TRIDENT Outdoor

RECESSED LINEAR PROFILE

senso
by luminii

IP68 IK10

PIA'22
Architectural SSL Magazine
product innovation award

Trident Outdoor - Recessed IP68 & IK10 Rated Linear Profile. The Trident Outdoor Recessed is designed for applications requiring sturdy and secure in-ground and IP68 & IK10 rated lighting. Our LED encapsulation process ensures a long lasting, vandal resistant seal with hard resin and our specialty machined end caps, straight and corner adapters. Many options are available making it highly modular, versatile and easy to install.

Ordering Code

Fixture	455	407						
	1	2	3	4	5	6	7	8

Product Specifications

SAMPLE : Fixture **455 - 407 - FH - LO - 25 - 02 - E36 - 6'**

1 - Type	2 - Model	3 - Resin	4 - LED Style*1	
455 · IP68 & IK10 Rated Profile	**407** · Trident Recessed Outdoor	**FH** · Frosted Hard **CH** · Clear Hard	Static White **LO** · LLHE48LO Low Output **SO** · LLHE48SO Standard Output **MO** · LLHE48MO Medium Output **HO** · LLHE48HO High Output	Dynamic Color*2 **DWSO** · LLDW68SO Dynamic White Standard Output **DWHO** · LLDW68HO Dynamic White High Output **RGBSO** · LLRGB42SO Color changing Standard Output **RGBHO** · LLRGB42HO Color changing High Output **RGBWSO** · LL-RGBW36-SO Color changing Standard Output **RGBWHO** · LL-RGBW36-HO Color changing High Output

5 - CCT		6 - Finish	7 - Feed Length	8 - Fixture Length*1
Static White **25** · 2500K **27** · 2700K **30** · 3000K **35** · 3500K **40** · 4000K	Dynamic Color*2 **1935** · 1900K - 3500K*4 **98** · RGB Color changing **99** · RGB+W Color changing	**02** · Black*3 **08** · Silver	**B36** · 36" Back Fed **E36** · 36" End Fed **BXX** · Custom Back Fed **EXX** · Custom End Fed	**XX** · Custom (XX.XX") *Continuous runs will be made in equal sections no more than 6' long* **NOTE:** *For Channels and Lenses over 90", incremental shipping charges will apply*

*1 Refer to page 2 for LED cut length intervals and available CCT
*2 DMX driver required
*3 Only Trident extrusion and mounting blocks finished in anodized black
*4 Please ask about different CCT ranges

Project : _____
Quantity : _____
Type : _____
Notes : _____

5 YEAR WARRANTY | c UL us LISTED | RoHS | MADE IN CANADA

LED Technical Information

	STYLE	WATT/FT	DELIVERED LM/FT CLEAR	DELIVERED LM/FT FROSTED	CRI	MAX. LENGTH	Color TEMPERATURE
Static White	LLHE48LO-1W	1.0	80	51	92	60'	
	LLHE48LO	1.9	160	102	92	48'	
	LLHE48SO	2.8	228	146	92	42'	2200K, 2500K, 2700K, 3000K, 3500K, 4000K
	LLHE48MO	3.5	304	195	92	33'	
	LLHE48HO	7.3	488	313	90	21'	
Dynamic Color	LLDW68SO-1935	4.1	251	186	95	32'	
	LLDW68HO-1935	5.2	273	202	96	32'	1900K - 3500K
	LLRGB42SO	4.4	149	81	–	28'	
	LLRGB42HO	7.7	231	126	–	28'	Red/Green/Blue
	LLRGBW36SO	4.1	127	94	97	26'	Red/Green/Blue White LED 97 CRI / 3000K
	LLRGBW36HO	7.6	281	153	97	26'	

* Lumen output calculations based on 3500K.
For LED strip information, See the page for:

LLHE48 HERE.
LLDW68 HERE.
LLRGB42 HERE.
LLRGBW36 HERE

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Resin & Profile Features

Top Layer

The top resin layer of the Trident acts as the lens and first line of defense for the LED.

Soft cured resin:

Outdoor resistant against rain, snow and direct sunlight as well as intense conditions like hail and acid rain. The resin is also thermal resistant against thermal cycles and drastic changes in temperature.

Chemicals like detergents or disinfectants will not deteriorate, disintegrate or discolor the soft resin.

Hard cured resin:

The hard cured resin maintains all of the same outdoor resistant features as the soft, but acquires extra physical resistance as well. Abrasion resistance will keep the resin intact even after wear, impact or high levels of pressure are applied. It will prevent vandalism and resist fire and ignition. The hard resin allows any profile to be floor mounted.

