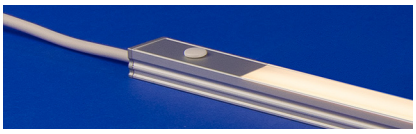
# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

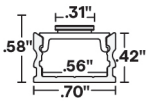
24VDC Linear Fixtures - Surface & Recessed

410.2 & 410.16 Closet Rated up to 4.0W/ft

SW/SW-HE ONLY

SW, SW-HE ONLY






- Shallow, low-profile fixture for surface or recessed installations
- Choose from diffused, polar, frosted, or clear lens options for varying diode visibility and beam angles
- Flanged design merges light source with surface
- Built-in dimming module
- Mounting options include stainless steel clips, magnets, and low-profile magnet mounts
- Features painted end caps to match extrusion finish

| 1 PRODUCT | 2 WATTS/ FT | 3 CCT | 4 RATED | 5 EFFICIENCY | 6 LENS | 7 WIRE INPUT/ OUTPUT | 8 CONNECTOR/ WIRE IN | 9 CONNECTOR/ WIRE OUT | 10 WIRE COLOR | 11 WIRE TYPE | 12 MOUNTING | 13 FINISH | 14 LENGTH (IN) | 15 EXACT/ OPTIMAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DRY | STD | | | | | | | | | | |

Sample Part Number: **LL1SW-ID-5.0-30-DRY-STD-DF-P1-BW-BW-BK-CL2-SST-BK-48"-E**

## 1 PRODUCT

**LL1SW-ID**
**LL1SW-ID-USA**

Select USA option for BAA and BABA projects.

See following pages for compatible power supplies.

## 2 WATTS/FT

| | |
|---|---|
| **1.5** | 1.5W/ft |
| **3.0** | 3.0W/ft |
| **4.0** | 4.0W/ft |
| **5.0** | 5.0W/ft |
| **1.5HE** | 1.5W/ft HE |
| **3.0HE** | 3.0W/ft HE |
| **6.0HE** | 6.0W/ft HE |
| **3.0HE+** | 3.0W/ft HE+ |
| **6.0HE+** | 6.0W/ft HE+ |

## 3 CCT

| | |
|---|---|
| **20** | 2000K |
| **22** | 2200K |
| **24** | 2400K |
| **27** | 2700K |
| **30** | 3000K |
| **35** | 3500K |
| **40** | 4000K |
| **27** | 2700K |
| **30** | 3000K |
| **35** | 3500K |
| **40** | 4000K |

## 4 RATED

| | |
|---|---|
| **DRY** | IP20 |

## 5 EFFICIENCY

| | |
|---|---|
| **STD** | Standard |

## 6 LENS

| | |
|---|---|
| **DF** | Diffused |
| **PR** | Polar |
| **FR** | Frosted |
| **CL** | Clear |

For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages

## 7 WIRE INPUT/OUTPUT

| | |
|---|---|
| **S1** | Single 1 (Input only) - End Feed |
| **S2** | Single 2 (Input only) - Bottom Feed |
| **P1** | Pass Through 1 (Input/output) - End Feed |
| **P2** | Pass Through 2 (Input/output) - Bottom Feed |

For continuous mounting, consider bottom feed.

## 8 CONNECTOR/WIRE IN

| | |
|---|---|
| **BW** | Bare Wire (Standard 24") |
| **BRL** | Barrel |
| **CON6** | Connector 6" |
| **CON24** | Connector 24" |
| **BW** | Bare Wire (Standard 24") |
| **BRL** | Barrel |
| **CON6** | Connector 6" |
| **CON24** | Connector 24" |

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

## 9 CONNECTOR/WIRE OUT

| | |
|---|---|
| **CLS** | Closed End (No feed) |
| **BW** | Bare Wire (Standard 24") |
| **BRL** | Barrel |
| **CON6** | Connector 6" |
| **CON24** | Connector 24" |

