

Q-TRAN Q-SET+QZ-DMX Compact LED Drivers Owner's Manual

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Q-TRAN Q-SET+QZ-DMX Compact LED Drivers



Product Information

The Q-SET+QZ-DMX LED Power Supply 96W is a product that provides power to compatible light engines. It has four channel options (1CH, 2CH, 3CH, 4CH) and operates with DMX control. The power supply has a primary voltage range of 100-277V and a secondary voltage of 24VDC. It has a maximum output power of 96W and is compatible with the following light engines: SW, SW-HE, SW-HE+, SC, WD, DW, DW-HE, RGB, and RGBW. The power supply comes with a voltage drop chart that provides information on the recommended wiring size and distance for different load wattages.

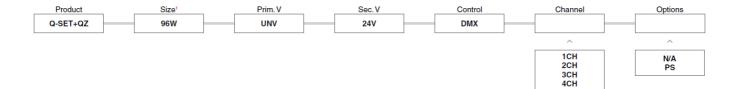
Product Usage Instructions

- 1. Ensure that the Q-SET+QZ-DMX LED Power Supply 96W is compatible with your light engine.
- 2. Determine the appropriate channel option for your light engine (1CH, 2CH, 3CH, or 4CH).
- 3. Connect the primary voltage (100-277V) to the power supply as per the instructions.
- 4. Connect the secondary voltage (24VDC) to the light engine as per the instructions.
- 5. Use DMX control to adjust the light output as desired.
- 6. Refer to the voltage drop chart provided in the user manual to determine the appropriate wiring size and distance for your specific installation.
- 7. For pool and spa installations, an in-line pool and spa rated junction box is required.

Note: The product specifications are subject to change, please refer to the latest revision of the user manual before installation or use.

Q-SET+QZ-DMX is Q-Tran's direct burial and outdoor rated electronic power supply to be installed in our Q-VAULT-5 enclosure. A versatile Class 2 LED driver, the Q-SET+QZ-DMX is available with DMX capabilities. It features up to 4 channel outputs that can power static white, static color, warm dim and dynamic color LED products. The Q-SET+QZ is powered at 110-277V and provides a secondary voltage of 24VDC. It is available in 96 watt and is fully listed for direct burial use when installed in the Q-VAULT. Additionally, it is compatible with the Q-Tran NFC App for reading and writing DMX addresses and adjusting output voltage.

Part Number Builder



Technical Information

Size

| Channel | Size | Primary Voltag e | Secondary Volt age | Secondary Cur rent | Compatible Light engine |
|---------|------|---------------------|--------------------|-----------------------|---------------------------|
| CH1 | 96W | 100-277V | 24VDC | 1X4A | SW, SW-HE, SW-HE+, SC, WD |
| CH2 | 96W | 100-277V | 24VDC | 2X2.08A | DW, DW-HE |
| СНЗ | 96W | 100-277V | 24VDC | 3X1.39 A | RGB |
| CH4 | 96W | 100-277V | 24VDC | 4X1.04A | RGBW |

Options PS

• Pool & Spa

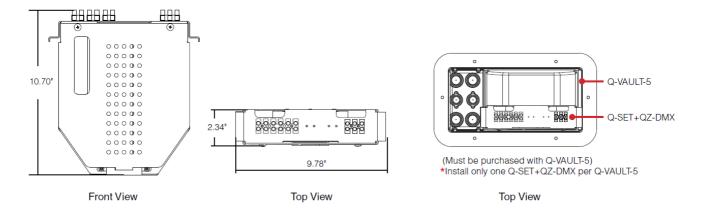
Voltage Drop Chart

| VDC | Load Wattag e (W) | Distance from PS for 5% Voltage Drop | | | | | | | | |
|-----|-------------------------|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | 10 AW G | 12 AW G | 14 AW G | 16 AW G | 18 AW G | 20 AW G | 22 AW G | 24 AW G | 26 AW G |
| | 15 | 913 | 574 | 361 | 227 | 143 | 90 | 55 | 35 | 22 |
| | 30 | 456 | 287 | 181 | 114 | 71 | 45 | 28 | 17 | 11 |
| | 60 | 228 | 143 | 90 | 57 | 36 | 22 | 14 | 9 | 5 |
| 24 | 80 | 171 | 108 | 68 | 43 | 27 | 17 | 10 | 7 | 4 |
| | 96 | 143 | 90 | 56 | 35 | 22 | 14 | 9 | 5 | 3 |

Wiring from power supply to light fixture must be single multiconductor cable

- Distances are based on a 5% Voltage drop max.
- This product must be installed in accordance with all applicable codes by a person familiar with the

construction and operation of the product.



Housing

- Dimensions: 10.70"L x 9.78"W x 2.34"D
- Q-VAULT-5 enclosure can fit up to one Q-SET+QZ-DMX
- Q-VAULT-5 is IP68 rated
- Housing for direct burial fixtures shall be IP68 Rated, with all sealing materials supplied by the manufacturer
- · Housing for direct burial fixtures shall be rated for burial in soil, gravel and concrete

GENERAL Information

- · Constant voltage output
- 8 Bit DMX Control
- · RDM addressing
- · NFC App for addressing & Voltage adjust
- Adjustable output voltage Range: 24V-26V
- DMX dimming down to 0.1%
- · Suitable for dry, damp and wet locations
- Suitable for direct burial use
- Not for installation to conduit extending directly to an underwater pool light forming shell. In line Pool and Spa rated junction box required.
- · Suitable for use with submersible luminaries
- Primary voltage universal (100-277V)
- Operating temperature range: -40°F to +122°F
- · UL, cUL listed
- · Type HL rated
- Compliant to FCC Part 15B
- 5 year warranty
- CSA #239924
- · Low Voltage Lighting Systems
- CSA Class 3426-04 and Class 3426-94
- CSA Standard C22.2 No. 250.0-08 Luminaires
- ANSI/UL Standard 2108 Low Voltage Lighting System

