48V Low Voltage Track Deep Profile Recessed







#### **Features**

Slots & Dots, a 48V Track lighting system, connects all the dots for architects and lighting designers: color, comfort, controls and configurability. Slots & Dots is an easily configurable low voltage track lighting system that creates visual ambience for hospitality, residential, commercial and retail environments. Featuring surface, recessed or pendant mounting options, with easy light module in linear and accent that can be easily snapped in and out as needed. Slots are made up of linear modules to create visual interest, wall grazing and glare free accent. Dots deliver focused beams of light from either an accent pendant or surface mounted accent that bring items into focus.

## PROJECT:

## SLOTS & DOTS

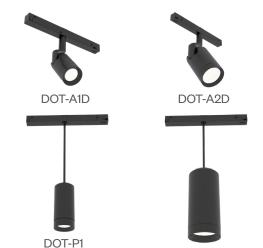


















(JA8/Title 24 compliant on DOT models with certain options (see pg 6))

## TYPE:

## **Product Overview**

## Track (SD-TRD) Deep Profile Recessed

48V Low Voltage Track Type

1 circuit + Data Bus: ±15A/0-48V + D+/D-Circuit(s)/Amps:

48V Voltage:

3.8 (4'), 7.6 (8') Weight (lbs):

## Slots (SLOT-xx) (Linear Modules)

Type: 48V Track Linear System

Watts:

Lumen Output: 490 lm (OP), 343 lm (PR), 511 lm (CO), 527 lm (30)

Color Temp: 2700K, 3000K, 3500K, 4000K

CRI: 90 typ.

Driver: DALI 1% dim, 0-10V 1% dim

Weight (lbs): SLOT-ADJ-CO 045 09 SLOT-OP 1.3

SLOT-PR 04 0.7 1.4 SLOT-ADJ-30 0.45 0.9 SLOT-CO 0.5 0.9 1.8 SLOT-ADJ-26x42 0.45 0.9

SLOT-30

#### Dots (DOT-Ax/DOT-Px) (Accent Modules)

48V Track Accent & Pendant System Type:

Watts (per head): Small - 7W (A1/P1) Large - 16W (A2/P2)

Lumen Output: 391 lm (A1/P1), 1206 lm (A2/P2)

Color Temp-CRI: Small - 3500K-80, 4000K-80, 2700K-90+, 3000K-90+

Large - 2200K-90+, 2700K-90+, 3000K-90+, 3500K-90+,

4000K-90+, CrispWhite, 3K Class A

Driver: DALI 1% dim, 0-10V 1% dim Weight (lbs): 0.4 (DOT-A1), 0.8 (DOT-A2) 0.6 (DOT-P1), 1.1 (DOT-P2)

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48V Low Voltage Track, Deep Profile Recessed



**PROJECT:** 

## **Track Ordering Information**



1

2

Track Model

SD-TRD-4 - recessed deep profile track, 48" SD-TRD-8 - recessed deep profile track, 96"

Note: All tracks are field cuttable. SD-TOOL is required for cutting track conductors (ordered separately, see Accessories below)

<u>Finish</u> **B** - black

W - white

#### **Component Ordering Information**





End Cap

(1 required for each end of track run)

SD-EC-TD - end cap

SD-EC-F-TD - end cap with feed hole

Connectors

(required to make electrical connection between tracks)

SD-CNS-POL - middle connector, polarized, straight

SD-CNS-M - middle connector, mechanical, straight

SD-IVCJ-TRD - internal vertical mechanical corner joint

SD-HCJ-TRD - horizontal mechanical corner joint

SD-XF-POL\* - flex connector, wall to ceiling and horizontal,

\* Can be used as in-plane with variable angle

#### **End Feed**

(1 live feed required for feed end of track)

SD-SF-L-POL - end feed, polarized, left, straight

SD-SF-R-POL - end feed, polarized, right, straight

Mounting Kits (Pendant mount)

SD-BR-314<sup>†</sup> - track joining bracket for SD-TRD/TRL to provide mechanical connection. Qty 3 for straight connection, Qty 4 for corner joint.

