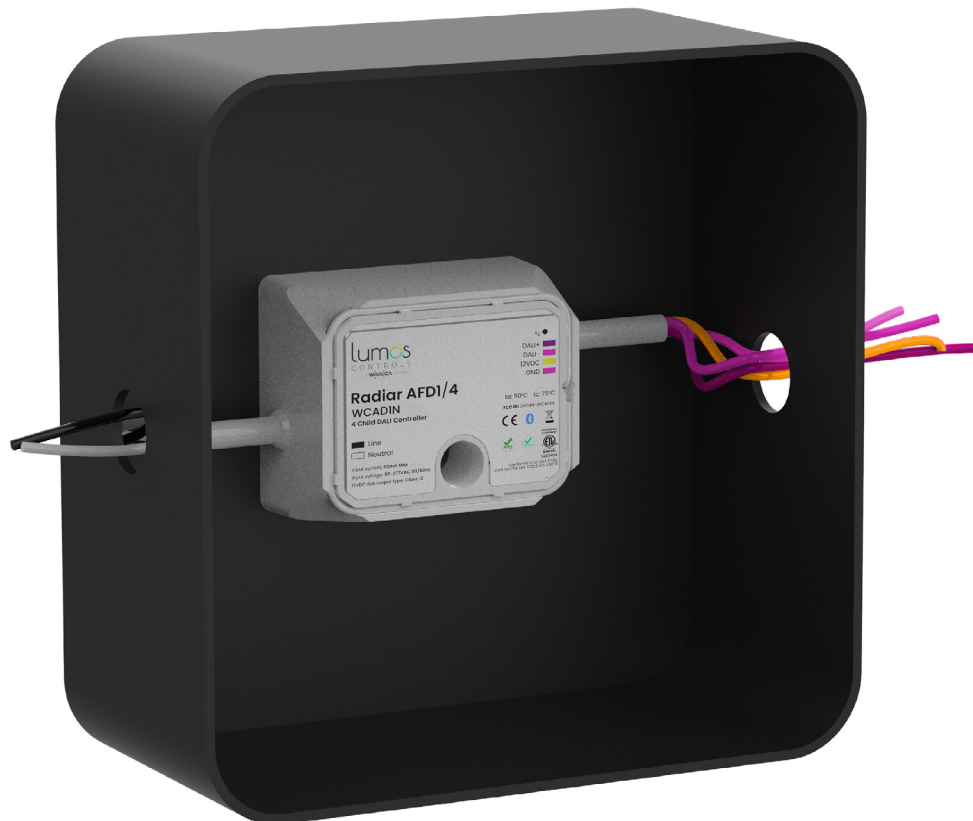
Note: DALI is polarity insensitive

- Installing within