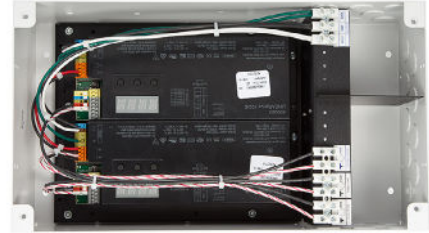


# QTM-DRIVE

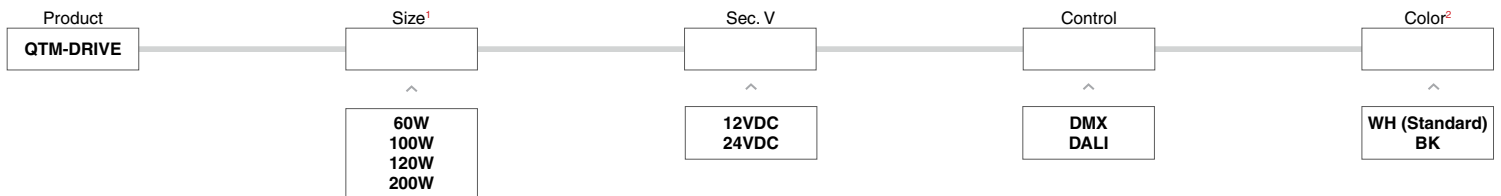
LED POWER SUPPLY 60W-200W



QTM-DRIVE is an LED power supply for DMX or DALI control. It is available in 12 or 24VDC and 60-200 watts of power. The QTM-DRIVE utilizes eldoLED LINEARdrive drivers and is suitable for indoor use. The power supplies and modules are all prewired together along with terminal blocks for power and control wires. The housing can be recessed or surface mounted.



## Part Number Builder



## Technical Information

### <sup>1</sup> Size

Size	Max Load (Watts)	Secondary Voltage (12/24VDC)	Max Prim Amps @ 120V	Max Prim Amps @ 277V
60W	1x60W	12VDC	0.60A	0.45A
120W	2x60W	12VDC	2.10A	0.90A
100W	1x100W	24VDC	1.05A	0.45A
200W	2x100W	24VDC	2.10A	0.90A

### <sup>2</sup> Color

**WH** White (Standard)  
**BK** Black Powder Coat Finish

## 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 (0.22mm <sup>2</sup> )	26 AWG (0.13mm <sup>2</sup> )
		12	12	315'	198'	125'	78'	49'	31'	19'
	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'	

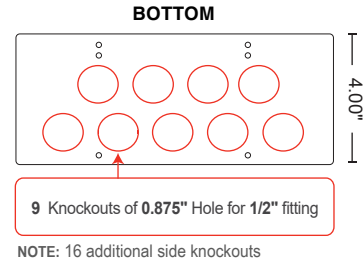
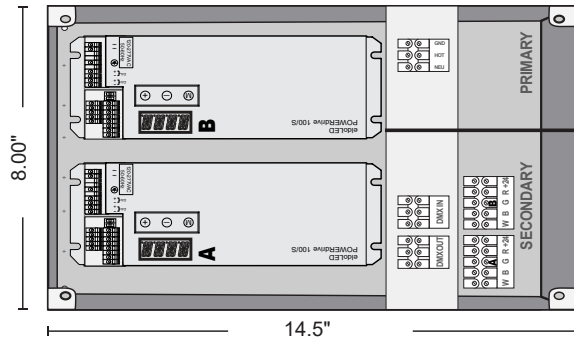
\*Distances are based on a 5% Voltage drop max.

• 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



# QTM-DRIVE

LED POWER SUPPLY 60W–200W



## Housing

- 18 gauge welded steel enclosure: 14.5"W x 8.00"H x 4.00"D
- Door: 15.5"W x 9.00"H
- Knockouts: 9
- Built-in support bracket incorporated to secure housing for surface mounting

## Performance

- Power Supply
  - : Rated for surface mount or recessed 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
  - : Short circuit protection (SCP)
  - : Overload protection (OLP)
  - : Live tested by the manufacture to ensure proper operation
  - : Manufacturer offers a minimum of 5 years warranty
- Terminal blocks is made of tin plated copper with a voltage rating of 300V and a current rating of 40A

