



General

Product Type	Constant Voltage Driver
Length (mm)	175
Width (mm)	42
Height (mm)	33
Housing Color	Matte Black
Housing Material	Metal
Mounting	Surface mounted
Weight (g)	310
Wire Strip Length	5mm
Wire Type	2.5mm2

Electronics

Input Domain	DC
Input Voltage	5 ~ 24V DC
Output Voltage	5 ~ 24 V DC
Output Current (mA) max/output	6000
Output Current Max. (A)	18
Output Power (W)	90W @ 5V, 216W @ 12V, 432W @ 24V,
Power Supply	N/A
LED Outputs	3

Lighting

Color Range	RGB
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Control

Output Signal	PWM-CV
Control	DMX
RDM Support	Yes
Dimming Range	0~100%
Dimming Curve	Linear
Driver Configuration	Dip Switches
Number of Channels	3

Protection

Reverse Polarity	Yes
LED Output Short	Yes
Overload	Yes
Restart after Protection	Yes

Environmental

Operating Temperature	-30 ~ +65 °C
Ingress Protection	IP20

CE FCC IP20

5year warranty

Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.



LT-851-6A DMX/RDM CV Decoder



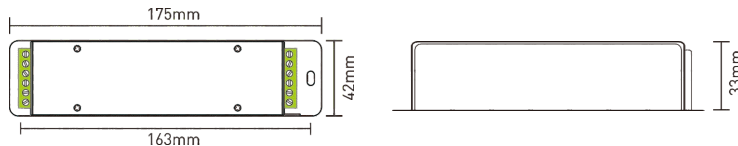
LT-851-6A with the standard RDM remote device management protocol, supports DMX512 signal bi-directional communication, achieves remote management of reading and writing DMX address [DMX master controller must recognize the RDM protocol]. Realize 0-100% dimming or different lighting effect; workable with single color, bi-color, RGB LED lamps.

1. Product Parameter:

LT-851-6A

Input Signal:	DMX512, RDM	Protection:	Short circuit/Over load protection
Input Voltage:	5~24Vdc	Working Temp.:	-30℃~65℃
Current Load:	6A×3CH Max. 18A	Dimensions:	L175×W42×H33mm
Output Power:	[0~30W...144W]×3CH Max. 432W	Package Size:	L183×W48×H41mm
DMX512 Socket:	Green Terminal	Weight[G.W.]:	310g

2. Configuration Diagram:

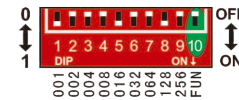


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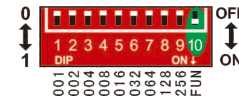
3. Dip Switch Operation:



RDM Mode: The dip switch 1-10 are OFF.



DMX Mode: FUN=OFF (the 10th dip switch=OFF)
Setting DMX addresses with dip switch 1-9



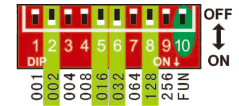
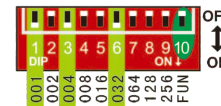
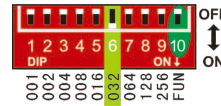
Self-testing Mode: FUN=ON (the 10th dip switch=ON)

3.1 How to set DMX address via dip switch:

FUN=OFF (the 10th dip switch=OFF) **DMX Mode**

DMX address value = the total value of [1-9], to get the place value when "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.



001+004+032=37

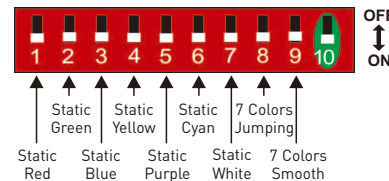
002+016+032+128=178

3.2 Self-testing Mode:

FUN=ON (the 10th dip switch=ON)

Self-testing Mode

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 Purple	Static Cyan	Static White	7 Colors Jumping	7 Colors Smooth



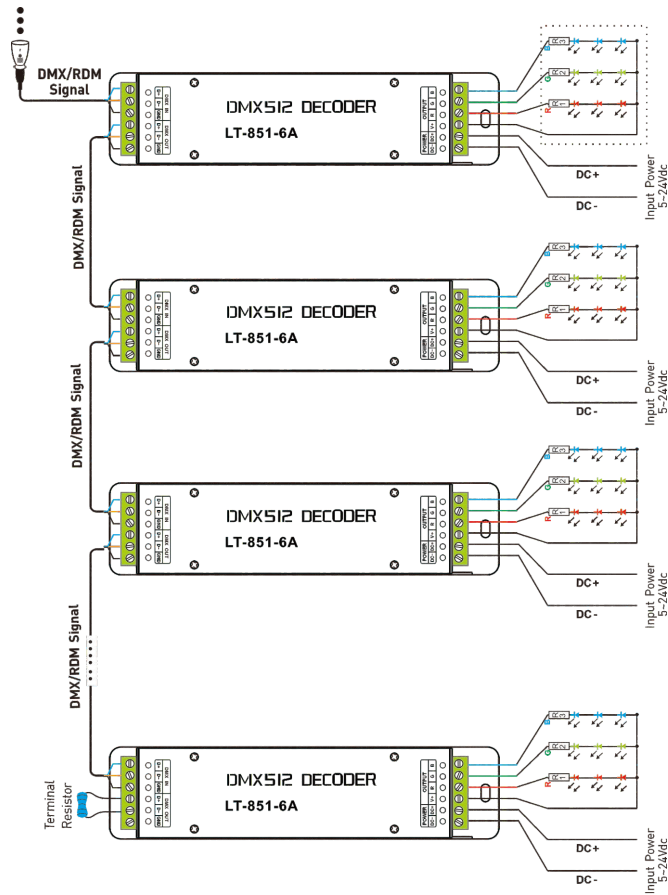
For changing effects (Dip Switch 8/9=on):
DIP switch 1-7 is used to realize 7 speed levels. (7=on, the fastest level)

[Attn] When several dip switches are on, subjected to the highest switch value.

As the figure above shows, the effect will be 7 colors smooth at 7 speed level.

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4. Wiring Diagram:



- * An amplifier is needed when more than 32 decoders are connected, signal amplification should not be more than 5 times continuously.
- * If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at the end of each line.

5. Attention:

- 5.1 The product shall be installed and serviced by the qualified person.
- 5.2 This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
- 5.3 Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- 5.4 Please check if the output voltage of the LED power supplies used comply with the working voltage of the product.
- 5.5 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.
- 5.6 Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- 5.7 If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

6. Warranty Agreement:

- 6.1 We provide lifelong technical 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.
- 6.2 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.
- 6.3 Repair or replacement as provided under this warranty 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 warranty.
- 6.4 Any amendment or adjustment to this warranty must be approved in writing by our company only.

★This manual only applies to this model. We reserve the right to make changes without prior notice.