Specification Data	
Job Name	
Type	
Catalog #	
Comments	
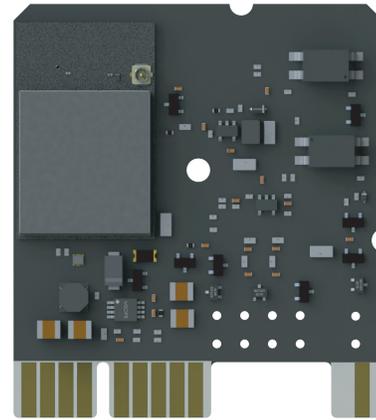
PRODUCT OVERVIEW

The DIM10-087-06 embedded wireless controller opens an exciting integration path for LED Luminaires. The smaller size and lower cost make this DC-powered wireless controller versatile enough to be embedded in nearly any wattage LED Luminaire.

Pairing the DIM10-087-06 with a SimplySnap Site Controller makes it easy to comply with ASHRAE 90.1, Title 24, DLC NLC Indoor/Outdoor, and other energy requirements today and in the future.

KEY FEATURES:

- Seamless SimplySnap Integration
- Simplified DC Design — mates with LED Drivers
- Secure AES128 Encryption
- DLC Certification for both Indoor and Outdoor
- Self-healing 2.4GHz SNAP Mesh Networking
- Secure, over-the-air software upgrades
- 2 Sensor Inputs: DC Motion and 0-10V Photocells

IEC 62386 DALI-2 Certified – D4i

- DALI-2 Certified DATA Bus – Part 101
- D4i Power Monitoring – Part 252
- D4i – Type D – Single-Master Controller – Part 351
- DALI-2 Linear Dimming, ON/OFF – Part 218
- Compatible with WattStopper DALI-2 FDP-301 Motion and Photocell
- RGBA Color Support
- Requires DALI Power Supply on D4i Driver
- Requires D4i Aux Power Supply

DIM to OFF LED Drivers

- 0-10V Dimming, ON/OFF
- No Power Monitoring
- Powered via LED Driver Aux Power

Note- LED Driver must support DIM to OFF functionality

Powered by SimplySnap

Future D4i Enhancements

- Luminaire Run Time - Part 253
- Luminaire Model Data - Part 251 - Memory Bank 1
- LED Driver Model Data - Part 102 - Memory Bank 0
- Surge Detection - Part 253
- Over Temperature Counters - Part 253
- Over Current Counters - Part 253
- Diagnostics and Alerts - Part 253

SPECIFICATIONS

Dimensions	2.4" x 2.2" x 0.4" See Mechanical Datasheet for Engineering dimensions	
Input Power	12-24 VDC +/- 10% , 900mW max	
Temperature	-40°C to +80°C	
Dimming	0-10V, 10mA Source/Sink (Max) or D4i Dimming	
D4i LED Drivers[1]	Limited to 4 D4i LED Drivers	
Wire Size	15-20 AWG (.063")	
Sensor Input Specifications	Analog: 0-10V Digital: 0-24V	2 Available software select
Radio	SNAP 2.4GHz ; 802.15.4 +20 dBm Transmit Power -103 dBm Receive Sensitivity	
Certifications	UL Recognized Component; FCC/IC; CE; UKCA; DLC- Indoor/Outdoor; DALI-2 - D4i Certification	
Warranty[2]	5 Years	

1. Maximum of 4 LED Drivers per controller, consult Synapse Support if a greater ratio is needed.
2. See www.synapsewireless.com/warranty for warranty terms.

LIGHTING CONTROLLER

DALI 2 D4 DLC LISTED

WIRING DIAGRAM EXAMPLES

Product #	Description
DIM10-087-06	Bare Board, External Antenna (RF cable and Antenna not included)
DIM10-087-06-F	Bare Board, Internal antenna

