

## HADRON

Item ref: 150.456UK

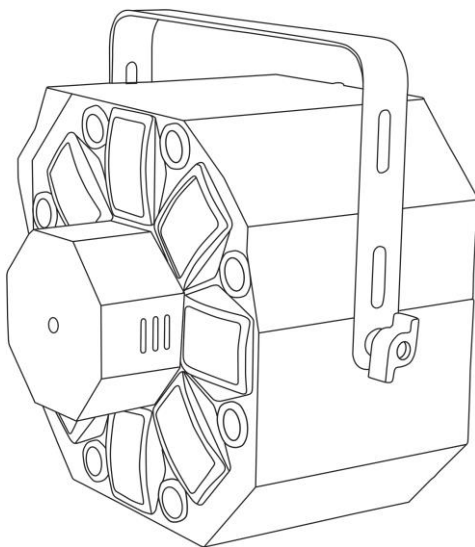
### 3-in-1 LED Light Effect

### User Manual

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

An incredible 3-in-1 light effect combining an LED projector, strobe and laser in one compact unit. This dynamic effect covers a large area and can be operated by built-in auto or sound-to-light programs for an easy plug and play show. Multiple Hadron effects can be connected together using the master/slave function with DMX to create a fantastic synchronised light show.

- 5 single colour bright 3W LEDs in red, green, blue, white and amber produce the classic Derby effect
- 8 bright 1W white LEDs create strobe effect
- 50mW green and 150mW red lasers create firefly, firework and star cluster effects
- 9 preset auto programs for different effect combinations
- Auto, sound-to-light, DMX or master/slave controls
- 1 or 22 channel DMX control
- We recommend that this product is used within the guidelines HSG95



### Specifications

Power supply	100-240Vac, 50/60Hz	Laser class	3B
Power	30W	Beam angle	90°
Fuse rating	F3A	DMX channels	1 or 22
Effect LEDs	5 x 3W (R,G,B,W,A)	DMX connection	XLRM in, XLR out
Strobe LEDs	8 x 1W white	Dimensions	295 x 225 x 285mm
Red laser	150mW, 532nm	Weight	3.6kg
Green laser	50mW, 650nm	Laser safety standard	BSEN62471:2008

### In the box

1 x HADRON unit with bracket, 1 x UK IEC mains lead and 1 x manual.



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



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. Always check the correct voltage and the condition of the IEC lead before connecting to a power outlet. Always ensure any DMX leads used are in good condition with no short connections or damaged plugs.



### Warning

This item contains laser radiation, no user serviceable/repairable parts within. Please refer to licensed electrician to perform any required repair or maintenance. This product is strictly for professional use only. Approved personnel required to install and operate the unit, strictly following the laser health and safety guide HSG95.

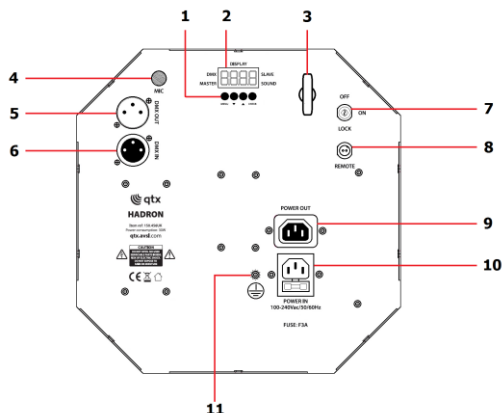
For detailed information regarding HSG95, please see the below web link:

<http://www.hse.gov.uk/pubns/books/hsg95.htm>

**LASER RADIATION  
AVOID EXPOSURE TO BEAM  
CLASS 3B LASER PRODUCT**



This product is a class 3B laser, which means extreme care needs to be taken when operating the device. This laser can cause permanent damage to eyesight through misuse or misconduct. Please read through this manual thoroughly before use.



1. 4 buttons control
2. 7 segment LED display
3. I-bolt for secondary flying point
4. Microphone
5. DMX signal out
6. DMX signal in
7. Laser keyed switch
8. 2 pin threaded connector for laser emergency stop
9. IEC mains out
10. IEC mains in
11. Earth binding (DO NOT UNSCREW)

## Manual control menu

Press the “menu” button to enter the setting menu.

Press “up” and “down” to navigate through various setting options.

Press “enter” to enter the desired setting.

Choose set value by “up” and “down” buttons and confirm setting by pressing “enter”.

