

DMX-50-500-1750-F1P1

LED Intelligent Driver

LTECH

DMX/RDM Push DIM

5W~50W 500~1750mA 10~54Vdc

- Dimming interface: DMX512/RDM, Push Dim.
- Supports the RDM remote device management protocol.
- PWM digital dimming, no alter LED color temperature.
- Dimming range: 0~100%, LED start at 0.1% possible.
- Power factor > 0.99, Efficiency > 85%.
- Multi-current & wide voltage, suitable for different power LED.
- Short circuit / Over-heat / Over load / Non-load protection, recover automatically.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor I / II/III type lamps application.



Dimmable:
0.1%~100%

SELV □ T10 ▼ F M M F R CE RoHS

DMX/RDM
Push DIM

PWM
Digital
Dimming

PF
>0.99

η >85%
Efficiency

Over-heat
Protection

Short Circuit
Protection

Over Load
Protection

Multiple
Current

Main Characteristics

| | | | | | | | | |
|---------------------------|--|---------|---------|------------|----------|------------|----------|------------|
| Dimming Interface: | DMX512/RDM, Push DIM | | | | | | | |
| Input Voltage Range: | 100-240Vac ±10% | | | | | | | |
| Frequency: | 50/60Hz | | | | | | | |
| Input Current: | 115Vac≤0.6A, 230Vac≤0.3A | | | | | | | |
| Power Factor: | PF>0.99/115Vac, PF>0.95/230Vac, at full load | | | | | | | |
| THD: | ≤10% at 115Vac, ≤20% at 230Vac, at full load | | | | | | | |
| Efficiency(yp.): | 85% | | | | | | | |
| Inrush Current(yp.): | Cold start 50A at 230Vac | | | | | | | |
| Control Surge Capability: | L-N: 1kV | | | | | | | |
| Leakage Current: | <0.5mA/230Vac | | | | | | | |
| Operating Voltage: | 10-54Vdc | | | | | | | |
| Output Power Range: | 5W-50W | | | | | | | |
| Output Current : | 500mA | 700mA | 900mA | 1050mA | 1200mA | 1450mA | 1600mA | 1750mA |
| Output Voltage : | 10-54V | 10-54V | 10-54V | 10-48V | 10-42V | 10-34V | 10-32V | 10-29V |
| Output Power : | 5-27W | 7-37.8W | 9-48.6W | 10.5-50.4W | 12-50.4W | 14.5-49.3W | 16-51.2W | 17.5-50.8W |

| | |
|--------------------------|---|
| Current Accuracy: | ±3% |
| Max. Output Voltage: | 58Vdc |
| Non-load Output Voltage: | 0Vdc |
| Dimming Range: | 0~100%, LED start at 0.1% possible. |
| PWM Frequency: | ≤4KHz |
| Working Temperature: | ta: -20°C ~ 55°C tc: 80°C |
| Working Humidity: | 20 ~ 95%RH, non-condensing |
| Storage Temp., Humidity: | -40 ~ 80°C, 10-95%RH |
| Temp. Coefficient: | ±0.03%/°C(0-50°C) |
| Vibration: | 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes |

Protection

| | |
|---------------------------|---|
| Over-heat Protection: | Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers. |
| Over Load Protection: | When O/P voltage exceed its range, O/P current declines, auto recovers. |
| Short Circuit Protection: | Shut down automatically if short circuit occurs, auto recovers. |
| Non-load Protection: | Auto detecting, auto recovers when load back to normal. |

Safety & EMC

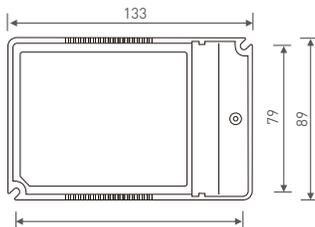
| | |
|-----------------------|----------------------------------|
| Withstand Voltage: | I/P-O/P: 3750Vac |
| Isolation Resistance: | I/P-O/P: 100MΩ/500VDC/25°C/70%RH |
| Safety Standards: | IEC/EN61347-1, IEC/EN61347-2-13 |

