

APPLICATION

Low voltage LED lighting fixtures using remote driver platforms are ideally suited to applications that require easy access to LED drivers for routine maintenance and improved LED life and reliability. Remote driver lighting system architectures are especially useful in hard to access ceilings and where historic or important architectural features cannot be disturbed during lighting updates.

PRODUCT DESCRIPTION

The Pathway LCD series of remote constant current drivers provide digital power conversion, constant current LED drive and a variety of dimming control interfaces. Pathway LED luminaires of all lumen levels are supported. Superb, smooth, flicker free dimming is accomplished using 0-10V, DMX or DALI controls. Both linear and logarithmic dimming profiles are available with dimming levels as low as 0%. Power is transmitted to each luminaire with a single two-conductor Class 2 wire. Pathway remote drivers are customized to customer requirements to achieve the ultimate in performance, flexibility and reasonable cost. On board diagnostics continuously monitor the driver health status and provide a visual indication of this status. Field serviceability improves repair turn-around time in the unlikely event of a driver failure.

PRODUCT FEATURES

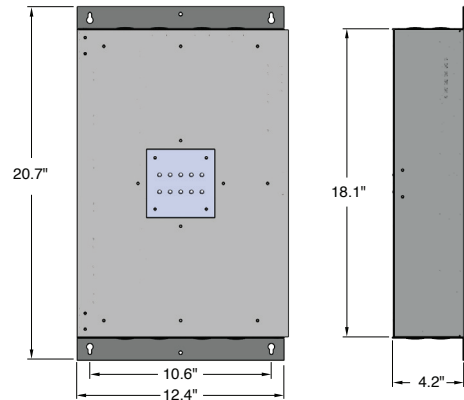
- Powers LED luminaires located up to 200 ft away (cable length)
- Up to 10 independent channels (luminaire outputs)
- Capable of driving all Pathway Lighting luminaires including high lumen 11,000 lumen products
- Analog 0-10V, DMX, DALI, and phase cut dimming interfaces are available
- Superb flicker free dimming as low as 0%
- Analog 0-10V mode—single dimming zone
- Phase cut (forward and reverse) available only on 2100mA
- DMX and DALI -all outputs can be assigned unique addresses and dimmed independently in most models
- DMX is RDM compliant in most models, DMX addresses set manually in high current models
- Drive currents from 200 mA to 2100 mA (12 standard values with custom values available)
- Linear and Logarithmic dimming curve profiles available
- Up to 444 watts total output power
- On board diagnostics monitor driver output health continuously
- LEDs on outside of unit instantly indicate the location of a fault.
- If a single output channel fails, the others remain operational
- Field serviceable—reduces down time in the event of a failure
- ETL listed; RoHS compliant
- **Pathway's sales and engineering teams are available to design complete Central Drive systems.**

CALIBER PLUS

ARCHITECTURAL

LCD Central Drive Remote Driver Pathway Custom Series

5 Year
Warranty



MODEL NO.	CHANNELS	DRIVE CURRENT	OUTPUT VOLTAGE	MAX. OUTPUT POWER PER CHANNEL
LCDELD	Up to 10	200-1400 mA	1.5-55 V	50 W
LCDELDDMX	Up to 10	200-1050 mA	1.5-55 V	50 W
LCDELDDALI	Up to 10	200-1400 mA	1.5-55 V	50 W
LCDLS	Up to 4	1750mA, 2100 mA	20-43.8 V	92 W
LCDSLDMX	Up to 4	1750mA, 2100 mA	20-43.8 V	92 W
LCDD8 (linear)	Up to 6*	200mA-1700mA	27-54V	50W (75W**)
LCDDL8 (logarithmic)	Up to 6*	200mA-1700mA	27-54V	50W (75W**)
LCDERP1	Up to 5	2100mA	30-42V	88.2W
LCDERP2	Up to 5	2100mA	30-42V	88.2W

* Up to 4 for 1300-1700mA

** For 1300-1700mA

Fixture:	Type:
Project:	



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CALIBER PLUS

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Specifications

AC Input	
Rated Input Voltage	120-277 VAC
Rated Input Frequency	50 / 60 Hz
Rated Input Current	Depends on custom configuration
Inrush Current per Driver	Meets NEMA - 410 Requirements
Power Factor	>0.9 @ 120 or 277 VAC, 100% load
Input Current Total Harmonic Distortion	<20 % max. @ 115 or 277 VAC, 100% load
Wiring Style	Hard-Wired to Lighting Circuit (suitable for emergency mode power applications)

