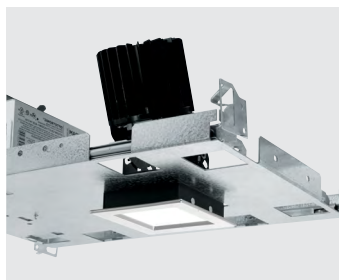
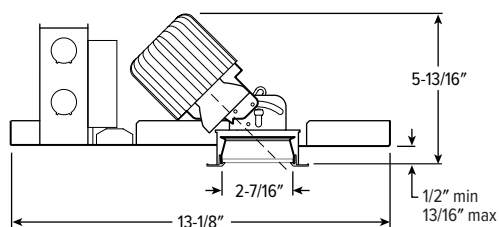


# 2AS<sup>LED</sup> 2" Adjustable Downlight – Square



NEW CONSTRUCTION AND REMODEL



CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_



ORDERING EXAMPLE: 2AS - L15/835 - OPTIONS - CONTROL/DIM - UNV - LW - OF - CS - TRIM OPTIONS - N - F1

## HOUSING

SERIES	LUMENS <sup>[1]</sup>	CRI	CCT	OPTIONS	CONTROL	DRIVER	VOLTAGE
2AS	L5 500lm L7 700lm L9 900lm L12 1,200lm L15 1,500lm	8 80 9 90 <sup>[2]</sup>	27 2700K 30 3000K 35 3500K 40 4000K 50 5000K	See page 3 for EMERGENCY BATTERY OPTIONS. ATH Airtight construction <sup>[3]</sup> F Fuse CP Chicago plenum (CCEA) <sup>[4]</sup> SDT Stepdown transformer <sup>[5]</sup>	See page 5 for ADDITIONAL CONTROL/ DRIVER OPTIONS. – None AVI-LVFA Avi-on wireless fixture control <sup>[6]</sup> AWNRLutron Athena wireless node integral fixture control, RF only <sup>[7]</sup>	See page 5 for ADDITIONAL CONTROL/DRIVER OPTIONS. DIM Dimming driver, 0-10V DIM1 1% Dimming driver, 0-10V <sup>[8]</sup> DA Driver with 12V auxiliary power, without external dimming wires <sup>[9]</sup>	UNV 120-277V 347 347V <sup>[10]</sup>

## TRIM<sup>[11]</sup>

TRIM TYPE	DISTRIBUTION	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens R Regressed lens	See page 2 for BEAM ANGLE. W Wide M Medium N Narrow	OF 1/2" standard flange ZF Zero-flange mud-in <sup>[12]</sup>	CS Clear semi-specular powder coat WH White texture powder coat BL Black texture powder coat	AD Diffuse acrylic lens <sup>[13]</sup> PD Diffuse 1/8" polycarbonate lens WET/CC Wet location, covered ceiling listed AM Anti-microbial <sup>[14]</sup>

## MOUNTING

### MOUNTING TYPE<sup>[15]</sup>

- N Open pan for new construction<sup>[17]</sup>
- I IC-rated enclosure for new construction<sup>[18]</sup>
- R Remodel kit<sup>[19]</sup>

### MOUNTING HARDWARE<sup>[16]</sup>

- F1 Integral 2-position fixed pan bracket, universal bar hanger included<sup>[20]</sup>
- BA1 Adjustable butterfly pan bracket, bar hanger not included<sup>[21]</sup>
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included<sup>[22]</sup>

## NOTES

- <sup>1</sup> Lumen output based on L Trim Type, W Distribution and WH Reflector Finish, 80 CRI/3500K CCT. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- <sup>2</sup> Not available with 5000K CCT.
- <sup>3</sup> I Mounting Type required.
- <sup>4</sup> I Mounting Type required.
- <sup>5</sup> Not available with R Mounting. May be required for 347V, see product builder at [hew.com/product-builder](http://hew.com/product-builder)
- <sup>6</sup> DA Driver only. See page 5 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
- <sup>7</sup> DA Driver only.
- <sup>8</sup> L9 minimum lumen package required.
- <sup>9</sup> Avi-on and Lutron Athena Controls only. Not available with R Mounting Type.
- <sup>10</sup> Not available with EM batteries, DA, or DMX drivers.
- <sup>11</sup> Trim ships separately.
- <sup>12</sup> For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for TRIM TYPE DETAILS. Not available with ATH or WET/CC Options.