- · Landscape Lighting Systems
- CSA Class 3425-15 and Class 3425-95
- CSA Standard C22.2 No. 250.7-07 Extra-Low Voltage Landscape Lighting Systems
- ANSI/UL Standard 1838 Low Voltage Landscape Lighting Systems
- Hydromassage (Pool and Spa)
- CSA Class 3425-46 and class 3425-96
- ANSI/UL Standard 379 Power Units for Fountain, Swimming Pool, and Spa Luminaires

Performance

- Power supply shall be rated for outdoor and direct burial use in Q-VAULT-5 IP68 Listed direct burial enclosure
- Fully rated to operate low voltage load at listed wattage (No Derating Required)
- Limit voltage regulation to 5% or less of rated output voltage
- Universal input range of 120-277 Vrms
- Terminal blocks shall be made of tin plated copper with a voltage rating of 300V and a current rating of 40A
- Live tested by manufacturer to ensure proper operation
- · Rated for:
- CSA Class 3425-15 and Class 3425-95 Landscape Lighting System Components
- CSA Class 3426-04 and Class 3426-94 Low Voltage Lighting Systems
- CSA Class 3425-46 and class 3425-96 Hydromassage

Specifications

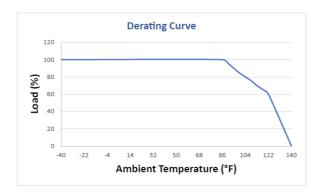
| Input | | | | | |
|----------------------------|--------------|-----|-----|--|--|
| Input Voltage (Vrms) | 110-277V | | | | |
| Input Current, max (Arms) | 1.25A @ 110V | | | | |
| Inrush Current, max* (Apk) | 48.5A@277V | | | | |
| Input Frequency (Hz) | 50/60 | | | | |
| Input Power (W) | 125 | | | | |
| | | | | | |
| Output | | | | | |
| Output Voltage, nom (V) | 24 | | | | |
| Output Current (A) | 4A @ 24V | | | | |
| Output Power (Wmax) | 96W | V | | | |
| | | | | | |
| Environmental | Min | Nom | Max | | |
| THD (%) | _ | _ | 20 | | |
| PF (%) | 0.94 | - | - | | |
| Working Temp (°F) | _ | _ | 122 | | |

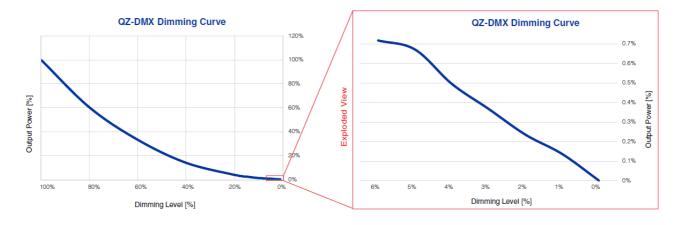
Protections

- Short Circuit Protection
- Over Loading Protection
- Over Temperature Protecton
- I/P-O/P:1.88KVAC
- I/P-O/P:100MΩ/500VDC/77ºF/70%RH

Compliance

- EMI Spec
- FCC 47 CFR Part 15 Subpart B
- CSA Certified
- UL-2108
- UL-8750
- UL-379
- CSA C22.2 No 250.7-07
- CSA C22.2 No 250.0-08

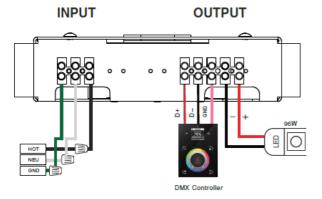


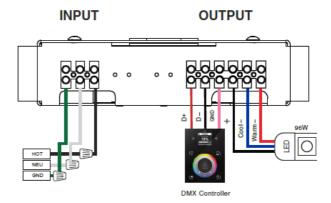


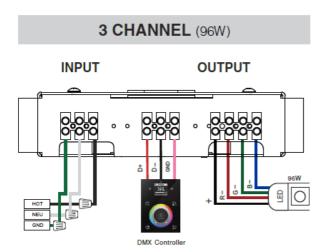
DMX Control

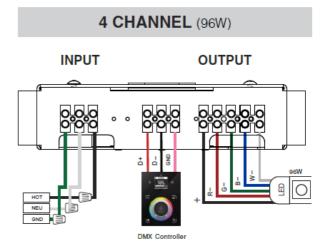
1 CHANNEL (96W)

2 CHANNEL (96W)



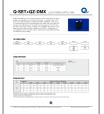






- Wiring from power supply to light fixture must be single multiconductor cable.
- For best practice use a DMX Optosplitter for splitting DMX connections.
- Default DMX address for the driver is #1 and default output voltage is 24V.
- © 2022 Q-Tran Inc. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@q-tran.com | www.q-tran.com
- Specification subject to change. Rev-03-22-23

Documents / Resources



Q-TRAN Q-SET+QZ-DMX Compact LED Drivers [pdf] Owner's Manual Q-SET QZ-DMX 96W, Q-SET QZ-DMX Compact LED Drivers, Q-SET QZ-DMX, Compact LED Drivers, LED Drivers

References

<u>RealNames</u> | A more meaningful email address

• Q_LED Lighting Systems, Linear LED Lights, LED transformers | Q-Tran

Manuals+,