EQUINOX

Fusion 150
12 x 12W Moving Head
User Manual

Order code: EQLED005

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.

CAUTION! **KEEP THIS EQUIPMENT AWAY FROM RAIN, MOISTURE AND LIQUIDS**	**CAUTION!** **TAKE CARE USING THIS EQUIPMENT!** **HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!**

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 voltage is between 100~240V, 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.
- 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.

Fusion 150

Housing 12 x 12W quad colour LEDs, the Equinox Fusion 150 moving head wash gives smooth colour mixing from rich saturated hues to subtle pastel shades. The compact and lightweight design allows for easy transportation and installation. The 4 push button LED menu allows for easy access to the functions including DMX, auto, sound active and master/slave modes. Loaded with advanced internal programming by Equinox the sound active and auto modes deliver stunning light shows.

- 12 x 12W quad-colour LEDs
- Beam angle: 40°
- Pan: 540°, Tilt: 180°
- DMX channels: 1, 4, 7 or 10 selectable
- Auto, sound active, strobe and master slave modes
- 0-100% dimming
- 4 push button menu with LED display
- IEC in/out sockets
- 3-pin XLR in/out socket
- Fan cooled
- Supplied with hanging bracket

45° - Lux	850	280	100	40	16

45°

0m	1m	2m	3m	4m	5m
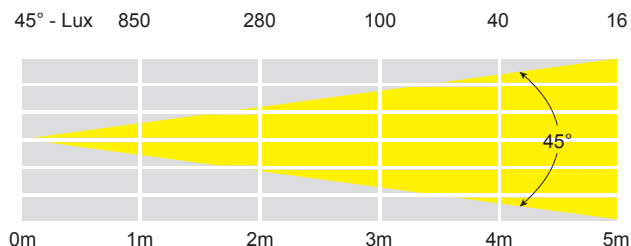
Specifications	Fusion 150
Power consumption	180W
Power supply	100~240V, 50/60Hz
Dimensions	288 x 222 x 190mm
Weight	3.6kg
Order code	EQLED005