- <sup>13</sup> W Distribution only.
- <sup>14</sup> WH and BL Reflector Finishes only.
- <sup>15</sup> Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
- <sup>16</sup> Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
- <sup>17</sup> Top access required.
- <sup>18</sup> L9 lumen package max. Top access required. Not available with EM batteries.
- <sup>19</sup> Also used in new construction sheetrock ceilings. Pan-less installation. Additional plenum space required for R mounting when specified with EM battery. See page 3 for REMODEL MOUNTING PLENUM RESTRICTIONS.
- <sup>20</sup> N and I Mounting Types only. I Mounting requires external brackets.
- <sup>21</sup> N Mounting Type only.
- <sup>22</sup> N Mounting Type only.



# 2AS<sup>LED</sup> 2" Adjustable Downlight – Square

## FEATURES

- Beam angles ranging from 15° narrow to 35° wide for tailored performance
- Adjustable aim with 0° - 45° tilt and 360° rotation
- 2" aperture is unobtrusive in small scale spaces
- Zero-flange trim options for modern ceiling
- Etched degree markers and directional indicator make it simple to fine-tune the illumination angle
- Die-cast trim choices include flush or regressed lens
- Square shape accentuates architectural styles
- New construction mounting pan, IC-rated, or pan-less remodel kit available
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Low UGR meets LEED and WELL requirements
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

## SPECIFICATIONS

- HOUSING** – Die-cast aluminum spun and stamped articulating mechanism with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2" – 13/16".
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL** – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70 > 44,000 hours. Reported L90 = 28,000 hours. Estimated L70 = 117,000 hours.
- MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. N and R mounting types for use in non-fire rated installations only. Minimum 17" O.C. marked spacing required for L12 and L15 lumen packages when specified with R Mounting Type.

- LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC option.
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/buy-american](http://hew.com/buy-american)
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty)

## FIXTURE PERFORMANCE DATA

	DISTRIBUTION	WATTAGE	FLUSH LENS TRIM TYPE		REGRESSED LENS TRIM TYPE	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
L5	W	8.2	503	61	480	59
	M	8.2	408	50	372	45
	N	8.2	463	57	449	55
L7	W	11.5	714	62	681	59
	M	11.5	578	50	527	46
	N	11.5	656	57	636	55
L9	W	14.5	885	61	845	58
	M	14.5	717	49	654	45
	N	14.5	814	56	789	54
L12	W	21.3	1179	55	1125	53
	M	21.3	955	45	871	41
	N	21.3	1084	51	1051	49
L15	W	27.9	1331	48	1270	46
	M	27.9	1078	39	983	35
	N	27.9	1224	44	1187	43

- Photometrics tested in accordance with IESNA LM-79. Results based on L trim type, W distribution, WH finish, 80 CRI/3500K CCT, average wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%
- Beam angle based on L Trim Type and WH Reflector Finish.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

## MULTIPLIER TABLES

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
90 CRI	5000K	1.02
	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84

REFLECTOR FINISH	
CATALOG NUMBER	CONVERSION FACTOR
WH	1.00
CS	0.98
BL	0.79

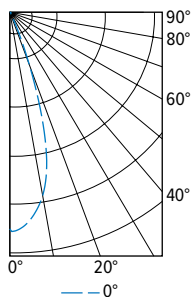
TRIM OPTIONS	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

## BEAM ANGLE

	TRIM TYPE	
	L	R
W	35°	35°
M	20°	20°
N	15°	15°

## PHOTOMETRY

2AS-L12/835-DIM-UNV-LW-OF-WH 0° TILT Report #: 13257190; 03/19/20 | Total Luminaire Output: 1179 lumens; 21.3 Watts | Efficacy: 55.4 lm/W | 80 CRI; 3500K CCT



