



# QOM-DRIVE

The Q-Tran QOM-Drive with available DMX or DALI control and dimming options is an ideal solution for nearly all interior lighting applications. This electronic outdoor power supply, utilizes eldoLED LINEARdrive drivers and is suitable for indoor and outdoor use, in 12VDC or 24VDC constant voltage options, and is capable of up to 200 Watts of flicker free power within a single enclosure. The QOM-Drive comes pre-wired to meet any need, with terminal blocks for all input and output connections to greatly reduce installation time.

## FEATURES

- DMX or DALI Controllable
- Surface mount capable
- Suitable for dry, damp and wet locations
- Suitable for Indoor or Outdoor Use
- Suitable for Use with Submersible Luminaire
- 4x 12/24V Controllable outputs per driver
- Standby power: < 0.5W
- Built-in Surge Protection: 3kV (L to N), 4kV (L/N to GND)
- Flicker Free operation
- Efficiency: 90% at full load, ≥ 87% above 50W output
- Class 2 output
- Power factor: > 0.94
- THD @ full load : <10%
- 3 year warranty
- CSA #239924

### Low Voltage Lighting Systems

- : CSA Class 3425-15 and Class 3425-95
- : CSA Standard C22.2 No. 250.0-08 - Luminaires
- : ANSI/ UL Standard 2108 - Low Voltage Lighting Systems
- : ANSI/ UL Standard 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products
- : CSA Std C22.2 No 250.13-14 - Light Emitting Diode (LED) Equipment for Lighting Applications

### LED Landscape Lighting Systems

- : CSA Class 3402-15 and Class 3402-95
- : CSA Standard C22.2 No. 250.7-07 - Extra-Low-Voltage Landscape Lighting Systems
- : ANSI/ UL Standard 1838 - Low Voltage Landscape Lighting Systems
- : ANSI/ UL Standard 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products
- : CSA Std C22.2 No 250.13-14 - Light Emitting Diode (LED) Equipment for Lighting Applications

## DALI

Use these connectors to connect the driver to a DALI network. Always combine a DA+ and DA- connector for either data input or data output. A separate DALI power supply is required to power the DALI bus.

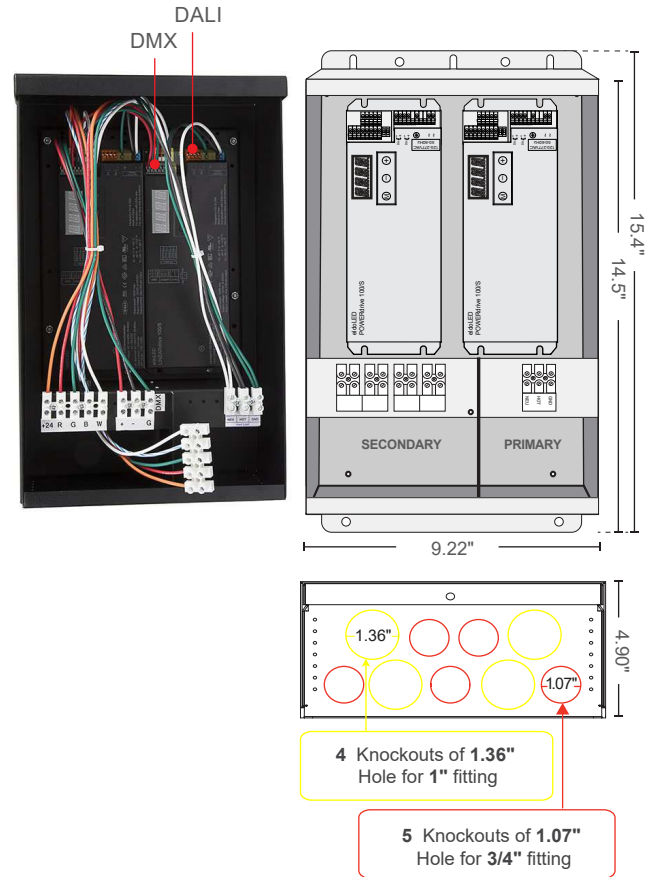
## DMX in/LedSync out

Use these connectors when the driver is used in a DMX network. For DMX in, connect the network cable's DMX+, DMX- and DMX shielding wire (the orange/white, orange and brown wire in a CAT5 cable) to the DMX in+, DMX in- and DMX in- in shield connector respectively. For LedSync out, connect the network cable's DMX+, DMX- and DMX shielding wire to the LedSync out+, LedSync out- and LedSync shield connector respectively.

## WIRE LENGTH TABLE \*Distances are based on a 5% Voltage drop max.

VOLTAGE DROP CHART										
VDC	Watts (w)	10 AWG (5.6mm <sup>2</sup> )	12 AWG (3.3mm <sup>2</sup> )	14 AWG (3.0mm <sup>2</sup> )	16 AWG (1.3mm <sup>2</sup> )	18 AWG (0.78mm <sup>2</sup> )	20 AWG (0.50mm <sup>2</sup> )	22 AWG (0.33mm <sup>2</sup> )	24 AWG (0.20mm <sup>2</sup> )	26 AWG (0.13mm <sup>2</sup> )
12	12	315'	198'	125'	78'	49'	31'	19'	12'	7'
	25	115'	72'	45'	28'	18'	11'	7'	4'	4'
	60	7'	4'	3'						
24	17	897'	564'	355'	223'	140'	88'	55'	35'	22'
	25	567'	356'	224'	141'	88'	56'	35'	22'	14'
	40	309'	194'	122'	77'	48'	30'	30'	12'	7'
	80	130'	82'	51'	32'	20'	13'	8'	5'	3'
	100	84'	53'	33'	21'	13'	8'	5'	3'	

- This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.