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

## 10 WIRE COLOR

| | |
|---|---|
| **WH** | White |
| **BK** | Black |
| **N/A** | For Barrel |

wet barrel only available in black

## 11 WIRE TYPE

| | |
|---|---|
| **CL2** | Class 2 |
| **CL2P** | Plenum Rated |
| **N/A** | For Barrel |

CL2P only available with bare wire leads (BW)

## 12 MOUNTING

| | |
|---|---|
| **SST** | Stainless Steel |
| **M4** | Low Profile Magnet |
| **MG** | Magnet |

## 13 FINISH

| | |
|---|---|
| **ST** | Satin |
| **BK** | Black |
| **CU** | Custom |

Custom finishes require a longer lead time, consult factory

## 14 LENGTH (IN)

Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".

## 15 EXACT/OPTIMAL

| | |
|---|---|
| **O** | Optimal Illumination |
| **E** | Exact Specified Length |

Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end. See Exact/Optimal Fixture Length charts.

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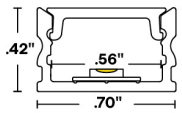
Specification subject to change. Rev-01-13-26

Push Button: On/Off | Press and hold: Dimming | Dimming down to 4% | 5 year warranty | Warranty only valid with QTL non-dimming power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance

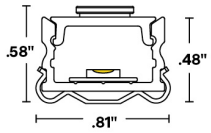
# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

24VDC Linear Fixtures - Surface & Recessed

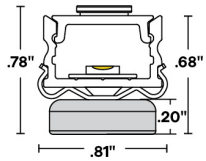
## 1 PRODUCT - DIMENSIONS



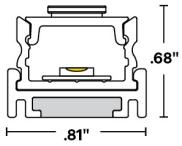

Profile with flat lens




Profile with flat lens, inline dimmer and stainless steel mounting clip




Profile with flat lens, inline dimmer and magnet mounting clip




Profile with flat lens, inline dimmer and low profile magnet

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs, L70 = 50000 for HE+]
Tested with LL1SW-**-30-DRY-STD

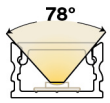
| | 1.5 W/FT | | 1.5HE W/FT | | 3.0 W/FT | | 3.0HE W/FT | | 3.0HE+ W/FT | | 4.0 W/FT | | 5.0 W/FT | | 6.0HE W/FT | | 6.0HE+ W/FT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI |
| CL | 143 | 98 | 175 | 98 | 249 | 98 | 321 | 98 | 463 | 92 | 309 | 98 | 376 | 98 | 608 | 98 | 856 | 92 |
| FR | 142 | 98 | 174 | 98 | 248 | 98 | 320 | 98 | 461 | 92 | 308 | 98 | 375 | 98 | 606 | 98 | 853 | 92 |
| PR | 134 | 98 | 157 | 98 | 234 | 98 | 288 | 98 | 416 | 92 | 291 | 98 | 354 | 98 | 546 | 98 | 768 | 92 |
| DF | 120 | 98 | 141 | 98 | 210 | 98 | 259 | 98 | 373 | 92 | 261 | 98 | 318 | 98 | 490 | 98 | 690 | 92 |

## 6 DIODE VISIBILITY

## PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

**CL**




Clear 78°

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# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

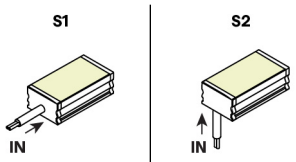
24VDC Linear Fixtures - Surface & Recessed

## TEMPERATURE RATINGS

| | | 1.5 W/FT | | 1.5 HE W/FT | | 3.0 W/FT | | 3.0 HE W/FT | | 3.0 HE+ W/FT | | 4.0 W/FT | | 5.0 W/FT | | 6.0 HE W/FT | | 6.0 HE+ W/FT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| DRY | Ambient Operating Temp - Surface | -4°F | 130°F | -4 | 135 | -4°F | 120°F | -4 | 125 | -13 | 125 | -4°F | 115°F | -4°F | 110°F | -4 | 110 | -13 | 110 |