- DMX or DALI controllable
- Can fit up to 2 drivers
- Surface or recess mount capable
- 4x 12/24V controllable outputs per driver
- Standby power: < 0.5W
- Flicker free operation
- Built-in surge protection: 3kV (L to N), 4kV (L/N to GND)
- Efficiency: 90% at full load,  $\geq$  87% above 50W output
- Power factor: > 0.94
- THD @ full load : < 10%

- DMX dimming down to 0.1%
- 3 years warranty
- Class 2 output
- 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
    - : CSA standard C22.2 No 250.13-14 - Light emitting diode (LED) equipment for lighting applications
    - : ANSI/ UL standard 8750 - Light emitting diode (LED) equipment for use in lighting products



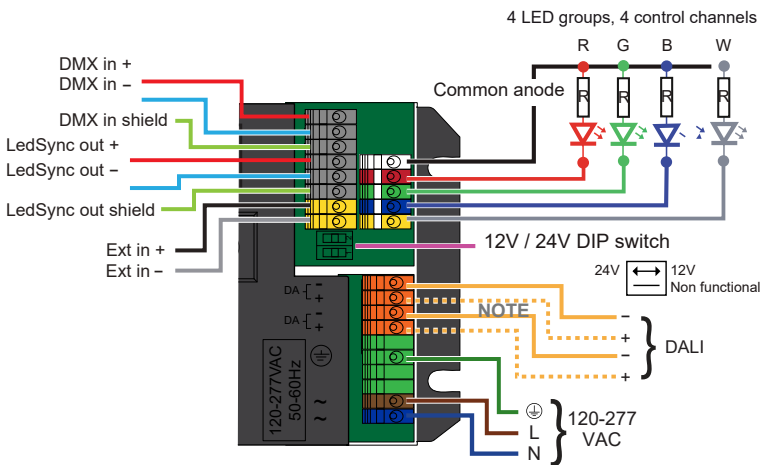
### DMX in/LedSync out

- 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 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.

### 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.

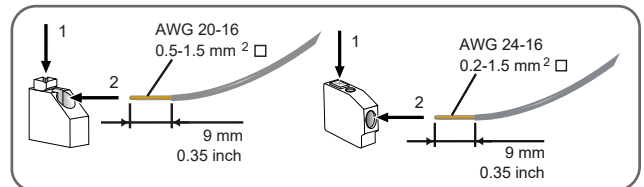
### Wiring Diagram



**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
- Power per channel: 60W 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

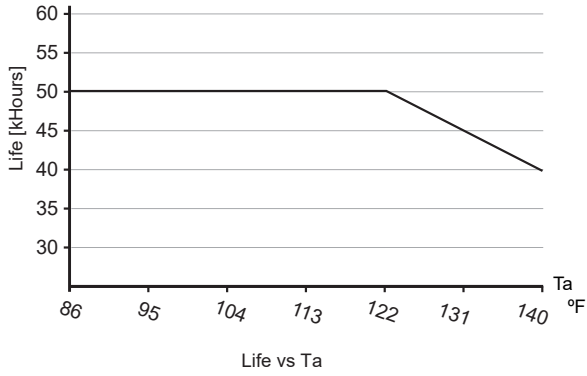
### COMPLIANCE / SAFETY

- 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-8750
  - : CSA C22.2 No 250.0-08
  - : CSA C22.2 No 250.13-14

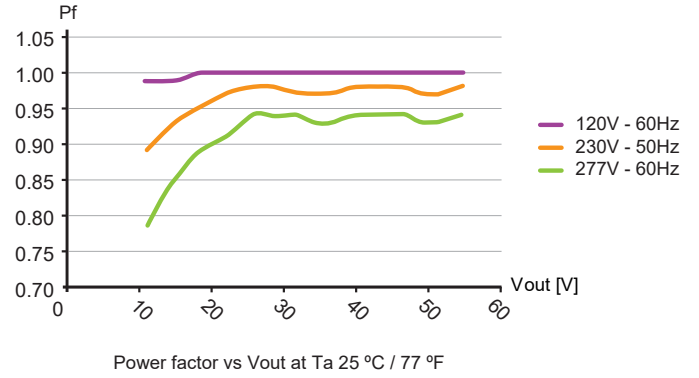
**NOTE:** All measurements have been carried out at maximum load in free air without heat sink.



