

EQUINOX

Saturn Spot

User Manual



Order code: EQLED023

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.



IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power cable come into contact with other cables. Handle the power cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the equipment and do not modify the unit.
- Do not connect this equipment to a dimmer pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available mains supply voltage is between 100~240V AC, 50/60Hz.
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not connect power or switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Pro Light dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. **THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.**
- This lighting fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- Warning! Risk Group 2 LED product according to EN 62471. Do not view the light output with optical instruments or any device that may concentrate the beam.
- **WARRANTY:** One year from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g: short-circuit, burns and electric shocks etc.

Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.

Saturn Spot

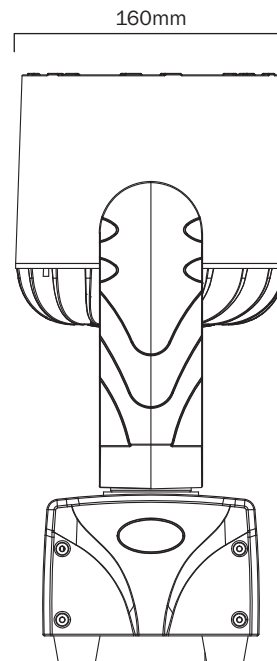
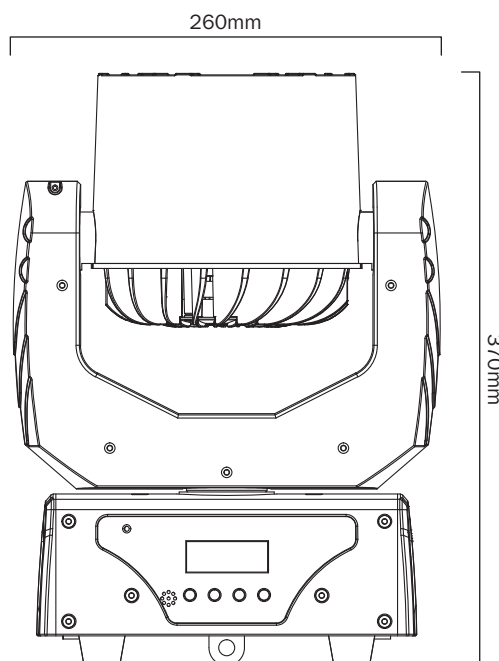
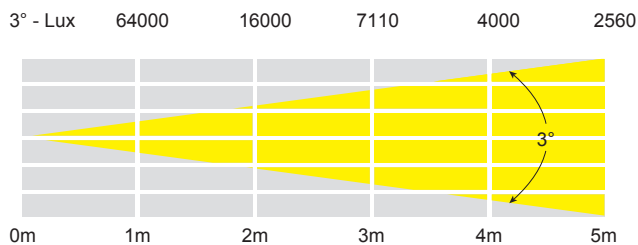
This hybrid two-in-one moving head houses a high output 30W LED, along with a gobo wheel utilising 9 gobos plus open and a colour wheel with 9 dichroic colours plus open with manual focus adjustment.

