

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

TYPE:

Features

The Carisma® Combo combines our linear 2" Carisma® pendants with track sections. Carisma® is a family of architectural linear luminaires that offer excellent performance, quality, visuals and value. A sleek edge-to-edge lens design results in an elegant aesthetic with clean lines. Carisma's patent pending design includes an integrated optical system that minimizes optical losses, allowing for industry-leading efficacy.



CAR2-D-COMBO

Product Overview

Type: Direct distribution with pendant mounting
Wattage: 5W/ft, 10W/ft (or specify wattage between 3W/ft and 10W/ft)
Color Temp: 2700K*, 3000K, 3500K, 4000K (*90+ CRI only)
CRI: 80+ typ. or 90+ typ.
Dimming: 0-10V, 1% dimming

Certifications



Fixture Summary

Performance Data

Wattage per Foot	Lens	Delivered Lumens	LPW
5	P	2519	126.8
10	P	4755	122.8
5	A	2693	135.6
10	A	5408	128.6

Data is based on 4' fixture, 3500K-80+ 120V IES files available on website.

Runs

Individual Runs: 2' - 8' (specify in 1' increments).

Continuous Runs: > 8' (specify to the nearest foot).



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

TYPE:

Ordering Information

CAR2-D-COMBO-GES / **120/277** . **120**

1	2	3	4	5	6	7	8	9	10	11
----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------	-----------

Example: 28' run with 2' track at beginning and end of run

CAR2-D-COMBO-GES . 28 . 8TP/8P/8P/4PT . ASW04D . 5 . 35 . HW . 120/277 . 120 . CON . 0-10V

1	Model	2	Total Run Length
	CAR2-D-COMBO-GES		----- (min. 4ft, increments of 2ft)

3	Run Builder	/ _____ (section lengths must equal total run length)
		Combo Module with Linear Only:
	<u>Module Length</u>	<u>Lens</u>
4	47.5"	P performance lens
6	71.25"	A asymmetric lens
8	95.0"	
		<u>Combo Module with Linear & Track:</u>
	<u>Module Length</u>	<u>Track Position & Lens</u>
4	47.5"	PT performance lens with 2' track at end
6	71.25"	TP performance lens with 2' track at beginning
8	95.0"	AT asymmetric lens with 2' tract at end TA asymmetric lens with 2' track at beginning TPT performance lens with 2' track at beginning and end (6' & 8' lengths only) TAT asymmetric lens with 2' track at beginning and end (6' & 8' lengths only)
		<u>Combo Module with Track Only:</u>
	<u>Module Length</u>	<u>Track</u>
4	47.5"	T track
6	71.25"	
8	95.0"	

Note: Add **-EMB** for emergency battery pack or **-EMC** for emergency circuit. Applies to lensed Linear only. Examples: **6P-EMB** is a 6' performance lens only module with emergency battery pack. **8TP-EMB** is an 8' module with track and performance lens with emergency battery pack for the performance lens section.

Note: P and A lens cannot be directly adjacent.

4	Mounting	5	Wattage (per foot)	6	Color Temp
	<u>Pendant Mount</u> (aircraft cable suspension)		5 5W/ft		<u>80+ CRI</u> <u>90+ CRI</u>
	ASW04D through ceiling tile or gyp board, white, 4' (18/6, 12/3)		10 10W/ft		30 3000K-80+ 279 2700K-90+
	ASW10D through ceiling tile or gyp board, white, 10' (18/6, 12/3)				35 3500K-80+ 309 3000K-90+
	ASW20D through ceiling tile or gyp board, white, 20' (18/6, 12/3)				40 4000K-80+ 359 3500K-90+
	ASB04D through ceiling tile or gyp board, black, 4' (18/6, 12/3)				409 4000K-90+
	ASB10D through ceiling tile or gyp board, black, 10' (18/6, 12/3)				
	ASB20D through ceiling tile or gyp board, black, 20' (18/6, 12/3)				

7	Finish	8	Linear Voltage	9	Track Voltage	10	Configuration
	HW high reflectance matte white		120/277		120		IND use IND if row consists of only one single Module (e.g. 4PT)
	BT black texture						CON use CON if row consists of more than one single Module (e.g. 6P/4TA/6TP)
	ST silver texture						

11	Drivers/Controls 0-10V* 1% electronic dimming, multi-volt 120-277VAC constant current driver (standard) <i>* For linear ambient sections only.</i>
----	--

NOTE: Each run must include a combination of track sections and lit linear sections.