Fill Layer

The fill layer of the IP68 & IK10 rated Trident main purpose is to fully encapsulate and protect the LED strip. This fully sealed layer is able to maintain light quality without any color shift. The fill layer will not yellow over time and will keep perfect CRI and color- consistency over the lifespan of the LED.

Aluminum Extrusion

Trident, along with all our profile fixtures, are made of anodized aluminum. This allows our profile to be as thin as possible while maintaining rigidity and limiting flex over long runs.

Recessed Features

The recessed channels grooves allows linking multiple sections together. The trident profile slots straight into the top of the recessed channel and sits flush with any surface when installed. The main gap of the recessed channel provides ample space for long runs of cable and guarantees expansion and future proofing. The dedicated bottom space promotes drainage down and away from wiring.
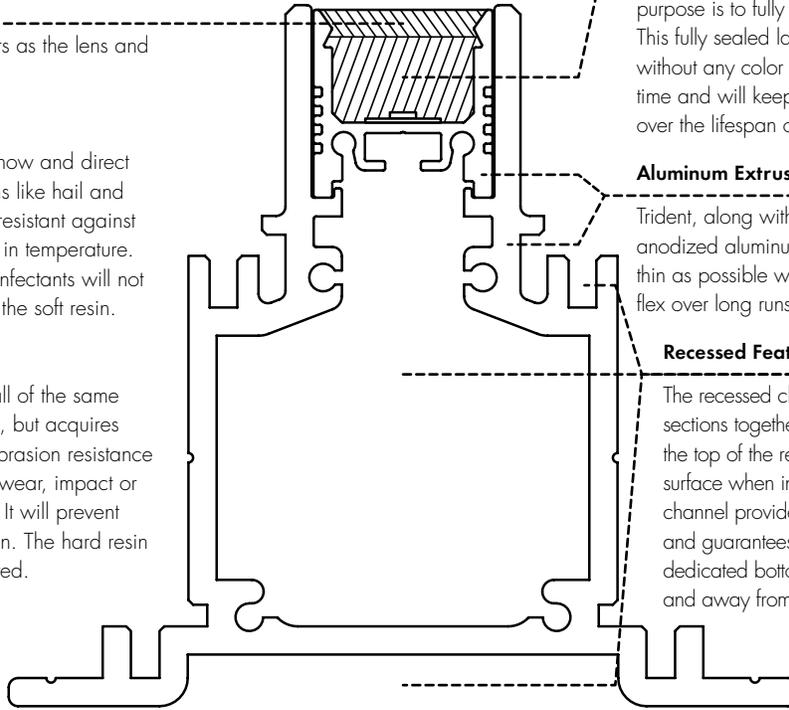
Top Layer Finish

Frosted Resin
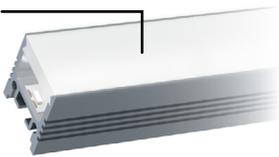
The frosted resin top layer is available in both hard and soft options. It offers a soft diffused light with no dots.

Clear Resin
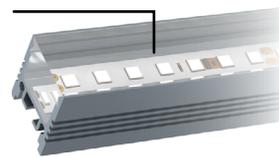
The clear resin top layer is the best option for maximum light efficiency. Low light loss allows you to get the most out of each LED.

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Construction

- High quality poured resin lens
- Hard, clear and frosted resin options
- Aluminum extruded profile and recessed channel

Installation

- Electrical wire included
- Recessed channel connects to end caps, corner and straight connectors
- Includes plastic spacer for laying ground material

Dimensions

Recessed Channel with Trident

0.98"
[25mm]

0.79"
[20mm]

2.94"
[74.6mm]

3.30"
[84mm]
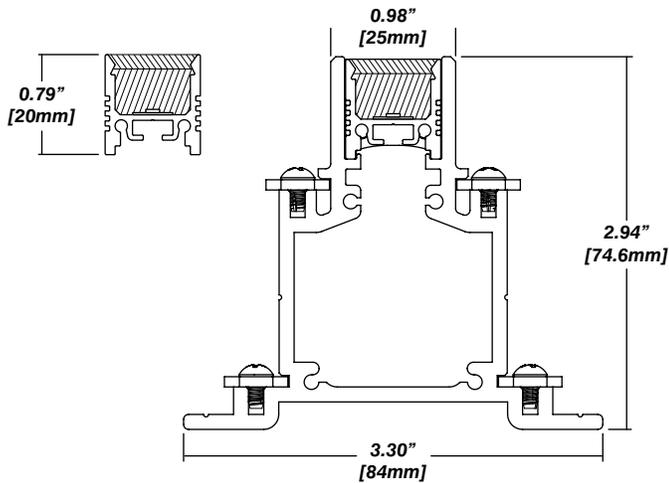
Recessed Channel

- Solid aluminum extruded construction
- Trident drops straight in to channel
- Allows Trident to be recessed into many different materials


