# EVENT LIGHTING lite

# ORBIT2

3-in-1 Effect Light

## USER MANUAL

## For safety, please read this user manual carefully before initial use.

Event Lighting reserves the right to revise the manual at any time. Information and specifications within this manual are subject to change without notice. Event Lighting assumes no liability or responsibility for any errors or omissions. Please consult Event Lighting for any clarification or information regarding this item.

Version: 10 (6 May 2020)

# Safety Instructions

## Warning

- Do not open this device, there are no user-serviceable parts inside. The laser power inside the housing can start fires or burn skin and will cause eye injury.
- Do not look at the light source when the device is on.
- This unit's housing may be hot during and after operation.
- Install this device in a location with adequate ventilation, at least 20 inch (50 cm) from adjacent surfaces.
- Do not leave any flammable material within 50 cm of this unit while operating or connected to power.
- Do not operate this device outdoors or in any location where dust, excessive heat, water, or humidity may affect it.
- Do not operate this device if the housing, lenses, or cables appear damaged.
- Do not connect this device to a dimmer or rheostat.
- ONLY connect this device to a grounded and protected circuit.
- ONLY use the hanging bracket to carry this device.
- In case of a serious operating problem, stop using immediately.
- The maximum ambient temperature is 104° F (40° C). Do not operate this device at higher temperatures.
- Do not leave the product running unattended. Use the key to lock the laser to avoid unauthorised use.
- Use aperture cover when the laser is not in use.

## Laser Warning
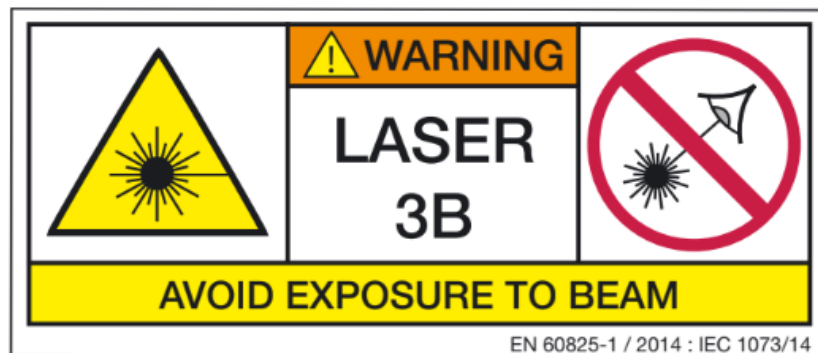


**Laser light can cause instant eye injury if the product is not set up and used correctly.** Avoid direct eye contact with the laser light. Never intentionally expose your eyes or others to direct laser light. This laser product can potentially cause instant eye damage or blindness if laser light directly strikes the eyes. The heat from a laser cannot be felt, but it can still injure or blind people. This can occur even with very small amounts of exposure at a long distance.

This product contains a Class 3B Laser. It is critical to prevent the possibility of ANY direct eye exposure.

- Do not operate the laser without reading and understanding the safety information contained in this manual.
- **Do not assume** exposure to an individual laser beam is safe.
- **Do not assume** a moving laser light is safe. Eye injury can occur **instantly**.

- ORBIT2 must be installed at least 3 metres above ground level and at least 3 metres horizontally from any person. See the Product Installation section for details.
- Do not point the laser at any person or animal.
- Do not point the laser towards any area where people could be exposed to it.
- Do not point the laser towards any reflective surfaces, such as windows, mirrors and metals. Laser reflections can also cause injury.
- Do not point the laser towards any area where you or the operator do not know where it is being directed.
- Do not point the laser into the sky or towards any aircraft.
- The legal requirements for operating laser products vary between jurisdictions. It is the user's responsibility to meet the legal requirements in the location/country of use.

Additional laser warning stickers (pictured above) are included with this user manual. Please attach these to the power supply.