Delta Intelligent Building Technologies

Carisma® Combo

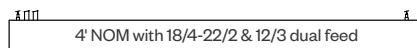
Linear Direct Pendant with Track



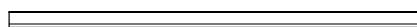
PROJECT:

TYPE:

Modules



4P = 4' with Performance Lens



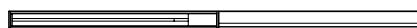
4A = 4' with Asymmetric Lens



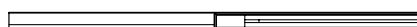
4TP = 4' with 2' Track at Beginning & 2' Performance Lens at End



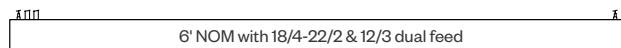
4PT = 4' with 2' Performance Lens at Beginning & 2' Track at End



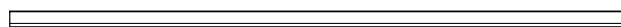
4TA = 4' with 2' Track at Beginning & 2' Asymmetric Lens at End



4AT = 4' with 2' Asymmetric Lens at Beginning & 2' Track at End



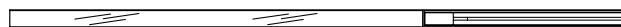
6P = 6' with Performance Lens



6A = 6' with Asymmetric Lens



6TP = 6' with 2' Track at Beginning & 4' Performance Lens at End



6PT = 6' with 4' Performance Lens at Beginning & 2' Track at End



6TPT = 6' with 2' Track at Beginning & 2' Track at End & 2' Performance Lens



6TA = 6' with 2' Track at Beginning & 4' Asymmetric Lens at End



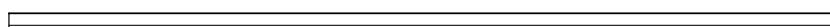
6AT = 6' with 4' Asymmetric Lens at Beginning & 2' Track at End



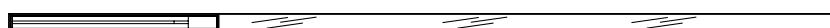
6TAT = 6' with 2' Track at Beginning & 2' Track at End & 2' Asymmetric Lens



8P = 8' with Performance Lens



8A = 8' with Asymmetric Lens



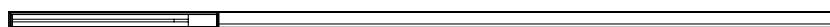
8TP = 8' with 2' Track at Beginning & 6' Performance Lens at End



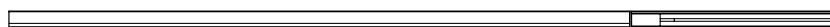
8PT = 8' with 6' Performance Lens at Beginning & 2' Track at End



8TPT = 8' with 2' Track at Beginning & 2' Track at End & 4' Perf Lens



8TA = 8' with 2' Track at Beginning & 6' Asymmetric Lens at End



8AT = 8' with 6' Asymmetric Lens at Beginning & 2' Track at End



8TAT = 8' with 2' Track at Beginning & 2' Track at End & 4' Asy Lens



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

TYPE:

Specifications

Construction

Extruded aluminum housing and reflector.
Die-cast end caps match fixture body finish.
Dual wire way wiring chassis, 1 circuit GES track (*Track Heads sold separately*)

Optical

All lenses are snap-in, extruded acrylic, with a maximum length of 8'. Amerlux's proprietary acrylic lens provide excellent transmission while effectively concealing source image.

P - Performance Lens provides high efficiency with controlled lens surface brightness.

A - Asymmetric Lens

LED

Our LED binning is within 3 MacAdam ellipse. Boards are configured for maximum flexibility resulting in even illumination no matter the fixture layout. LED boards are easily replaced in the field with just a Phillips screw driver.

Color Temperature Options: 2700K*, 3000K, 3500K, 4000K

CRI: 80+, 90+

R9: 16 @ CRI 83; **R9:** >50 @ CRI 92

Life: 50,000+ hr., > 70% of initial lumens (*L70*)

* Available in 90+ CRI only

Electrical

LED = Line 1, Track = Line 2

Wiring: Individual and "Beginning of Run" (*BOR*) fixtures are prewired with power cord. All configurations have quick connect power harnesses for row connections.

Standard Wattage: 5W/ft, 10W/ft.

Optional Wattages: 3W/ft, 4W/ft, 6W/ft, 7W/ft, 8W/ft, 9W/ft. (3W & 4W have a minimum length of 3'). For other wattages consult factory.

Emergency circuit via remote inverter or auxiliary emergency power supply (*by others*).

This product complies with IEEE C62.41 for surge endurance up to 2.5KV.