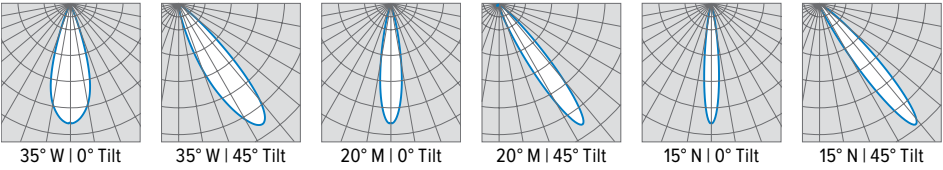
	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
CANDLEPOWER DISTRIBUTION	0	3527	
	5	3424	227
	15	2151	269
	25	179	47
	35	30	11
	45	24	10
	55	24	11
	65	20	9
	75	12	5
	85	3	1
	90	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1101	93
	0 - 60	1144	97
	0 - 90	1179	100
	0-180	1179	100

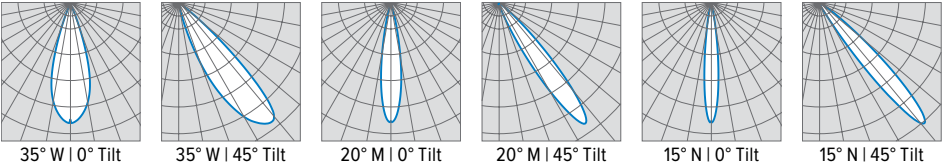
PHOTOMETRY CONTINUED ON NEXT PAGE

# 2AS<sup>LED</sup> 2" Adjustable Downlight – Square

## FLUSH (L)



## REGRESSED (R)



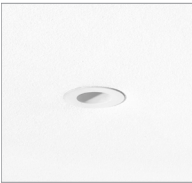
## EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.

CATALOG NUMBER	DESCRIPTION
EM/5W	5-watt emergency battery
EM/7W	7-watt emergency battery
EM/7W/RTS	7-watt emergency battery with regressed test switch <sup>[1]</sup>
EM/10W	10-watt emergency battery <sup>[2]</sup>
EM/10W/RTS	10-watt emergency battery with regressed test switch <sup>[3]</sup>

- <sup>1</sup> Not available with WET/CC Trim Option. N Mounting Type only. Top access required.
- <sup>2</sup> Not available with L5 lumen package.
- <sup>3</sup> Not available with L5 lumen package or WET/CC Trim Option. N Mounting Type only. Top access required.

## MOUNTING DETAILS

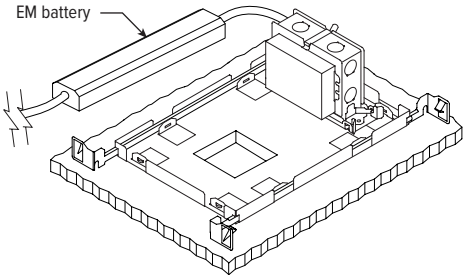
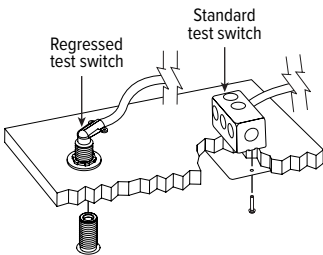


Regressed test switch  
ø1-3/4"



Standard test switch  
2-3/4" x 4-1/2"

Max remote distance is 50',  
connection by others.



## REMODEL MOUNTING PLENUM RESTRICTIONS

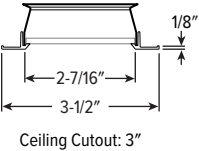
Additional plenum space required for R mounting when specified with EM battery.

CATALOG NUMBER	MINIMUM HEIGHT
EM/5W	7"
EM/7W	9"
EM/10W	11"