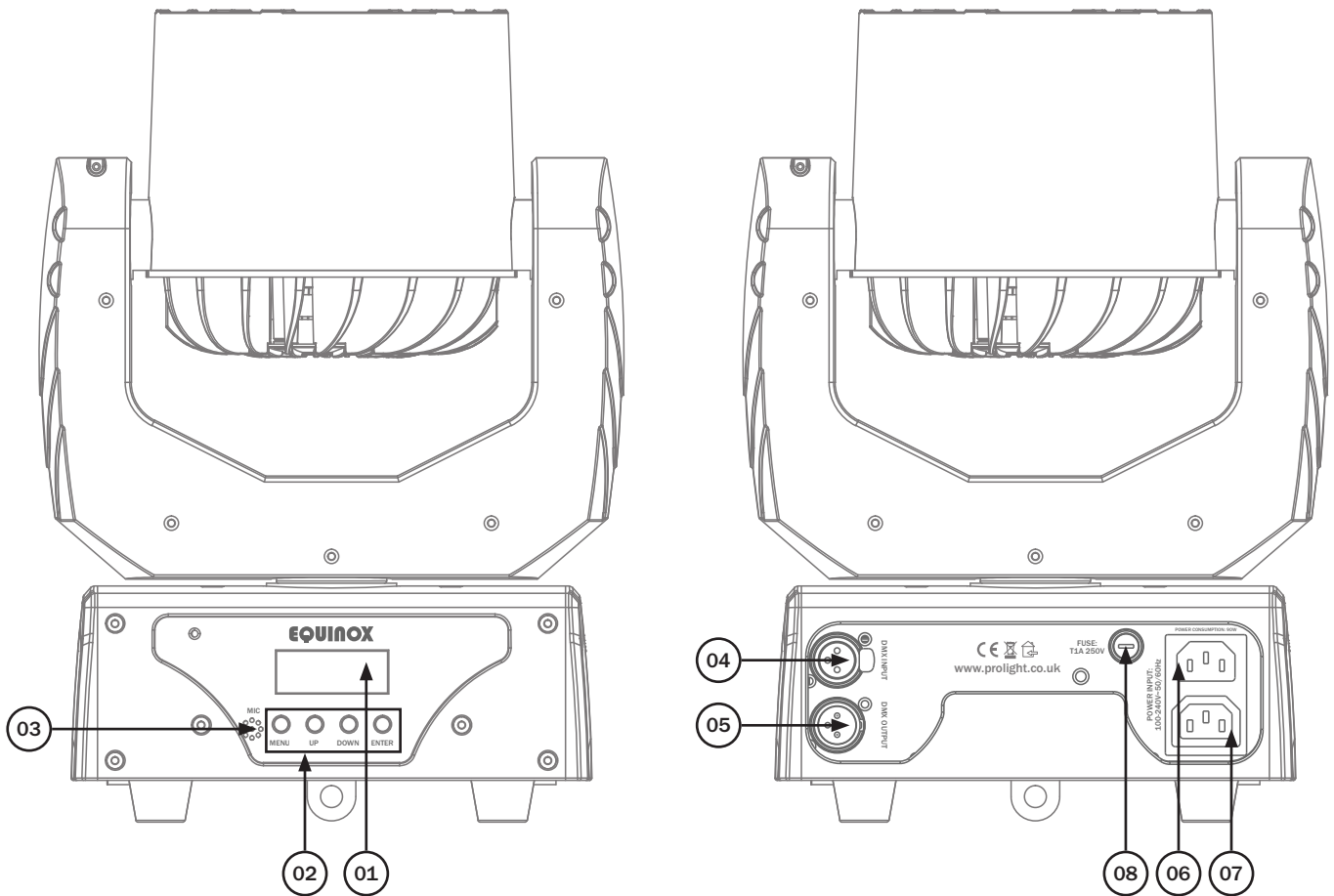
Adding to the functions of this unit are 3 LED rings with a total of 76 RGB SMD LEDs providing individual control with stepless RGB colour changing meteor effects. The 4 button LED menu system facilitates control via DMX, stand-alone and master/slave modes. Flicker-free projection and automatic position correction are also included.

- 1 x 30W white LED
- 76 x tri-colour 5050 SMD LEDs (RGB)
- Beam angle: 3°
- 16,000 Lux @ 2m
- Flicker-free projection
- Individually controllable LED rings with stepless RGB colour changing
- Gobo wheel: 9 static gobos + open
- Colour wheel: 9 dichroic colours + open
- DMX channels: 12 or 23 selectable
- Auto, sound active and master/slave modes
- Pan: 540° or 630° selectable, Tilt: 210°
- Pan/tilt auto correction
- 16 bit pan/tilt positioning
- 0-100% dimming and variable strobe
- Supplied with quick release omega clamp
- 4 push button menu with LED display
- IEC power input/output
- 3-Pin XLR input/output
- Temperature controlled fan for whisper quiet operation



| Specifications | |
|-------------------|-------------------|
| Power consumption | 90W |
| Power supply | 100~240V, 50/60Hz |
| Fuse | T1A 250V |
| Dimensions | 370 x 260 x 160mm |
| Weight | 4.8kg |
| Order codes | EQLED023 |