## Power Input
This device has an auto-switching power supply work with input voltage range of 100~240 VAC, 50/60 Hz.

# Product Installation
- This device can be mounted in many orientations provided each individual device is secured by the use of correct mounting bracket.
- This device should be directed above the heads of people. Do not direct this device towards the line of sight of anyone.
    - o  Refer to the diagram below.
- A minimum of 3 meters vertical separation is required between the floor and the laser device.
- A minimum of 3 metres horizontal separation is required between the laser light and any person or public space.
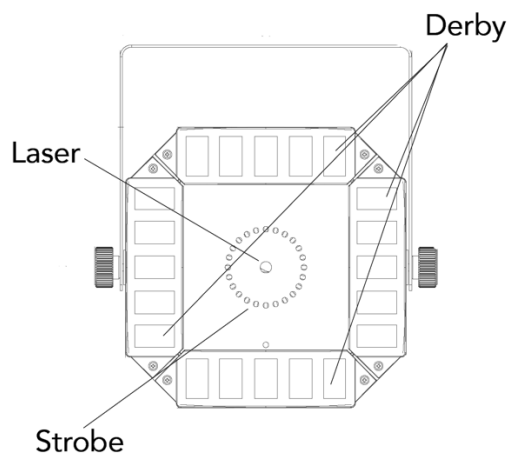- Use a safety chain when mounting this device overhead.
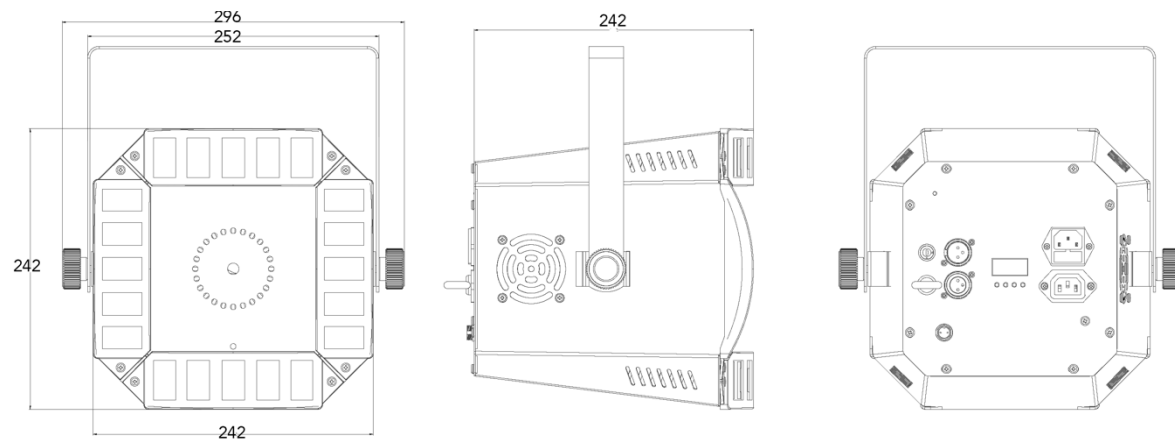


3.0 Meters
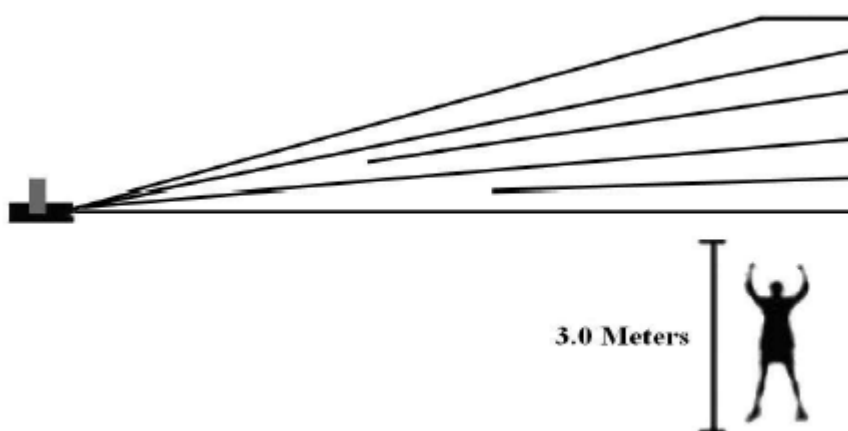
# Laser Interlock

The use of the laser is controlled by an interlock and key located on the back of the unit. In order for the laser to operate, the interlock must be inserted, and the key switched to the unlocked position.