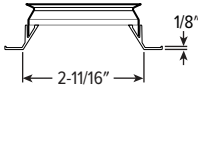
## TRIM TYPE DETAILS

### 1/2" STANDARD FLANGE TYPE

#### FLUSH

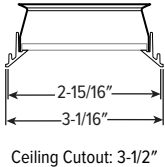


#### REGRESSED

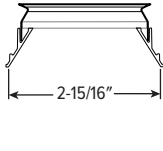


### ZERO-FLANGE MUD-IN

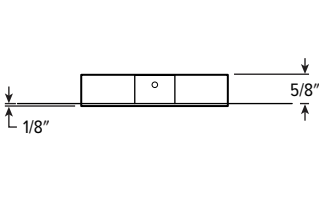
#### FLUSH



#### REGRESSED



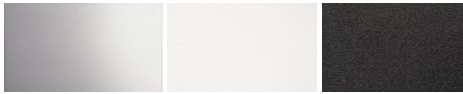
### MUD FLANGE MOUNTING KIT



# 2AS<sup>LED</sup> 2" Adjustable Downlight – Square

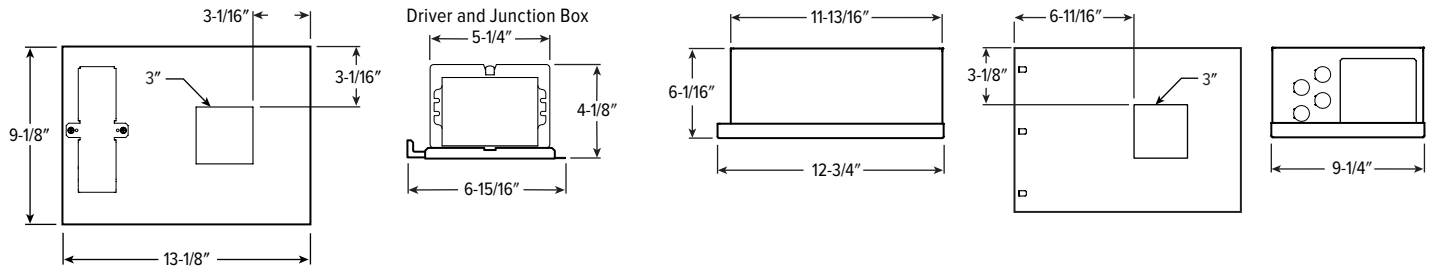
## REFLECTOR FINISH DETAILS

**CS** Clear semi-specular White  
**WH** White  
**BL** Black

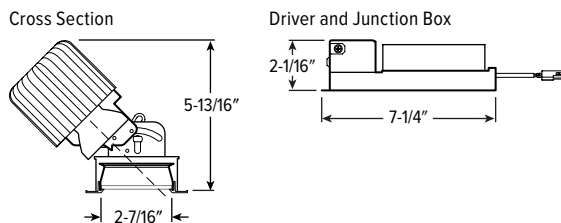


## MOUNTING TYPE DETAILS

### NEW CONSTRUCTION

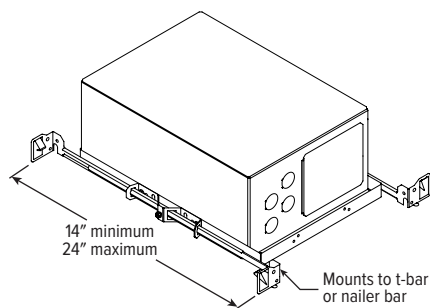
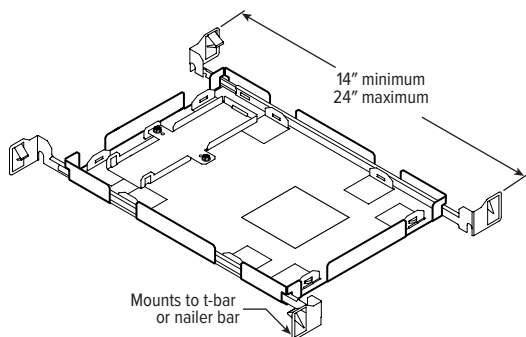


### REMODEL



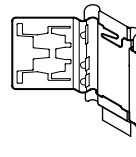
## MOUNTING HARDWARE DETAILS

**F1** Integral 2-position fixed pan bracket, universal bar hanger included

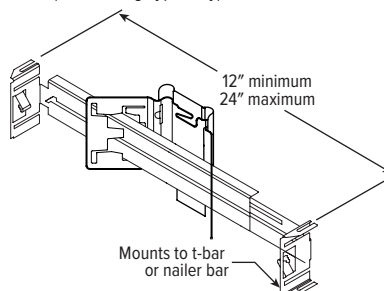


F1 with I Mounting Type

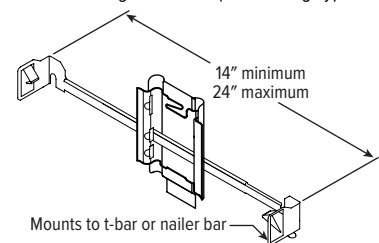
**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