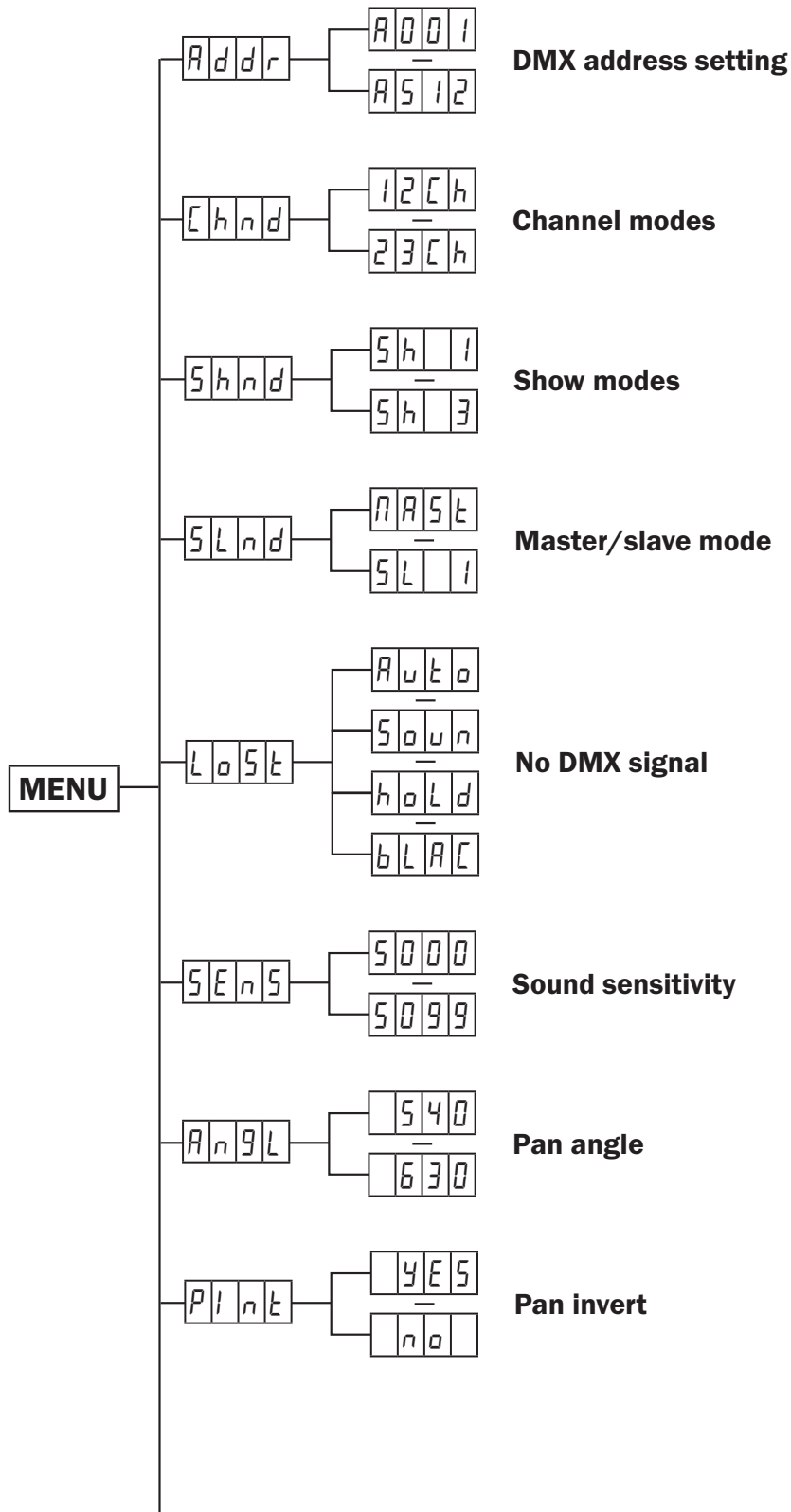


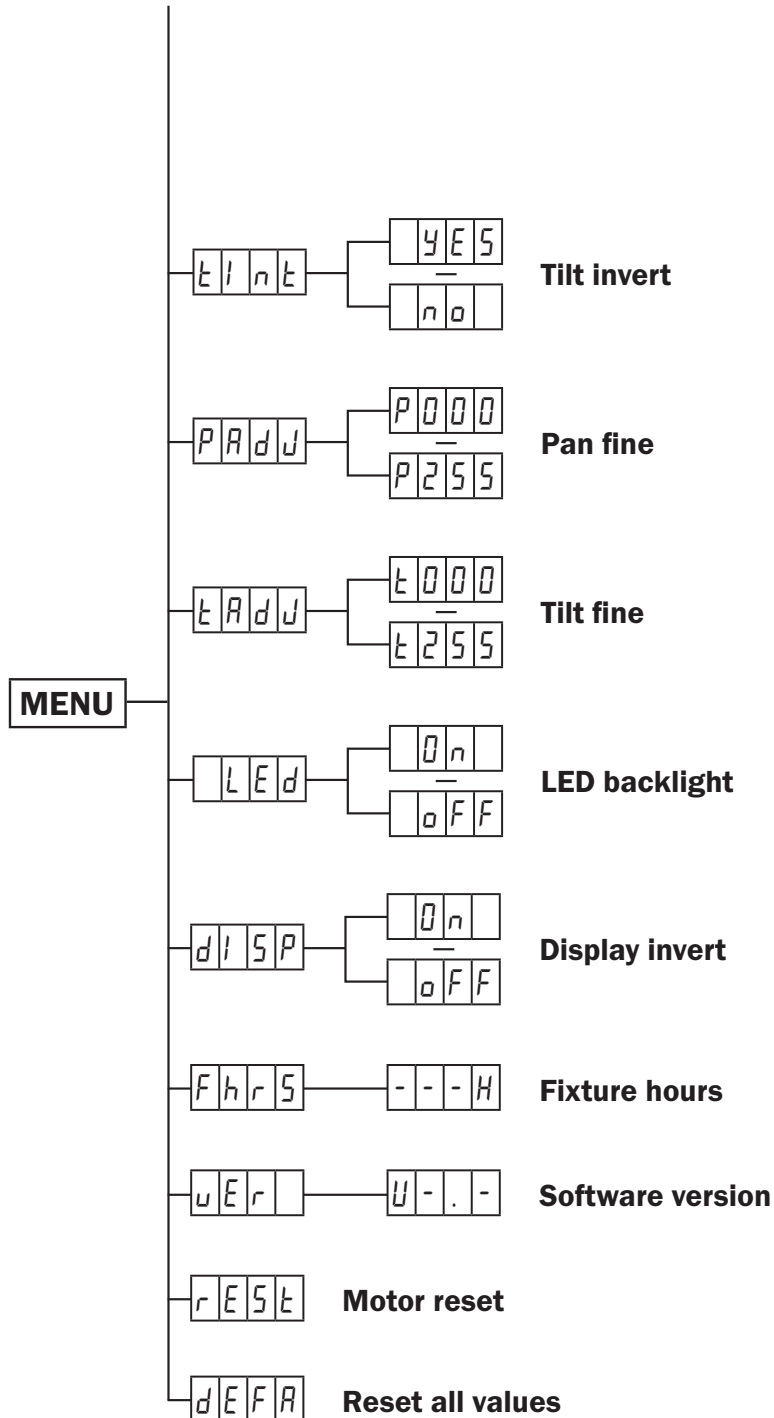


01 - LED display
 02 - Function buttons
 03 - Microphone

04 - DMX input socket
 05 - DMX output socket
 06 - IEC power input socket
 07 - IEC power output socket
 08 - Fuse T1A 250V

In the box: **1 x fixture,**
1 x power cable,
1 x omega clamp,
& 1 x user manual





DMX mode:

Operating in a DMX control mode environment gives the user the greatest flexibility when it comes to customising or creating a show. In this mode you will be able to control each individual trait of the fixture and each fixture independently.

