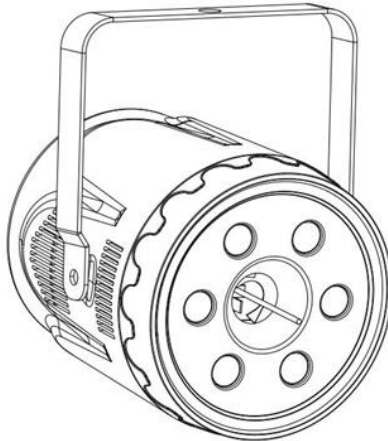# MESMERIZER

3D Animation Laser

Item ref: 152.745UK

User Manual

Please read through this manual thoroughly before use, any damage
Caused by misuse of product will not be covered by warranty.

Thank you for choosing the QTX Mesmerizer 3D animation Laser With a stunning set of 440 dynamic and static patterns available including jaw-dropping 3D laser animations, colourful RGBW patterns and wall washes, the Mesmerizer is sure to pack a punch at any party, show or event. 4 control modes including auto, sound to light and DMX512 make this compact and lightweight unit perfect for any occasion large or small.

In the box:

Your Mesmerizer should arrive with you in a single carton in good condition. The carton should contain 1x main unit with bracket, 1x UK IEC mains lead, 1x laser key and 1x user guide.

Warning:

To prevent risk of fire or electric shock, do not expose the unit to rain or damp environments. In the event of a spillage, disconnect the mains and allow the unit to dry out naturally. Qualified personnel should then check the unit before continuing use.

Please do not open cover, contains high voltage. This product is not serviceable or repairable by the end user. Please refer to qualified personnel for service and repair.

Caution: Laser radiation

Avoid pointing directly towards eyes. Laser output can cause injury if viewed directly. This product is a Class 3B laser and should only be installed and used by persons who are trained in the management of laser radiation and are able to operate in accordance within the guidance given by the Health and Safety Executive (HSE) in HS(G)95: "The Radiation Safety of Lasers used for Display purposes". Copies of this guide can be downloaded from: www.avsl.com/assets/documents/hsg95.pdf
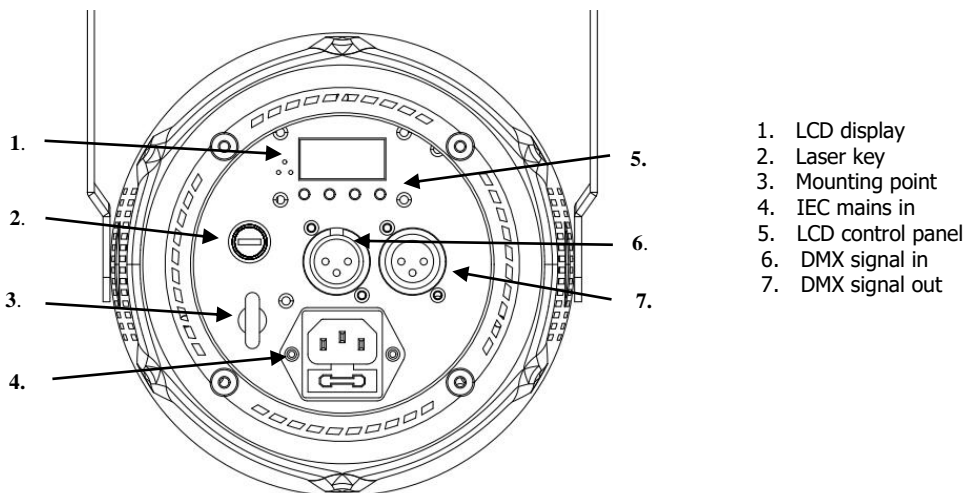
Placement:

- Use the included mounting bracket to fix to a stand or lighting truss
- Use secondary safety fixings if mounting overhead.
- Keep away from damp or dusty environments.
- Ensure adequate air-flow around the fixture housings.
- Ensure adequate access to controls and connections.
- Do not aim LED or laser output directly into line of sight, as this can result in eye injury.

Cleaning:

- Use a soft cloth with a neutral detergent to clean the casing as required.
- Use a vacuum cleaner to clear ventilation grilles of any dust or debris build-ups.
- Do not use strong solvents for cleaning the unit.