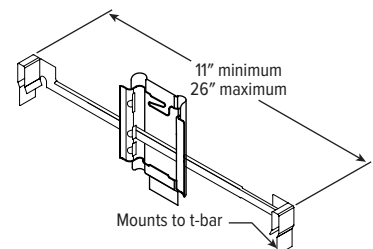
**BA2** Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)



**CA1** Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



**CA2** Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)



# 2AS<sup>LED</sup> 2" Adjustable Downlight – Square

## AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

### FEATURES

#### Simple

- Gateway-free distributed control
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

#### Scalable

- Virtually unlimited network size
- Spans small offices to large warehouses
- Flexible control strategies

#### Secure

- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

### COMMISSIONING & INSTALLATION TOOLS

Avi-on mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers. Live commissioning training and on-site or remote support by Avi-on must be ordered separately through Avi-on.



Commissioning Mobile App

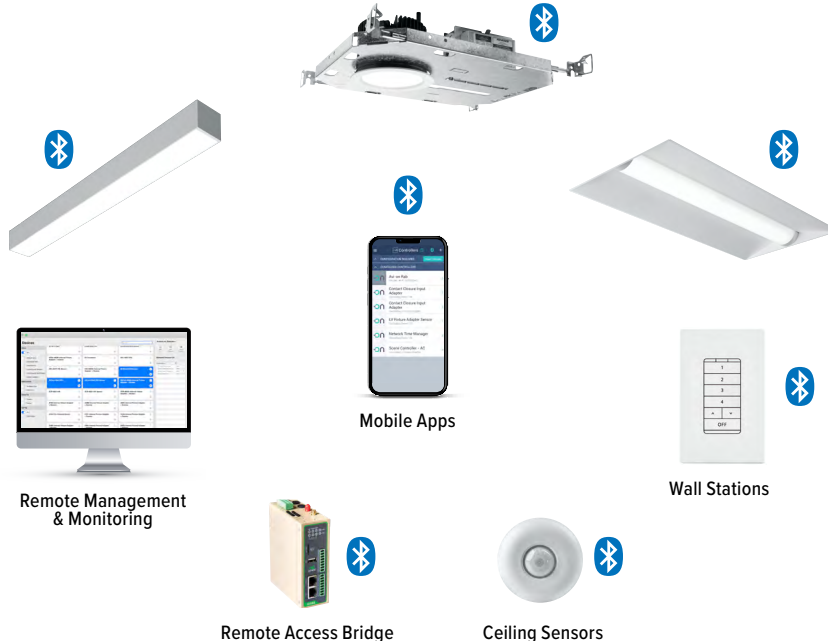


Zone Scanner Web App



Commissioning Pro App

### SYSTEM COMPONENTS



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Avi-on is under license. Other trademarks and trade names are those of their respective owners.

### ACCESSORIES

WALL STATIONS	
AVI-B-2401AC-1	Scene controller - buttons numbered 1-4 and up/down/off, 120-277VAC
AVI-B-2402BAT-1	Scene controller - buttons numbered 1-4 and up/down/off, battery powered
AVI-B-2401AC-2	Dimmer with presets - buttons with percentages and up/down/off, 120-277VAC
AVI-B-2402BAT-2	Dimmer with presets - buttons with percentages and up/down/off, battery powered
AVI-B-2401AC-3	Two button control on/off or hold to dim up/down, 120-277VAC
AVI-B-2402BAT-3	Two button control on/off or hold to dim up/down, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge
AVI-NTM	Network time manager with battery backup
CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

For load controllers and additional accessory info, see [hew.com/avi-on](http://hew.com/avi-on)

### ADDITIONAL CONTROL/DRIVER OPTIONS

Lumen restrictions apply: L7 minimum for DIM LINE driver. R Mounting Type only available with DIM, DIM1, and DIM LINE controls. Lutron controls available with N Mounting Type only, top access required. 347V may require stepdown transformer, see product builder at [hew.com/product-builder](http://hew.com/product-builder)

CATALOG NUMBER	DESCRIPTION
AVI-LVFA/DA	Avi-on wireless fixture control for use with driver with 12V auxiliary power
AWNRR/DA	Lutron Athena wireless node integral fixture control, RF only, for use with driver with 12V auxiliary power
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, with Lutron Hi-lume 1% EcoSystem dimming LED driver
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DALI	DALI dimming driver
DMX	0.1% dimming driver for DMX controls
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