LED Outputs	
LED Drive Current	LCDELD 200 mA, 300 mA, 350 mA, 400mA, 500 mA, 600 mA, 700 mA, 800 mA, 1000 mA, 1200 mA, LCDELDDMX 200 mA, 300 mA, 350 mA, 400mA, 500 mA, 600 mA, 700 mA, 800 mA, 1000 mA LCDELDDALI 200 mA, 300 mA, 350 mA, 400mA, 500 mA, 600 mA, 700 mA, 800 mA, 1200 mA LCDLS 1750 mA, 2100 mA LCDLSDMX 1750 mA, 2100 mA LCDD8, LCDDL8, 200-1700 mA LCDERP1, LCDERP2 2100 mA NOTE: Inquire for custom drive currents
Drive Current Tolerance	± 5%
Number of Output Channels	LCDELD—Up to 10 LCDELDDMX—Up to 10 LCDELDDALI— Up to 10 LCDLS—Up to 4 LCDLSDMX—Up to 4 LCDD8, LCDDL8 Up to 6 LCDERP1, LCDERP2 Up to 5
LED Output Voltage Range	LCDELD 1.5-55 V LCDELDDMX 1.5-55 V LCDDALI 1.5-55 V LCDLS 20-43.8 V LCDLSDMX 20-43.8 V LCDD8, LCDDL8 27-54V LCDERP1, LCDERP2 30-42W
Maximum LED Output Power	LCDELD 300W LCDELDDMX 250 W LCDELDDALI 300W LCDLS 368W LCDLSDMX 368 W LCDD8, LCDDL8 300W LCDERP1, LCDERP2 440W
Full Load Power Efficiency	>86 % @ 120 or 277 VAC
Remote Wiring Distance	Up to 200 ft max.
Remote Wire Type	16-20 AWG 2-Conductor Shielded (Belden 87760 or equivalent)

Dimming Control Interface	
Dimming Method / Standard	0-10V / IEC 60929 Annex E, ESTA E1.3-2001 DMX / USITT DMX 512-A DALI / DALI / IEC 62386 Forward or Reverse Phase - ERP1 Option Only
0-10 V Dimming Zones	One
0-10 V Dimming Source Current	2 mA max
Minimum Dimming Level	LCDELD 0 % LCDEDDMX 0% LCDEDDALI 0% LCDLS 0.2% LCDLSDMX 0.2% LCDD8 1% LCDDL8 1% LCDERP1 1% LCDERP2 0.2%
Dimming Curve Profile *	LCDELD Linear, Logarithmic LCDEDDMX Linear, Logarithmic LCDEDDALI Linear, Logarithmic LCDLS Logarithmic LCDLSDMX Logarithmic LCDD8 Linear LCDDL8 Logarithmic ERP Linear
Loss of 0-10V Control Signal	Outputs go to 100%
Loss of DMX Dimming Signal	Model Dependant - Outputs go to 100% or remain at previous setting - Consult Pathway
Max number of units in single DMX Universe	64
DMX—RDM Compliant	LCDEDDMX models only
DMX-Manual address setting	LCDSLSDMX**
DMX Wire Type	LCDEDDMX—3 or 5 conductor DMX , CAT 5E/6 Bare wire termination LCDLSDMX -- CAT 5/5E/6 with RJ-45 connector
Max. Distance-DMX Controller To Last LCDLSDMX or LCDLSDMX In Daisy Chain	1000 ft. A DMX amplifier/repeater is required to extend cable length beyond 1000 ft
DMX Termination	120 ohms on last unit in daisy chain

* Reference Pathway Lighting "Linear vs. Logarithmic Dimming" white paper for more information