Amerlux® recommends using additional surge protection with this unit (supplied by others), surge and over voltage damage is not covered under warranty.

Finish

All painted surfaces are premium powder coated baked on for maximum durability and color stability.

HW - High reflective matte White

BT - Black Texture

ST - Silver Texture

For special paint colors supply RAL and/or actual paint chip for factory consultation.

Configurations/Lengths

IND - Individual fixtures are made of single standard lengths of 2ft to 8ft (*in 2ft increments*). These are stand alone fixtures with matching End Caps, supplied with the mounting hardware. Lengths less than 4' may have restrictions based upon wattage, lengths, drivers or other options.

CON - Continuous runs, > 8' specified to nearest whole foot length in 2ft increments. Runs made from standard lengths have End Caps at the beginning and end of run. Runs > 60' may require second power feed. Each housing has factory installed alignment pins. Mating fixtures are easily aligned and joined. Wiring is made fast and positive with molded quick connectors.

Mounting

The Carisma® Direct is intended for pendant mounting.

Pendant Mount-ASWxxD - Direct pendant mounted in center of ceiling tile or gypsum board ceiling (*standard*) i.e. ASWxxD.

Cable is stranded stainless steel wire. All fittings are protected against rust and corrosion. Canopies are 5" x 1/4" die formed painted steel. Adjustment mechanism allows for infinite height adjustment. Amerlux recommends the required feed and non-feed suspensions based upon length and electrical options. Options include: color of canopy and power cord (*black or white*), length 4', 10' or 20', and mounting condition, in center of ceiling tile and in gypsum board ceiling (*standard*) i.e. ASWxxD.

Options

EMB - Emergency battery pack - 10W output power, 90 min of illumination time, up to 1300 lm of initial light output. Illuminated test-switch/charging indicator light is provided. Wattage consumption by EM: 2.5W/ft (4ft fixture), 1.66W/ft (6ft fixture), 1.25W/ft (8ft fixture).

Certifications

Approved to UL standards for damp locations as tested by CSA.
Intended for indoor use only.

Warranty

Amerlux's 5 year limited warranty. Please consult Amerlux website for details.



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track

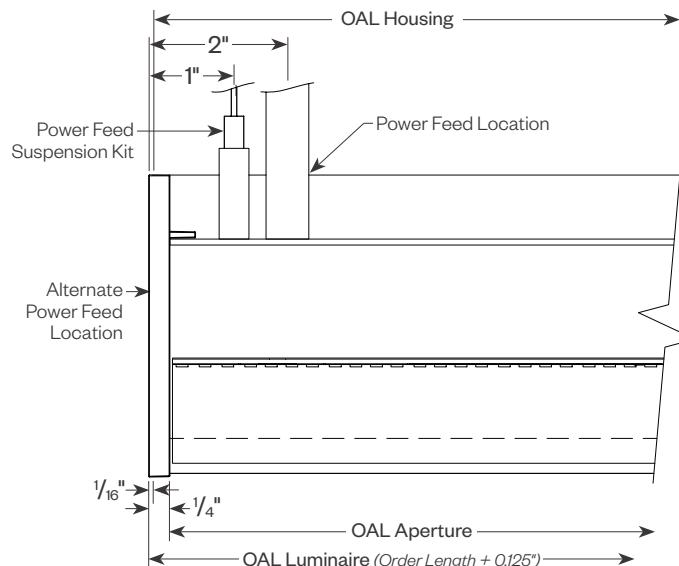
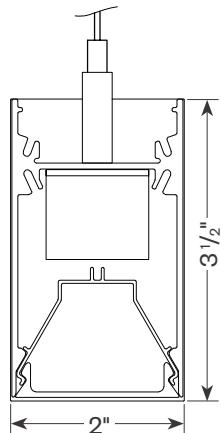


PROJECT:

