



Low Voltage Fixture Adapters

- Status LEDs & Config Button**
Quick and easy validation of wiring and network
- Direct Connect™ Sensor Port**
Simple and cost-effective addition to Avi-on sensors
- Terminal Blocks & Mounting Tabs**
Faster, easier and lower cost installation eliminating connectors



Fixture-integrated adapter works with any dim-to-off 0-10V fixture

UL 924 2022 Listed
Designate any fixture as an emergency fixture after installation without changing hardware

Internal and External Antenna Options

Internal antenna offers improved performance and eliminates risk of accidentally cutting a hanging wire, while the outdoor IP rated antenna provides multi hundred foot range for outdoor applications

PRODUCT OVERVIEW

Description

The LVFA series fixture adapter mounts inside lighting fixtures providing addressability for each luminaire. All fixture adapters are part of the Avi-on® Bluetooth® with Mesh product ecosystem supported by the Avi-on mobile app, commissioning tools and cloud IoT Services.

Operation

The fixture adapter requires 12-24VDC. It must be powered either by a LED driver with AUX output or an external Avi-on power supply (Class II). Once powered up and added to the network, the fixture adapter dims lighting loads in response to the input from communicating devices.

Direct Connect™ Ready

Just plug any Avi-on Direct Connect Sensor into the sensor port for easy sensor integration. Sensor is powered directly from the LVFA.

Applications

This family of low voltage fixture adapters is ideal for controlling any lighting fixture that utilizes 0-10V dim-to-off drivers. Its compact size makes it easy to fit inside most indoor fixtures such as flat panels, troffers, retrofit kits, linear architectural fixtures, recessed and other luminaires for offices and schools applications.

The LVFA is an easy solution for almost any indoor commercial lighting project including offices, manufacturing, warehouses, schools, gymnasiums, common areas, UV-C lighting control, and outdoor area lights including floods, canopies in garage, open parking, site, and athletic facilities.

The LVFA is UL 924 listed, and when used in conjunction with the Avi-on Normal Power Beacon, any fixture can be designated as an emergency fixture in the field with no change in hardware (must be powered by emergency power).

Finally, the 2-channel 0-10V model is ideal for projects with tunable white requirements.

ORDERING INFORMATION

Part Number	Description	Application	Input Voltage
AVI-B-LVFA-12-24VDC-1CH	Fixture adapter, single channel 0-10V, dim-to-off driver	Indoor	12 - 24 VDC
AVI-B-LVFA-12-24VDC-CCT	Fixture adapter, dual channel 0-10V, dim-to-off driver, tunable white	Indoor, CCT	12 - 24 VDC
AVI-B-LVFA-12-24VDC-WC	Use for two standard drivers for color changing (0-10V dimming on each string)	Indoor, CCT	12 - 24 VDC
AVI-B-LVFA-12-24VDC-1CH-OA	Fixture adapter, single channel 0-10V, dim-to-off driver, external antenna	Outdoor	12 - 24 VDC

To order please contact Avi-on sales at **(877) AVION-US**, (877) 284-6687 or prosales@avi-on.com for order information or integration support.

Project		Location/Type	
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SPECIFICATIONS

Input Voltage: 12-24VDC
Current: 15mA without a Sensor
 19mA with a DC PIR Sensor
 48mA with a DC Microwave Sensor

Inrush Current
12VDC: 225 mA (285 mA max)
12VDC + Sensor: 275 mA (340 mA max)
12VDC Inrush Current Time: 10ms $\leq \Delta t \leq$ 20ms
 (15ms Typical with 3dB Width of 6ms)

24VDC: 250 mA (315 mA max)
24VDC + Sensor: 310 mA (390 mA max)
24VDC Inrush Current Time: 12ms $\leq \Delta t \leq$ 24ms
 (20ms Typical with 3dB Width of 16ms)

0-10V Dimming: 5mA per Channel
Size: 2.30in x 1.43in x 0.75in
 (58.2mm x 36.4mm x 19mm)

Mounting: Removable mounting tabs
Weight: 0.45 oz (16g)
Terminal Blocks: 22-16 AWG wires
Operating Temperature: -40F to +158F (-40C to +70C)*

Storage Temperature: -40F to +185F (-40C to +85C)
Humidity Rating: 95% non-condensing
Radio Frequency: 2.4GHz
Wireless Standard: BLE 4.2 with Mesh
Point to Point Range¹: 80ft with obstructions and 350ft unobstructed

Security: AES 128-bit encryption for device to device communication
 AES 256-bit encryption for device to cloud communication

Warranty: 5 years; 10 years optional
Regulatory: FCC ID: 2AFZI-AVIBG21
 IC ID: 20544-AVIBG21
 BQB: DID: D063032
 CE: EN IEC 6100-6-1:2019,
 EN IEC 6100-6-3:2021
 UL 916, 2043 (Plenum Rated)
 UL 924 Emergency Lighting Equipment)

Note: Operating controller at or above these levels may result in damage to components/product

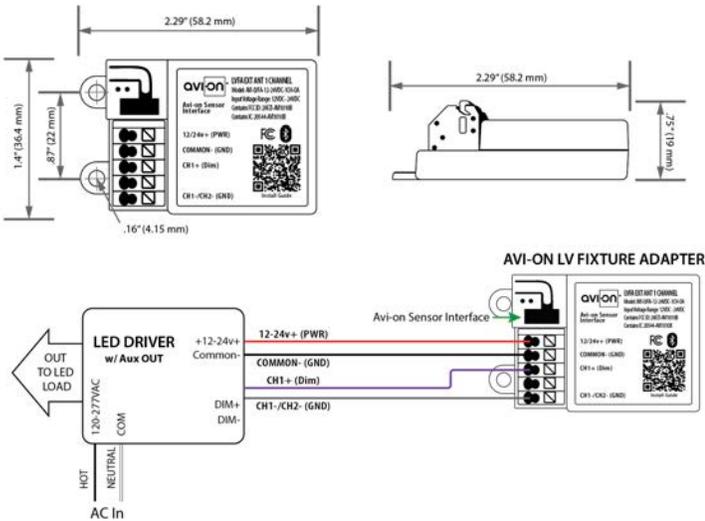
*For temperatures below freezing or dew point, the device should be sealed in a watertight container to prevent frost buildup

**When communicating through the mesh, range is essentially unlimited (5000ft+)

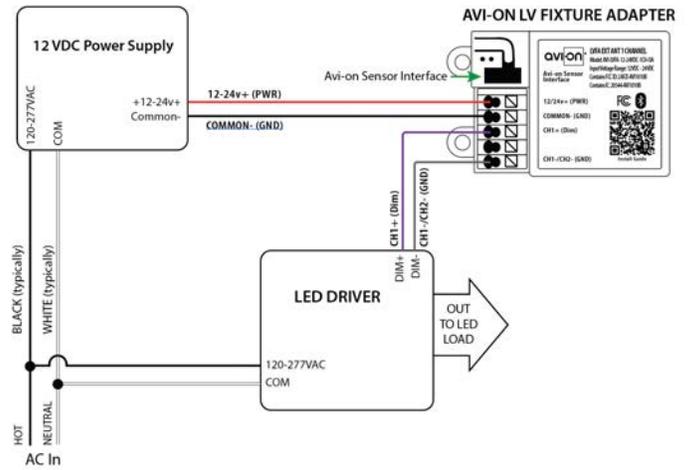
See Safety and Certification Details here: <https://tinyurl.com/y4698945>

DIAGRAMS

Dimensions:



Fixture adapter powered by LED driver auxiliary output



Fixture adapter connected to LED driver and using power supply

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