222mm

288mm

190mm
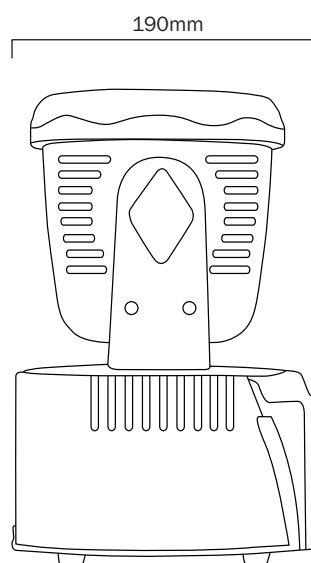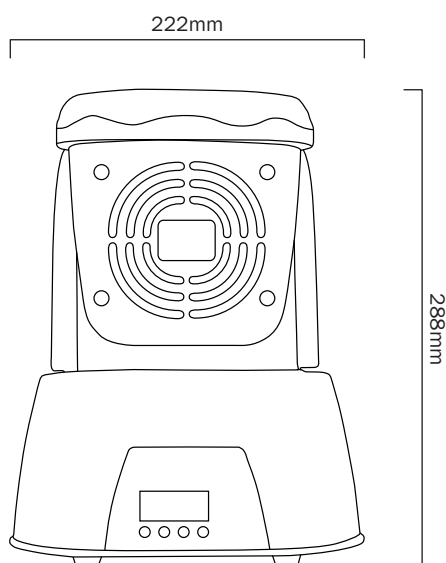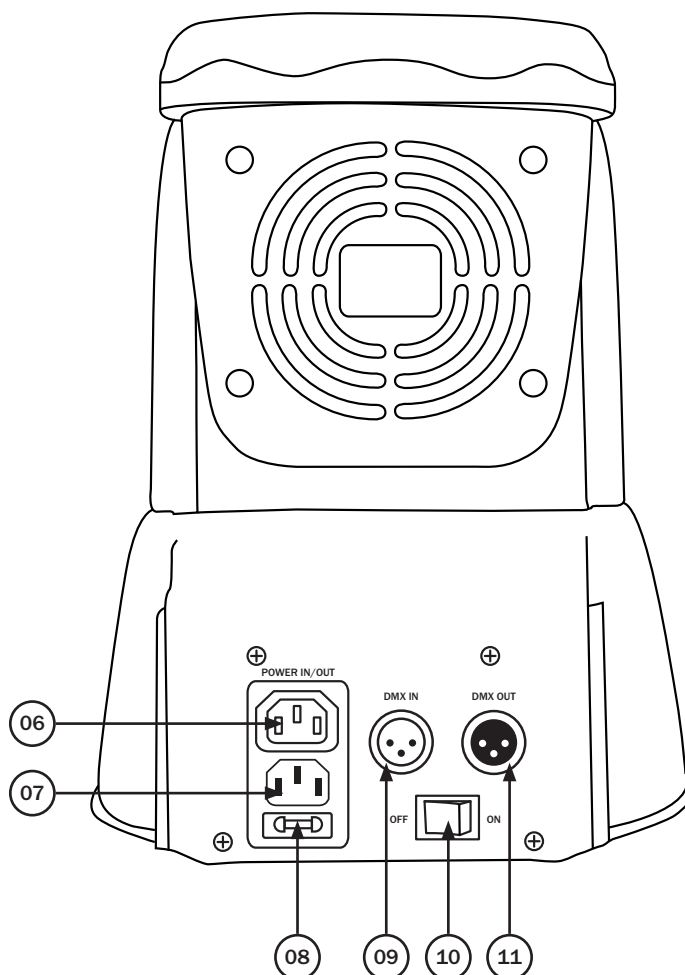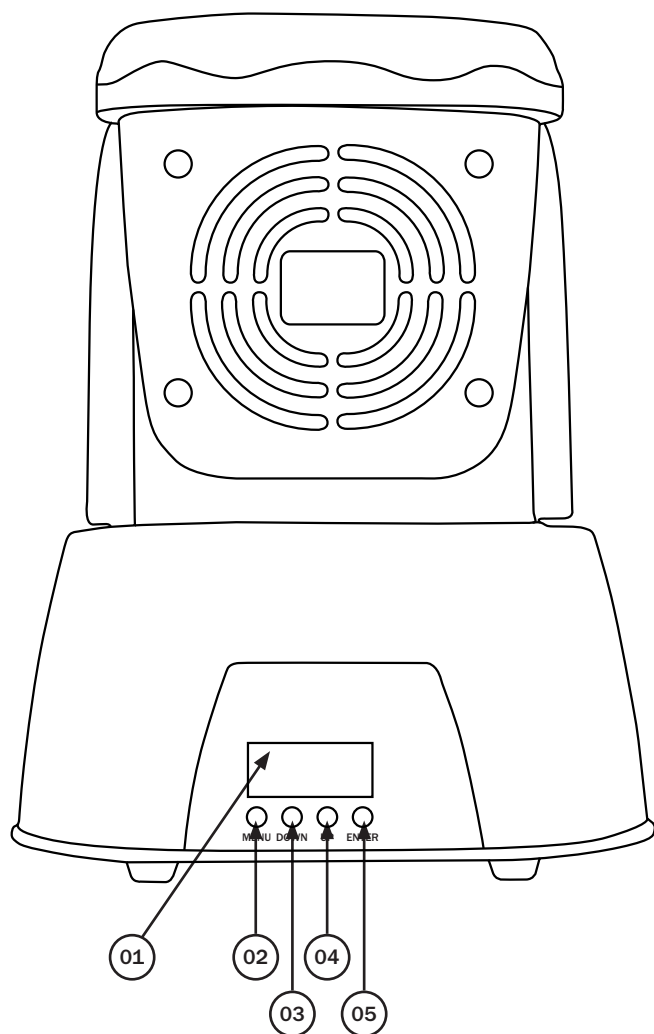
01 - LED display
02 - Menu button
03 - Down button
04 - Up button

05 - Enter button
06 - Power out socket
07 - Power in socket
08 - Fuse 5A 250V

09 - DMX in
10 - On/off switch
11 - DMX out

In the box: **1 x fixture, 1 x power cable, hanging bracket & 1 x user manual**

<u>DMX channel selection:</u>

Operating in DMX control mode 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 channel mode, press the "**MODE**" button on the font of the unit to show $CHnd$ on the LED display. Now press the "**ENTER**" button and the channel mode will be displayed.
Use the "**UP**" and "**DOWN**" buttons to choose one of the 1, 4, 7, or 10 DMX channel modes. Press the "**ENTER**" button again, this will set the DMX channel. The display will now display $Addr$.

To exit out of any of the above options, press the "**MODE**" button.

