## XD3-30500-DC

## DMX Decoder/Driver

## Product Features

- Operates in DMX Slave or Master configuration.
- Easy to assign DMX address using LED display.
- Master mode has 8 static and 10 dynamic scenes.
- DMX status indicator confirms signal reception.
- 12-24VDC input voltage.
- 3-Channel output, 5A per channel.


## Product Specifications

- Input Voltage Range
- Max. Load Current
- Max. Output Power
- Grayscale Levels
- Input Signal
- Output Signal
- Channels
- DMX512 Connection
- Operating Temperature
- Product Dimensions
- Weight

12-24VDC
5A per channel $\times 3$ channels
12V: 180W; 24V: 360W
4096
DMX512/1990 digital signal
Constant Voltage, PWM
3
Terminal Block
$0-50^{\circ} \mathrm{C}$
(L) $176 \times(\mathrm{W}) 46 \times(\mathrm{H}) 30(\mathrm{~mm}) ; 6.93 \times 1.81 \times 1.18$ (inch)

170grams

Dimensions


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 DMX Decoder/Driver
## Applications

Please review the entire user manual and consult with local electrical codes prior to installation. This decoder/driver can only be used with constant voltage LED lights.
In Slave mode, the decoder interprets the DMX512 signal and converts it to a PWM (Pulse with Modulation) signal used to control the LED lights.
The decoder/driver can also operate without DMX input as a stand-alone Master controller with Slave decoder/drivers.

## Safety Warnings

1. Please consult with local electrical codes and inspectors prior to installation.
2. Do not install near high voltage lines or strong magnetic fields.
3. Check all wiring connections to ensure polarity and avoid a short circuit prior to powering on.
4. Installation should be in a dry well ventilated area. Not for wet or damp locations.
5. $12-24 \mathrm{VDC}$ constant voltage power supply is required.
6. The power supply wattage should match or exceed the load of the LED lights.

## Operating Instructions

3 Touch buttons: M, +, -

| $M$ | Select display digit |
| :---: | :--- |
| + | Increase |
| - | Decrease |

- The 3 LED display indicates DMX addresses (001 to 512) or preprogrammed modes (513 to 999).
- The display turns off after 1 minute of no activity. Press any key to re-activate.
- The decoder will automatically shut off if overload or short circuit is detected; the display will read "ERR".



## Note:

The decoder has an automatic key lock. If no setting changes are made to the decoder, the key lock function is automatically activated after approximately 15 seconds. Pressing the " M " button for about 2 seconds will deactivate the key lock.

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## Operating Instructions (Cont.)

Note: The decimal point behind the last digit will blink when receiving a normal DMX512 signal. If no signal is received, the address will be blank.
The value is 001 to 512 . For example, 001.
 Static and dynamic scenes):

| 000 | Set all channels to 100\% | $520-529$ | Red, orange, yellow, green, cyan, blue, magenta (Fading Mode) |
| :--- | :--- | :--- | :--- |
| 513 | Red | $530-539$ | White, magenta, red, orange, yellow, green, cyan, blue (Fading Mode) |
| 514 | Blue | $540-549$ | Magenta, red (Fading Mode) |
| 515 | Green | $550-559$ | Green, yellow (Fading Mode) |
| 516 | Yellow | $560-569$ | Blue, green (Fading Mode) |
| 517 | Cyan | $570-579$ | Magenta, blue (Fading Mode) |
| 518 | Pink | $580-589$ | All 3 channels make a pulsating move from 1\% to 100\% (Fading Mode) |
| 519 | Magenta | $590-599$ | Strobe all 3 channels from 0\% to 100\% (Jumping Mode) |
|  |  | $600-699$ | Blue to white from 0\% to 99\% |
|  |  | $700-799$ | Yellow to white from 0\% to 99\% |
|  |  | $800-899$ | Red to green from 0\% to 99\% |
|  |  | $900-999$ | 10 different white tones mixing with different RGB percentage |

- 520-599: The first two digits indicate the modes, the third indicates the speed. There are a total of 10 speed levels. 0 is the highest speed, and 9 is the lowest speed. There are total 8 modes. For example,

- Speed for Program 520-589 (Color Changing Fading Mode) for one step and not for the entire program:

| $0=0,5 \mathrm{sec}$. | $1=1 \mathrm{sec}$. | $2=2 \mathrm{sec}$. | $3=3 \mathrm{sec}$. | $4=5 \mathrm{sec}$. | $5=10 \mathrm{sec}$. | $6=15 \mathrm{sec}$. | $7=30 \mathrm{sec}$. | $8=60 \mathrm{sec}$. | $9=120 \mathrm{sec}$. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

- Speed for Program 590-599 (One step and not for the entire program):

| $0=0.02 \mathrm{sec}$. | $1=0.04 \mathrm{sec}$. | $2=0.1 \mathrm{sec}$. | $3=0.2 \mathrm{sec}$. | $4=0.5 \mathrm{sec}$. | $5=1 \mathrm{sec}$. | $6=2 \mathrm{sec}$. | $7=5 \mathrm{sec}$. | $8=10 \mathrm{sec}$. | $9=15 \mathrm{sec}$. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

- Brightness for 900-999. The digits show the brightness:

| $0=1 \%$ | $1=5 \%$ | $2=10 \%$ | $3=20 \%$ | $4=30 \%$ | $5=40 \%$ | $6=50 \%$ | $7=60 \%$ | $8=80 \%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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## Wiring Configurations

## - Master Mode:



- Slave Mode:



## Troubleshooting Guides

| Problem | Reason | Solution |
| :---: | :--- | :--- |
| No Light (s) | No power | Check power supply and wiring |
|  | Reversed polarity | Check wiring |
|  | Signal terminal not connected or reversed | Check wiring |
|  | Long circuit | Add DMX signal terminator or use amplifier |
| Wrong color (s) | Wrong RGB wiring | Check wiring |
|  | Wrong decoder address entered | Enter the correct address |
|  | Signal terminator has wrong connection or reversed | Check wiring |
|  | Long circuit | Add DMX signal terminator or use amplifier |
| Abnormal flickering | Signal terminator has wrong connection | Check wiring |
|  | Long circuit | Add DMX signal transmitter or use amplifier |