To access the DMX address mode, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *ADD 1* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to set the required DMX address. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

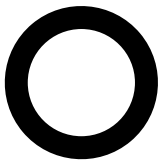
DMX channel mode:

To access the DMX channel mode, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *Chnd* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose one of the 12 or 23 DMX channel modes. Press the “ENTER” button to confirm the setting.

To exit out of any of the above options, press the “MENU” button.

PLEASE NOTE: When the unit is receiving DMX the first red dot on the display will flash.

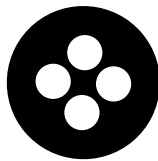
Gobos:



Open



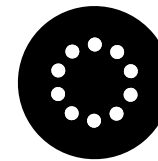
Gobo 1



Gobo 2



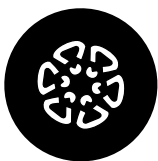
Gobo 3



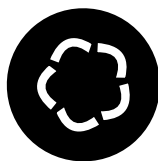
Gobo 4



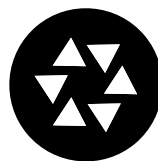
Gobo 5



Gobo 6



Gobo 7



Gobo 8



Gobo 9

12 channel mode:

| Channel | Value | Function |
|---------|----------------|----------------------------------|
| CH1 | 000-255 | Pan adjustment 0-630° |
| CH2 | 000-255 | Tilt adjustment 0-210° |
| CH3 | 000-255 | Pan/Tilt speed (fast-slow) |
| CH4 | 000-255 | White LED Master dimmer (0-100%) |
| CH5 | 000-015 | Strobe off |
| | 016-096 | Strobe (1Hz-25Hz slow-fast) |
| | 097-175 | Strobe (1Hz slow-fast) |
| | 176-255 | Random strobe |
| CH6 | 000-030 | Open |
| | 031-055 | Red |
| | 056-080 | Green |
| | 081-105 | Blue |
| | 106-130 | Yellow |
| | 131-155 | Orange |
| | 156-180 | Magenta |
| | 181-205 | Light Green |
| | 206-230 | Purple |
| | 231-255 | Cyan |
| CH7 | 000-021 | Open |
| | 022-034 | Gobo 1 |
| | 035-047 | Gobo 2 |
| | 048-060 | Gobo 3 |
| | 061-073 | Gobo 4 |
| | 074-086 | Gobo 5 |
| | 087-099 | Gobo 6 |
| | 100-112 | Gobo 7 |
| | 113-125 | Gobo 8 |
| | 126-138 | Gobo 9 |
| | 139-151 | Gobo 1 Shaking |
| | 152-164 | Gobo 2 Shaking |
| | 165-177 | Gobo 3 Shaking |
| | 178-190 | Gobo 4 Shaking |
| | 191-203 | Gobo 5 Shaking |
| | 204-216 | Gobo 6 Shaking |
| | 217-229 | Gobo 7 Shaking |
| | 230-242 | Gobo 8 Shaking |
| 243-255 | Gobo 9 Shaking | |