<u>1 channel mode:</u>

Channel	Value	Function
1	0-7	Blackout
	8-127	Auto run (AT01)
	128-255	Sound active (128: low sensitivity, 255: high sensitivity)

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4 channel mode:

Channel	Value	Function
1	0-255	Pan adjustment
2	0-255	Tilt adjustment
3	0-255	0-100% dimming (0: low brightness, 255: high brightness)
4	0-4	Blackout
	5-14	Red
	15-24	Green
	25-34	Blue
	35-44	White
	45-54	Cyan
	55-64	Yellow
	65-74	Orange
	75-84	Pink
	85-94	Purple
	95-104	Pastle green (green & white)
	105-114	Pastle red (red & white)
	115-124	Pastle blue (blue & white)
	125-134	Pastle pink (red, blue & white)
	135-144	Warm white (orange & white)
	145-150	Blackout
	151-200	Colour fade (151: slow fade, 200: fast fade)
	201-255	Colour change (201: slow change, 255: fast change)

7 channel mode:

Channel	Value	Function
1	0-255	Pan adjustment
2	0-255	Tilt adjustment
3	0-255	0-100% dimming (0: low brightness, 255: high brightness)
4	0-255	Red (0: low brightness, 255: high brightness)
5	0-255	Green (0: low brightness, 255: high brightness)
6	0-255	Blue (0: low brightness, 255: high brightness)
7	0-255	White (0: low brightness, 255: high brightness)

10 channel mode:

Channel	Value	Function
1	0-255	Pan adjustment
2	0-255	Tilt adjustment
3	0-255	Speed (pan & tilt)
4	0-255	0-100% dimming (0: low brightness, 255: high brightness)
5	0-255	Red (0: low brightness, 255: high brightness)
6	0-255	Green (0: low brightness, 255: high brightness)
7	0-255	Blue (0: low brightness, 255: high brightness)
8	0-255	White (0: low brightness, 255: high brightness)
9	0-4	Blackout
	5-14	Red
	15-24	Green
	25-34	Blue
	35-44	White
	45-54	Cyan
	55-64	Yellow
	65-74	Orange
	75-84	Pink
	85-94	Purple
	95-104	Pastle green (green & white)
	105-144	Pastle red (red & white)
	115-124	Pastle blue (blue & white)
	125-134	Pastle pink (red, blue & white)
	135-144	Warm white (orange & white)
	145-150	Blackout
	151-200	Colour fade (151: slow fade, 200: fast fade)
	201-255	Colour change (201: slow change, 255: fast change)
10	0-127	Sound control via controller is OFF
	128-255	Sound control via controller is ON

Changing the address:

To access the address menu, press the "**MODE**" button on the front of the unit to show $Addr$ is displayed. Press the "**ENTER**" button, the unit should now display $A001$. Use the "**UP**" and "**DOWN**" buttons to select $A001$ through $A512$. Press the "**ENTER**" button again, this will set the address.

To exit out of any of the above options, press the "**MODE**" button.

Slave mode:

To access slave mode press "**MODE**" until the display shows $5L\,nd$. Press the "**ENTER**" button, the unit should now display $5L\quad l$. Use the "**UP**" and "**DOWN**" buttons to select either $5L\quad l$ or $5L\quad 2$. Press the "**ENTER**" button again, this will enable your chosen slave mode.

To exit out of any of the above options, press the "**MODE**" button.

Adjusting the sound sensitivity:

To access the sound sensitivity menu press "**MODE**" until the display shows $5oUn$. Press the "**ENTER**" button, the unit should now display the sensitivity in three digits . Use the "**UP**" and "**DOWN**" buttons to select $00\,l$ through $l00$. Press the "**ENTER**" button again, this will set the sound sensitivity.

To exit out of any of the above options, press the "**MODE**" button.

Auto mode:

To access auto mode press "**MODE**" until the display shows $RuEo$. Press the "**ENTER**" button. The unit will now display $REO\,l$. Use the "**UP**" and "**DOWN**" buttons to select either $REO\,l$ or $5ou\,l$. Press the "**ENTER**" button again, this will enable your chosen auto mode.

To exit out of any of the above options, press the "**MODE**" button.

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

Static colour mode (to use the fixture as an uplighter):

To access static colour mode press "**MODE**" until the display shows $RuEo$. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select either $5ERE$. Press the "**ENTER**" button again, this will enable you to choose between $ELO\,l - EL\,l5$ or $FRdE$.

When using the $FRdE$ function press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select the desired fade speed between $5PO\,l - 5P\Xi\,l$. Press the "**ENTER**" button to confirm the setting.

To exit out of any of the above options, press the "**MODE**" button.