**Lifetime data**



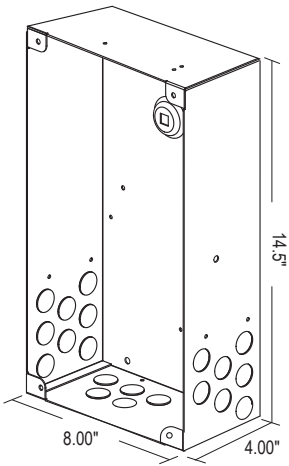
**Power factor data**



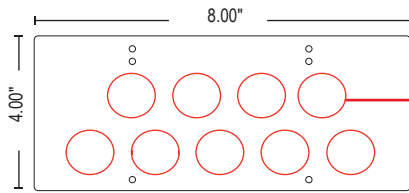
# INSTALLATION LED POWER SUPPLY - QTM-DRIVE



## Housing

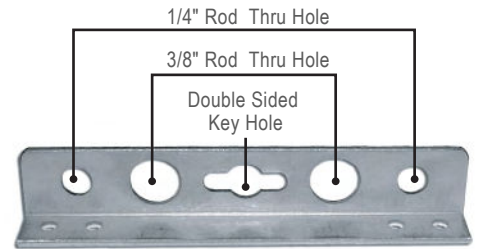


ISOMETRIC VIEW



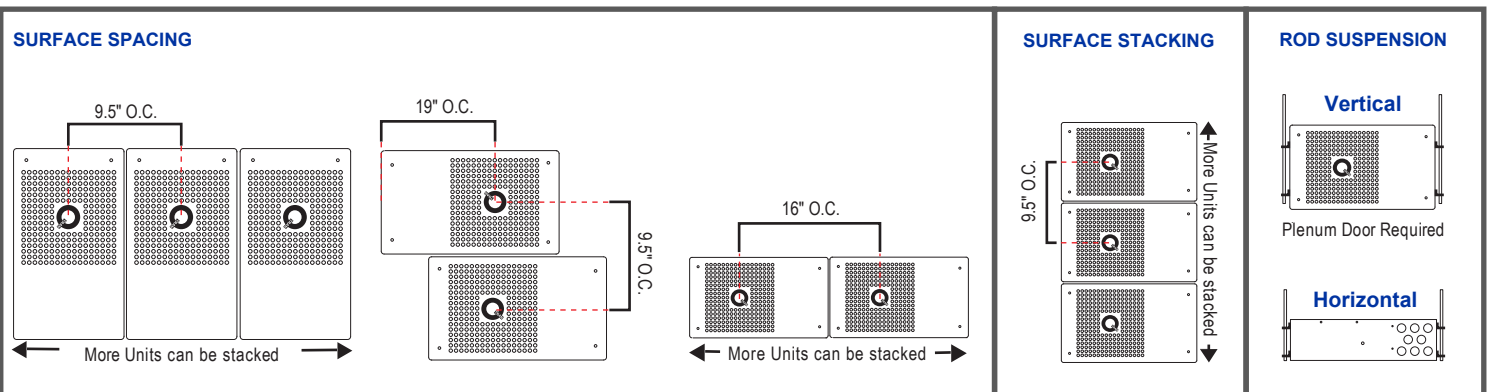
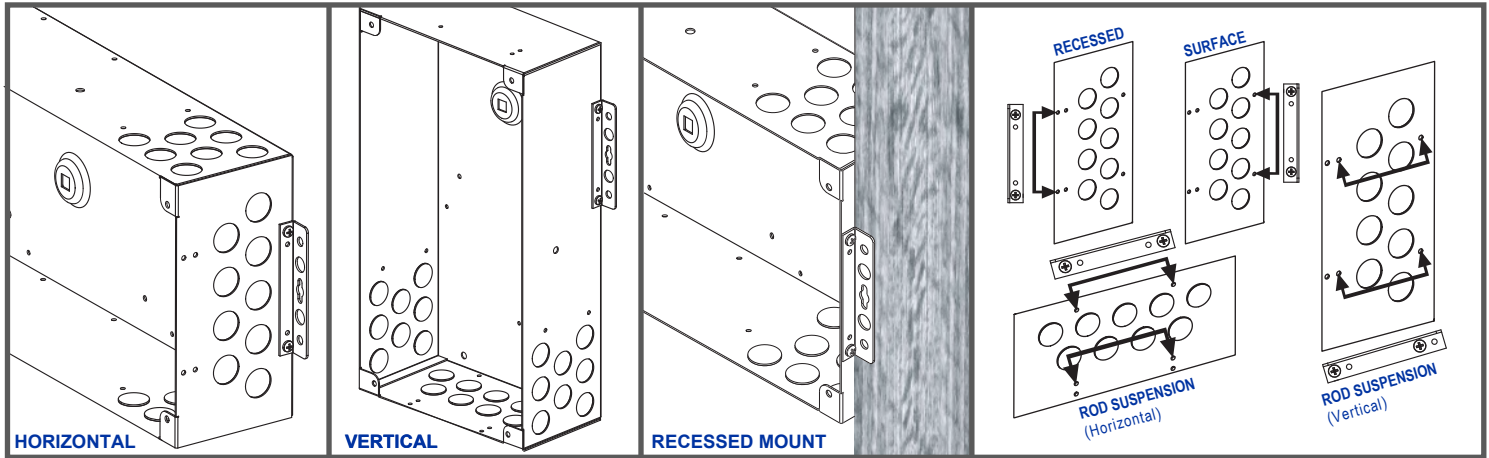
BOTTOM VIEW