| Channel | Value | Function |
|---------|--------------|-------------------------------------|
| CH8 | 000-029 | SMD ring strobe off |
| | 030-225 | SMD ring strobe (slow-fast) |
| | 226-255 | SMD ring strobe off |
| CH9 | 000-255 | SMD ring master dimmer (0-100%) |
| CH10 | 000-035 | No function |
| | 036-040 | Red |
| | 041-045 | Green |
| | 046-050 | Blue |
| | 051-055 | R+G |
| | 056-060 | R+B |
| | 061-065 | G+B |
| | 066-070 | R+G+B |
| | 071-080 | RGB change |
| | 081-085 | Red chase |
| | 086-090 | Green chase |
| | 091-095 | Blue chase |
| | 096-100 | R+G chase |
| | 101-105 | R+B chase |
| | 106-110 | G+B chase |
| | 111-115 | R+G+B chase |
| | 116-120 | Red zoom out |
| | 121-125 | Green zoom out |
| | 126-130 | Blue zoom out |
| | 131-135 | RGB zoom out |
| | 136-140 | Red zoom in |
| | 141-145 | Green zoom in |
| | 146-150 | Blue zoom in |
| | 151-155 | RGB zoom in |
| | 156-160 | Red, Green, Blue, White Effect |
| | 161-165 | Yellow, Magenta, Cyan, White Effect |
| 166-255 | Colour chase | |
| CH11 | 000-255 | SMD ring speed (slow-fast) |
| CH12 | 000-049 | No function |
| | 050-099 | Auto program 1 |
| | 100-149 | Auto program 2 |
| | 150-199 | Auto program 3 |
| | 200-249 | Sound active |
| | 250-255 | Motor reset |

23 channel mode:

| Channel | Value | Function |
|---------|----------------|------------------------------------|
| CH1 | 000-255 | Pan adjustment 0-630° |
| CH2 | 000-255 | Pan fine |
| CH3 | 000-255 | Tilt adjustment 0-210° |
| CH4 | 000-255 | Tilt fine |
| CH5 | 000-255 | Pan/Tilt speed (fast-slow) |
| CH6 | 000-255 | White LED Master dimmer (0-100%) |
| CH7 | 000-015 | Strobe off |
| | 016-096 | Strobe (1Hz-25Hz slow-fast) |
| | 097-175 | Strobe (1Hz slow-fast) |
| | 176-255 | Random strobe |
| CH8 | 000-030 | Open |
| | 031-055 | Red |
| | 056-080 | Green |
| | 081-105 | Blue |
| | 106-130 | Yellow |
| | 131-155 | Orange |
| | 156-180 | Magenta |
| | 181-205 | Light Green |
| | 206-230 | Purple |
| | 231-255 | Cyan |
| CH9 | 000-021 | Open |
| | 022-034 | Gobo 1 |
| | 035-047 | Gobo 2 |
| | 048-060 | Gobo 3 |
| | 061-073 | Gobo 4 |
| | 074-086 | Gobo 5 |
| | 087-099 | Gobo 6 |
| | 100-112 | Gobo 7 |
| | 113-125 | Gobo 8 |
| | 126-138 | Gobo 9 |
| | 139-151 | Gobo 1 Shaking |
| | 152-164 | Gobo 2 Shaking |
| | 165-177 | Gobo 3 Shaking |
| | 178-190 | Gobo 4 Shaking |
| | 191-203 | Gobo 5 Shaking |
| | 204-216 | Gobo 6 Shaking |
| | 217-229 | Gobo 7 Shaking |
| | 230-242 | Gobo 8 Shaking |
| 243-255 | Gobo 9 Shaking | |
| CH10 | 000-255 | Inner SMD ring red dimmer (0-100%) |

| Channel | Value | Function |
|---------|---------------|--|
| CH11 | 000-255 | Inner SMD ring green dimmer (0-100%) |
| CH12 | 000-255 | Inner SMD ring blue dimmer (0-100%) |
| CH13 | 000-255 | Middle SMD ring red dimmer (0-100%) |
| CH14 | 000-255 | Middle SMD ring green dimmer (0-100%) |
| CH15 | 000-255 | Middle SMD ring blue dimmer (0-100%) |
| CH16 | 000-255 | Outer SMD ring red dimmer (0-100%) |
| CH17 | 000-255 | Outer SMD ring green dimmer (0-100%) |
| CH18 | 000-255 | Outer SMD ring blue dimmer (0-100%) |
| CH19 | 000-029 | SMD ring strobe off |
| | 030-225 | SMD ring strobe (slow-fast) - CH10 000-070 |
| | 226-255 | SMD ring strobe off |
| CH20 | 000-255 | SMD ring master dimmer (0-100%) |
| CH21 | 000-035 | No function |
| | 036-040 | Red |
| | 041-045 | Green |
| | 046-050 | Blue |
| | 051-055 | R+G |
| | 056-060 | R+B |
| | 061-065 | G+B |
| | 066-070 | R+G+B |
| | 071-080 | RGB change |
| | 081-085 | Red chase |
| | 086-090 | Green chase |
| | 091-095 | Blue chase |
| | 096-100 | R+G chase |
| | 101-105 | R+B chase |
| | 106-110 | G+B chase |
| | 111-115 | R+G+B chase |
| | 116-120 | Red zoom out |
| | 121-125 | Green zoom out |
| 126-130 | Blue zoom out | |
| 131-135 | RGB zoom out | |
| 136-140 | Red zoom in | |
| 141-145 | Green zoom in | |

