EQUINOX

Vortex
User Manual

Order code: EQLED073

WARNING

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

- Before 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 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.

Vortex

Boasting a combined 120W LED output, the 3 x 40W RGBW LEDs coupled with a zoom feature and a continuous front-lens rotation offers mobile DJs and entertainers a unique moving head that creates superb mid-air effects. The 4 push button OLED menu allows for easy access to the functions including DMX, auto, sound active and master/slave modes. Loaded with advanced internal programming including a 180 degree forward facing show which further enhances the sound active and auto modes delivering stunning light shows.

- 3 x 40W quad-colour LEDs (RGBW)
- Adjustable beam angle: 5° - 60°
- 10,380 Lux @ 2m (full on)
- Motorised zoom
- Pan: 540°, Tilt: 190°
- DMX channels: 10 or 17 selectable
- Auto, sound active and master/slave modes
- 0-100% dimming and variable strobe
- Supplied with quick release omega clamp
- 4 push button menu with OLED display
- PowerCON input/output
- 3-Pin XLR input/output
- Fan cooled

Specifications	Vortex
Power consumption	150W
Fuse	F2A 250V
Power supply	100~240V, 50/60Hz
Dimensions	360 x 265 x 175mm
Weight	6kg
Order code	EQLED073

5° - Lux
FULL ON	120000	29860	13300	7480	4780
R	21500	5370	2390	1340	859
G	39200	9809	4360	2450	1570
B	10200	2560	1140	640	410
W	58000	14540	6440	3630	2320

60° - Lux
FULL ON	11000	2738	1220	685	438
R	2140	534	237	134	85.4
G	3600	900	400	225	144
B	940	235	104	58.8	37.6
W	5080	1270	564	318	203

