# R-150 DMX Light Source

## Instruction Menu

Thank You for purchasing the R-150 DMX LIGHT SOURCE. Please read carefully the instruction menu before using the R-150 DMX LIGHT SOURCE. If you have any questions concerning the operation or maintains, please contact your wholesaler/distributor.

**Special Notification**

**Before using the R-150 DMX LIGHT SOURCE, please open the top case and take out of the color wheel protector.**

**R-150 DMX LIGHT SOURCE is best for fiber optic with diameter more than 0.75mm.**

### A. Safety Instruction

1. Make sure the R-150 DMX LIGHT SOURCE and Power Source have the same voltage.
2. Make sure the ground connection is well connected.
3. Keep out of rain or moist area to avoid shock hazards.
4. To change lamp, shut down and keep R-150 DMX LIGHT SOURCE cooling down for at least 15 minutes.
5. Keep at least 10 spacing for fan ventilation at each side while installation.
6. Clean the dust from Dustproof Plate at the end of fiber optic periodically.
7. Avoid high temperatures. (< 40°C)
8. Keep ventilation.

### B. Technical Data

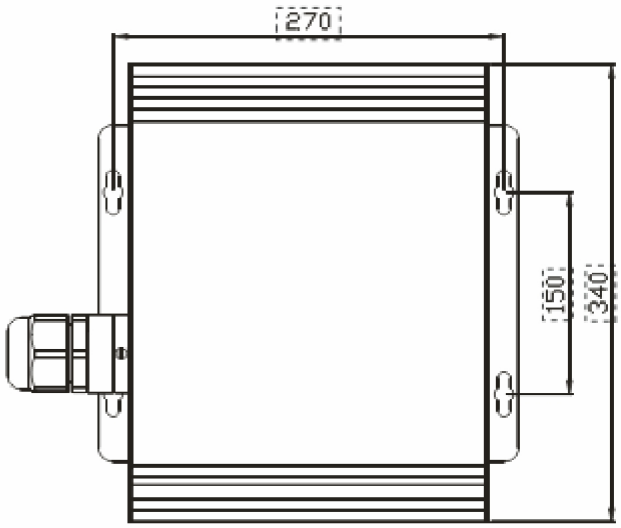
Voltage: 220-240V/50HZ or 100-130V/60Hz
Fuse: 5A/250V
Power consumption: 180W
DMX Channel: 1 for I type, 2 for II type or I/O
Colour: white, purple, yellow, blue, green, orange, sky-blue, grass-green.
Lamp: HQI-T150W OSRAM HID
Colour Temp: 4200K
Size: L295 x W340 x H150mm
Net Weight: 11Kg with lamp

### C. Characteristics

1. Suitable for wide range of Fiber Optic (Solid core or Multi String Fiber Optic)
2. 6000h of lamp life
3. Overheat protection
4. UV and X-ray protection
5. Shutter, with speed adjustable (only II type available)
6. Standard DMX signal for free program arrangement
7. Master / Slave function
8. With 31 programs

### D. Installation

1. The installation dimension of the R-150DMX Light Source.




2. Lamp Installation Use only HQI-150W OSRAM HID lamp. The lamp is installed and adjusted to the best position before delivery.
3. How to change lamp
   a. Make sure the power is OFF.
   b. Unscrew the screws for LAMP-FIXING BOARD at the back case (see Fig 2. No. 6), draw back the LAMP-FIXING BOARD until the lamp is fully seen.
   c. Take out the lamp and change a new one. Avoid touching the glass part of the lamp.
   d. Push the LAMP-FIXING BOARD fully contact with the LIGHT SOURCE back case. Screw the screws for LAMP-FIXING BOARD.
4. How to adjust the lamp focus. Please re-adjust the lamp focus is the fiber optic is bigger than 16mm in diameter. Adjust the screws (3 screws) at the back case on the LAMP-FIXING BOARD. (See Fig 2. No. 5) NOTE: Mis-adjust the lamp will weaken the brightness of the fiber.
5. Placement of the R-150 DMX LIGHT SOURCE
   a. Keep the LIGTH SOURCE at horizontal position. Make sure that the two electrodes of the lamp are at horizontal position.
   b. If the LIGHT SOURCE is installed on the wall, make sure the two electrodes of the lamp always are at horizontal position.
   c. If the LIGHT SOURCE is installed on the ceiling, make sure the two electrodes of the lamp always are at horizontal position.

**E. Maintenance**

1. Please clean the Heat-Insulation Plate, Color Wheel and other Optical parts periodically.
2. Please clean fiber optic end out of dust periodically.

**F. LIGHT SOURCE Settings**

1. DMX 512 signal

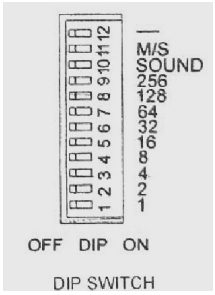
1) Address Setting

Please set the address in No. 12, 11, 10 to be OFF, the Address between No. 1-9 is the DMX address.