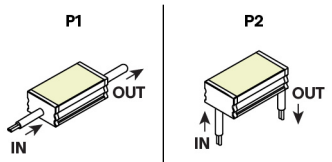
## 7 WIRE INPUT/OUTPUT

SINGLE (Input only)



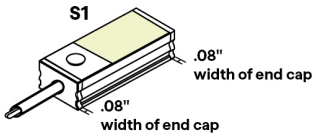

End Feed | Bottom Feed

PASS THROUGH (Input/Output)

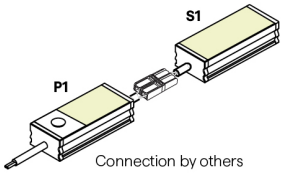



End Feed | Bottom Feed

## CONFIGURATION OPTIONS

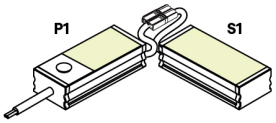



Single End Feed



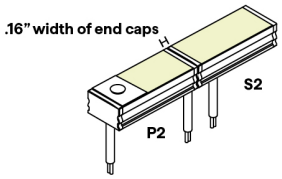

Connection by others

Non-Continuous End Feed

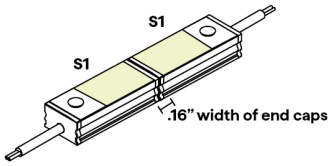



Connection by others

Non-Continuous Corner Feed



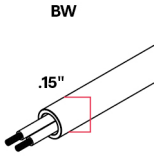

Continuous Bottom Feed



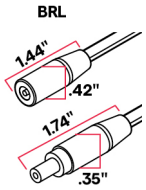

Continuous End to End Feed

## 8 / 9 CONNECTOR/WIRE – IN/OUT

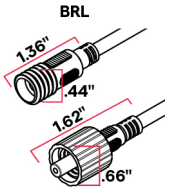
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



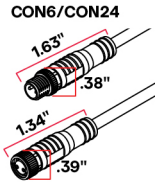

Bare Wire 24"
22 AWG




Barrel 6" - DRY/DMP | 22 AWG

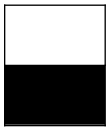



Barrel 6"- WET | 22 AWG




6" or 24" Overall
Wire Connector | 22 AWG
IP67 Rated, UL Listed

## 10 WIRE COLOR



White

Black

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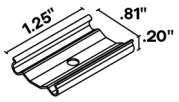
# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

24VDC Linear Fixtures - Surface & Recessed

## 12 MOUNTING

**SST**



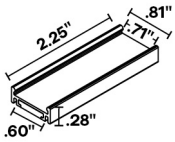

Stainless Steel Clip

2 clips provided for 4' or less; 4 clips provided for greater than 4'

To order separately use SST-01

Each clip comes with a #4 x 5/8" Flat Head SS

**M4**

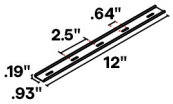



Low Profile Magnet

One M4 provided per foot.

To order separately use MG-04

**MMA-04**



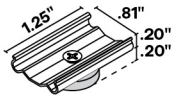

Magnet Mount Accessory for M4

Sold separately, to order use MMA-04

Each bracket comes with 2 #6 x 5/8 Flat Head SS

Required when mounting to a non-magnetic surface

**MG**

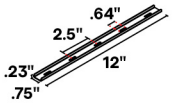



Magnet Clip

One MG provided per foot

To order separately use MG-01

**MMA-01**



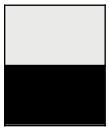

Magnet Mount Accessory of MG-01

Sold separately, to order use MMA-01

Each bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface

## 13 FINISH



Satin

Black

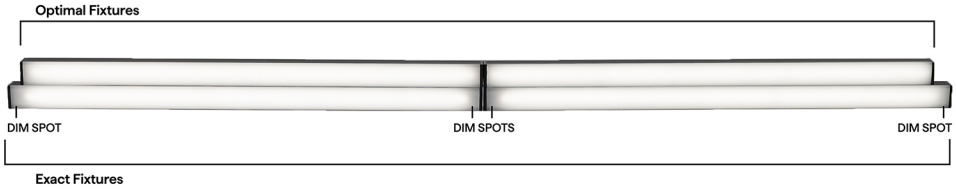
Custom finishes require a longer lead time, consult factory