Rear panel controls:

1. LCD display
2. Laser key
3. Mounting point
4. IEC mains in
5. LCD control panel
6. DMX signal in
7. DMX signal out

Manual control menu:

Press the "**MENU**" button to enter the settings menu.
Press "**UP**" and "**DOWN**" buttons to navigate through various setting functions.
Press "**ENTER**" button to confirm the desired setting.

Menu	Function	Description
Addr	A001-A512	DMX address settings
CHND	21CH	DMX 21CH select
	7CH	DMX 7CH select
Auto	Au0	Auto random mode
	Au1-Au15	Auto group selections
SPEE	SP0-SP9	Auto mode speed adjust-slow to fast
SoUn	So0-So15	Sound to light range selections
SoSE	SE0-SE9	Sound to light sensitivity adjust-low to high
vEr	vE10	Software version 1.0

DMX modes:

The Mesmerizer can be controlled by DMX signal, simply connect the DMX signal source to the DMX input on the unit via a balanced XLR lead. Extra fixtures can be controlled by the same DMX signal by looping through the DMX out on the unit. To enter DMX mode, select A001 from the menu and confirm the correct start address by using the "**UP**" and "**DOWN**" buttons and "**ENTER**". The A on the LED display will begin to flash once it's received the DMX signal from the controller. This unit has either 7 or 21 DMX channels as indicated in the tables below:

7-CH (start address A001 for 1st unit, A008 for 2nd unit etc):

Channel	Function	Value	Details
CH1	Dimmer	0-9	No function
		10-255	Total dimmer, laser on and LED for dimmer
CH2	Strobe	0-9	LED No function
		10-255	LED Strobe from slow to fast
CH3	LED colour control	0-9	LED No function
		10-79	LED colour macro
		80-159	LED jump from slow to fast
		160-255	LED gradual change from slow to fast
CH4	Laser colour control	0-1	Laser off
		2-69	W-R--B-P-CYAN-Y-G (Fixed colour)
		70-79	Total colour change (chase speed controlled by CH5)
		80-89	Default colour (chase speed controlled by CH5)
		90-94	Rainbow colour (chase speed controlled by CH5)

		95-114	2-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		115-139	3-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		140-164	4-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		165-189	8-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		190-224	16-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		225-229	Colour dynamic chase 1 (speed controlled by CH5)
		230-234	Colour dynamic chase 2 (speed controlled by CH5)
		235-239	Colour dynamic chase 3 (speed controlled by CH5)
		240-244	Colour dynamic chase 4 (speed controlled by CH5)
		245-249	Colour dynamic chase 5 (speed controlled by CH5)
		250-255	Colour dynamic chase 6 (speed controlled by CH5)
CH5	Colour chase speed	0-9	No function
		10-127	Clockwise colour chase from slow to fast
		128-255	Anti-clockwise colour chase from slow to fast
CH6	Inner dynamic effect	0-1	No function
		3-183	Inner dynamic effect single option, 2 datas as one effect, speed and colour controlled by CH7
		184-248	Inner dynamic effect group option, 5 datas as one effect, speed and colour controlled by CH7
		249-255	Random auto, speed and colour controlled by CH7
CH7	Inner dynamic effect speed	0-127	Speed from fast to slow by inner programme
		128-255	Speed from fast to slow by DMX controller

21-CH (start address A001 for 1st unit, A022 for 2nd unit etc):

Channel	Function	Value	Details
CH1	Dimmer	0-9	No function
		10-255	Total dimmer, laser on and LED for dimmer
CH2	Strobe	0-9	LED No function
		10-255	LED Strobe from slow to fast
CH3	LED colour control	0-9	LED No function
		10-79	LED colour macro

