synapse

DIM10-087-06-IP
D4i OR 0-10V DIM TO OFF
WIRELESS LIGHTING CONTROLLER

Specification Data	
Job Name	
Type	
Catalog #	
Comments	

PRODUCT OVERVIEW

The DIM10-087-06-IP 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 externally mounted with nearly any wattage LED Luminaire.

Pairing the DIM10-087-06-IP 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
- IP66 rated for indoor and outdoor applications

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
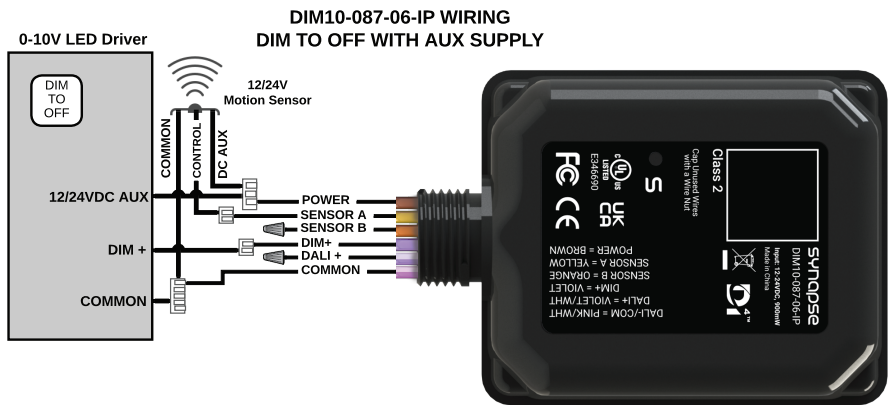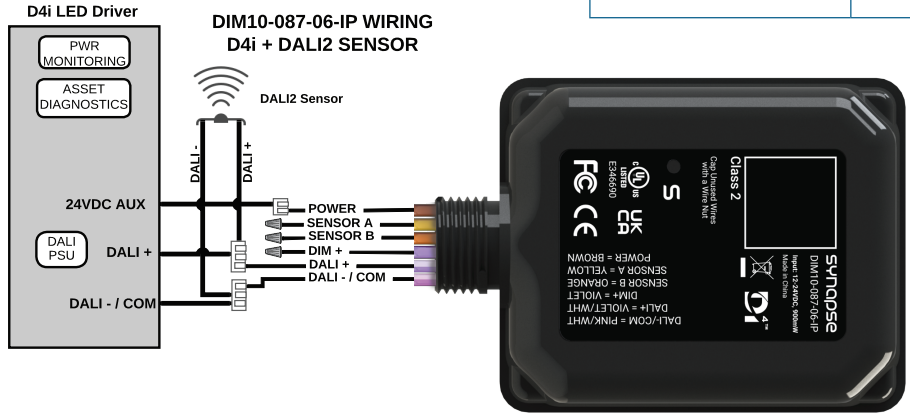- Diagnostics and Alerts - Part 253

SPECIFICATIONS

Dimensions	3.7" x 2.8" x 0.9" See Mechanical Datasheet for Engineering dimensions
Input Power	12-24 VDC +/- 10% , 900mW max
Temperature	-40°C to +80°C
IP Rating	IP66
Wire Size	18AWG, 15" Wires, 600V
Dimming	0-10V, 10mA Souce/Sink (Max) or D4i Dimming
D4i LED Drivers[1]	Limited to 4 D4i LED Drivers
Sensor Input Specifications	Analog: 0-10V Digital: 0-24V / Software selectable
Radio	SNAP 2.4GHz ; 802.15.4 +20 dBm Transmit Power -103 dBm Receive Sensitivity
Certifications	c(UL)us; FCC/IC; CE; UKCA; DLC- Indoor/Outdoor; DALI-2 - D4i Certification
Warranty[2]	5 Years

LIGHTING CONTROLLER

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.

WIRING DIAGRAM EXAMPLES

Product #	Description
DIM10-087-06-IP	Board in IP66 Case with Wires, internal antenna

D4i LED Driver

DIM10-087-06-IP WIRING
D4i + DALI2 SENSOR

- PWR MONITORING
- ASSET DIAGNOSTICS
- 24VDC AUX
- DALI PSU
- DALI +
- DALI - / COM

DALI2 Sensor

DALI -
DALI +

POWER
SENSOR A
SENSOR B
DIM +
DALI +
DALI - / COM

0-10V LED Driver

DIM10-087-06-IP WIRING
DIM TO OFF WITH AUX SUPPLY

- DIM TO OFF
- 12/24VDC AUX
- DIM +
- COMMON

12/24V Motion Sensor

COMMON
CONTROL
DC AUX

POWER
SENSOR A
SENSOR B
DIM+
DALI +
COMMON

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)

Signal/Wire Colors

Signal	Wire Color
DALI-/COMMON	PINK/WHITE STRIPE
DALI+	VIOLET/WHITE STRIPE
DIM+	VIOLET
SENSOR INPUT B	ORANGE
SENSOR INPUT A	YELLOW
POWER	BROWN

Note: Cap Unused Wires with a Wire Nut!

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

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

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