0.875" KNOCKOUT 9X  
(FOR 1/2" FITTINGS)



NOTE: Bracket can also be mounted (Top & Bottom) for Vertical Mounts.

## Mounting Options

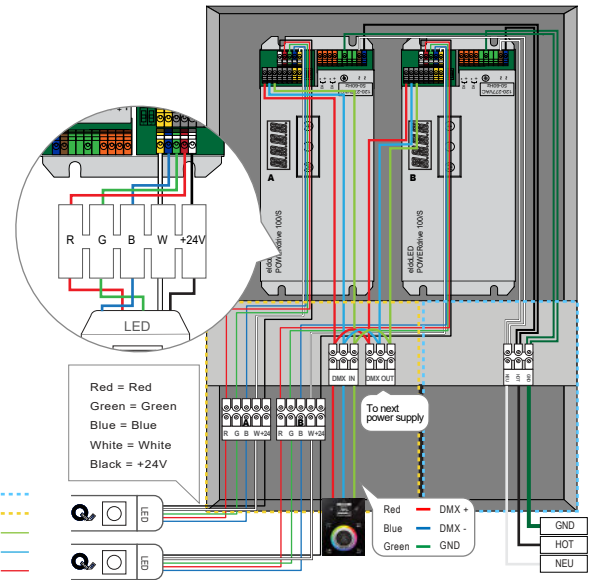
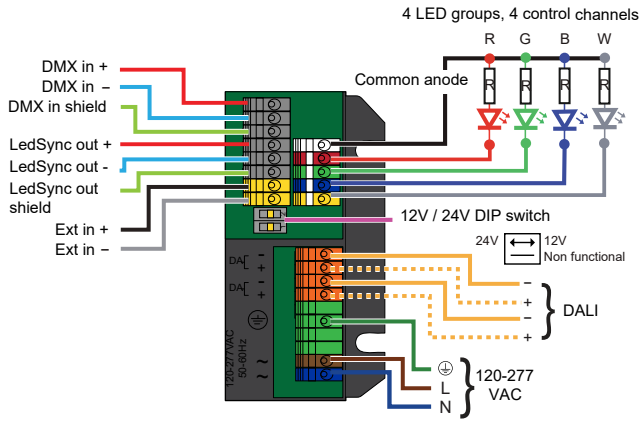


NOTE: Rods not included.