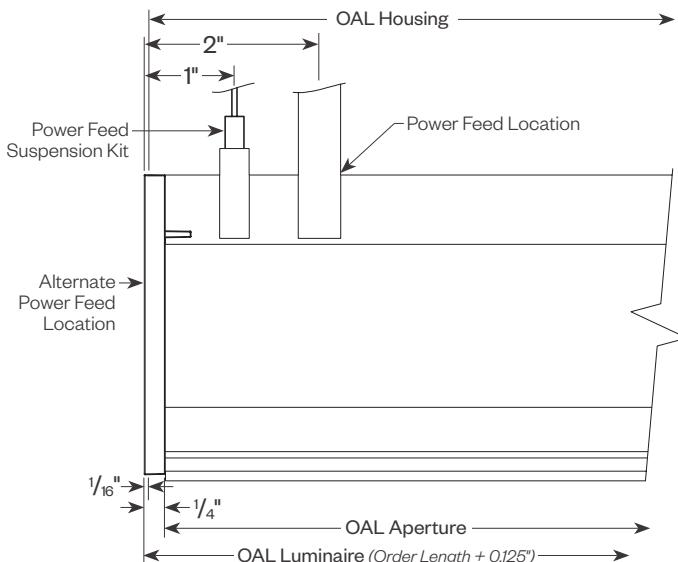
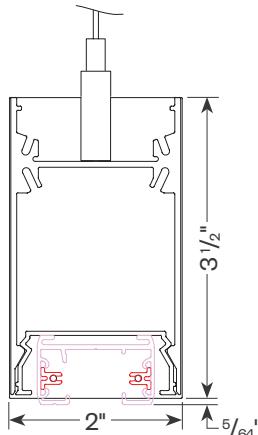
TYPE:

Product Details

Pendant



Track Profile



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

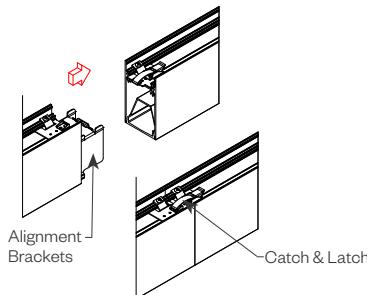
TYPE:

Tool-less Joining

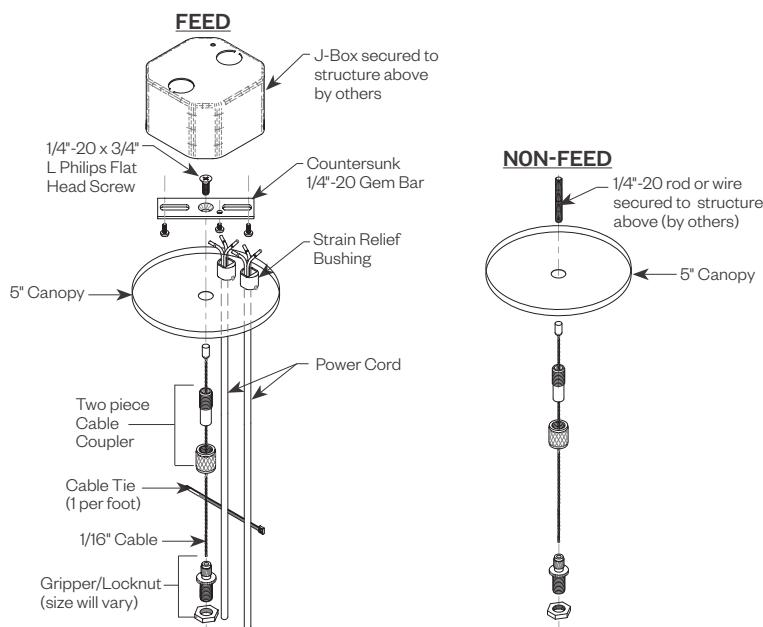
Line up the two housings using the alignment brackets.

Secure them together by using the Catch & Latch

System on the top of the extrusion.



Cable Kit Suspension - Ceiling or Gypsum Board



Cat#	Length	Cord/Canopy	Application
ASW04D	4'	white/white	ceiling tile/gypsum
ASW10D	10'	white/white	ceiling tile/gypsum
ASW20D	20'	white/white	ceiling tile/gypsum
ASB04D	4'	black/black	ceiling tile/gypsum
ASB10D	10'	black/black	ceiling tile/gypsum
ASB20D	20'	black/black	ceiling tile/gypsum



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

TYPE:

Performance Data

Multiplying Factors: (Multiplying Factor is based on 3500K-80 120V IES file on website)

Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.59	0.78	1.0	1.20	1.40	1.60	1.79	1.98