Display	Mode	Press ENTER for setting
<i>Addr</i>	DMX address	<i>ADD 1</i> to <i>AS 12</i>
<i>Chnd</i>	DMX channel mode	<i>1Ch</i> or <i>2 1Ch</i>
<i>SLnd</i>	Slave mode	<i>1ASL</i> = master, <i>SL_1</i> = slave 1, <i>SL_2</i> = slave 2
<i>Shnd</i>	Auto mode	<i>Sh_0</i> to <i>Sh_8</i> , <i>AUTO</i>
<i>SoUn</i>	Sound activation	<i>on</i> = sound to light on, <i>oFF</i> = sound to light off
<i>SEnS</i>	Microphone sensitivity	<i>0 - 100</i> (0-100% gain)
<i>bLnd</i>	Blackout mode	<i>no</i> = on, <i>YES</i> = blackout
<i>LEd</i>	LED display dimmer	<i>oFF</i> = display off after 20s <i>on</i> = constant display
<i>di SP</i>	LED display inverted	<i>di SP</i> / <i>dSI P</i> (normal or inverted display)
<i>tESL</i>	Fixture test sequence	Fixture steps through all functions – press MENU to exit
<i>hoUr</i>	Fixture hours	Displays how many hours of use for the fixture

## Operation

The HADRON can operate in stand-alone, master, slave or DMX modes.

### Stand-alone

For stand-alone mode, first choose whether sound-to-light is required by selecting **on** or **off** from **SoLn**. Then select one of the eight pre-programmed modes from **Shnd** option:

**Sh\_0** - Random show

**Sh\_1** - Derby, Laser and Strobe fully on

**Sh\_2** - Derby and Laser 1

**Sh\_3** - Derby only

**Sh\_4** - Laser only

**Sh\_5** - Strobe only

**Sh\_6** - Derby and Laser 2

**Sh\_7** - Derby on, Laser/Strobe alternating

**Sh\_8** - Strobe with laser

### Master/slave

Additional HADRON units can be controlled by one master unit allowing synchronisation.

Ensure the master unit slave mode **SLnd** is set as **AST** and the controlled unit slave mode is set as **SL\_1** or **SL\_2**. Choose **SL\_1** for same direction movement as master unit and choose **SL\_2** for oppose direction movement. Connect DMX out from the master unit to the DMX in of the slave unit.

### DMX mode

The HADRON can be control by DMX signal, simply connect the DMX signal source to the DMX in of 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 HADRON. Ensure the correct DMX start address is set from the **Addr** option on the manual control.

### Laser safety function

The laser will only function when the laser safety key switch is turned to the "ON" position. When in the "OFF" position, the HADRON will only use strobe and derby for all settings. The remote socket below the key switch serves a similar function; the laser function will be disabled when the two connections of this socket are connected. To restart the laser function, the key switch need to be turned off and on again.

## DMX channel value reference

1 channel mode:

Channel	DMX Value	Function
Channel 1 sound-to-light active from 008-255	000-007	Black out
	008-037	Show mode 1
	038-067	Show mode 2
	068-097	Show mode 3
	098-127	Show mode 4
	128-157	Show mode 5
	158-187	Show mode 6
	188-217	Show mode 7
	218-247	Show mode 8
	248-255	Random show mode 1-8

21 channel mode:

Channel	DMX Value	Function
Channel 1	000-255	Derby master dimmer 0-100%
Channel 2	000-255	Derby strobe speed
Channel 3	000-255	Derby red dimmer 0-100%
Channel 4	000-255	Derby green dimmer 0-100%
Channel 5	000-255	Derby blue dimmer 0-100%
Channel 6	000-255	Derby white dimmer 0-100%
Channel 7	000-255	Derby amber dimmer 0-100%
Channel 8	000-255	Derby rotation speed 0-100%
Channel 9	000-255	White flash master dimmer 0-100%
Channel 10	000-255	White flash strobe speed 0-100%
Channel 11	000-255	White flash LED1 dimmer 0-100%
Channel 12	000-255	White flash LED2 dimmer 0-100%
Channel 13	000-255	White flash LED3 dimmer 0-100%
Channel 14	000-255	White flash LED4 dimmer 0-100%
Channel 15	000-255	White flash LED5 dimmer 0-100%
Channel 16	000-255	White flash LED6 dimmer 0-100%
Channel 17	000-255	White flash LED7 dimmer 0-100%
Channel 18	000-255	White flash LED8 dimmer 0-100%
Channel 19	000-255	0-x red laser off, x-255 red laser on
Channel 20	000-255	0-x green laser off, x-255 green laser on
Channel 21	000-255	Laser rotation

## 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 output	Check laser safety key lock is turned to the On position
	Switched safety key lock off and on again to reactivate laser function if it has been previously deactivate via remote socket
No LED display	Press any control panel button and check LED setting in menu
No light output	Check control panel mode settings (standby, slave, sensitivity, DMX)
	Check DMX settings from controller (dimmer levels, blackout etc.)
No strobe output	Check strobe settings on control panel or from DMX controller
Unresponsive to DMX	Check DMX connection and leads
	Check that DMX mode is enabled (set "Addr" on control panel)
Overheating/ cutting out	Ensure that the 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.

*Errors and omissions excepted.  
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