

|          |  |
|----------|--|
| Project: |  |
| Type:    |  |

## KVX SERIES

DMX512 Dimmable LED Driver

### Product Features

- Constant Voltage Driver
- Input Voltage: 100-277VAC
- Slightly adjustable output voltage
- Built-in active PFC, PF up to 0.98
- Efficiency: up to 89%
- RDM (Remote Device Management)
- Protection: short circuit/over load/over heat
- Dry/damp/wet locations
- Flicker-free
- Dimming options: DMX512
- 0-100% dimmable
- Read and write DMX512 address or fine-tune output voltage with mobile ProNFC app or special NFC device.



Class 2

Class P

### Product Code

| MODEL                 |
|-----------------------|
| <b>KVX-24096-4C-A</b> |
| CERTIFICATES          |
| FCC UL cUL Class 2    |

| KVX             | - | XX        | XXX      | - | XC                    | - | X           |
|-----------------|---|-----------|----------|---|-----------------------|---|-------------|
| Series          |   | Voltage   | Power    |   | Channel               |   | Enclosure   |
| DMX512 Dimmable |   | 24 -24VDC | 096 -96W |   | 4C -4 channels (RGBW) |   | A -Aluminum |

### Specifications

| OUTPUT                             |        |
|------------------------------------|--------|
| <b>DC Voltage:</b>                 | 24V    |
| <b>Fine-tune DC Voltage Range:</b> | 24-26V |
| <b>Rated Current:</b>              | 4x1A   |
| <b>Rated Power:</b>                | 96W    |
| <b>Voltage Tolerance:</b>          | ±0.5V  |
| <b>Voltage Regulation:</b>         | ±1%    |
| <b>Load Regulation:</b>            | ±1%    |

| INPUT                                  |                               |
|--|-------------------------------|
| <b>Voltage Range:</b>                  | 100-277VAC                    |
| <b>Frequency:</b>                      | 47-63Hz                       |
| <b>Power Factor (Typ.) @full load:</b> | ≥ 0.98 @230VAC                |
| <b>THD (Typ.) @full load:</b>          | ≤ 10% (120VAC) ≤ 15% (230VAC) |
| <b>Efficiency (Typ.) @full load:</b>   | 89% @230VAC                   |

|                               |  |
|-------------------------------|--|
| <b>AC Current (Max.):</b>     | 1.3A @100VAC   |
| <b>Inrush Current (Typ.):</b> | 8.4A 50% 940us @120V 40.4A 50% 370us @230VAC 21.6A 50% 960us @277VAC |
| <b>Leakage Current:</b>       | <0.50mA  |

### PROTECTION

|                          |  |
|--------------------------|--|
| <b>Short Circuit:</b>    | Shut down o/p voltage, re-power on to reset after fault condition is removed |
| <b>Over Loading:</b>     | ≤120% hiccup mode, recover automatically after fault condition is removed    |
| <b>Over Temperature:</b> | 100°C±10°C shut down o/p voltage, automatically recover after cooling        |

### ENVIRONMENT

|                                 |   |
|---------------------------------|---|
| <b>Working Temp.:</b>           | -40~+60°C (-40° to 140°F)   |
| <b>Working Humidity:</b>        | 20-95% RH, non-condensing   |
| <b>Storage Temp., Humidity:</b> | -40~+80°C (-40° to 176°F), 10-95% RH                                    |
| <b>Temp. Coefficient:</b>       | ±0.03%/°C (0-50°C)  |
| <b>Vibration:</b>               | 10~500Hz, 5G 10min./1 cycle, period for 60min., each along X, Y, Z axis |

### SAFTY & EMC

|                              |                                   |
|------------------------------|-----------------------------------|
| <b>Safety Standards:</b>     | UL8750 UL1310 (US)                |
| <b>Withstand Voltage:</b>    | I/P-O/P:1.5KVAC (US)              |
| <b>Isolation Resistance:</b> | I/P-O/P:100MΩ/500VDC/25°C/70%RH   |
| <b>EMC Emission:</b>         | FCC Part 15 B (US) (≥60% loading) |