Floor Material   Spacer   Floor Material

Drainage Area
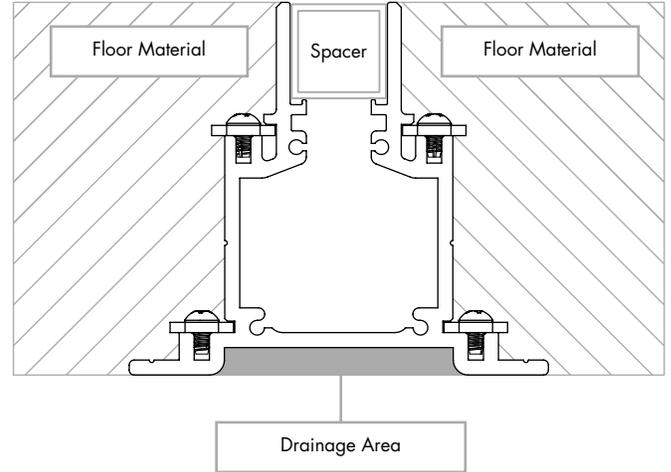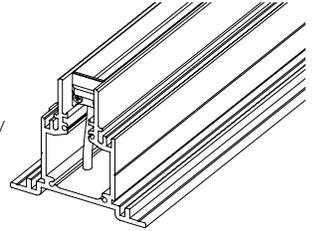
End Cap

- Holds Trident in place at each end of the channel
- End cap may have hole drilled out to be end fed

End Cap

1.0"
[25mm]

2.72"
[69mm]

0.47"
[45mm]

End Cap with
end feed
To be drilled by installer on site
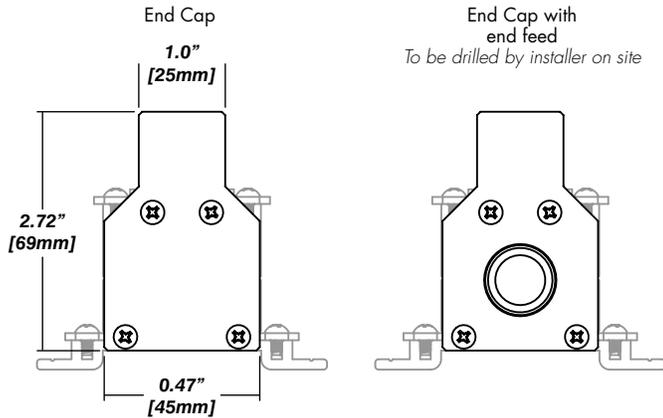
Channel Brackets and Anchors

- Securely connects 2 channel sections together
- Held in place by 2 screws per channel section
- 4 brackets required per join (2 per side)

Straight Adapter

0.5"
[13mm]

2.0"
[51mm]

Corner Adapter

0.5"
[13mm]

1.5"
[38mm]
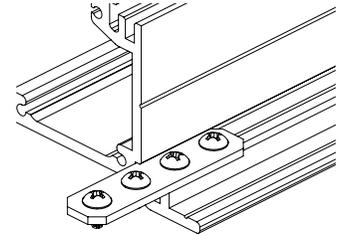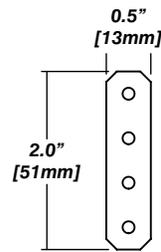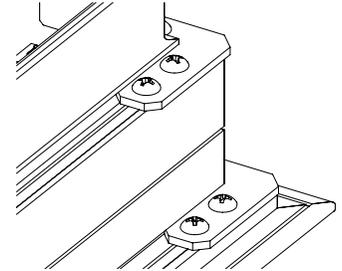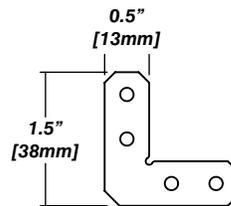
- Anodized aluminum anchors provide quick channel mounting
- Tamper resistant screws help keep Trident secure
- 1 anchor is required at each end of channel as well as 1 anchor every 6' section of Trident.