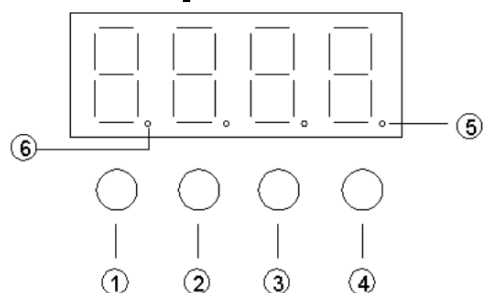- If these conditions are not met, only the LEDs will be operational.

# Overview



# Dimensions

# Menu Operation



1. Menu – Move up a level.
2. Up – Move selection up one item.
3. Down – Move selection down one item.
4. Enter – Select / Move down a level.
5. DMX Signal LED indicator. LED will flash when DMX connected.
6. Master/Slave mode indicator. LED will flash when in Slave mode.

# Menu

| Display | Function | Description |
|---------|----------|-------------|
| Addr | DMX Address | Change DMX Address (A001-A512). |
| ChNd | DMX Channels | Change DMX Channel Mode (2Ch / 11Ch). |
| SLNd | Master/Slave Mode | Change between Master (NASt) and Slave (SL1/SL2) mode. In Slave Mode 1 (SL1), slave fixtures will follow the Master fixture when in Sound Active Mode. In Slave Mode 2 (SL2), each slave fixture will use its own microphone and behave independently when in Sound Active Mode. When not in Sound Active Mode, SL1 and SL2 function identically. |
| Soun | Sound Mode and Sound Sensitivity | Change between Sound Active Modes (So0-So8) and Sound Sensitivity (Se00-Se99) |
| Auto | Auto-run Mode | Change between Auto-run Modes (Aut0-Aut8) and Auto-run Speed (SP1-SP9) |
| Led | Display backlight | Turn the display backlight on or off. |
| diSP | Display normal/inverted. | Switch between normal or inverted display mode. |
| Ver | Software Version | Display the current software version. |

## IR Remote

| Button | Description |
| --- | --- |
| Black Out | Turn on/off |
| Auto | Autoplay |
| Sound | Sound Active mode |
| Strobe | Strobe mode |
| Fade/ Jump | No Function |
| Sensitivity | Adjust sound sensitivity |
| R/G/B/W/A/UV/W | No Function |
| + | Increase parameter (strobe speed, sound sensitivity, auto speed) |
| - | Decrease parameter (strobe speed, sound sensitivity, auto speed) |
| 0-8 | Switch between functions in Auto Mode and Sound Active Mode |
| 9 | No Function |

# DMX Chart

The device is controlled by universal DMX 512 protocol, DMX address is the start channel used to receive instructions from the external controller. For independent control, each fixture must be assigned its unique address control channels. For example, this device has three channel modes: 2/11, if we set the mode to standard 2 channels mode, and there are several models that need to be independently controlled, we just simply address first fixture at 1, and second fixture at 3, third one at 5, etc.

- If the devices have the same address, they will behave synchronically.
- Display is flashing when no DMX signal is received.

## 2 Channel Mode

| Channel | Value | Function |
|---|---|---|
| 1 | 5-20 | Auto 0 (combined effect) |
| | 21-35 | Auto 1 (Derby effect 1) |
| | 36-50 | Auto 2 (Derby effect 2) |
| | 51-65 | Auto 3 (Laser + strobe) |
| | 66-80 | Auto 4 (Derby + strobe) |
| | 81-95 | Auto 5 (Laser + Derby 1) |
| | 96-110 | Auto 6 (Laser + Derby 2) |
| | 111-125 | Auto 7 (Laser effect) |
| | 126-130 | Auto 8 (Strobe effect) |
| | 131-144 | Sound 0 (Combined effect) |
| | 145-159 | Sound 1 (Derby effect 1) |
| | 160-174 | Sound 2 (Derby effect 2) |
| | 175-189 | Sound 3 (Laser + strobe) |
| | 190-204 | Sound 4 (Derby + strobe) |
| | 205-219 | Sound 5 (Laser + Derby 1) |
| | 220-234 | Sound 6 (Laser + Derby 2) |
| | 235-249 | Sound 7 (Laser effect) |
| | 250-255 | Sound 8 (Strobe effect) |
| 2 | 0-255 | Run speed and sound sensitivity adjust |