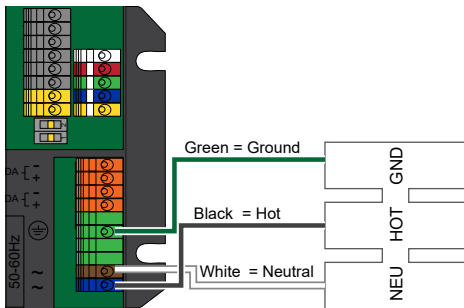
# INSTALLATION LED POWER SUPPLY - QTM-DRIVE



## Connecting and Configuring the LINEARdrive 100/S



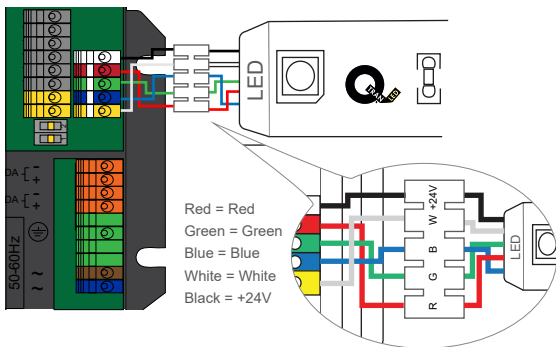
### Primary Wiring



### Commonly Asked Questions

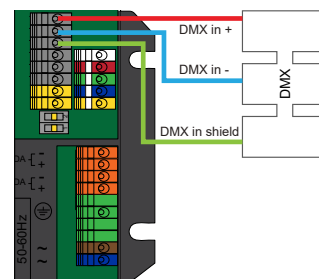
- How can I verify my installation?
  - Apply AC input, verify display turns on : This confirms AC input wiring
  - Run "Visual Test Run" : This verifies wiring of LEDs. Make sure LEDs turning on go in same order as the Test Run
- I don't have a controller yet, how can I keep my lights on?
  - Change the Mode to "COLOR" : This allows to manually set a specific color to be on
  - Adjust the Hue or WHITE to achieve the desired color : This sets that specific color
- My LEDs aren't coming out the right color. They look like white has been added in
  - Verify the Network Resolution "NETW RES" : Default is 8 BT
  - Check your DMX Programming. Stick controllers come with RGB programs by default. This will cause RGBW LEDs to show Pink vs. Red

### Secondary Wiring

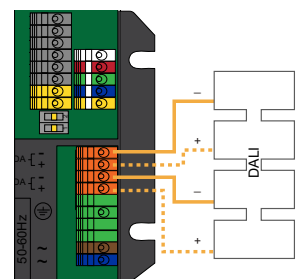


### Control Wiring

#### DMX Connections



#### DALI Connections



**NOTE:** The unit will be factory wired based on the way the unit is ordered.  
Only the one applicable control will be prepared.  
: DMX shielding wire must be grounded to Earth ground external to power supply.



**WARNING:** Risk of electrical shock. May result in serious injury or death. Disconnect power before servicing or installing.



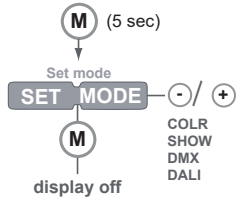
**CAUTION:** The device may only be connected and installed by a qualified electrician. All applicable regulations, legislation and building codes must be observed. Incorrect installation of the device can cause irreparable damage to the device and the connected LEDs.

# INSTALLATION LED POWER SUPPLY - QTM-DRIVE

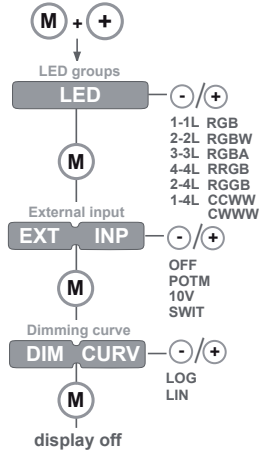


## Manual Configuration

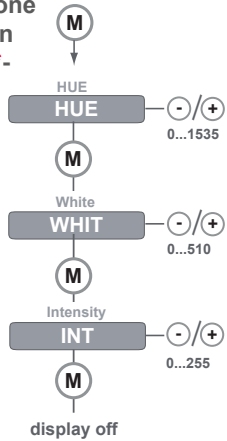
### 1. Select mode of operation:



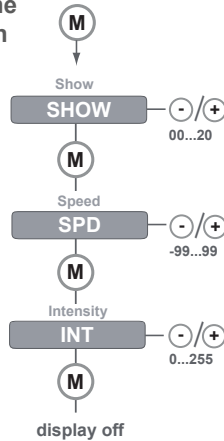
### 2. Set LED groups:



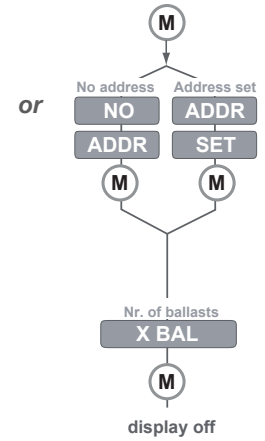
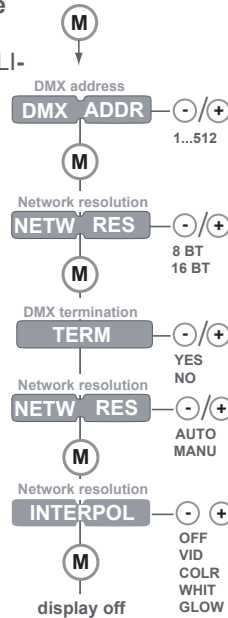
### 3. Standalone operation - Colour\*



### Standalone operation - Show-



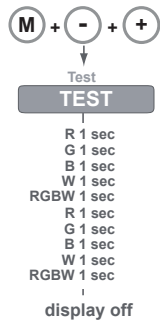
### Standalone operation - DMX or DALI-



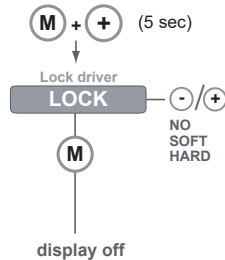
\*The colour menu depends on the LED group settings you have selected in step 2.