## 14 EXACT/OPTIMAL FIXTURE LENGTH

E/O Length Calculator →

E/O Explained →

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.

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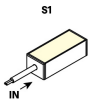
# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

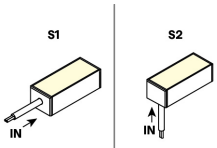
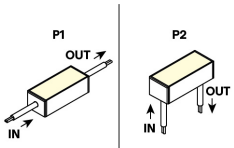
24VDC Linear Fixtures - Surface & Recessed

## SW DRY LENGTHS BY INCH

### EXACT LENGTH

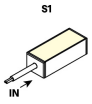
| Requested Length | Potential dim spot on either end of a S1 fixture   |
|---|---|
| 12" | 0.5" |
| 13" | 0.5" |
| 14" | 0.5" |
| 15" | 0.5" |
| 16" | 0.5" |
| 17" | 0.5" |
| 18" | 0.5" |
| 19" | 0.5" |
| 20" | 0.5" |
| 21" | 0.5" |
| 22" | 0.5" |
| 23" | 0.5" |
| 24" | 0.5" |
| 36" | 0.5" |
| 48" | 0.5" |
| 60" | 0.5" |
| 72" | 0.5" |
| 84" | 0.5" |
| 96" | 0.5" |

### OPTIMAL LENGTH

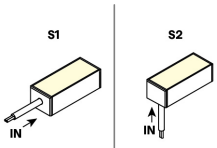
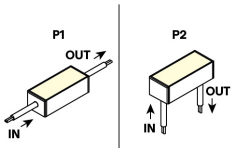
| Requested Nominal Length | S1 & S2   | P1 & P2   |
|---|---|---|
| 12" | 11.41" | 11.66" |
| 13" | 12.41" | 12.66" |
| 14" | 13.41" | 13.66" |
| 15" | 14.41" | 14.66" |
| 16" | 15.41" | 15.66" |
| 17" | 16.41" | 16.66" |
| 18" | 17.41" | 17.66" |
| 19" | 18.41" | 18.66" |
| 20" | 19.41" | 19.66" |
| 21" | 20.41" | 20.66" |
| 22" | 21.41" | 21.66" |
| 23" | 22.41" | 22.66" |
| 24" | 23.41" | 23.66" |
| 36" | 35.41" | 35.66" |
| 48" | 47.41" | 47.66" |
| 60" | 59.41" | 59.66" |
| 72" | 71.41" | 71.66" |
| 84" | 83.41" | 83.66" |
| 96" | 95.41" | 95.66" |

## SW-HE DRY LENGTHS BY INCH

### EXACT LENGTH

| Requested Length | Potential dim spot on either end of a S1 fixture   |
|---|---|
| 12" | 1" |
| 13" | 0.5" |
| 14" | 1" |
| 15" | 0.5" |
| 16" | 1" |
| 17" | 0.5" |
| 18" | 1" |
| 19" | 0.5" |
| 20" | 1" |
| 21" | 0.5" |
| 22" | 1" |
| 23" | 0.5" |
| 24" | 1" |
| 36" | 1" |
| 48" | 1" |
| 60" | 1" |
| 72" | 1" |
| 84" | 1" |
| 96" | 1" |