23 channel mode cont...:

| Channel | Value | Function |
|---------------|---------|-------------------------------------|
| CH21 cont. | 146-150 | Blue zoom in |
| | 151-155 | RGB zoom in |
| | 156-160 | Red, Green, Blue, White Effect |
| | 161-165 | Yellow, Magenta, Cyan, White Effect |
| | 166-255 | Colour chase |
| CH22 | 000-255 | SMD ring speed (slow-fast) |
| CH23 | 000-049 | No function |
| | 050-099 | Auto program 1 |
| | 100-149 | Auto program 2 |
| | 150-199 | Auto program 3 |
| | 200-249 | Sound active |
| | 250-255 | Motor reset |

Show mode:

To access the show modes, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *Shnd* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *Sh 1* ~ *Sh 3*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Master/slave mode:

To set the master unit, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *SLnd* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose *MASTER*. Press the “ENTER” button to confirm the setting. Then select your desired program.

To set the other units in slave mode, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *SLnd* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose either *SL 1*. Press the “ENTER” button to confirm the setting. The unit will now run in sequence with the master unit.

To exit out of any of the above options, press the “MENU” button.

Please ensure that all slave units are set to the same DMX channel mode as the master unit.

DMX signal lost:

To change what the unit does when the DMX signal is lost, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *Lost* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *Auto* (Auto), *Sound* (Sound), *Hold* (Hold the last command) or *BLAC* (Blackout). Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Sound sensitivity:

To adjust the sound sensitivity, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *SENS* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *5000* ~ *5099*. Press the “ENTER” button to confirm the setting.

Value: 000 - 099 (000 = low, 099 = high)

To exit out of any of the above options, press the “MENU” button.

Pan angle:

To access the pan angle setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *PanGL* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *540* (540° pan) or *630* (630° pan). Press the “ENTER” button to confirm the setting.

To exit out of any of the above options, press the “MENU” button.

Pan invert setting:

To access the pan invert setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *PI nE* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *YES* or *nO*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Tilt invert setting:

To access the tilt invert setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *TI nE* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *YES* or *nO*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Pan fine setting:

To access the pan fine setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *PA dJ* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *P000 ~ P255*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Tilt fine setting:

To access the tilt fine setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *TA dJ* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *P000 ~ P255*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

LED backlight:

To access the LED backlight setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *LE dJ* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *On* or *oFF*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Display invert setting:

To access the display invert setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the front of the unit to show *LE dJ* on the LED display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between *On* or *oFF*. Press the “ENTER” button to confirm the setting. To exit out of any of the above options, press the “MENU” button.

Fixture hours:

To display the fixture hours , press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the front of the unit to show *Fhr 5* on the LED display. Press the “**ENTER**” button and the fixture hours will be displayed. To exit out of any of the above options, press the “**MENU**” button.

Software version:

To display the software version , press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the front of the unit to show *VER* on the LED display. Press the “**ENTER**” button and the software version will be displayed. To exit out of any of the above options, press the “**MENU**” button.

Motor reset:

To reset the units motors, press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the front of the unit to show *RESET* on the LED display. Press the “**ENTER**” button and motors will perform a reset. To exit out of any of the above options, press the “**MENU**” button.

