## ACL-SC3C4A-DMX DMX/RDM 3CH CV DECODER



With the standard RDM remote device management protocol, it supports DMX512 signal bi-directional communication, achieves remote management of reading and writing DMX address (DMX mas ter controller must recognize the RDM protocol). Equipped with DMX standard XLR-3, green terminal interface. Realize $0-100 \%$ dimming or different lighting effect; workable with single color, bi-color or RGB LED lamps.

1. Product Parameter:

ACL-SC3C4A-DMX

| Input Signal: | DMX512, RDM | Dimming Range: | $0 \sim 100 \%$ |
| :--- | :--- | :--- | :--- |
| Input Voltage: | $12 \sim 24 \mathrm{Vdc}$ | Working Temper ature: | $-30^{\circ} \mathrm{C} \sim 65^{\circ} \mathrm{C}$ |
| Curr ent Load: | $4 \mathrm{~A} \times 3 \mathrm{CH} \quad$ Max. 12A | Package Size: | $\mathrm{L} 135 \times \mathrm{W} 70 \times \mathrm{H} 50(\mathrm{~mm})$ |
| Output Power: | Max. $144 \mathrm{~W} / 432 \mathrm{~W} / 576 \mathrm{~W}(12 \mathrm{~V} / 36 \mathrm{~V} / 48 \mathrm{~V})$ | Weight (G.W.): | 305 g |
| DMX512 Socket: | XLR-3, Green Terminal |  |  |

2. Product Size:

3. Configuration Diagram:

4. Dip Switch Opeation:


RDM Mode: The dip switch 1-10 are OFF


DMX Mode: $\mathrm{FUN}=$ OFF (the 10th dip swit ch=OFF) Setting DMX addr es ses with dip swit ch 1-9


Self-teting Mode: $\mathrm{FUN=ON}$ (the 10th dip swit ch=ON)
4.1 How to set DMX address via dip switch:

FUN = OFF (the 10th dip swit ch=OFF) DMX Mode
DMX address value=the total value of (1-9), to get the place value when in "ON" position, otherwise will be 0
E.g.1: Set Initial Address To 32. E.g.2: Set Initial Address To 37. E.g.3: Set Initial Address To 178.

4.2 Self-testing Mode:

| FUN $=\mathbf{O N}$ (the 10th dip swit ch $=\mathbf{O N}$ ) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dip Switch | 1-9=off | 1=on | 2=on | 3=on | 4=on | 5=on | 6=on | 7=on | 8=on | 9=on |
| Self-test Function | Static Black | Static Red | Static Green | Static Blue | Static Yellow | Static Purpl e | Static Cyan | Static White | 7 Colors Jumping | 7 Colors Smooth |


4.3 DMX Dimming Instruction:

Each DMX decoder occupied 3 DMX addresses when connecting the DMX console. e.g., the defaulted initial address is 1 , please find their corresponding relationships in the form.

| DMX Console | DMX Decoder |  |
| :---: | :---: | :---: |
| CH1 0-255 | CH1 $\quad$ PWM 0-100\% (LED R) |  |
| CH2 0-255 | CH2 | PWM 0-100\% (LED G) |
| CH3 0-255 | CH3 | PWM 0-100\% (LED B) |

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## 5. Wiring Diagram:

5.1 Decoder can be connected to a variety of standard DMX512 devices:


寿 Equipped with 2 types DMX terminals for users' sel ection. The diagram takes XLR-3 terminal as a example, same connecting method for the green terminal (with amplifier function)


* If the recoil eff ect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120 $\Omega$ terminal resistor at the end of each line.
* An amplifier is needed when more than 32 decoders are connected, signal amplific ation should not be more than 5 times continuously.
5.2 The connection diagram of two DMX terminals:


XLR-3 Connected in Paralle


Green Terminal Connected in Parallel

These 2 terminals can be connected in a mixed way.
5.3 The connection diagram of AMP signal amplifier terminal


* AMP interf ace can be used $f$ or signal amplific ation when too many DMX decoders are connected or signal line is too long, signal amplification should be no more than 5 times continuously.


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## 6. Attention:

6.1 The product shall be installed and serviced by the qualified person.
6.2 This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
6.3 Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
6.4 Please check if the output voltage of the LED power supply used comply with the working voltage of the product.
6.5 Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector
6.6 Ensur e all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
6.7 If a fault occurs, please return the product to your supplier. Do not attempt to fix this product by yourself.

## 7. Warranty Agreement

7.1 We provide lifelong technic al assistance with this product:

- A 5-year warranty is given from the date of purchase. The warranty is for free repair or replacement if cover manufacturing faults only.
- For faults beyond the 5 -year warranty, we reserve the right to charge for time and parts.
7.2 Warranty exclusions below:
- Any man-made damages caused from improper operation, or connecting to excess voltage and overloading.
- The product appears to have excessive physical damage.
- Damage due to natural disasters and force majeure.
- Warranty label, fragile label and unique barcode label have been damaged
- The product has been replaced by a brand new product.
7.3 Repair or replacement as provided under this warr anty is the exclusive remedy to the customer. We shall not be liable for any incidental or consequential damages for breach of any stipulation in this warr anty.
7.4 Any amendment or adjustment to this warr anty must be approved in writing by our company only.
» This manual only applies to this model. We reserv e the right to make changes without prior notice.

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