Anchors

0.75"
[19mm]

0.75"
[19mm]
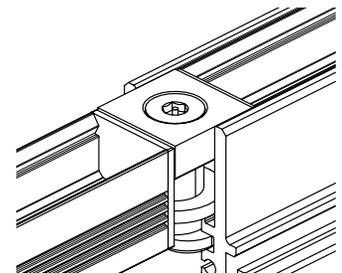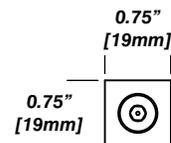
Recessed System

Recessed lighting promotes the best integration of lighting and architecture. Creativity is the only limitation because Trident recessed can flow through a space linking surfaces with minimal dark spots.

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Universal Power Supply 1% 120VAC - 277VAC

Universal Power Supply 1% 120VAC - 277VAC

MODEL	POWER	OUTPUT
	-	-
PDCU-D - IP20 Dry Series	30 - 30 W 60 - 60 W 96 - 96 W	24 - 24 VDC
PDCU-W - IP66 Wet Series	96 - 96 W	

0-10V dims down to 1%, MLV/ELV/TRIAC dims down to 1%.
Contact Senso to specify 347V transformer.
For a complete details on the Universal Power Supply, see Spec Sheet,
Compatible Dimming and Install Guide on the Resources page.

MODELS	PDCU-W 96W	PDCU-D 30W	PDCU-D 60W	PDCU-D 96W
Length	8.66"	6.10"	7.93"	8.25"
Width	3.73"	3.35"	3.35"	4.10"
Depth	1.61"	1.33	1.32"	1.56"

To 0-10V Dimmer (if applicable)

PDCU-W/PDCU-D

DIM -
DIM +

LineLED
24V DC+
24V DC-

Neutral
Ground
Load
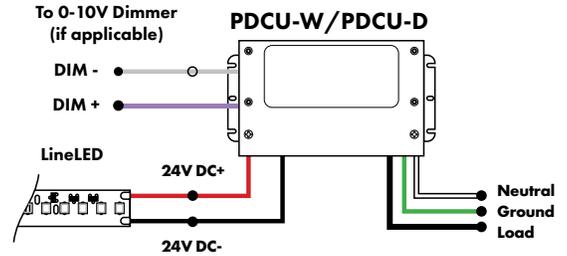
30W/60W 347V Transformer
attaches directly to PDCU box

3.5"
1.91"
1.88"
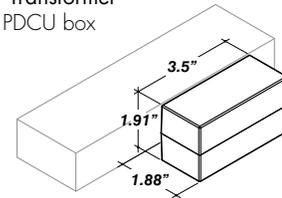
96W 347V Transformer
wired to PDCU box

11.5"
1.88"
2.0"
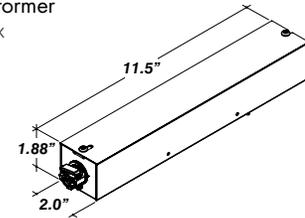
DMX Dimming Power Supply 120VAC - 277VAC

DMX Dimming Power Supplies 120VAC - 277VAC

MODEL	POWER	OUTPUT
	-	-
PSDMX - DMX Power Supply dims down to 0%	96 - 96 Watt 3X96 - 3 X 96 Watt	24 - 24 VDC

Features eldoLED's LINEARdrive configurable dimmable drivers. For a
complete details on the DMX Dimming Power Supply, see Spec Sheet on
the Resources page.

MODELS	96W	3X96
Length	14.40"	15.75"
Width	5.20"	6.62"
Depth	2.60"	4.95"

To Controller
D-
D+
GND

Load
Ground
Neutral

INPUT 120 - 277VAC

PSDMX-96

DMX cables
(For DMX cable, use Belden 9829, 9842 or CAT5 shielded twisted pair cabling or equivalent)

to the next
LED Driver

+ R G B W +

RGBW 96 W max

PSDMX-3X96

To Controller
D-
D+
GND

Load
Ground
Neutral

INPUT 120 - 277VAC

DMX cables
(For DMX cable, use Belden 9829, 9842 or CAT5 shielded twisted pair cabling or equivalent)