a light fixture

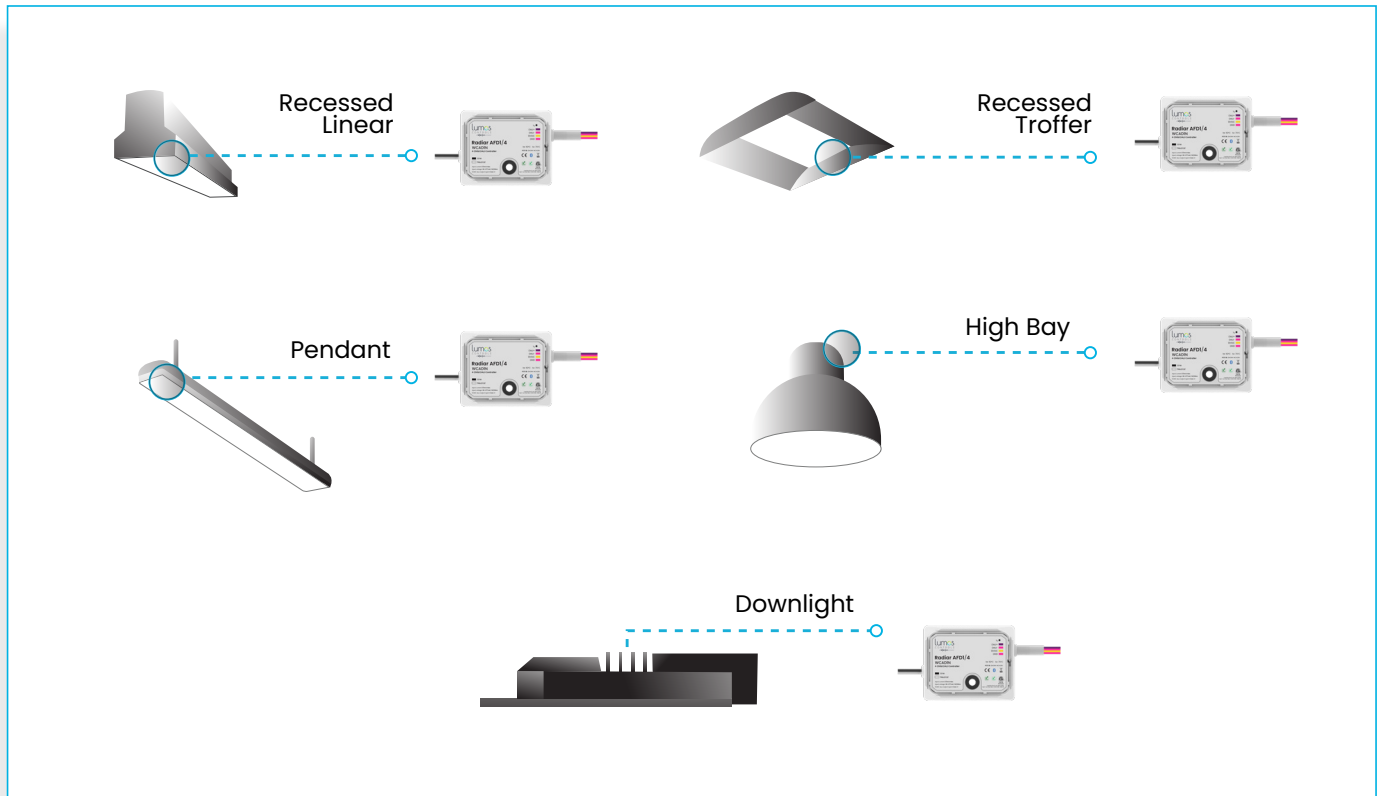


(Top view of a light fixture)