SD-RODKIT-TRD<sup>+</sup> - threaded rod kit, 8-32 rod (supplied by others), 1 required every 36"

SD-CABLEKIT-TRD+ - aircraft cable kit, 1 required every 36"

† Finish not required

See Mounting example on page 14

#### Accessories

SD-4BLANK - 48" blank to cover track without light module

SD-8BLANK - 96" blank to cover track without light module

SD-TOOL† - cutting tool for track conductors

\* Finish not required

Note: All Blank sections are field cuttable



<u>Finish</u>

B - black

W - white

## **Transformer Ordering Information**



Transformer (connect with 18AWG wire, plenum rated cable supplied, 30' max distance fixture to transformer, 120/277 input, 48V DC output)

TR-48V100W - 100W, 48V transformer with enclosure\*, capable of providing 80W of power

TR-48V260W - 260W, 48V transformer with enclosure\*, capable of providing 208W of power

TR-48V320W - 320W, 48V transformer with enclosure\*, capable of providing 256W of power

\* Enclosure size: 15  $^{11}/_{16}$ " x 4  $^{5}/_{16}$ " x 2  $^{3}/_{16}$ "

Note: Ensure that the transformer does not exceed 80% of the total wattage in order to maintain its optimal performance.

See pg 13 for voltage drop & max track length information.

48V Low Voltage Track, Deep Profile Recessed



PROJECT: TYPE:

## **Specifications - Track**

## **48V Low Voltage Track**

## Application

48V power supply for Amerlux® track lighting fixtures, 18AWG, 15 Amp

#### Construction

Architectural grade, extruded aluminum housing
Milled grounding bar provides continuous ground contact
Continuously crimped conductor ensures mechanical strength and
electrical reliability

#### Finish

Black or white

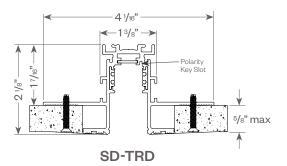
## Mounting

Recessed mounted, 5/8" max ceiling thickness

#### Certifications

cUL listed for dry locations only

## **TRACK**



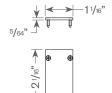
48V Low Voltage Track, Deep Profile Recessed



## PROJECT: TYPE:

## **END CAPS**

#### For SD-TRD Track



SD-EC-TD

(Required on each end of a track run)

#### With Feed hole





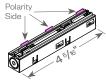
SD-EC-F-TD

(Required when feeding track from the side)

## **END FEED**

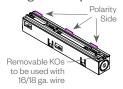
#### **End Feed**

## **Left Polarity**



SD-SF-L-POL

#### **Right Polarity**



SD-SF-R-POL

## **CONNECTORS**

### Middle Straight Connector

**Polarized** 



SD-CNS-POL

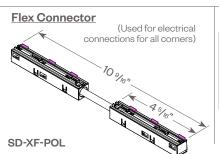
## Mechanical

(non-electrical)



SD-CNS-M

(Used to create dead ends in between two sections of track)



## Note:



## MOUNTING BRACKETS/KITS

#### **SD-BR-314**



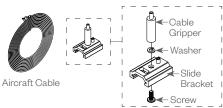




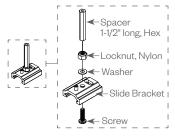
Reinforcement (Joining) Bracket to be used with straight connector and corners. This bracket will act as a mechanical connection for trimless track.

(3) Required for straight connections. (4) Required for corner connections.

## SD-CABLEKIT-TRD



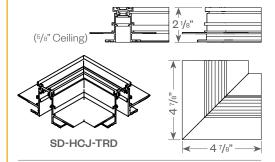
## SD-RODKIT-TRD



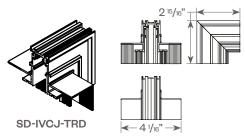
## Notes:

 Kit is to be used with 8-32 threaded rod.
 Do not tighten nylon locknut completely. Hex standoff must rotate freely.

