# Low Voltage Fixture Adapters



#### Status LEDs & Config Button

Quick and easy validation of wiring and network

Direct Connect<sup>™</sup> Sensor Port Simple and cost-effective addition to Avi-on sensors



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

#### Internal Antenna

Improved performance and eliminates risk of accidentally cutting a hanging wire

Terminal Blocks & Mounting Tabs

Faster, easier and lower cost installation eliminating connectors

### **Product Overview**

#### Description

The LVFA series fixture adapter mounts inside lighting fixtures proving addressability for each luminaire. All fixture adapters are part of the Avi-on<sup>®</sup> Bluetooth<sup>®</sup> 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.

#### 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 also a great solution for commercial, industrial and outdoor projects such as warehouses, gymnasiums, common areas, parking lots, garages, and manufacturing plants using high-bays (linear or UFO), vapor tights, utility wraps, etc.

The external antenna model is well suited for outdoor luminaires such as area lights, floods, canopies and other garage or open parking area fixtures.

Finally, the 2-channel 0-10V model is ideal for projects with tunable white requirements, where one channel is used to adjust the color temperature (CCT) and the other the light level (also works with two independent drivers).

## **Ordering Information**

Description	Application	Input Voltage
Fixture adapter, single channel 0-10V, dim-to-off driver	Indoor	12 - 24 VDC
Fixture adapter, dual channel 0-10V, dim-to-off driver, tunable white	Indoor, CCT	12 - 24 VDC
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 information on becoming an Avi-on partner and order details.



# **Specifications**

Input Voltage:	12-24VDC
	17mA without a Sensor
	22mA with a DC PIR Sensor
	60mA with a DC Microwave Sensor
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
<b>Operating Temperature:</b>	-22F to +158F (-30C to +60C)
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 Range*:	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

HVIN: AVI-B-LVFA-12-24VDC-1CH, AVI-B-LVFA-12-24VDC-2CH \*When communicating through the mesh, range is essentially unlimited (5000ft+)

**Dimensions:** 





# Wiring Diagrams

#### Fixture adapter powered by LED driver auxiliary output



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#### Fixture adapter connected to LED driver and using power supply

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

This device complies with Innovation, Science, and Economic Development Canad licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil nedoit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

L'appareil est conforme aux limites d'exposition aux rayonnements spécifiées par la FCC/ISED pour les environnements non contrôlés. La distance entre le radiateur et le corps doit être d'au moins 20 cm lors de l'installation et du fonctionnement de l'appareil.

Cet émetteur ne doit pas coexister ou fonctionner conjointement avec toute autre antenne ou émetteur.