- You can also install the device within a box

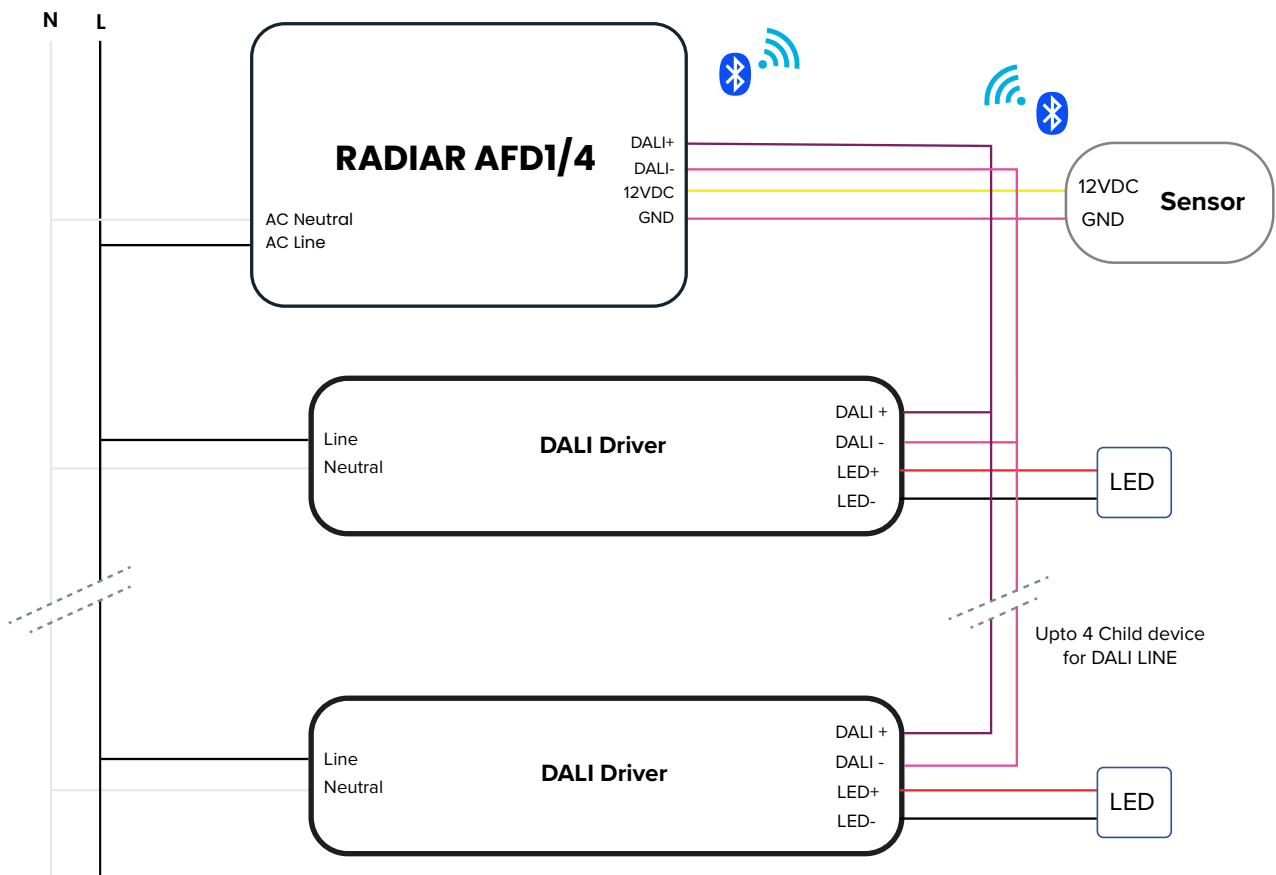


On the extrusion or on top of the fixture

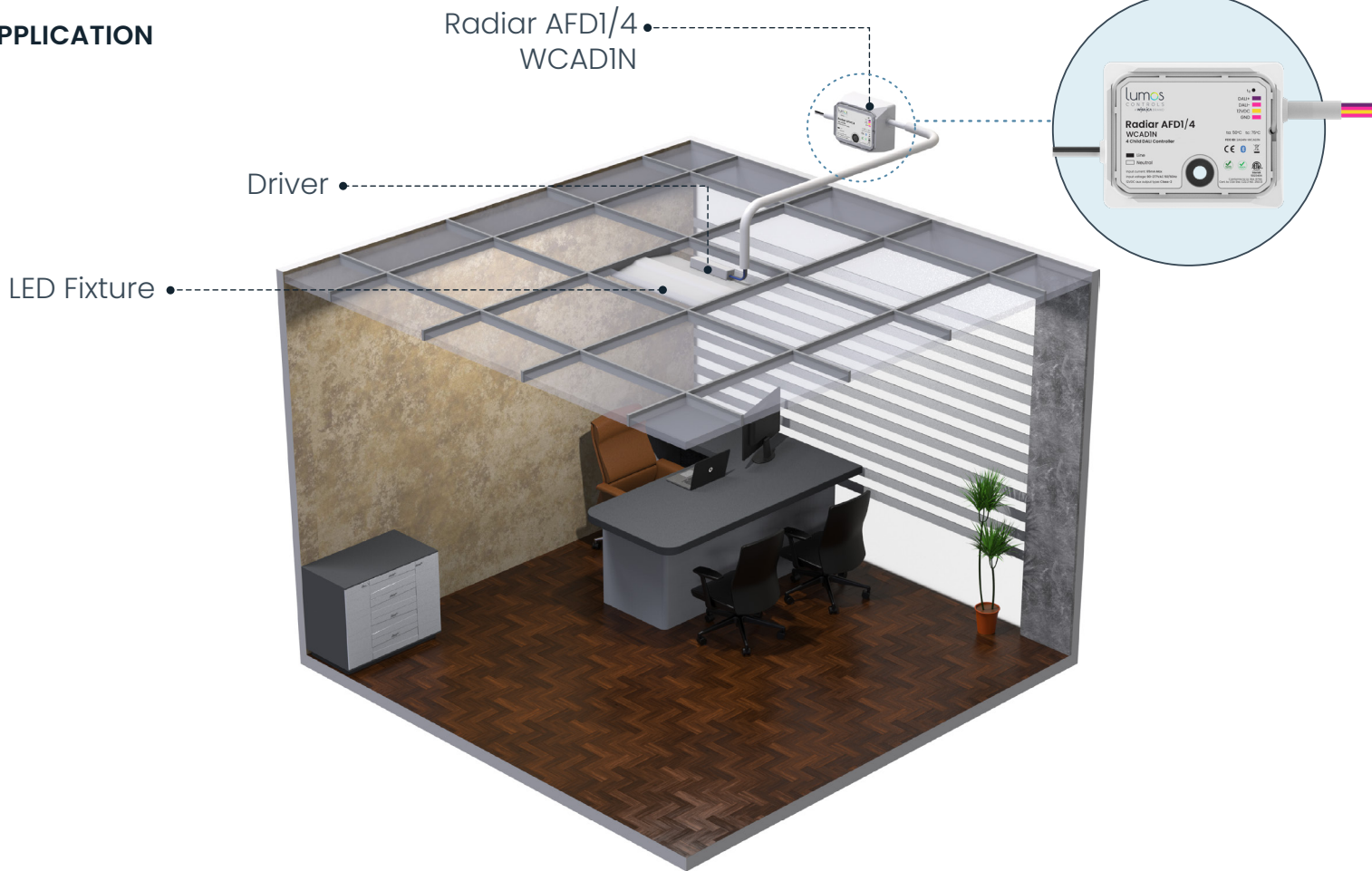


WIRING

Connecting DALI drivers to the Radlar AFD1/4 controller



APPLICATION



RF GUIDELINES

If pairing of devices are getting failed continuously then it may be due to BLE traffic. To reduce the traffic, power OFF other devices in the vicinity and pair again.

TROUBLESHOOTING

When returning from a Power Outage, lights go back to ON state.	This is normal operation. Our device has a fail-safe feature forcing the device to go to 50% or 100% and 0-10V at the full output on the loss of power. Alternatively, the device will return to its previous state after the power is restored, as configured using the Lumos Controls mobile app.
Device doesn't operate immediately after power ON	Check whether you have set up a transition time
Lights flickering	<ul style="list-style-type: none"> The connection is not appropriate The wires are not secured firmly with connectors
Lights did not turn ON	<ul style="list-style-type: none"> Circuit breaker tripped Fuse has blown Inappropriate wiring

WARRANTY

5-year limited warranty

Please find warranty [terms and conditions](#)

Note: Specifications may change without notice

Actual performance can vary due to end-user environment and application

COMMISSIONING

Once powered up, the device will be ready to be commissioned via the Lumos Controls mobile app, available for free download on [iOS](#) and [Android](#). To begin commissioning, click the '+' icon from the top of the 'Devices' tab. The app allows you to preset certain configurations which will be loaded after the device is added. The pre-configurations made using 'Commissioning Settings' will be sent to the devices being commissioned.

Once commissioned, the device will be displayed in the 'Devices' tab and you can perform individual operations like ON/OFF, Dimming from this tab.



Please visit [Help center](#) for more details

LUMOS CONTROLS APPLICATION

Download the 'Lumos Controls' application from Play Store or App Store
OR

Scan the QR codes to download the 'Lumos Controls' application



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