#### **Horizontal Mechanical Corner Joint**



## Internal Vertical Mechanical Corner Joint



48V Low Voltage Track, Deep Profile Recessed



**PROJECT:** 

#### **SLOTS ORDERING INFORMATION (Linear Modules)**





1













SLOT-OP - linear segment with opal lens

**SLOT-PR\*** - linear segment with microprismatic lens

**SLOT-CO** - linear segment with comfort lens

**SLOT-30\*** - linear segment with 30° lens

SLOT-ADJ-CO<sup>†</sup> - linear segment, adjustable with comfort lens

SLOT-ADJ-30\*\* - linear segment, adjustable with 30° lens

SLOT-ADJ-26x42\*\* - linear segment, adjustable with 26° x 42° lens

† Available in 1' & 2' lengths only

Length

1\* - 1' nom. (11 1/4")

2 - 2' nom. (22 5/16")

4 - 4' nom. (44 7/16")

Color Temp-CRI 3

279\* - 2700K-90

309 - 3000K-90 (standard)

359\* - 3500K-90

409\* - 4000K-90

**Finish** 

B - black (standard)

W\* - white

**Driver** 

DALI - DALI driver, 1% dim

0-10V - 0-10V driver, 1% dim

\* special order, consult factory for lead times

## **DOTS ORDERING INFORMATION (Accent)**

## **Small Accent/Pendant Module Ordering Information**



T24 JA8/Title 24 compliant.









2 Model (7W per accent/pendant head) 3

3



4







**DOT-A1D** - small accent for deep profile track (SD-TSD) DOT-P1 - small pendant with 10' field adjustable cord

MW - matte white

MB - matte black

Beam Spread

**SP** - spot, 13°

NF - narrow flood, 18°

FL - flood, 28°

Color Temp-CRI 4

80 CRI

90+ CRI<sup>T24</sup>

**35** - 3500K-80

279 - 2700K-90+

**40** - 4000K-80

309 - 3000K-90+

**Driver** 

DALI - DALI driver, 1% dim (standard)

 $\mathbf{0-10V}^{T24}$  - 0-10V driver, 1% dim

Accessories (not JA8/Title 24 compliant) AH - accessory holder

**HEX** - hexcell louver (requires AH)

6

## **Large Accent/Pendant Module Ordering Information**



T24 JA8/Title 24 compliant.









2 Model (16W per accent/pendant head)

WF - wide flood, 45°

VWF - very wide flood, 60°

LS - linear spread, 60° x 10° (reduces #

of accessories by 1, if applicable)

DOT-A2D - large accent for deep profile track DOT-P2 - large pendant with 10' field adjustable cord

Finish

MW - matte white

MB - matte black

Beam Spreads

**SP** - spot, 15°

NF - narrow flood, 22°

MFL - medium flood, 25°

FL - flood, 28°

Color Tep

90+ CRI<sup>T24</sup>

5

**229** - 2200K-90+

**279** - 2700K-90+

309 - 3000K-90+

359 - 3500K-90+

409 - 4000K-90+

Driver

DALI - DALI driver, 1% dim (standard)

0-10V<sup>T24</sup> - 0-10V driver, 1% dim

Options/Accessories (not JA8/Title 24 compliant) (standard front door accepts up to 2 accessories)

**SN** - snoot (accepts up to 2 accessories or cross blade + 1 accessory)

**CRISP** - CrispWhite

3CLA - 3K Class A

**HEX** - hexcell louver

SOL - solite beam softening lens

CB - cross blade (requires snoot)

48V Low Voltage Track, Deep Profile Recessed



## PROJECT: TYPE:

## **Specifications - Light Modules**

#### Slots (Linear Light Module)

#### Application

Hospitality and retail task lighting

#### Construction

Extruded aluminum heatsink No exposed wiring

#### Optical

Lens options: Opal, Microprismatic, Comfort or 30°

#### LED

Color Temp Options: 2700K, 3000K, 3500K, 4000K

CRI: 90 typ.