### OPTIMAL LENGTH

| Requested Nominal Length | S1 & S2   | P1 & P2   |
|---|---|---|
| 12" | 10.41" | 10.66" |
| 13" | 12.41" | 12.66" |
| 14" | 12.41" | 12.66" |
| 15" | 14.41" | 14.66" |
| 16" | 14.41" | 14.66" |
| 17" | 16.41" | 16.66" |
| 18" | 16.41" | 16.66" |
| 19" | 18.41" | 18.66" |
| 20" | 18.41" | 18.66" |
| 21" | 20.41" | 20.66" |
| 22" | 20.41" | 20.66" |
| 23" | 22.41" | 22.66" |
| 24" | 22.41" | 22.66" |
| 36" | 34.41" | 34.66" |
| 48" | 46.41" | 46.66" |
| 60" | 58.41" | 58.66" |
| 72" | 70.41" | 70.66" |
| 84" | 82.41" | 82.66" |
| 96" | 94.41" | 94.66" |

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# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

24VDC Linear Fixtures - Surface & Recessed

## COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

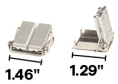
| DIMMING PROTOCOL | INDOOR | |
|---|---|---|
| | SW24/1.5-4.0 | SW24/5.0, SW-HE, SW-HE+ |
| Non-Dim | QTM-eLED-ND<br>QZ-ND | QTM-eLED-ND<br>QZ-ND |

## COMPATIBLE MOUNTING ACCESSORIES

**HINGE - HMB-M**

Adjustable mounting bracket - Medium

**HINGE - HMB-L**




Adjustable mounting bracket - Large

**HINGE - HMB-XL**

Adjustable mounting bracket - XLarge

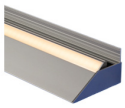
**Q-PIVOT**

Small mounting accessory

**Q-ANGLE**

Adjustable mounting accessory

**QUOVA-STANDARD**



QUOVA Knife Edge

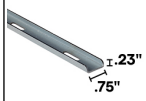
**NJ-MEDIUM**

J Mounting Bracket

**SD-L-MEDIUM**

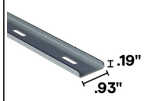
L Mounting Bracket

**MMA-01**



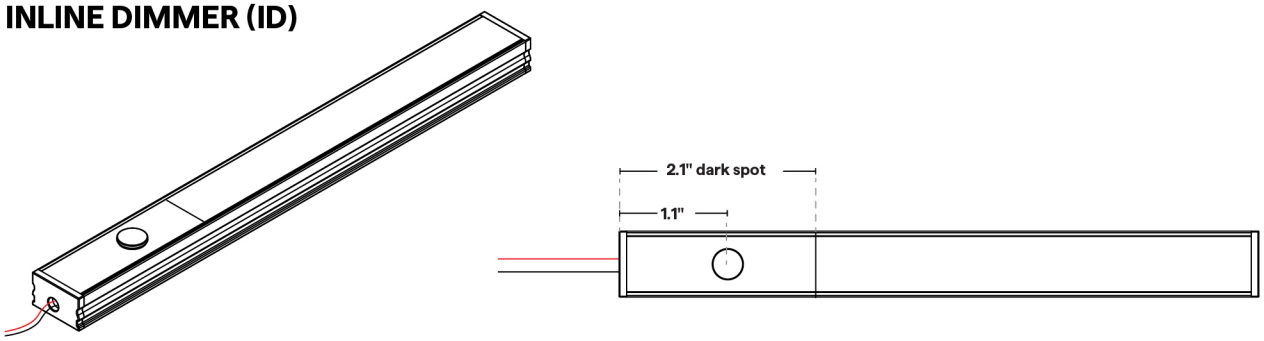

Magnet Mount Accessory of MG-01

**MMA-04**




Magnet Mount Accessory of MG-04

## INLINE DIMMER (ID)




- **On/off and dimming functionality**
- **24VDC**
- **4A DC max / 96W**
- **Dimming down to 4%**
- **Use with non-dimming driver**

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