5°   60°

0m   1m   2m   3m   4m   5m

265mm   175mm

360mm

EQUINOX
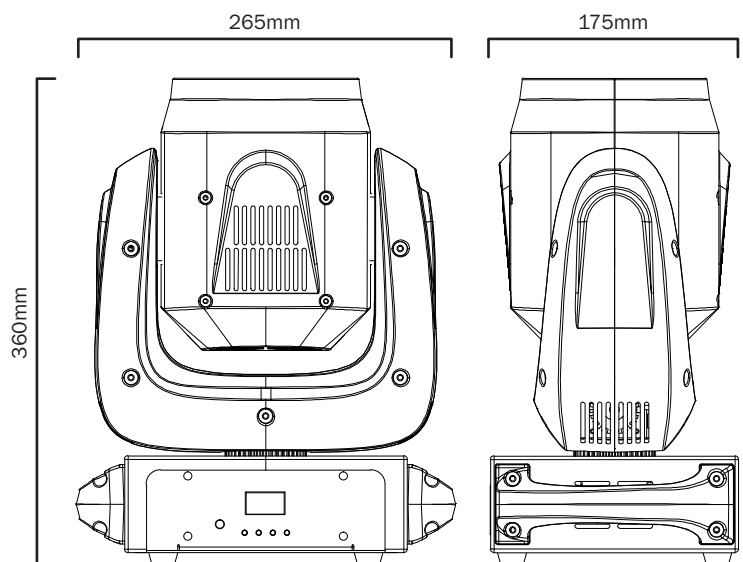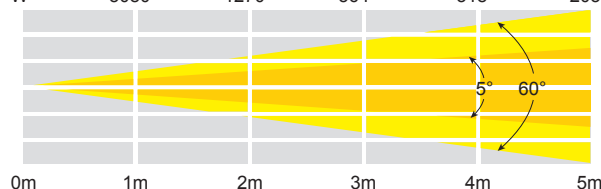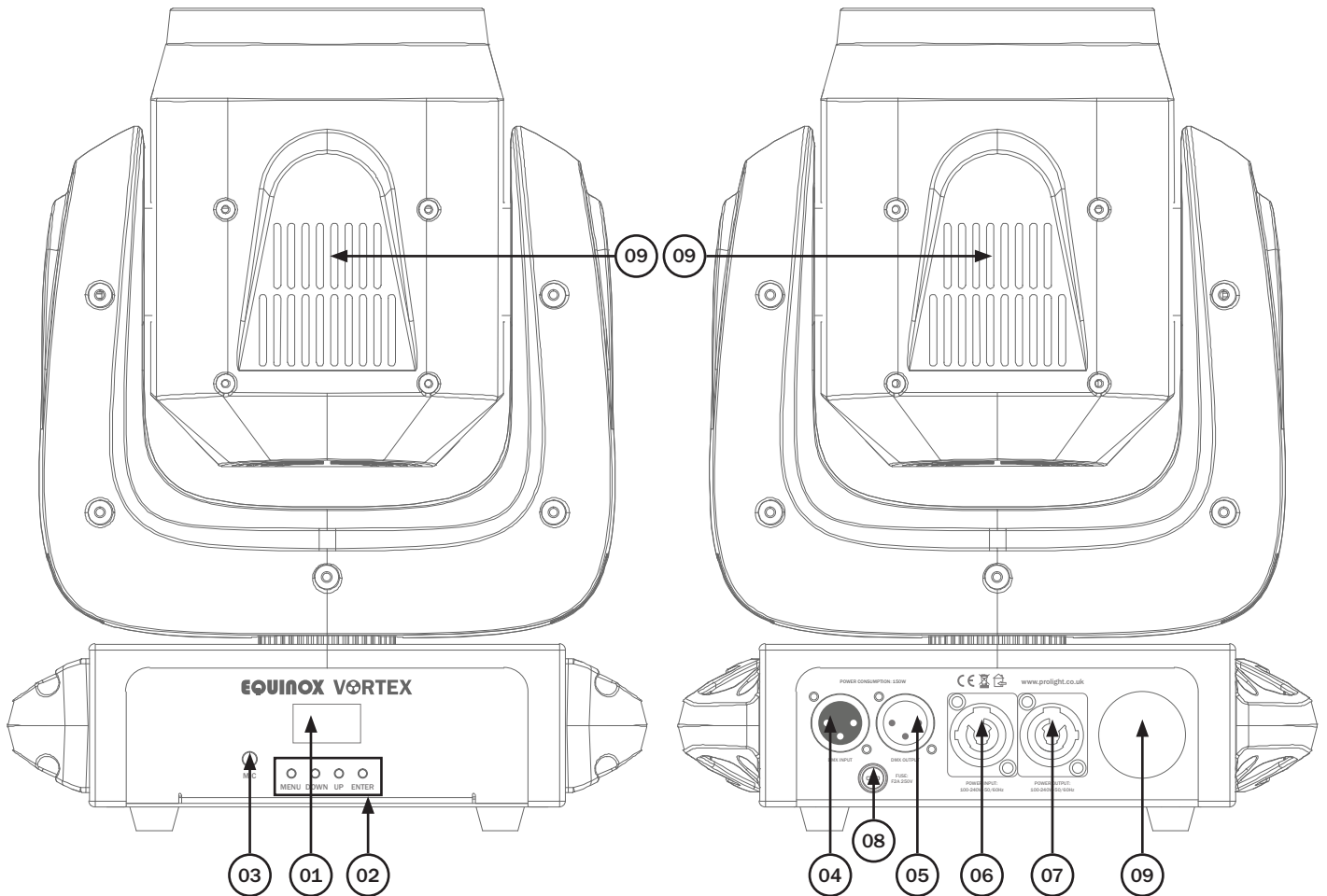
01 - OLED display
02 - Function buttons
03 - Microphone

04 - 3-Pin DMX input
05 - 3-Pin DMX output
06 - PowerCON input

07 - PowerCON output
08 - Fuse F2A 250V
09 - Fan cooling vents

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

Control Panel Menu:

The OLED control panel situated on the front of the fixture allows the user to access the menu system to adjust the fixtures settings. When the unit has been powered on it will show **"Equinox Vortex Resetting"**. The fixture will then return to its home screen. To access the main menu press the **"ENTER"** button and use the **"UP"** and **"DOWN"** buttons until the menu required is highlighted. Pressing the **"ENTER"** button on one of these options allows you to access the sub menu where you use the **"UP"** and **"DOWN"** buttons to select the option/value required.

Once the option/value has been selected press the **"ENTER"** button once more to confirm the setting.