Binning: 3 MacAdam (SDCM)

Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

#### Electrical

Wattage: 6W/ft

Electronic constant current LED driver, 48V input 18AWG, 15 Amp

## **Drivers**

DALI driver, 1% dimming 0-10V driver, 1% dim

#### Finish

Powder coat paint, matte black or matte white

## Mounting

A mechanical adapter allows for a quick and tool-less mounting to Amerlux's 48V track system, which saves times during installation and allows for easy reconfiguration

#### Certifications

cUL listed Indoor use only

#### Warranty

5 year limited warranty

#### **Dots (Accent/Pendant Light Module)**

#### Application

Hospitality and retail task lighting

### Construction

Complete die-cast optical head construction No exposed wiring

#### Optical

Tilt: 0-90° (for accent head)
Rotation: 360°+ (for accent head)

Beam Spreads: A1/P1: Spot, 13°; Narrow Flood, 18°; Flood, 28°

A2/P2: Spot, 15°; Narrow Flood, 22°; Medium Flood, 25°; flood, 28°; wide flood, 45°; very wide flood, 60° linear spread, 60° x 10°

#### LED

Color Temp Options\*: 2700K, 3000K, 3500K, 4000K

CRI\*: 80 typ. or 90+ typ.

R9 Values: A1/P1: 7 (80 CRI), 77 (90+ CRI)

A2/P2: 55 (90+ CRI)

Binning: 3 MacAdam (SDCM)

Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

\* see ordering page for details

#### **Electrical**

Wattage: 7W (A1/P1), 16W (A2/P2) Electronic constant current LED driver, 48V input 18AWG, 15 Amp

## Drivers

DALI driver, 1% dimming 0-10V driver, 1% dim

#### inish

Powder coat paint, matte black or matte white

#### Mounting

A mechanical adapter allows for a quick and tool-less mounting to Amerlux's 48V track system, which saves times during installation and allows for easy reconfiguration

#### Certifications

**CSA** listed

Indoor use only

JA8/Title 24 Compliant (see ordering page for options that apply)

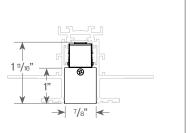
#### Warranty

5 year limited warranty

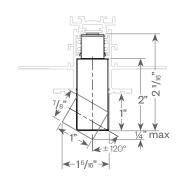
48V Low Voltage Track, Deep Profile Recessed



## **SLOTS**



SD-TRD w/SLOT-xx



SD-TRD w/SLOT-ADJ-xx



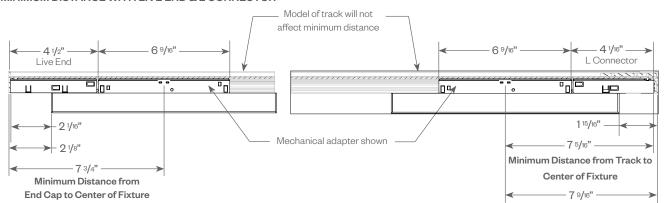
## **SLOT-LENSES**







#### MINIMUM DISTANCE WITH LIVE END & L CONNECTOR



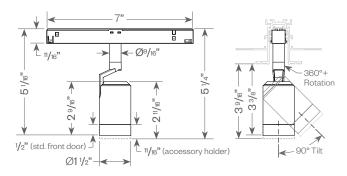
48V Low Voltage Track, Deep Profile Recessed



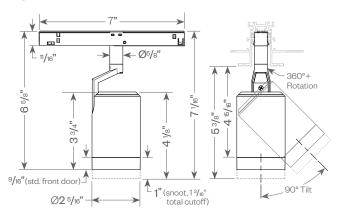
PROJECT: TYPE:

## DOTS WITH SD-TRD TRACK (RECESSED DEEP PROFILE)

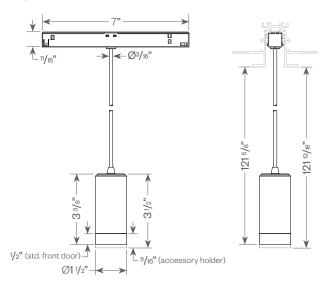
## DOT-A1D



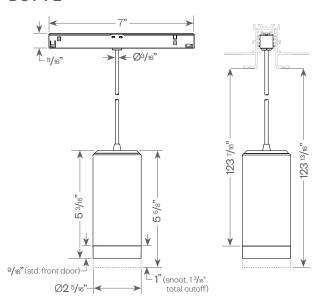
## DOT-A2D



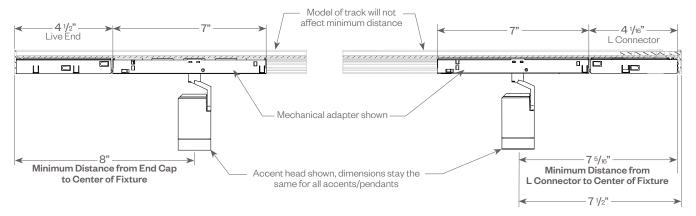
## DOT-P1



## DOT-P2



## MINIMUM DISTANCE WITH LIVE END & L CONNECTOR



48V Low Voltage Track, Deep Profile Recessed



PROJECT: TYPE:

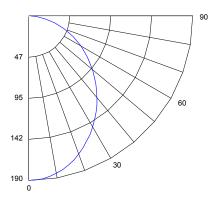
FIXTURE DATA: (Complete photometric data (ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-90120V IES file on website)

CCT:	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.98	1.0	1.03	1.07

#### SLOT-OP-1-309

Total Watts: 6 Total Lumens: 490 Lumens/Watt: 81.7



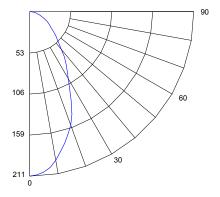
#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-40	228	46.6
0-60	390	79.7
0-90	490	100.0
0-180	490	100.0

Total Luminaire Efficiency = 82%

### SLOT-PR-1-309

Total Watts: 6 Total Lumens: 343 Lumens/Watt: 57.2



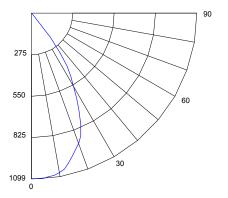
#### **ZONAL LUMEN SUMMARY**

Lumens	%Fixt
209	60.8
301	87.5
342	99.7
343	100.0
	209 301 342

Total Luminaire Efficiency = 57%

#### SLOT-CO-1-309

Total Watts: 6 Total Lumens: 511 Lumens/Watt: 85.2



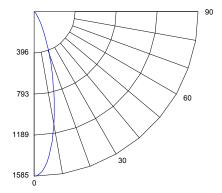
#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	488	95.5
0-60	511	99.9
0-90	511	100.0
0-180	511	100.0

Luminaire Efficacy = 91%

#### SLOT-30-1-309

Total Watts: 6 Total Lumens: 527 Lumens/Watt: 87.8



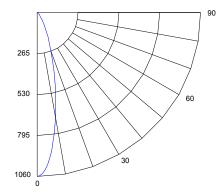
### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	492	93.3
0-60	523	99.2
0-90	527	99.7
0-180	527	100.0

Luminaire Efficacy = 95%

#### SLOT-ADJ-26X42-1-309

Total Watts: 6 Total Lumens: 474 Lumens/Watt: 79



### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	428	90.4
0-60	468	98.7
0-90	474	100.0
0-180	474	100.0

Luminaire Efficacy = 85%

48V Low Voltage Track, Deep Profile Recessed



PROJECT: TYPE:

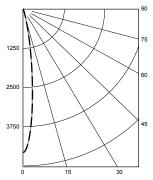
FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-90+120V IES file on website)

CCT:	3500K-80	4000K-80	2700K-90+	3000K-90+
Factor:	1.20	1.25	0.96	1.0

#### 7W LED, 3000K-90+

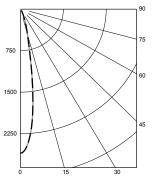
DOT-A1x/P1 SP, 13° LTL # 12914370.01 Lumens: 391



Candelas at Nadir

Deg	Candela
0	4573
5	3137
15	340
25	48
35	15
45	10

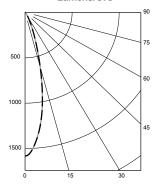
DOT-A1x/P1 NF, 18° LTL # 12914370.02 Lumens: 381



Candelas at Nadir

Deg	Candela	
0	2601	-
5	2140	
15	440	
25	102	
35	31	
45	13	

DOT-A1x/P1 FL, 28° LTL # 12914370.03 Lumens: 379



Candelas at Nadir

Deg	Candela
0	1583
5	1394
15	576
25	132
35	33
45	10

## APPLICATION DATA:

#### **Notes and Definitions:**

Beam spread is to 50% center beam candlepower (CBCP).