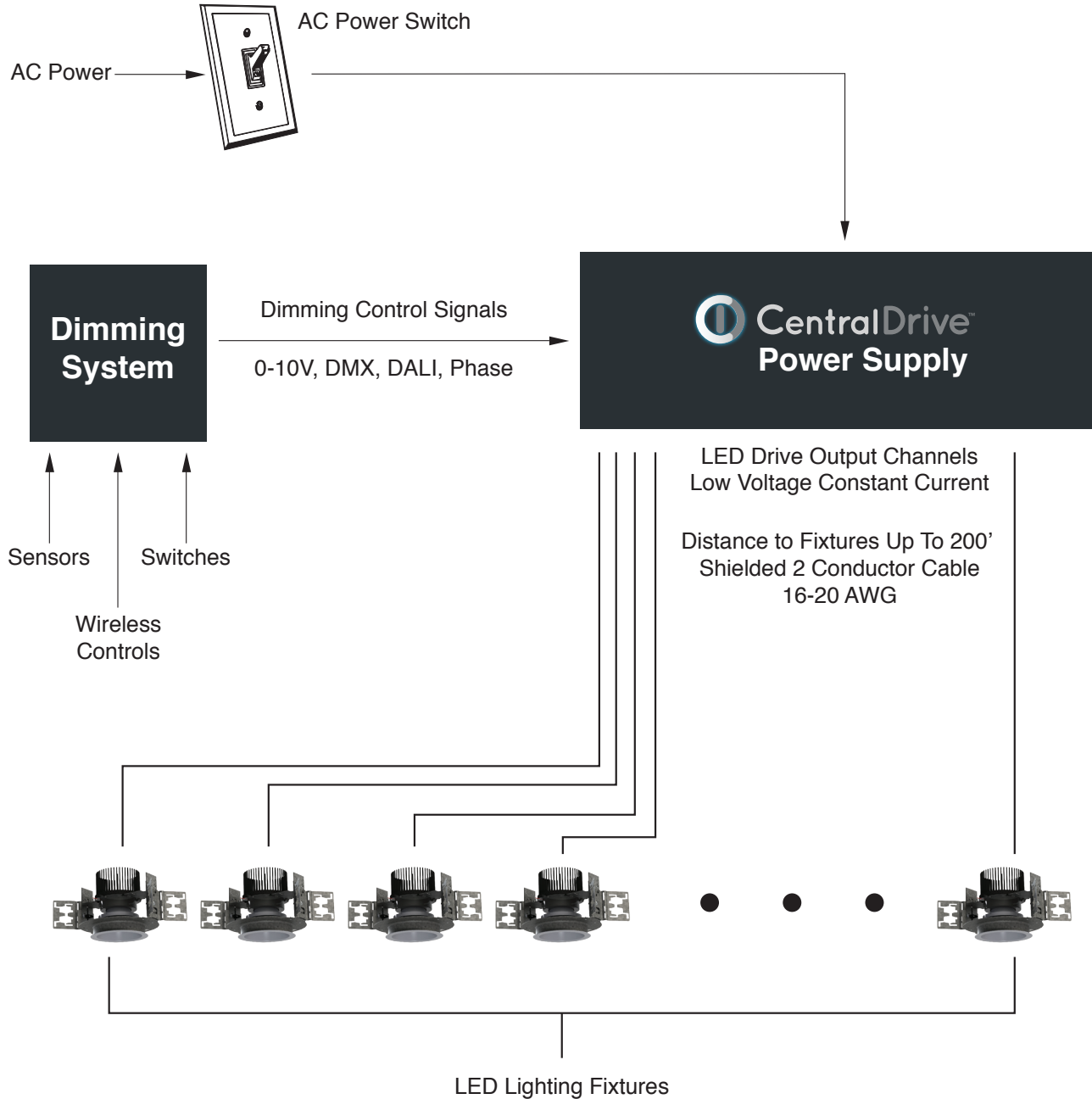
** Reference Pathway DMX Translator User Manual for more information

System Protection	
Output	Over voltage, Over Current, Short Circuit

Environmental/Mechanical	
Ambient Operating Temperature	-20 to 40 deg C
Ambient Storage Temperature	-40 to 80 deg C
UL Location Rating	Dry
Operating Relative Humidity	5% to 95% noncondensing
Plenum Rated	No
Cooling Method	Convection
Dimensions	20.25" H x 12.4 " W x 4.25" D
Weight	20 lbs. max. with full driver complement

Safety and EMI/EMC	
Agency Approvals	ETL per UL 60950-1 and UL 2108 Pending

Typical Layout for Low Voltage LED Lighting Fixtures with Remote Driver Platform



Note: For all CentralDrive systems, emergency backup applications must use a dedicated power supply supported by inverter/generator power.