Main Menu	Sub Menu (Default Settings in BOLD)	Options/Values		Description
1. DMX Address	**001**-512			DMX Address Setting
2. Running MODE	**DMX 17 Ch** (17 channel mode)			DMX Channel Setting
	DMX 10 Ch (10 channel mode)			
	Auto			Auto Mode
	Sound			Sound Mode
	Slave			Slave Mode
3. Auto Prog	Prog1-Prog04			Auto Mode Built-in Programs
4. Settings	Pan Rev	**OFF**		Pan Inverse Setting
		ON		
	Tilt Rev	**OFF**		Tilt Inverse Setting
		ON		
	Display Rev	**OFF**		Display Inverse Setting
		ON		
	Sensitivity	000-100		Sound Sensitivity Setting
	Speed Mode	FAST Speed		Pan/tilt Speed
		Slow Speed		
	Calibration	All to Origin		Calibration
		Adjust Pan	000-120	
		Adjust Tilt	000-120	
		Adjust Zoom	000-120	
		Adjust Rot	000-120	
		Adjust Red	000-255	
		Adjust Green	000-255	
		Adjust Blue	000-255	
		Adjust White	000-255	
	Factory Set	ON		Factory Reset
		OFF		
	Reset Motor			Motor Reset
5. System Info	Software Vx.xx			Software Version
	Mode			Fixtures Current Mode
	Address			Fixtures DMX Address

DMX channel modes:

Channel		Value	Function
10	17		
1	1	000-255	Pan adjustment 0-540°
	2	000-255	Pan fine adjustment
2	3	000-255	Tilt adjustment 0-190°
	4	000-255	Tilt fine adjustment
	5	000-255	Pan/tilt speed (fast-slow)
3	6	000-255	Master dimmer (0-100%)
4	7	000-004	LED off
		005-250	Strobe (slow-fast)
		251-255	LED on
5	8	000-255	Red dimmer (0-100%)
6	9	000-255	Green dimmer (0-100%)
7	10	000-255	Blue dimmer (0-100%)
8	11	000-255	White dimmer (0-100%)
9	12	000-255	Zoom (narrow-wide)
10	13	000-100	Effect lens indexing
		101-133	Effect lens shake (slow-fast)
		134-194	Effect lens anti-clockwise rotation (fast-slow)
		195-255	Effect lens clockwise rotation (slow-fast)
	14	000-010	No function
		011-020	Red
		021-030	Green
		031-040	Blue
		041-050	White
		051-060	Pastel Red
		061-070	Pastel Green
		071-080	Pastel Blue
		081-090	Yellow
		091-100	Cyan
		101-110	Magenta
		111-120	Pastel Yellow
		121-130	Pastel Cyan
		131-140	Pastel Magenta
		141-150	White (RGBW)
		151-200	Colour change (slow-fast)
		201-247	Colour fade (slow-fast)
		248-255	Colour change (sound activated)

DMX channel modes cont:

Channel		Value	Function
10	17		
	15	000-009	No function
		010-039	Zoom program 1
		040-069	Zoom program 2
		070-099	Zoom program 3
		100-129	Zoom program 4
		130-159	Zoom program 5
		160-189	Zoom program 6
		190-219	Zoom program 7
		220-255	Zoom program 8
	16	000-007	No function
		008-060	Pan/tilt program 1
		061-100	Pan/tilt program 2
		101-140	Pan/tilt program 3
		141-180	Pan/tilt program 4
		181-255	Pan/tilt (sound activated)
	17	000-050	No function
		051-100	Fast speed (10S)
		101-150	No function
		151-200	Slow speed (10S)
		201-255	Reset (10S)

Installation:

1) Bolt each clamp to the Omega bracket(s) with the bolt and locking nut throughout the hole in the bracket.

2) Fasten the Omega bracket(s) to the bottom of the moving head base by inserting the quick lock fasteners into the receiving holes in the base and tighten.