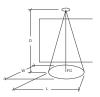
 ${f D}=$  Distance to floor or wall.

FC=Footcandles on floor or wall at center beam aiming location.

L=Effective Visual Beam length in feet (50% of maximum footcandle level).

W=Effective Visual Beam width in feet (50% of maximum footcandle level).

CB=Distance across or down to center beam location.





0° Aiming Angle Horizontal Footcandles

		D	FC	L	W	
	Spot	5.0'	102	1.6	1.6	
		7.5'	60	2.2	2.2	
	S	10.0'	38	2.8	2.8	
		12.5'	26	3.3	3.3	
-	р	D	FC	L	W	
	Narrow Flood	5.0'	71	1.9	1.9	
		7.5'	39	2.6	2.6	
	rro	10.0'	23	3.3	3.3	
	Na	12.5'	16	3.9	3.9	
		D	FC	L	W	
	_	5.0'	50	2.5	2.5	
	Flood	7.5'	25	3.4	3.4	
	正	10.0'	15	4.5	4.5	
		12.5'	10	5.5	5.5	

48V Low Voltage Track, Deep Profile Recessed



**PROJECT:** 

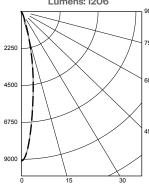
FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-90+120V IES file on website)

CCT:	2200K-90	2700K-90	3000K-90	3500K-90+	4000K-90+	CRISP	3CLA
Factor:	0.86	0.96	1.0	1.05	1.08	0.76	0.90

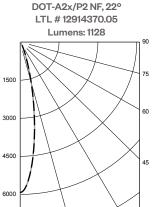
## 16W LED, 3000K-90+





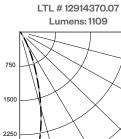
#### Candelas at Nadir

Deg	<u>Candela</u>
0	9104
5	6700
15	1618
25	237
35	74
45	25



Candelas at Nadir

Deg	Candela
0	5921
5	4961
15	1641
25	311
35	87
45	33



3000

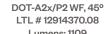
DOT-A2x/P2 FL, 28°

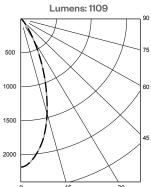
75

45

Candelas at Nadir

Deg	Candela
0	3252
5	2963
15	1629
25	529
35	137
45	46





Candelas at Nadir

Deg	Candela
0	2183
5	2061
15	1436
25	660
35	209
45	66

## **APPLICATION DATA:**

### Notes and Definitions:

Beam spread is to 50% center beam candlepower (CBCP).

**D**=Distance to floor or wall.

**FC**=Footcandles on floor or wall at center beam aiming location.

L=Effective Visual Beam length in feet (50% of maximum footcandle level).

W=Effective Visual Beam width in feet (50% of maximum footcandle level).

CB = Distance across or down to center beam location.





0° Aiming Angle Horizontal Footcandles

	D	FC	L	W	
	5.0'	232	2.0	2.0	
Spot	7.5'	126	2.7	2.7	
S	10.0'	77	3.3	3.3	
	12.5'	52	4.0	4.0	
р	D	FC	L	W	
Narrow Flood	5.0'	174	2.3	2.3	
	7.5'	90	3.1	3.1	
2	10.0'	54	3.9	3.9	
Na	12.5'	35	4.8	4.8	
	D	FC	L	W	
73	5.0'	109	2.9	2.9	
Flood	7.5'	53	3.9	3.9	
正	10.0'	31	5.2	5.2	
	12.5'	20	6.5	6.5	
_	D	FC	L	W	
Wide Flood	5.0'	77	3.4	3.4	
Ĕ	7.5'	37	4.9	4.9	
ide	10.0'	21	6.5	6.5	
3	12.5'	14	8.0	8.0	