## Other Features

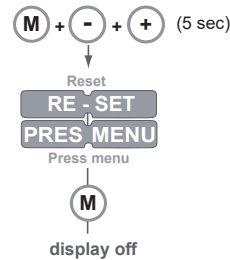
### Visual test run



### Locking the configuration:



### Reset to factory defaults

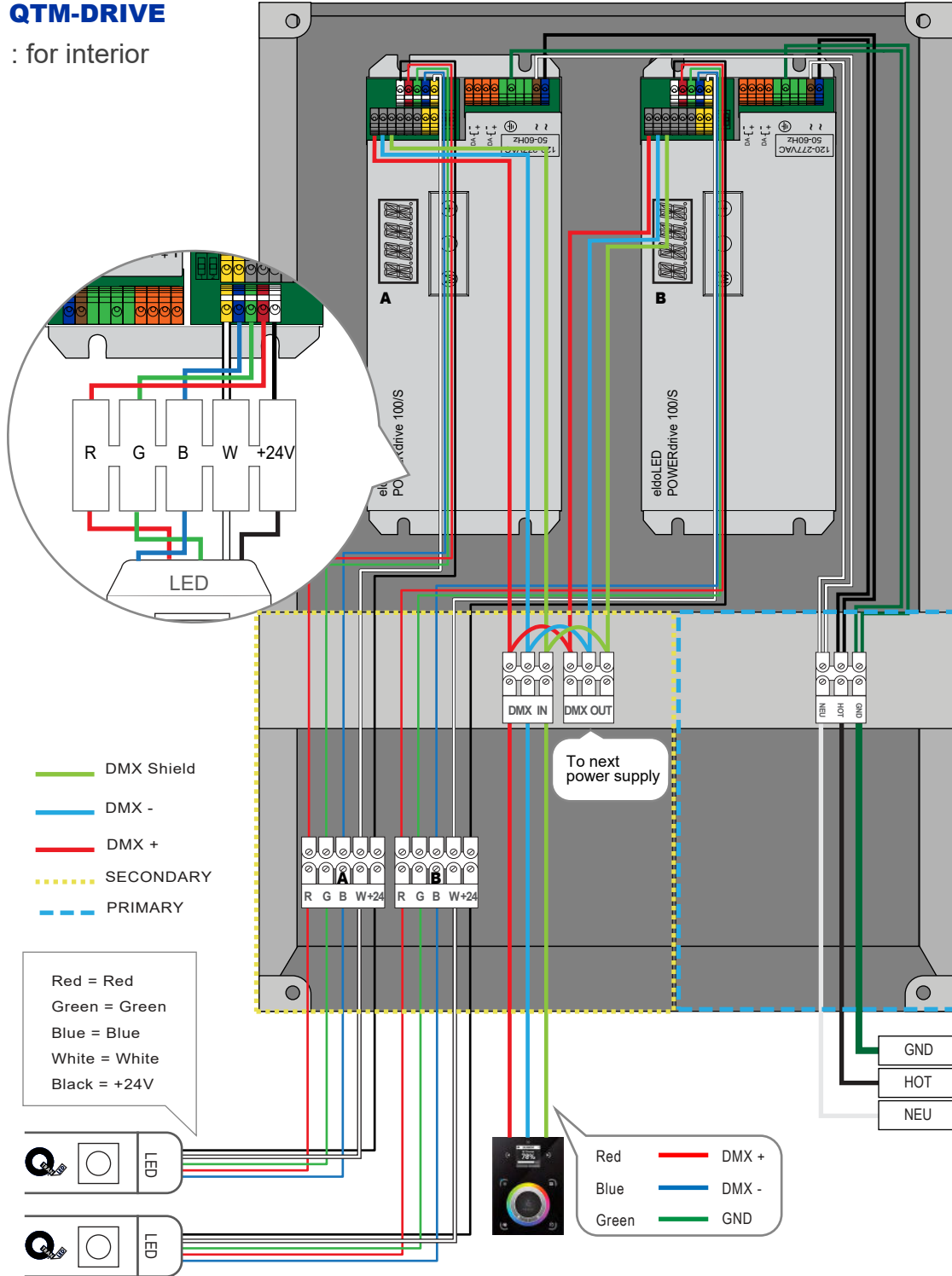


# INSTALLATION LED POWER SUPPLY - QTM-DRIVE



## Wiring Installation

**QTM-DRIVE**  
: for interior





# INSTALLATION LED POWER SUPPLY - QTM-DRIVE



## CSA Requirements

- Suitable for indoor use
- This power supply must be installed according to the National Electric Code and local codes and ordinances and in accordance with applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.
- Wear rubber shoes and work on a sturdy wooden or fiberglass ladder.
- This power supply is to be installed in a location where it is not likely to be contacted by non-electricians.
- To avoid a hazard to children, account for all parts and destroy all packaging materials.
- DMX shield wire must be grounded to earth ground at a single point external to power supply.

QTM-DRIVE		INPUT VOLTAGE			OUTPUT VOLTAGE		CONTROL TYPE
		120V-277V			12V	24V	
Model	Input Voltage (V)	Input Current (A)	Frequency	Nominal Output Voltage (VDC)	Nominal Output Wattage (W)		
QTM-DRIVE-60	120/277	0.67	50/60	12	60	<input type="checkbox"/> DMX <input type="checkbox"/> DALI	
QTM-DRIVE-120	120/277	1.30	50/60	12	120		
QTM-DRIVE-100	120/277	1.05	50/60	24	100		
QTM-DRIVE-200	120/277	2.10	50/60	24	200		

- Type IC recessed, inherently protected  
Type IC ENCASTRE, PROTECTION INHÉRENTE
- Wall mount only  
INSTALLATION MURALE SEULEMENT
- Suitable for damp locations  
CONVIENT AUX EMPLACEMENTS HUMIDES
- Not for use with dimmers  
NE CONVIENT PAS À DES GRADATEURS
- For supply connections use wire rated for at least 60°C.
- Class 2

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.


CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS.


**WARNING:**  
RISK OF FIRE. IF INSTALLATION INVOLVES RUNNING WIRE THROUGH A BUILDING STRUCTURE, SPECIAL WIRING METHODS ARE NEEDED. CONSULT A QUALIFIED ELECTRICIAN

RISQUE D'INCENDIE. SI L'INSTALLATION IMPLIQUE UN FIL DE COURANT À TRAVERS UNE STRUCTURE DE BÂTIMENT, DES MÉTHODES DE CÂBLAGE SPÉCIALES SONT NÉCESSAIRES. CONSULTEZ UN ÉLECTRICIEN QUALIFIÉ

LOW VOLTAGE LIGHTING SYSTEM

Q-Tran, Inc.  
CLASS: 3425 - 15  
3425 - 95





Q-TRAN, INC.  
MILFORD, CT U.S.A.  
(203) 367-8777  
WWW.Q-TRAN.COM