EQUINOX

ORBITAL
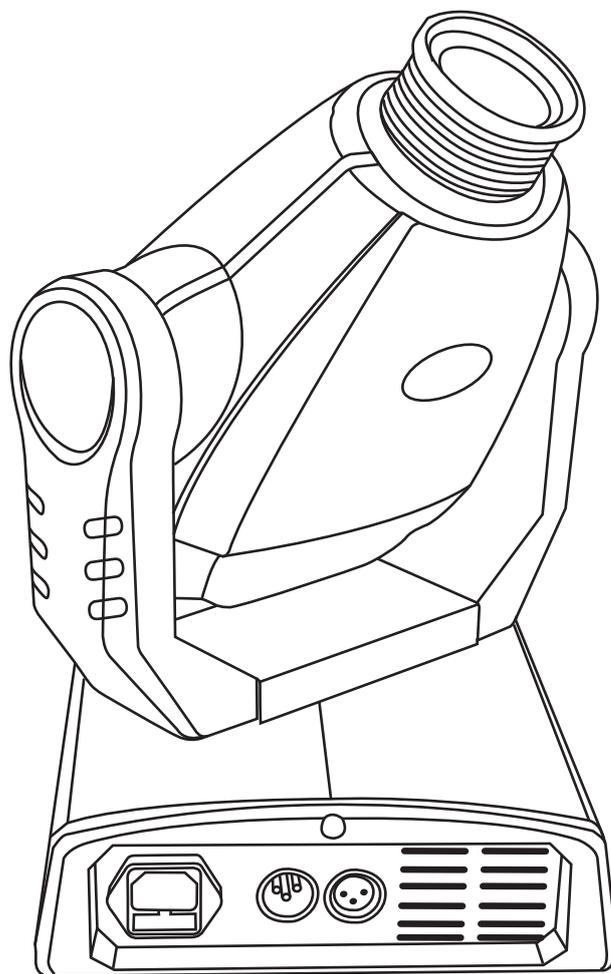

ORDER CODE: EQLED71

USER MANUAL

WARNING

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

CAUTION!

**Keep this equipment away from rain,
moisture and liquids.**

SAFETY INSTRUCTIONS

Every person involved with the installation, operation & maintenance of this
equipment should:
- Be competent
- Follow the instructions of this manual

**CAUTION! TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!**

Before your initial start-up, please make sure that there is no damage caused during
transportation. Should there be any, 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 equipment.
- Do not open the equipment and do not modify the equipment.
- 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 220v/240v.
- 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. 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 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, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight 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, electric shocks,
lamp failure etc.

Do not endanger your own safety and the safety of others!
Incorrect installation or use can cause serious damage to people and property.

You should find inside the carton the following items**:**

1, Equinox Orbital Moving Head   2, Power cable   3, User manual

Technical Specifications:

DMX channels: 6/11 selectable
Operating modes: 1, Sound Activated
                          2, Auto Run
                          3, DMX
                          4, Master/slave
Ultra Bright 25W LED output
Colour wheel: 8 Colours + White
Gobo wheel: 7 Gobos + Open
4 Push button LED digital display
Beam angle: 15 degrees
Pan: 540°, Tilt: 270°
0-100% dimming + strobe function
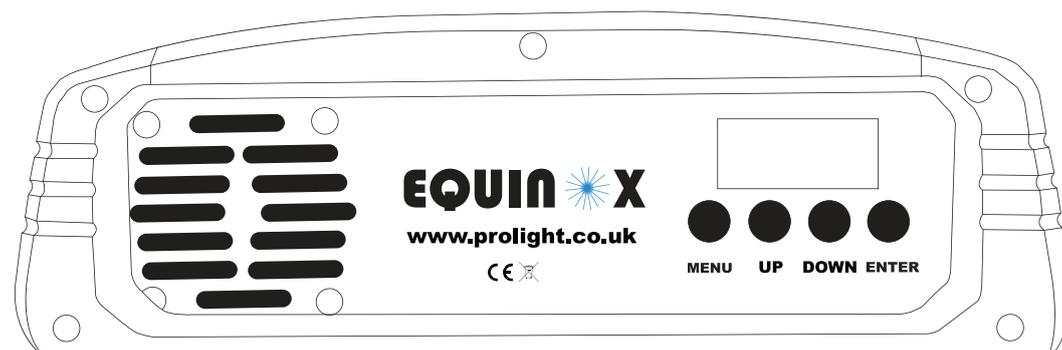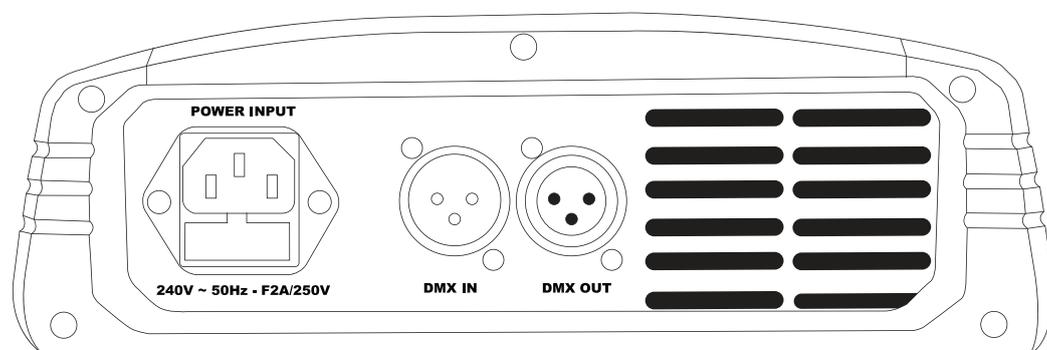IEC power in socket
3 pin XLR in/out sockets
Power consumption: 106W
Power supply: 240V - 50Hz
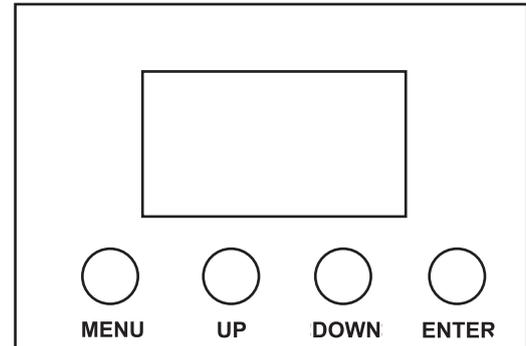Dimensions: 275 x 225 x 400mm
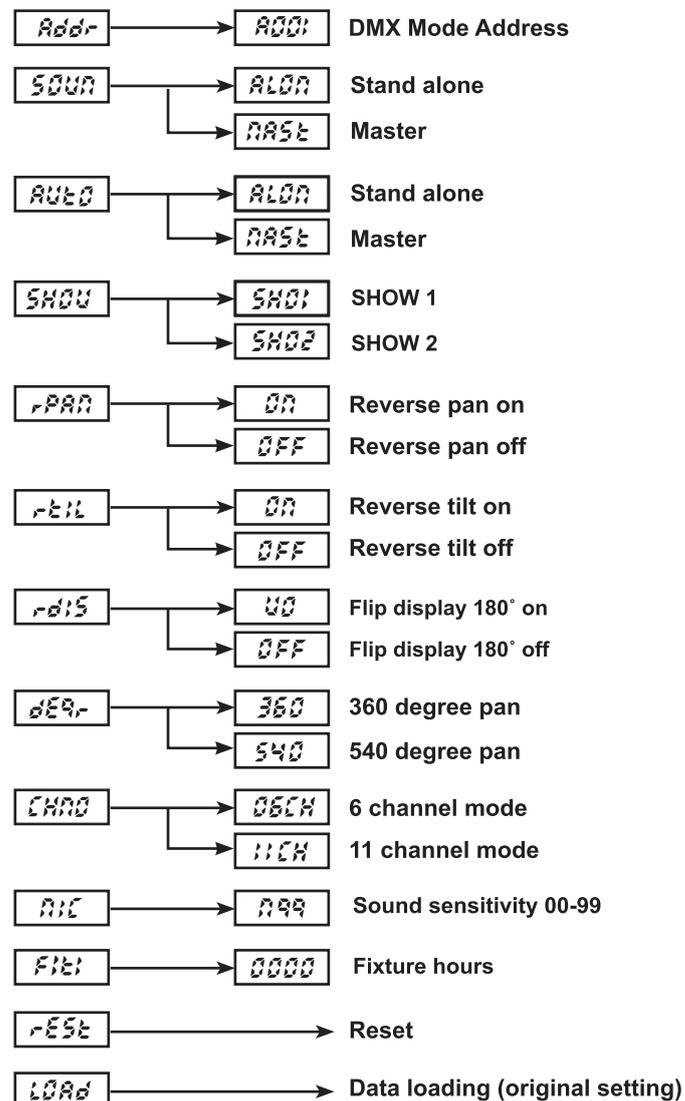Weight: 8.1Kgs