Please find the setting as the chart as below (1 is ON, 0 is OFF)

2) The calculation of DMX Address

| DMX Address | DIP Switch | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|
| 001 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 002 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 003 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 004 | | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 005 | | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| ….. | | - | - | - | - | - | - | - | - | - |
| 037 | | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| ….. | | - | - | - | - | - | - | - | - | - |
| 091 | | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| ….. | | - | - | - | - | - | - | - | - | - |
| 511 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |




i.e. DMX Address 037=32（$2^{(6-1)}$）+4（$2^{(3-1)}$+1（$2^{(1-1)}$）

091=64（$2^{(7-1)}$）+16（$2^{(5-1)}$）+8（$2^{(4-1)}$）+2（$2^{(2-1)}$）+1（$2^{(2-1)}$）

3) The biggest address is 511

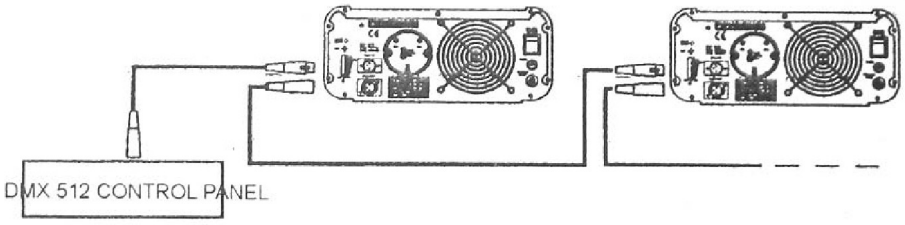
4) The function of the DMX channel

Type I: 1CH: Color

Type II: 1CH: Shutter

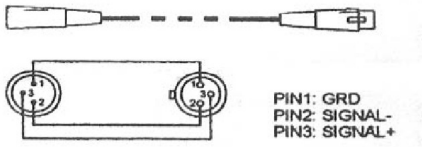
2CH: Color

5) The connection of DMX mode for the LIGHT SOURCE




6) Signal wire and the connector link:

Signal wire should be 2x0.5mm² screened cable



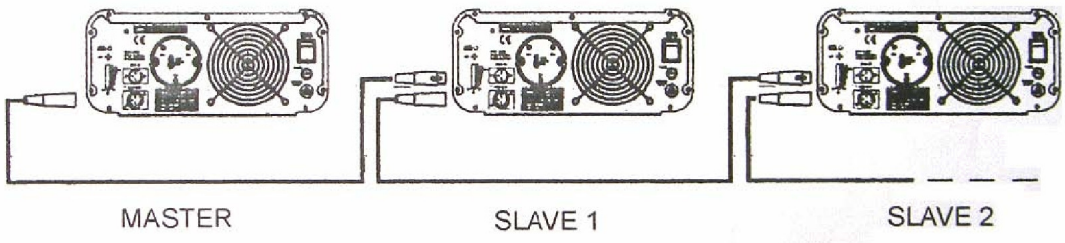

2. Master / Slave mode

1) The setting of master / slave mode

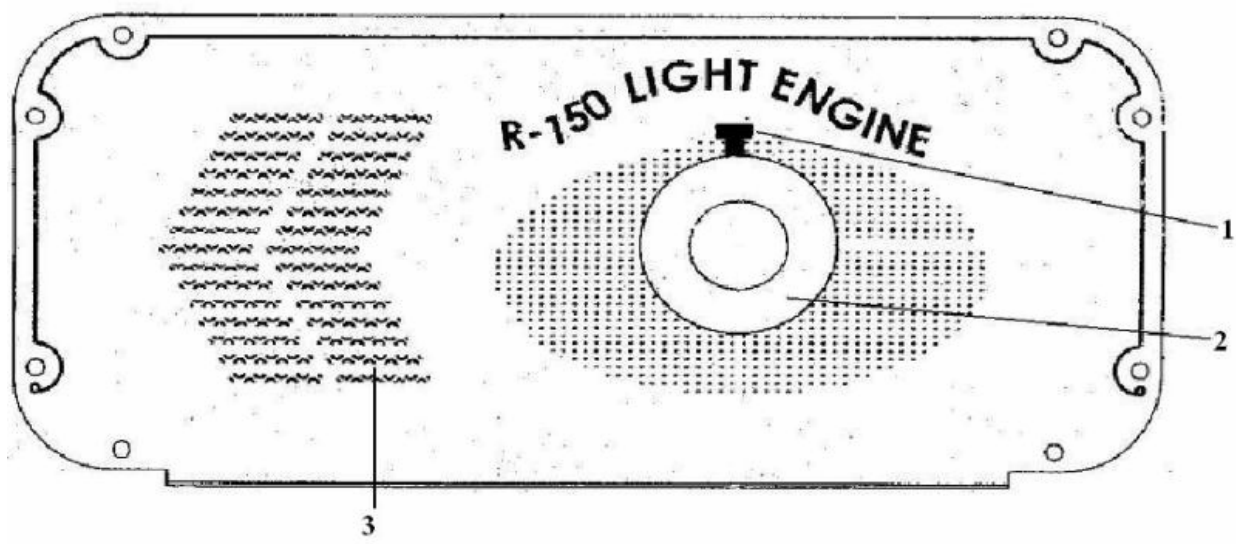
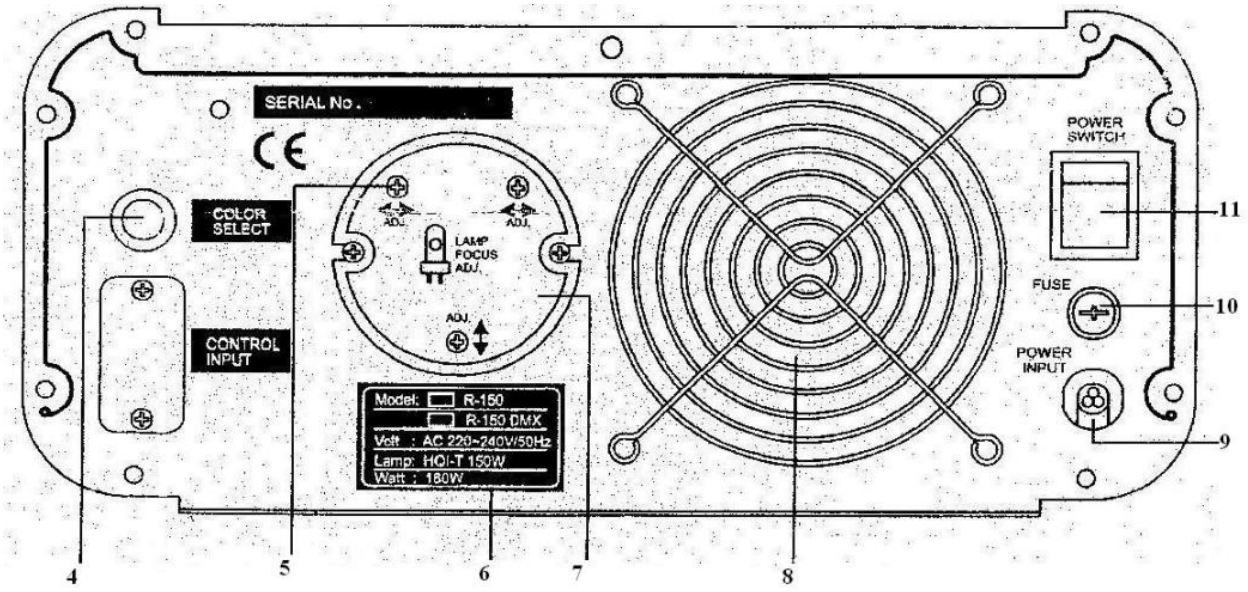
Master LIGHT SOURCE setting: The address switch on No. 12 is OFF, No 11 is ON, if No 10 is ON, the master / slave LIGTH SOURCE are controlled by external audio; if No. 10 is OFF, master / slave LIGHT SOURCES are controlled internally.

Slave LIGHT SOURCE setting:
Address No. 1 is ON, No 2-12 all set to OFF.

2) Connection of Master / Slave



## Master/Slave control preset programs form

| DMX address | DIP switch mode(1=ON, 0=OFF) | | | | | | | | | | | | Function |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | |
| 00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | No Light |
| 01 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | White |
| 02 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | Purple red |
| 03 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | Yellow |
| 04 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | Blue |
| 05 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | Green |
| 06 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | Orange red |
| 07 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | Sky-blue |
| 08 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | Grass green |
| 09 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | White, Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green change (2s) |
| 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | White, Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green change (5s) |
| 11 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | White, Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green change (10s) |
| 12 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | White, Purple red, Yellow, Blue, Green, Sky blue, Grass-green change (2s) |
| 13 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | White, Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green change (5s) |
| 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | White, Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green change (10s) |
| 15 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | Purple red, Blue, Green change (2s) |
| 16 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | Purple red, Yellow, Blue, Green, Orange red, Sky blue, Grass green change (5s) |
| 17 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | Purple red, YellowBlue, Green change (10s) |
| 18 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | Purple red, Yellow, Blue, Green change (2s) |
| 19 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | Purple red, Yellow, Blue, Green change (5s) |
| 20 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | Purple red, Yellow, Blue, Green change (10s) |
| 21 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 8 colors change(1RPM) |
| 22 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 8 colors change(1.5RPM) |
| 23 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 8 colors change(2RPM) |
| 24 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 8 colors change(3RPM) |
| 25 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 8 colors change, Quick shutter |
| 26 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 8 colors change, Slow shutter |
| 01 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | White, Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green Audio control |
| 02 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | Purple red, Yellow, Blue, Green, Orange red, Sky-blue, Grass-green Audio control |
| 03 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | Purple red, Blue, Green Audio control |
| 04 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | Purple red, Yellow, Blue, Green Audio control |
| 05 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | The combination of above program |

**R-150 DMX Light Engine Front and Back**