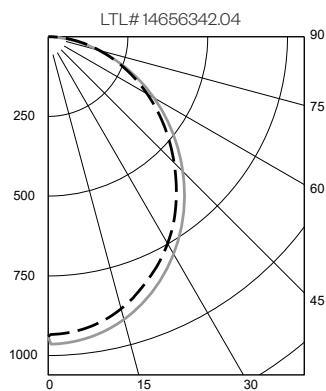
CCT:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.90	0.92	0.92	0.94

CARISMA 2" DIRECT PERFORMANCE LENS 5W 3500K 4FT

Total Watts: 20

Total Lumens: 2,519

Source: 192 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1154	45.8
0-60	1990	79.0
0-90	2519	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 126.8 lm/W

COEFFICIENTS OF UTILIZATION

RC	80			
	RW	70	50	30
RCR	0	119	119	119
	1	109	104	100
	2	99	91	84
	3	90	80	71
	4	83	71	62
	5	76	63	54
	6	70	57	48
	7	65	52	43
	8	61	47	39
	9	57	43	35
	10	53	40	32

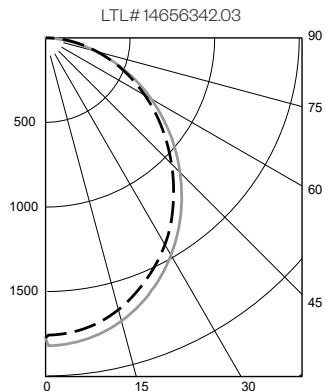
Note: Values expressed as % of total lumen output delivered to the task surface.

CARISMA 2" DIRECT PERFORMANCE LENS 10W 3500K 4FT

Total Watts: 39

Total Lumens: 4,755

Source: 192 White LED's



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	2177	45.8
0-60	3754	78.9
0-90	4755	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 122.8 lm/W

COEFFICIENTS OF UTILIZATION

RC	80			
	RW	70	50	30
RCR	0	119	119	119
	1	109	104	100
	2	99	91	84
	3	90	80	71
	4	83	71	62
	5	76	63	54
	6	70	57	48
	7	65	52	43
	8	61	47	39
	9	57	43	35
	10	53	40	32

Note: Values expressed as % of total lumen output delivered to the task surface.



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

TYPE:

Performance Data (continued)

Multiplying Factors: (Multiplying Factor is based on 3500K-80 120V IES file on website)

Wattage:	3W	4W	5W	6W	7W	8W	9W	10W
Factor:	0.59	0.78	1.0	1.20	1.40	1.60	1.79	1.98

CCT:	3000K-80	3500K-80	4000K-80	2700K-90	3000K-90	3500K-90	4000K-90
Factor:	0.97	1.0	1.02	0.90	0.92	0.92	0.94

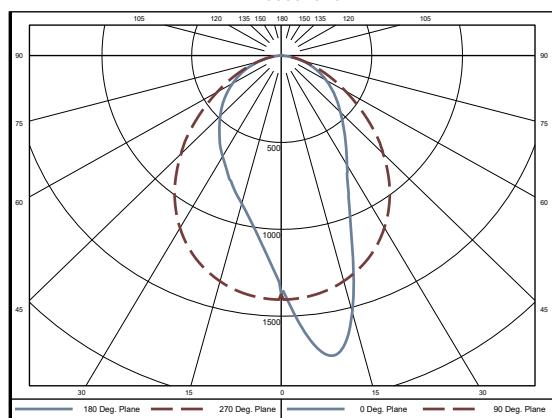
CARISMA 2" DIRECT ASYMMETRIC LENS 5W 3500K 4FT

Total Watts: 20

Total Lumens: 2693

Source: 192 White LED's

LTL# 15335267.01



COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
ROR				
0	119	119	119	119
1	110	105	102	98
2	101	93	57	82
3	93	83	75	69
4	86	74	66	60
5	79	67	58	53
6	74	61	53	47
7	69	56	48	42
8	64	51	43	38
9	60	48	40	34
10	57	44	37	32

Note: Values expressed as % of total lumen output delivered to the task surface.