Reset all values:

To reset the units values to the factory settings, press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the front of the unit to show *DEF* on the LED display. Press the “**ENTER**” button and the values will be set to factory settings. To exit out of any of the above options, press the “**MENU**” button.

Setting the DMX address:

The DMX mode enables the use of a universal DMX controller. Each fixture requires a “start address” from 1- 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100,101,102,103,104,105 and 106. Choose a start address so that the channels used do not overlap. E.g. the next unit in the chain starts at 107.

DMX 512:

DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a data “out” terminal).

DMX linking:

DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

DATA cable (DMX cable) requirements (for DMX operation):

This fixture can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit and your DMX controller require a standard 3-pin XLR connector for data input/output, see image below.



Further DMX cables can be purchased from all good sound and lighting suppliers or Pro Light Concepts dealers.

Please quote:

CABL10 – 2m

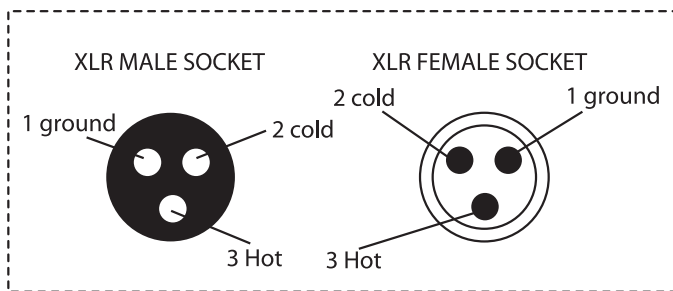
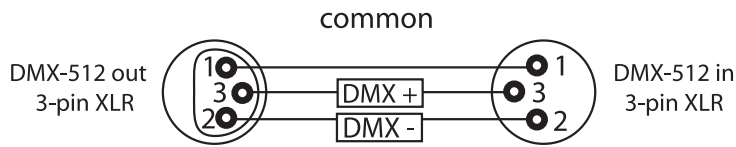
CABL11 – 5m

CABL12 – 10m

Also remember that DMX cable must be daisy chained and cannot be split.

Notice:

Be sure to follow the diagrams below when making your own cables. Do not connect the cables shield conductor to the ground lug or allow the shield conductor to come in contact with the XLRs outer casing. Grounding the shield could cause a short circuit and erratic behaviour.



| XLR Pin Configuration |
|-----------------------|
| Pin 1 = Ground |
| Pin 2 = Negative |
| Pin 3 = Postive |

Special note:

Line termination:

When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

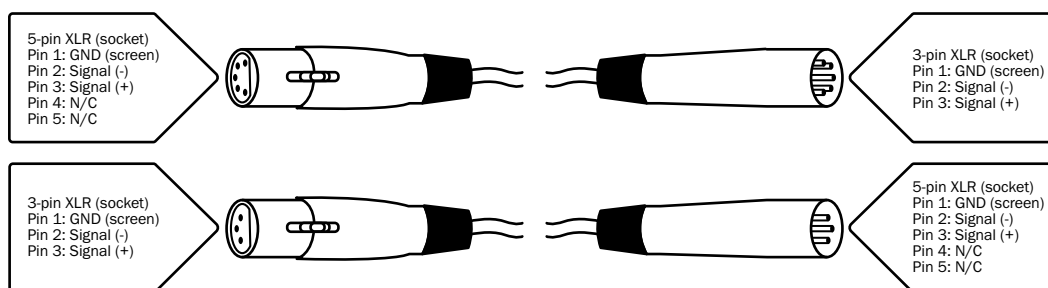
Using a cable terminator will decrease the possibilities of erratic behaviour.

(3-pin - Order ref: CABL90, 5-pin - Order ref: CABL89)

Termination reduces signal transmission problems and interference. it is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.

5-pin XLR DMX connectors:

Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The diagram below details the correct cable conversion.





Correct Disposal of this Product (Waste Electrical & Electronic Equipment)

**(Applicable in the European Union and other European countries
with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