DIM TO OFF Wiring
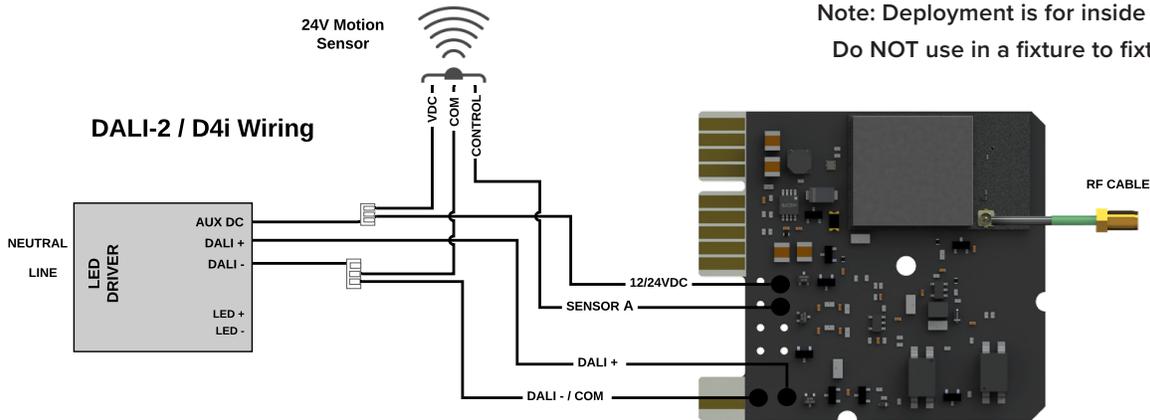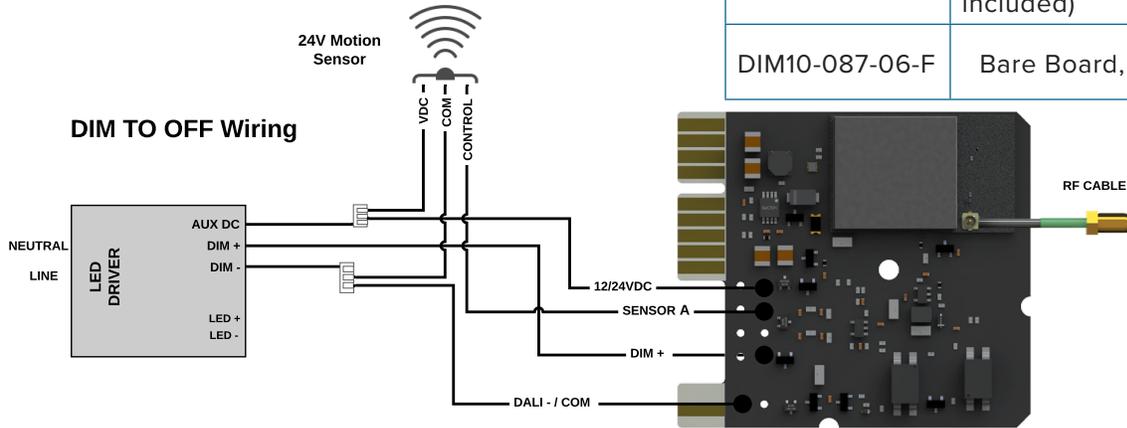
Note: Deployment is for inside fixtures only.

Do NOT use in a fixture to fixture design.

DALI-2 / D4i Wiring

Status LED- when powered

Color	Meaning
RED	No Network Found (Communication Lost)
BLINKING GREEN	Network Found, Controller Not Configured (Device not yet added to SimplySnap)
GREEN	Network Found, Controller Configured (Normal Operation)

u.FL RF cable and Antenna Options - optional for DIM10-087-06 model

Part #	Description
KIT-ANTUFL18-01	OUTDOOR ANT,RIGHT ANGLE,U.FL, 18" CBL,14MM BULKHEAD,O-RING
KIT-ANTUFL18-02	OUTDOOR ANT,STRAIGHT,U.FL, 18" CBL,14MM BULKHEAD,O-RING
KIT-ANTUFL18-03	OUTDOOR ANT,RIGHT ANGLE STUB,U.FL, 18" CBL,14MM BULKHEAD,O-RING
KIT-ANTUFL18-04	OUTDOOR ANT,STRAIGHT STUB,U.FL, 18" CBL,14MM BULKHEAD,O-RING

SimplySnap Site Controller options- required for all deployments

Part #	Description	Application
SS450-002	SimplySnap, WiFi, Verizon LTE, Industrial Metal Enclosure	Indoor
CBSSW-450-002	Central Base Station SS450-based Model with 5-button switch and NEMA 4X enclosure	Indoor/Outdoor

Patented – Virtual marking at https://www.synapsewireless.com/about/patents

LIGHTING CONTROLLER

synapse

To learn more, call or visit: (877) 982-7888 www.synapsewireless.com