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-40	1446	53.7
0-60	2259	83.9
0-90	2692	100.0
90-180	0	0.0

Efficacy (lumens/watt) = 135.6 lm/W

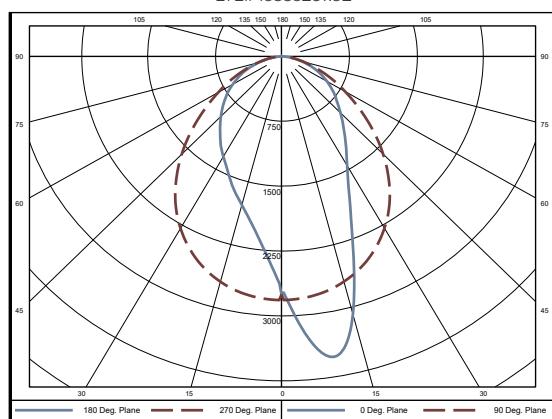
CARISMA 2" DIRECT ASYMMETRIC LENS 10W 3500K 4FT

Total Watts: 42

Total Lumens: 5408

Source: 192 White LED's

LTL# 15335267.02



COEFFICIENTS OF UTILIZATION

RC	80			
RW	70	50	30	10
ROR				
0	119	119	119	119
1	110	105	102	98
2	101	93	57	82
3	93	83	75	69
4	86	74	66	60
5	79	67	58	53
6	74	61	53	47
7	69	56	48	42
8	64	51	43	38
9	60	48	40	34
10	57	44	37	32

Note: Values expressed as % of total lumen output delivered to the task surface.



Delta Intelligent Building Technologies

Carisma® Combo

Linear Direct Pendant with Track



PROJECT:

TYPE:

Dimming Compatibility

Amerlux® Carisma® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

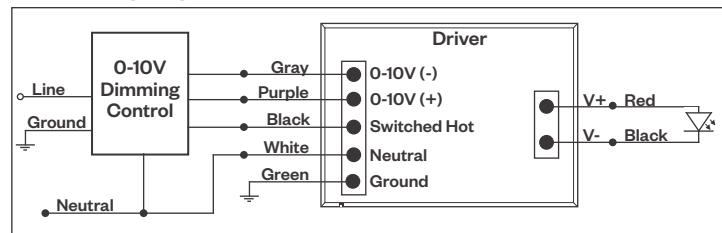
0-10V - DIMMING (Standard)

Integrates into a variety of building management and daylighting controls

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!**

0-10V Wiring Diagram



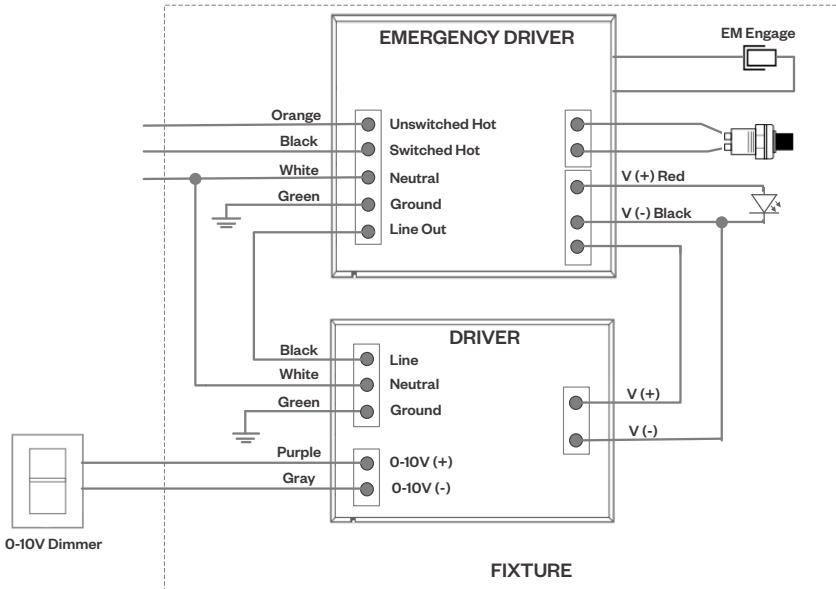
Compatible Dimmers*:

Wall Box	Central System
Lutron: Diva - DVSTV	Wattstopper: ADF-120277
Maestro - MS-Z101	Leviton: Renoir II
Nova-T - NTSTV-DV	Lutron Grafix Eye with GRX-TV1 Interface

Emergency Fixture with Built-In Battery Pack

Emergency fixture with built-in battery pack (**EMB**) wiring:

Note: EMB not available on lengths under 4'.



Notes:

* Driver is 277VAC dimmable with appropriate dimmer (*by others*). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer installation instructions for 277VAC wiring diagrams.

† The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.



Delta Intelligent Building Technologies