Others

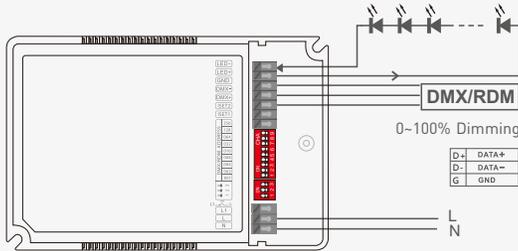
| | |
|---------------|--------------------|
| Dimension: | 133×89×30mm(L×W×H) |
| Packing: | 135×90×35mm(L×W×H) |
| Weight(G.W.): | 320g±10g |

Dimensions

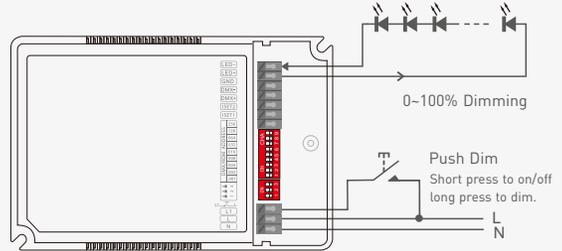
Unit: mm



DMX/RDM Connection



Push DIM Connection



The dimming interface priority: First DMX/RDM, next Push DIM.

Push Dimming



Reset Switch

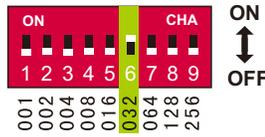
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

RDM Mode: The dip switch 1-9 are OFF.

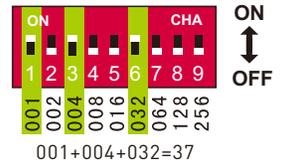


DMX Address Setting:

E.g.1: Set Initial Address To 32.



E.g.2: Set Initial Address To 37.

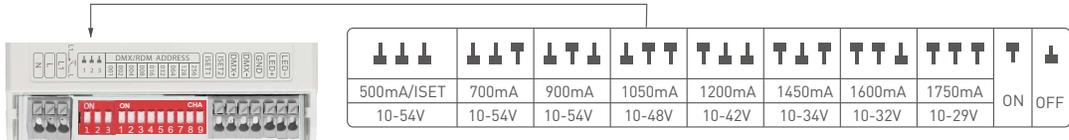


$$001+004+032=37$$

DMX address value=the total value of (1-9)
To get the place value when in "on" position,

LED Current Selection

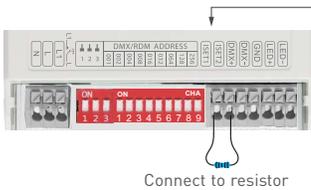
Quick options: DIP switch for 8 optional currents' quick selection[see the table below].



* After current setting by DIP switch, power off and then power on to make the new current effective.

* E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-29V can power 3-9pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Advanced options: Dial DIP switch down $\downarrow\downarrow\downarrow$, connect ISET port with resistors of different values to set up any current from 500mA to 1750mA (specific resistor values refer to the table).



Connect to resistor

Connecting ISET with resistors can obtain the following typical currents.

| | | | | | | | | | |
|-----------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|------------------|------------------|-----------------|
| Current(mA) | 500mA | 550mA | 600mA | 650mA | 700mA | 750mA | 800mA | 850mA | 900mA |
| Resistor(K Ω) | ∞ | 21.2K Ω | 18.95 K Ω | 17 K Ω | 15.3K Ω | 13.9 K Ω | 12.64 K Ω | 11.39 K Ω | 10.3 K Ω |
| Current(mA) | 950mA | 1000mA | 1050mA | 1100mA | 1150mA | 1200mA | 1250mA | 1300mA | 1350mA |
| Resistor(K Ω) | 9.38 K Ω | 7.95 K Ω | 7.18 K Ω | 6.52 K Ω | 5.87 K Ω | 5.25 K Ω | 4.62 K Ω | 4.13 K Ω | 3.69 K Ω |
| Current(mA) | 1400mA | 1450mA | 1500mA | 1550mA | 1600mA | 1650mA | 1700mA | 1750mA | |
| Resistor(K Ω) | 3.24 K Ω | 2.79K Ω | 2.31 K Ω | 2.03K Ω | 1.63 K Ω | 1.31 K Ω | 1.05 K Ω | 0 K Ω | |

* No further notice if any changes in the manual.
Product function depends on the goods.
Please feel free to contact our official distributor if any question.