R
G
B
W

RGBW

WW
CW

Dynamic white lineLED

to the next
LED Driver

lineLED

96 W max per terminal block
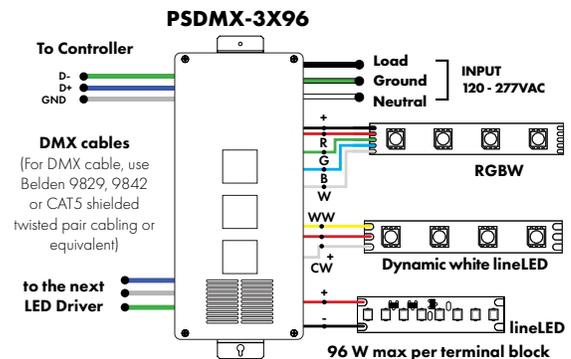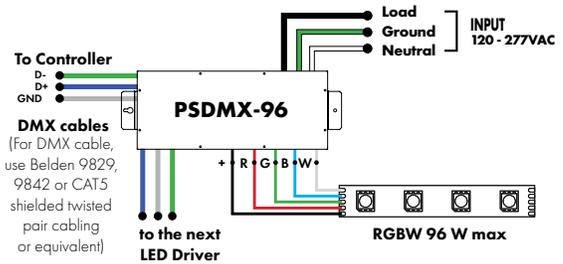
DALI 0% Dimming Power Supplies 120VAC - 277VAC

DALI 0% Dimming Power Supplies 120VAC - 277VAC

MODEL		POWER		OUTPUT
PSDALI - DALI Power Supply dims down to 0%	-	96 - 96 Watt 3X96 - 3 X 96 Watt	-	24 - 24 VDC

Features eldoLED's LINEARdrive configurable dimmable drivers

Model	96W	3X96
Length	14.40"	15.75"
Width	5.20"	6.62"
Depth	2.60"	4.95"
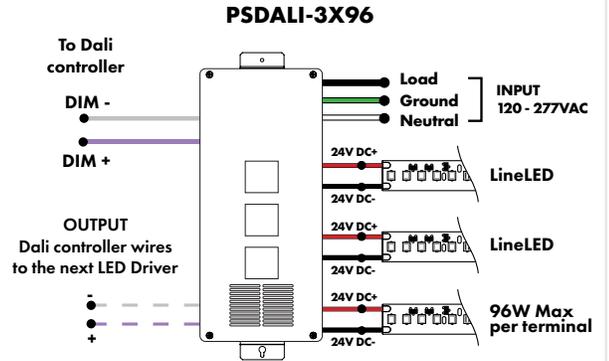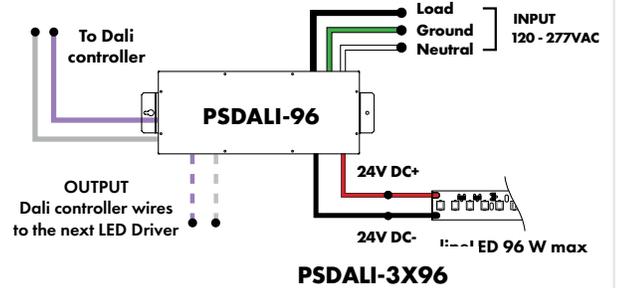
PSDALI-96

To Dali controller

OUTPUT
Dali controller wires to the next LED Driver

INPUT 120 - 277VAC
Load
Ground
Neutral

24V DC+
24V DC-
LineLED 96 W max

PSDALI-3X96

PSDALI-3X96

To Dali controller
DIM -
DIM +

OUTPUT
Dali controller wires to the next LED Driver
-
+

INPUT 120 - 277VAC
Load
Ground
Neutral

24V DC+
24V DC-
LineLED

24V DC+
24V DC-
LineLED

24V DC+
24V DC-
96W Max per terminal

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Lutron Power Supplies 1%

MODEL	MODEL
LTEA4U1UKL-CV240	L3DA4U1UKL-CV240

Lutron - Hi-lume™ 1% 2-wire LED Driver
40W max

(120V forward phase only)

Hi-lume™ 1% EcoSystem Voltage LED driver
40W max

MODELS	LTEA41UKL-CV240	L3DA4U1UKL-CV240
Length	4.89"	4.98"
Width	4.00"	4.00"
Depth	2.62"	2.62"

For a complete details on the Lutron Power Supply, see Spec Sheet and Install Guide on the Resources page.

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Lutron Power Supplies 0.1%

MODEL
L3D0-96W24V-U

Hi-lume™ 0.1% EcoSystem Voltage LED Driver with Soft-On, Fade-to-Black™
96W max

MODELS	L3D0
Length	10.50"
Width	5.50"
Depth	2.00"