Emergency Power Typical Layout

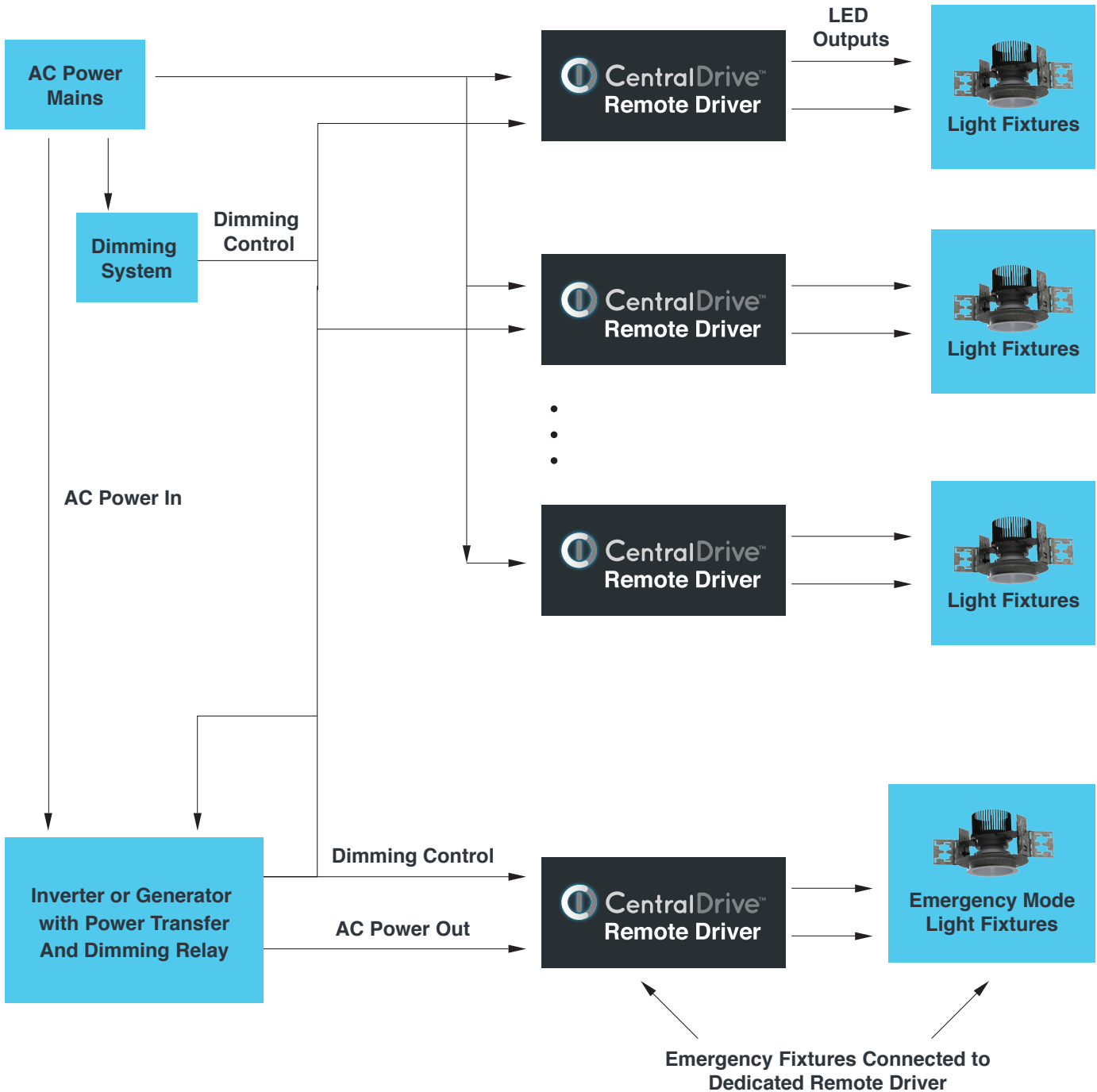


Diagram illustrates 0-10V dimming configuration. For DMX/Dali dimming systems, consult dimming system manufacturer for correct setup to insure EM fixtures are not dimmed when emergency power is switched on.