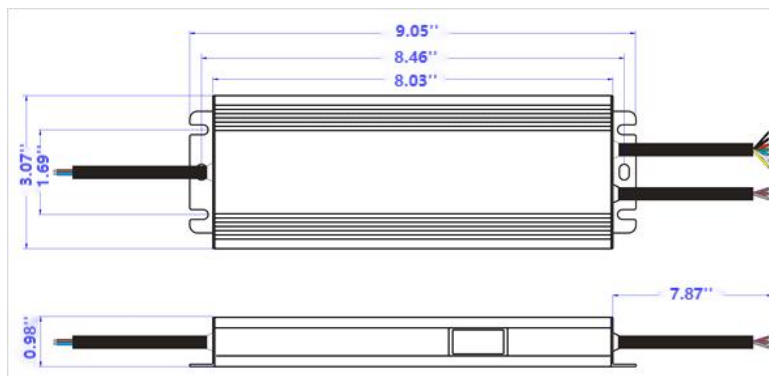
### OTHERS

|                     |   |
|---------------------|---|
| <b>Net. Weight:</b> | 1.0 kg                                    |
| <b>Size:</b>        | 9.05*3.07*0.98 inch / 230*78*25mm (L*W*H) |

#### Notes:

1. All parameters if NOT specially mentioned are measured at 230VAC input, under rated load and 25°C (77°F) of ambient temperature.

### Dimensions

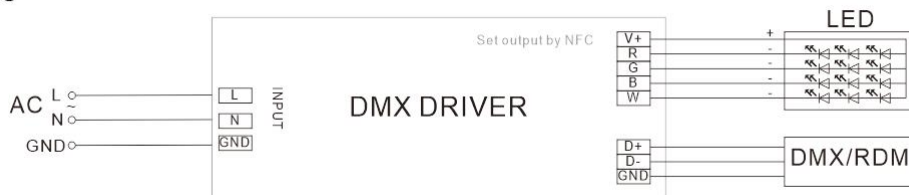


1. The input terminal has a 3-pin wire, brown wire is AC(L), blue wire is AC(N), green wire is GND.
2. The output terminal has a 5-pin wire, black wire is LED+, the other colors are LED-.
3. The dimming terminal has a 3-pin wire, purple wire is Signal+, grey wire is Signal-, brown wire is GND.

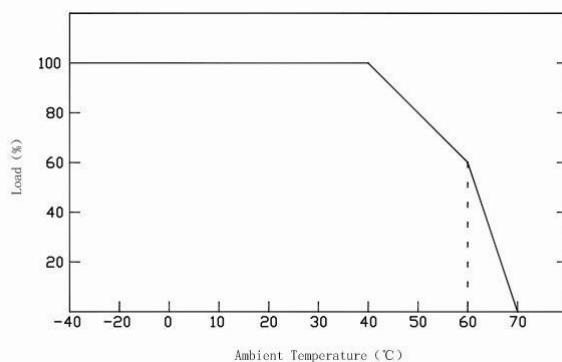
### Wiring Diagram

#### DMX512 Dimming:

Diagram - 4 CH



### Derating Curve



\*To ensure the driver's long life, please refer to the Derating Curve and derate according to the ambient temperature.

## Setting

### DMX512 Address Set up

\*The default address for KVX DMX driver is 001.

\*Address set up device:



RDM



EasyNFC app



NFC Handheld devices

\*Address Set up:

①RDM address set up:

Set up the address with RDM device. For detailed operation, please refer to your RDM device instruction manual.

②NFC address set up:

The DMX address of each KVX driver can be read and written by mobile phones with NFC function via Android or iOS ProNFC app (can be found in [Google Play](#) and [iOS App Store](#); apk download: [ProNFC.apk](#); [ProNFC set up video](#)), or NFC handheld device (NFC read & write device: NFC-RW) by placing it close to the NFC sensor of the DMX512 KVX driver.

### Output Voltage Adjustment

\*Fine-tuning output voltage for DMX512 driver.

①The output voltage of each KVX driver can be slightly adjusted by mobile phones with NFC function via Android or iOS ProNFC app (can be found in [Google Play](#) and [iOS App Store](#); apk download: [ProNFC.apk](#); [ProNFC set up video](#)), or NFC handheld device (NFC read & write device: NFC-RW) by placing it close to the NFC sensor of the DMX512 KVX driver.

②Adjustable voltage range is distributed into level 1~10, adding 1 level will increase 0.2V. The default output voltage level of KVX driver is 5. If the driver is 24V, you can adjust the output voltage within 24V to 26V freely.

### Demonstration

DMX512 address set-up and fine-tuning output voltage with mobile ProNFC app or NFC handheld device (NFC read & write device: NFC-RW)