Overview

Control Panel Overview:

Button	Function
<MENU>	To access the menu or to return to a previous menu option
<UP>	Scrolls through the menu options in a ascending order
<DOWN>	Scrolls through the menu options in a descending order
<ENTER>	To select and store the current menu or option within a menu.

MENU   UP   DOWN   ENTER

To access the control panel functions, use the four push buttons located under the LED display.

When a function is selected, the LED display will show the first available option for that particular function. Use the **"UP"** and **"DOWN"** buttons to navigate through the options. Press the **"ENTER"** button to select the menu function that is currently displayed to enable or disable the menu option. To return to the previous menu or option without changing the value, press the **"MENU"** button.

User Menu Configurations:

Addr	*A001*	DMX Mode Address
SOUN	*ALON*	Stand alone
	MASt	Master
AUtO	*ALON*	Stand alone
	MASt	Master
SHOU	*SHO1*	SHOW 1
	SHO2	SHOW 2
rPAN	*ON*	Reverse pan on
	OFF	Reverse pan off
rtIL	*ON*	Reverse tilt on
	OFF	Reverse tilt off
rdIS	*UO*	Flip display 180˚ on
	OFF	Flip display 180˚ off
dE9r	*360*	360 degree pan
	540	540 degree pan
CHNO	*06CH*	6 channel mode
	11CH	11 channel mode
MIC	*M99*	Sound sensitivity 00-99
FItI	*0000*	Fixture hours
rESt		Reset
LOAd		Data loading (original setting)

11 channel DMX chart

Channel	Value	Function
1	0-255	Pan 540˚
2	0-255	Tilt 270˚
3	0-255	Pan/tilt movement speed (fast to slow)
4	0-13	White
	14-27	Yellow
	28-41	Pink
	42-55	Green
	56-69	Purple
	70-83	Blue
	84-97	Lime Green
	98-111	Orange
	112-127	Red
	128-190	Continuous forwards rotation (fast to slow)
	191-255	Continuous backwards rotation (slow to fast)
5	0-9	Open
	10-19	Gobo 1
	20-29	Gobo 2
	30-39	Gobo 3
	40-49	Gobo 4
	50-59	Gobo 5
	60-69	Gobo 6
	70-79	Gobo 7
	80-99	Gobo 1 + Shake effect (slow to fast)
	100-119	Gobo 2 + Shake effect (slow to fast)
	120-139	Gobo 3 + Shake effect (slow to fast)
	140-159	Gobo 4 + Shake effect (slow to fast)
	160-179	Gobo 5 + Shake effect (slow to fast)
	180-199	Gobo 6 + Shake effect (slow to fast)
	200-219	Gobo 7 + Shake effect (slow to fast)
	220-255	Gobo wheel rotation (slow to fast)
6	0-127	Manual gobo rotation
	128-191	Auto clockwise gobo rotation (fast to slow)
	192-255	Auto anti-clockwise gobo rotation (slow to fast)

11 channel DMX chart (cont..)

Channel	Value	Function
7	0-9	Shutter closed
	10-19	Shutter open
	20-127	Strobe 1 (slow to fast)
	128-137	Shutter open
	138-201	Strobe 2 (slow to fast)
	202-255	Shutter open
8	0-255	Dimmer 0-100%
9	0-16	No function
	17-33	Blackout with pan/tilt movement
	34-50	Blackout with all internal wheels moving
	51-67	Colour and gobo wheel reset
	68-84	All motor reset
	85-101	Built-in programme 1
	102-118	Built-in programme 2
	119-135	Built-in programme 3
	136-152	Built-in programme 4
	153-169	Built-in programme 5
	170-186	Built-in programme 6
	187-203	Built-in programme 7
	204-220	Built-in programme 8
	221-237	Built-in show 1
	238-255	Built-in show 2
10		Fine control of pan movement
11		Fine control of tilt movement