CH	Function	Value	Description
		80-159	LED jump from slow to fast
		160-255	LED gradual change from slow to fast
CH4	Laser colour control	0-1	Laser off
		2-69	W-R--B-P-CYAN-Y-G (Fixed colour)
		70-79	Total colour change (chase speed controlled by CH5)
		80-89	Default colour (chase speed controlled by CH5)
		90-94	Rainbow colour (chase speed controlled by CH5)
		95-114	5-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		115-139	6-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		140-164	7-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		165-189	8-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		190-224	16-Segment colour option, 5 datas as one step (chase speed controlled by CH5)
		225-229	Colour dynamic chase 1 (chase speed controlled by CH5)
		230-234	Colour dynamic chase 2 (chase speed controlled by CH5)
		235-239	Colour dynamic chase 3 (chase speed controlled by CH5)
		240-244	Colour dynamic chase 4 (chase speed controlled by CH5)
		245-249	Colour dynamic chase 5 (chase speed controlled by CH5)
		250-255	Colour dynamic chase 6 (chase speed controlled by CH5)
CH5	Colour chase speed	0-9	No function
		10-127	Clockwise colour chase from slow to fast
		128-255	Anti-clockwise colour chase from slow to fast
CH6	Patterns option	0-255	Patterns option (patterns group controlled by CH7)
CH7	Patterns group option	0-24	Inner patterns group 1
		25-49	Inner patterns group 2
		50-74	Inner patterns group 3
		75-99	Inner patterns group 4
		100-124	Inner patterns group 5
		125-149	Dynamic patterns group 1
		150-174	Dynamic patterns group 2

CH8	Pattern size	175-255	No function
CH8	Pattern size	0-255	Pattern size option by manual
CH9	Pattern auto zoom	0-15	Pattern size option
		16-55	From small to big speed option
		56-95	From big to small speed option
		96-135	Big and small zoom speed option
		136-175	Cycle zoom effect 1
		176-215	Cycle zoom effect 2
		216-255	Cycle zoom effect 3
CH10	Patterns middle rotation	0-127	Rotation angle option
		128-191	Clockwise rotation speed option
		192-255	Anti-clockwise rotation speed option
CH11	Patterns X rotation	0-127	X location option
		128-255	X speed option
CH12	Patterns Y rotation	0-127	Y location option
		128-255	Y speed option
CH13	Horizontal remove	0-127	Horizontal location option
		128-255	Horizontal remove speed from slow to fast
CH14	Vertical remove	0-127	Vertical location option
		128-255	Vertical remove speed from slow to fast
CH15	X wave	0-9	No function
		10-255	Wave range and speed adjust
CH16	Patterns drawing	0-1	No function
		2-63	Manual drawing 1
		64-127	Manual drawing 2
		128-153	Auto drawing increase
		154-179	Auto drawing decrease
		180-205	Auto drawing, reverse from increase to decrease
		206-255	Auto drawing, syntropy from increase to decrease
CH17	Patterns trace	0-15	No function

		166-255	Trace option, range from big to small
	option		
CH18	Trace speed	0-255	Trace speed from slow to fast
CH19	Gobo wheel	0-255	Laser gobos wheel change
CH20	Inner dynamic effect	0-1	No function
		3-183	Inner dynamic effect single option, 2 datas as one effect, speed and colour controlled by CH21
		184-248	Inner dynamic effect group option, 5 datas as one effect, speed and colour controlled by CH21
		249-255	Random auto, speed and colour controlled by CH21
CH21	Inner dynamic effect speed	0-127	Speed from fast to slow by inner programme
		128-255	Speed from fast to slow by DMX controller

Specifications:

Power supply	110-240Vac, 50/60Hz (IEC)
Power consumption	40W (max)
Fuse rating	F2A
Laser power	1500mW
Laser Class	3B
DMX channels	7/21
LED power	6x 3W RGBW
Modes	Auto/Sound/DMX512/Master-Slave
Connections	IEC power, DMX in/out (XLR), Laser key
Dimensions	210 x 217 x 235mm
Weight	2.1kg

Troubleshooting:

No power (mains)	Check mains voltage is correct and outlet is switched on
	Check IEC lead and fuse (if fuse continually blows, refer to your dealer)
No laser or light output	Check control panel mode settings
	Check DMX settings from controller (dimmer levels, blackout etc.)
	Check laser key on rear panel is turned on
Unresponsive to DMX	Check that unit is in DMX mode and ensure the A on the DMX address flashes to confirm it's receiving a DMX signal
	Check DMX controller is on correct fixture/page
	Check master dimmer value
	Check correct DMX address is set
	Check DMX connection and leads
Overheating/ cutting out	Ensure adequate ventilation and unit is not too close to a heat source

This product is classed as Electrical or Electronic equipment and should not be disposed
with other household or commercial waste at the end of its useful life.
The goods must be disposed of according to your local council guidelines.