## 11 Channel Mode

| Channel | Value | Description | Function |
|---|---|---|---|
| 1 | 0-13 | Derby 1 | None |
| | 14-27 | | Red |
| | 28-41 | | Green |
| | 42-55 | | Blue |
| | 56-69 | | White |
| | 70-83 | | Red + Green |
| | 84-97 | | Red + Blue |
| | 98-111 | | Red + White |
| | 112-125 | | Green + Blue |
| | 126-139 | | Green + White |
| | 140-153 | | Blue + White |
| | 154-167 | | Red + Green + Blue |
| | 168-181 | | Red + Green + White |
| | 182-195 | | Red + Blue + White |
| | 196-209 | | Green + Blue + White |
| | 210-223 | | Red + Green + Blue + White |
| | 224-237 | | Jump change with Derby effect 1 |
| | 238-255 | | Jump change with Derby effect 2 |
| 2 | 0-250 | Derby 1 Strobe Effect | Speed from slow to fast |
| | 251-255 | | Sound strobe |
| 3 | 0-13 | Derby 2 | None |
| | 14-27 | | Red |
| | 28-41 | | Green |
| | 42-55 | | Blue |
| | 56-69 | | White |
| | 70-83 | | Red + Green |
| | 84-97 | | Red + Blue |
| | 98-111 | | Red + White |
| | 112-125 | | Green + Blue |
| | 126-139 | | Green + White |
| | 140-153 | | Blue + White |
| | 154-167 | | Red + Green + Blue |
| | 168-181 | | Red + Green + White |
| | 182-195 | | Red + Blue + White |
| | 196-209 | | Green + Blue + White |
| | 210-223 | | Red + Green + Blue + White |
| | 224-237 | | Jump change with Derby effect 1 |
| | 238-255 | | Jump change with Derby effect 2 |
| 4 | 0-250 | Derby 2 Strobe Effect | Speed from slow to fast |
| | 251-255 | | Sound strobe |
| 5 | 0-7 | Laser effect | None |
| | 8-47 | | Red |
| | 48-87 | | Green |
| | 88-127 | | Red + Green |
| | 128-167 | | Red + Green Strobe |
| | 168-207 | | Green + Red strobe |
| | 208-255 | | Alternate strobe |

| 6 | 0-250 | Laser Strobe effect | Speed from slow to fast |
|---|---|---|---|
| | 251-255 | | Sound activated |
| 7 | 0-7 | Laser rotation | No rotation |
| | 8-87 | | Backwards rotation, slow to fast |
| | 88-167 | | Forwards rotation, fast to slow |
| | 168-255 | | Random rotation |
| 8 | 0-7 | Strobe mode (centre, can add effects on top) | No function |
| | 8-36 | | No Strobe |
| | 37-66 | | Strobe effect 1 |
| | 67-96 | | Strobe effect 2 |
| | 97-126 | | Strobe effect 3 |
| | 127-156 | | Strobe effect 4 |
| | 157-186 | | Strobe effect 5 |
| | 187-216 | | Strobe effect 6 |
| | 217-246 | | Strobe effect 7 |
| | 246-255 | | Strobe effect 8 |
| 9 | 0-255 | Strobe effect speed | Ch. 8 effect speed, slow to fast |
| 10 | 0-7 | Strobe effect | No Strobe |
| | 8-240 | | Strobe speed, slow to fast |
| | 241-255 | | Sound activated |
| 11 | 0-9 | Derby Rotation | None |
| | 10-255 | | Motor rotation, slow to fast |

# Technical Specifications

- Power supply: 100-240V AC, 50/60Hz
- Power consumption: 45W
- Light Source:
  - o Derby: 2pcs 12W RGBW LEDs
  - o Strobe: 24pcs 0.2w SMD White LEDs
  - o Laser: 532nm/30mW (Green) laser diode, 650nm/100mW (red) laser diode
- Lifetime: 50,000 hours
- Control Panel: 4 digital LED display figures
- Control Mode: Sound activated, Auto, Master/Slave, DMX512, IR Remote
- DMX Channels: 2 / 11
- Dimensions: 320x320x320 (package)
- Weight: 3.35kg

# Warranty

Please refer to your local dealer or contact Event Lighting Pty Ltd.