6 channel DMX chart

Channel	Value	Function
1	0-255	Pan 540˚
2	0-255	Tilt 270˚
3	0-13	White
	14-27	Yellow
	28-41	Pink
	42-55	Green
	56-69	Purple
	70-83	Blue
	84-97	Lime Green
	98-111	Orange
	112-127	Red
	128-190	Continuous forwards rotation (fast to slow)
	191-255	Continuous backwards rotation (slow to fast)
4	0-9	Open
	10-19	Gobo 1
	20-29	Gobo 2
	30-39	Gobo 3
	40-49	Gobo 4
	50-59	Gobo 5
	60-69	Gobo 6
	70-79	Gobo 7
	80-99	Gobo 1 + Shake effect (slow to fast)
	100-119	Gobo 2 + Shake effect (slow to fast)
	120-139	Gobo 3 + Shake effect (slow to fast)
	140-159	Gobo 4 + Shake effect (slow to fast)
	160-179	Gobo 5 + Shake effect (slow to fast)
	180-199	Gobo 6 + Shake effect (slow to fast)
	200-219	Gobo 7 + Shake effect (slow to fast)
	220-255	Gobo wheel rotation (slow to fast)
5	0-127	Manual rotation
	128-191	Auto clockwise rotation (fast to slow)
	192-255	Auto anti-clockwise (slow to fast)
6	0-9	Shutter closed
	10-19	Shutter open
	20-127	Strobe 1 (slow to fast)
	128-137	Open
	138-201	Strobe 2 (slow to fast)
	202-255	Open

DMX Control 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.

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):
• The Equinox Orbital 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 (figure 1).

Figure 1

Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight 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 figures 2 & 3 when making your own cables. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behaviour.
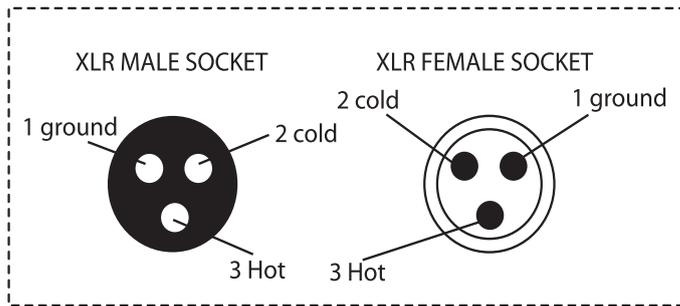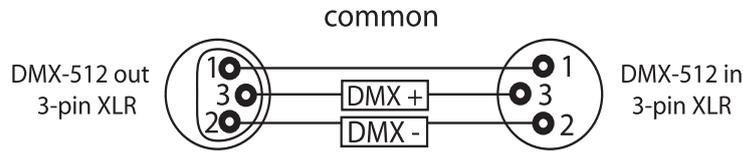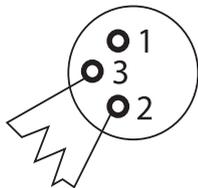
common

DMX-512 out
3-pin XLR

1
3
2

DMX +
DMX -

1
3
2

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

FIGURE 3   FIGURE 2

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.
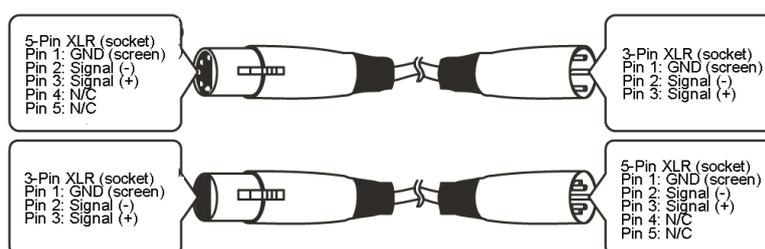
1
3
2

Termination reduces signal transmission problems and interferance. 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.

Using a cable terminator (part number CABL90) will decrease the possibilities of erratic behaviour.

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 Chart 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

EQUIN✳X

beyond your imagination

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