3) Hang the fixture to the support through the clamp and secure with the locking nuts. Fasten the safety cable through the bottom of the base and over the support.
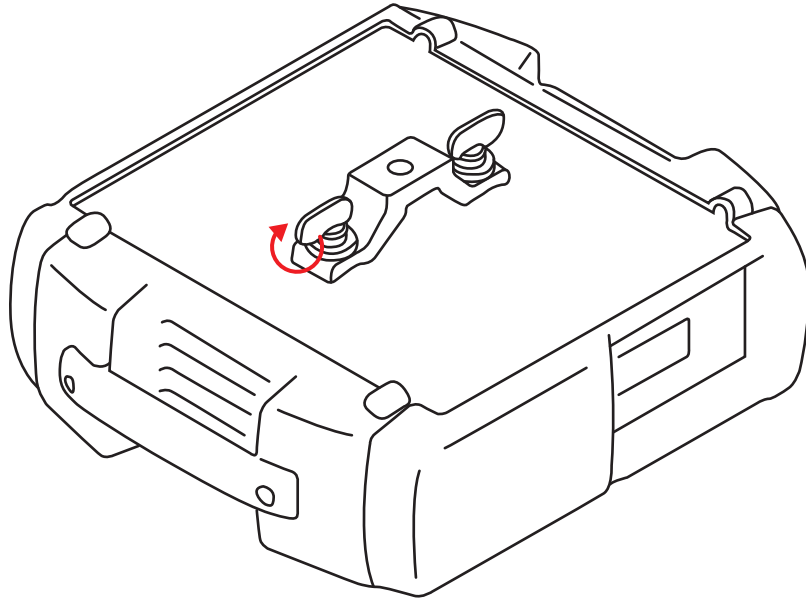
Attention:

• Always ensure that the structure to which you are attaching the fixture is secure and able to support a weight of 10 times the fixtures weight.

• Always use a safety cable that cab hold 12 times the weight of the fixture when installing.

• Make sure that the fixture is firmly attached in a way that no vibrations or movement could occur during operation.

• The equipment must be installed by professionals and must be installed in an area where it is out of reach of people and no one can pass by or under it.

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.
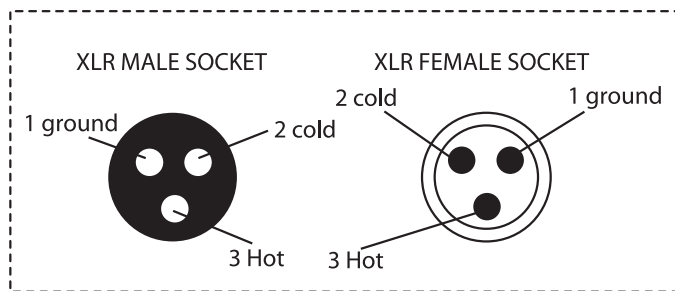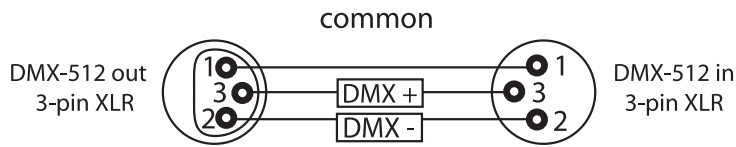Please quote:

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

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
3 Hot
1 ground

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

Special note:

Line termination:

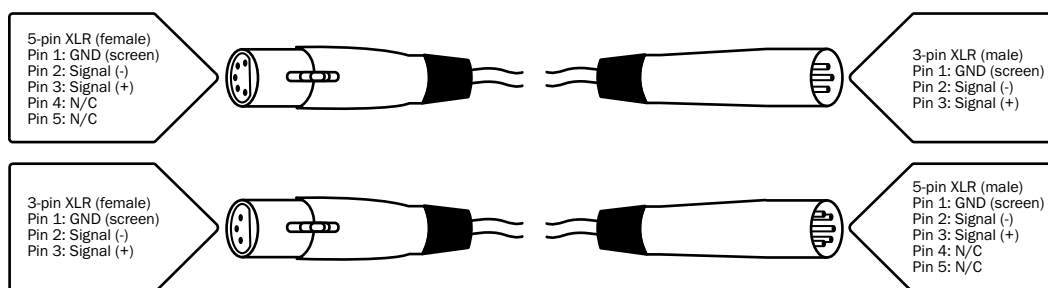When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

Using a cable terminator will decrease the possibilities of erratic behaviour.
(3-pin - Order ref: CABL90, 5-pin - Order ref: CABL89)

1
3
2

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

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

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

5-pin XLR (male)
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 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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