Other settings:

PRn (X motor positive/negative move set)	YES/NO
$E\,lE$ (Y motor positive/invert move set)	YES/NO
LEd (digital display ON/OFF set)	ON/OFF
$d\,5P$ (digital display invert)	YES/NO
$EP5E$ (function test)	
$HoUr$ (total fixture run time)	
$r5EE$ (reset)	

Setting the DMX address:

The DMX mode enables the use of a universal DMX controller. Each fixture requires a "start address" from 1- 511. 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 form 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.
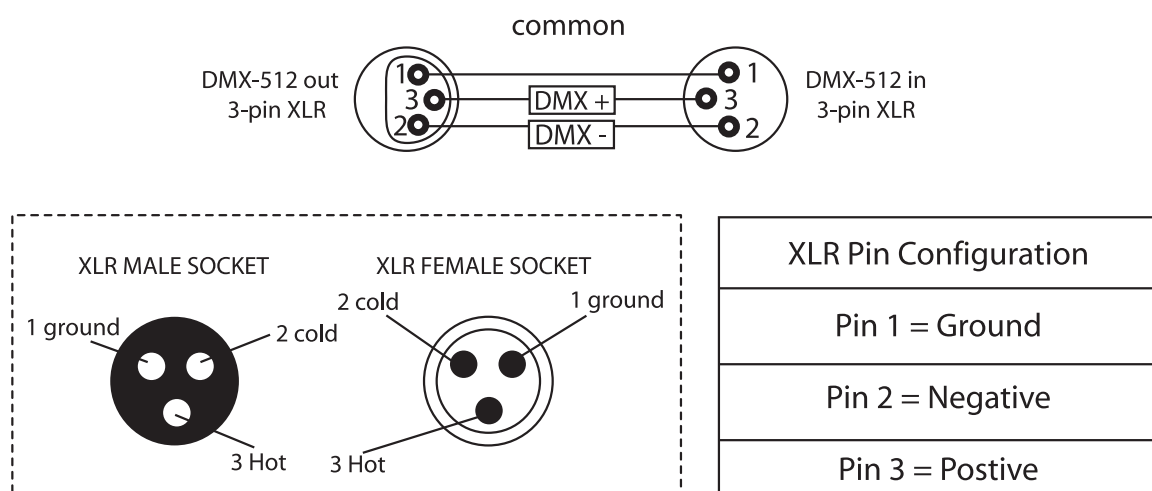
Please quote:

    CABL10 – 2m
    CABL11 – 5m
    CABL12 – 10m

Note: 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.
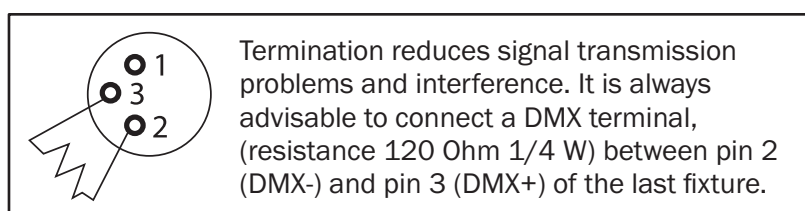
common

DMX-512 out
3-pin XLR

DMX +
DMX -

DMX-512 in
3-pin XLR

XLR MALE SOCKET

1 ground
2 cold
3 Hot

XLR FEMALE SOCKET

2 cold
1 ground
3 Hot

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

Special note:

Line termination:

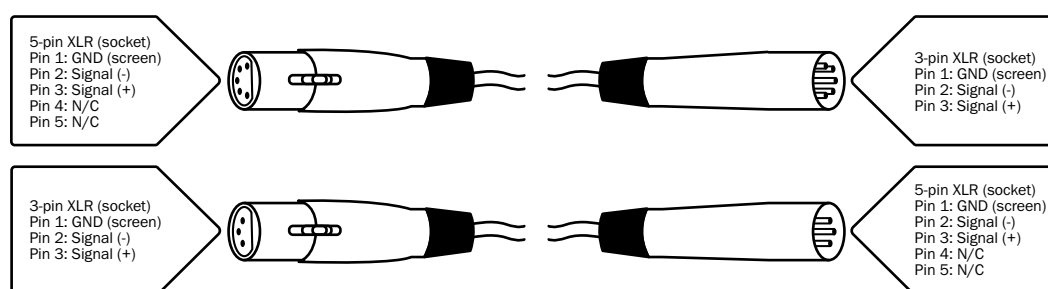When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

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.

5-pin XLR (socket)
Pin 1: GND (screen)
Pin 2: Signal (-)
Pin 3: Signal (+)
Pin 4: N/C
Pin 5: N/C

3-pin XLR (socket)
Pin 1: GND (screen)
Pin 2: Signal (-)
Pin 3: Signal (+)

3-pin XLR (socket)
Pin 1: GND (screen)
Pin 2: Signal (-)
Pin 3: Signal (+)

5-pin XLR (socket)
Pin 1: GND (screen)
Pin 2: Signal (-)
Pin 3: Signal (+)
Pin 4: N/C
Pin 5: N/C

*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.

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