ORDERING GUIDE				
Model	Size	Sec. V	Control	Housing
QOM-DRIVE	-	-	+	-
1 Size	Max Load (Watts)	Secondary Voltage (12/24VDC)	Max Prim. Amps @ 120V	Max Prim. Amps @ 277V
60W	1X60W	12VDC	1.05 A	0.45 A
120W	2X60W	12VDC	2.10 A	0.90 A
100W	1X100W	24VDC	1.05 A	0.45 A
200W	2X100W	24VDC	2.10 A	0.90 A
2 Secondary Voltage		4 Housing		
12VDC	24VDC	BK Black Powder Coat Finish ( Standard )		
3 Control		SS 316 Marine Grade Stainless Steel		
DMX	DALI			
Ordering Example				
<b>QOM-DRIVE-100-24V+DMX</b>				



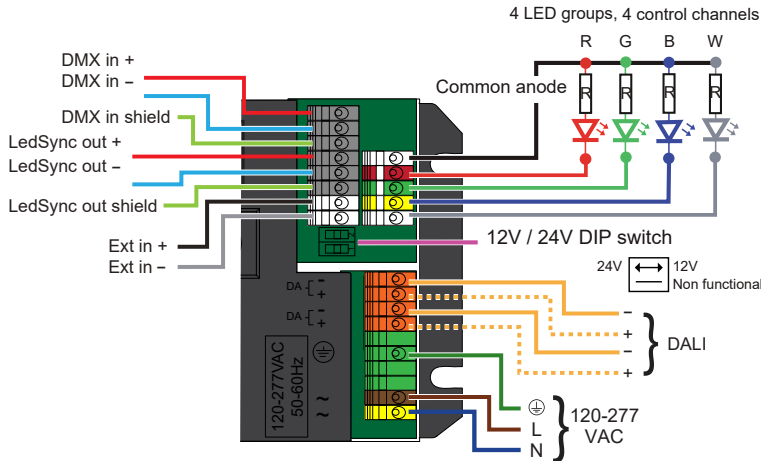
2020-01-14-V1

PROJECT NAME	DATE	COMPANY	TYPE	NOTE



# QOM-DRIVE SPECIFICATIONS

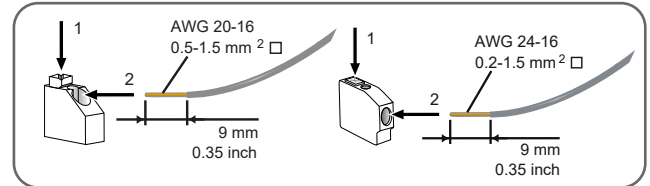
## WIRING DIAGRAM



**LED wire length:** Maximum wire length from LED driver to LED engine at full load:

AWG value	20	18	16
Distance (ft)	46	72	118

**NOTE:** Longer wire lengths increase EMI susceptibility.



**Pay attention when connecting the LED groups:**

- polarity reversal results in no light output and often damages the LEDs
- combining + and - of different groups damages the driver

## INPUT

- Voltage: 120 - 277 VAC, 50/60Hz
- Current, max per driver:
  - 1.05A at 120V/60Hz,
  - 0.5A at 230V/50Hz,
  - 0.45A at 277V/60Hz.

## OUTPUT

- Power per driver: 100W max
- Voltage: 12V/24V output
- Current
  - RGBW @ 12V: 1.25A per output
  - RGBW @ 24V: 1A per output
- Output
  - RGB @ 12V: 1.66A per output
  - RGB @ 24V: 1.33A per output
- Current Max: 5A common anode

## ENVIRONMENTAL

- Ta operating range : -40°F ~ +122°F
- Tc max : 185°F
- Lifetime : 50K hours at 122°F
- MTBF : 480,000 hours

## COMPLIANCE / SAFETY

- Class 2 output.
- Class A sound rating
- FCC: Title 47CFR Part 15 Class B
- The wiring inside electrical enclosures shall comply with the 600V/105 °C or higher.
- CSA Certified
  - : UL-2108
  - : UL-1838
  - : UL-8750
  - : CSA C22.2 No 250.7-07
  - : CSA C22.2 No 250.0-08
  - : CSA C22.2 No 250.13-14

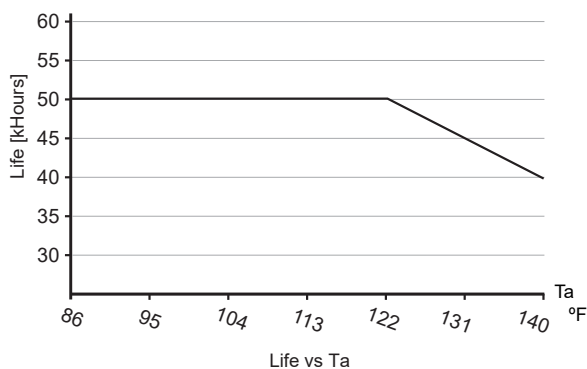
## PERFORMANCE

- Power Supply
  - : Rated for surface mount or outdoor use
  - : Fully rated to operate low voltage load at listed wattage (No Derating Required)
  - : Voltage regulation to 5% or less of rated output voltage
  - : Universal input range of 120-277 Vrms
- **Low Voltage Lighting Systems**
  - : CSA Class 3425-15 and Class 3425-95
- **LED Landscape Lighting System Components**
  - : CSA Class 3426-04 and Class 3426-94
  - : Short circuit protection (SCP)
  - : Overload protection (OLP)
  - : Live tested by manufacture to ensure proper operation
  - : Manufacturer offers minimum of 5 year warranty
- Terminal blocks is made of tin plated copper with a voltage rating of 300V and a current rating of 40A

**NOTE:** All measurements have been carried out at maximum load in free air without heat sink.



## Lifetime data



## Power factor data