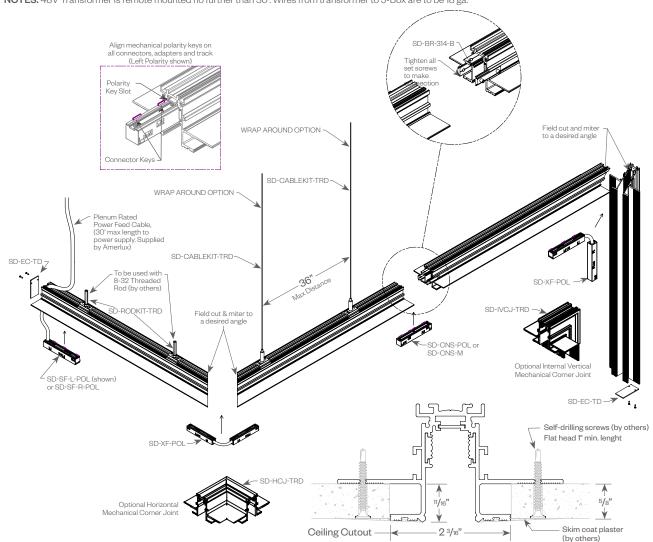
48V Low Voltage Track, Deep Profile Recessed



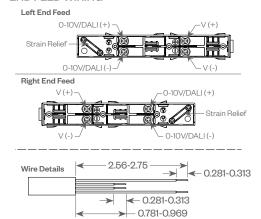
PROJECT: TYPE:

#### TRD TRACK BREAKDOWN

NOTES: 48V Transformer is remote mounted no further than 30'. Wires from transformer to J-Box are to be 18 ga.



## **END FEED WIRING**



## **REMOTE WIRING**

Note: Refer to Wired Control wiring schematics, pg 14.



### **VOLTAGE DROP**

Maximum allowed track length for a 30' plenum rated cable supplied by Amerlux according to the selected wattages.

Power Supply (W)/	Max.Track Length (ft)
100W	750
260W	200
320W	150

Voltage drop approximately 12.5%, 6V

Note: Ensure that the transformer does not exceed 80% of the total wattage in order to maintain its optimal performance.

48V Low Voltage Track, Deep Profile Recessed

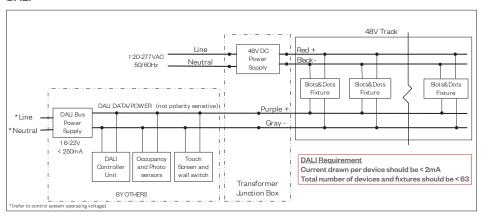


PROJECT: TYPE:

#### DIMMING COMPATIBILITY:

Amerlux® Slots & Dots 48V system is compatible with DALI system. Please see below for wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc.) may affect dimming performance.

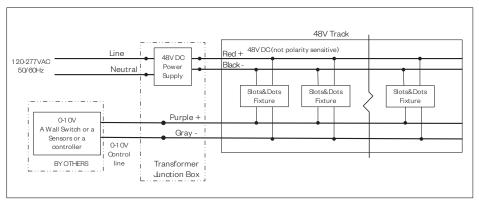
#### WIRED CONTROL - DALI



#### SUGGESTED SWITCHES FOR WIRED CONNECTION

Manufacturer	Model	
Loytec DALI PSU	L-DALI-PWR2-U	DALI Bus Power Supply, 85-240 VAC input, 2 channel DALI PSU, 116 mA per channel
Loytec Controller	L-DALI-ME204-U	DALI Controller, 4 channel DALI
Loytec Controller	L-DALI-ME201-U	DALI Controller, 1 DALI channel with integrated DALI power supply
B.E.G	PP-DALI-PS	DALI Bus Power Supply, 120-277VAC input, 100 mA bus power

## WIRED CONTROL - 0-10V



## Notes:

- 120V or 277V\*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

## Compatible Dimmers†:

Wall Box	Central System
Lutron "Diva" - DVTV with PP-120H Interface	Lutron Grafik Eye with GRX-TVI Interface
Leviton Renoir II 0-10V	

#### Notes:

- \* Driver is 277V dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120V wiring colors and method. Please refer to 277V dimmer installation instructions for 277V wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.