

MHS-90L

Item ref: 150.458UK

90W LED Moving Head with Laser

User Manual

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

An eye-popping moving head comprising 6 powerful 10W RGBW LEDs and bright green laser which combine to provide dazzling 3D room filling effects and washes. The unit can be operated on auto, sound-to-light or DMX modes and can be free standing or mounted to trussing using the supplied fixing bracket. Ideal for small stages, bars, nightclubs and mobile DJs the MHS-90L delivers smooth, feature packed performance.



In the box:

Your MHS-90L should arrive with you in a single carton in good condition. The carton should contain 1 x main unit with bracket, 1 x UK IEC mains lead and 1 x manual.

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



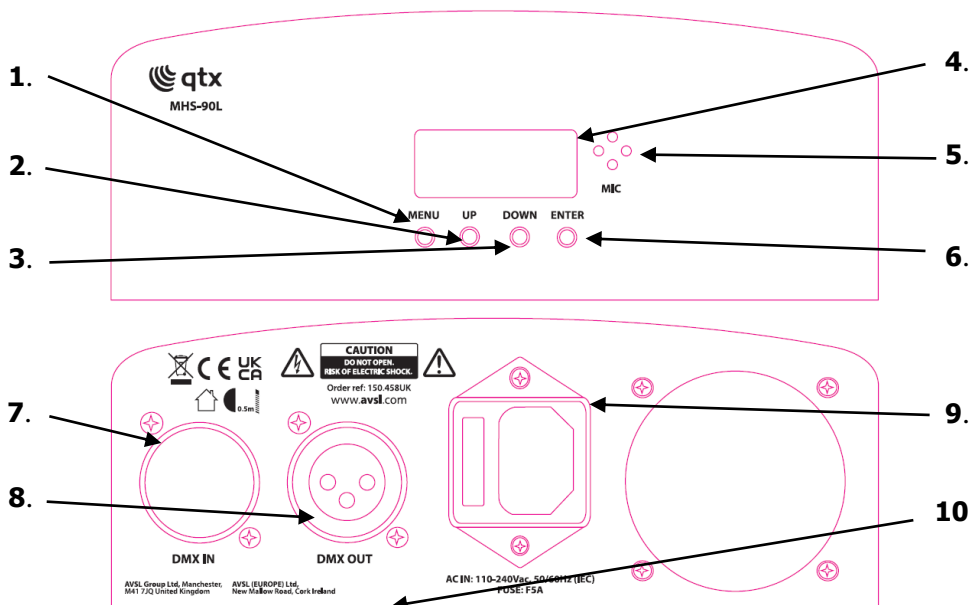
Placement:

- 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 and control



1. **Menu button**
2. **Up button**
3. **Down button**
4. **LED display**
5. **Microphone**
6. **Enter button**
7. **DMX input**
8. **DMX output**
9. **IEC input (110-240 Vac, 50/60 Hz)**
10. **Laser key (on underside)**

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 | 15CH | Channel select |
| SLnd | DMX | DMX mode |
| | Auto | Auto fast running mode |
| | Sound | Sound active mode |
| | Aut1 - Aut5 | Auto mode selection |
| PAN | NO | PAN motor forward mode |
| | YES | PAN motor reverse mode |
| TiL | NO | Tilt motor forward mode |
| | YES | Tilt motor reverse mode |
| SEne | 0-100 | Sound active sensitivity adjustment |
| LED | ON/OFF | LED display setting |
| dISP | ON/OFF | Reverse display mode |
| Ver | | Software version number |
| Faet | YES/NO | Factory reset |

DMX mode:

The MHS-90L 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 15 DMX channels as indicated in the table below:

| Channel | Function | DMX value and description |
|---------|----------------|--------------------------------|
| 1 | PAN | 0-255 PAN adjust |
| 2 | PAN fine | 0-255 PAN fine adjust |
| 3 | Tilt | 0-255 Tilt adjust |
| 4 | Tilt fine | 0-255 Tilt fine adjust |
| 5 | PAN/Tilt Speed | 0-255 P/T Speed (slow to fast) |
| 6 | Master dimmer | 0-255 Dimmer (0-100%) |
| 7 | Strobe | 0-255 Strobe (slow to fast) |
| 8 | Red pattern | 0-255 Red (0-100%) |
| 9 | Green pattern | 0-255 Green (0-100%) |
| 10 | Blue pattern | 0-255 Blue (0-100%) |

| | | |
|----|------------------|---|
| 11 | White pattern | 0-255 White (0-100%) |
| 12 | Pattern rotation | 0-59 0-360° mode, 60-119 Rotate clockwise (fast to slow), 120-179 Rotate anticlockwise (fast to slow), 180-255 Back and forth mode (slow to fast) |
| 13 | Green Laser | 0-255 Laser dimmer (0-100%) |
| 14 | Macro functions | 0-49 No function, 50-200 Auto mode, 201-255 Sound active mode |
| 15 | Reset | 0-240 No function, 241-255 Reset |

Specifications:

| | |
|--------------------------|--|
| Power supply | 110-240Vac, 50/60Hz (IEC) |
| Power consumption | 90W |
| Fuse rating | F5A |
| LED power | 6x 10W RGBW, 30mW green laser |
| Modes | Auto, sound, master/slave, DMX512 |
| DMX channels | 15CH |
| PAN range | 540° |
| Tilt range | 270° |
| Effects | RGBW pattern, green laser, strobe effect |
| Dimensions | 210 x 145 x 270mm |
| Weight | 3.127kg |

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 light output | Check control panel mode settings |
| | Check DMX settings from controller (dimmer levels, blackout etc.) |
| No laser output | Check laser key isn't turned off |
| 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 not set to black out |
| | Check DMX controller is on correct fixture/page |
| | Check master dimmer value |
| | Check correct DMX address is set |
| Overheating/ cutting out | Check DMX connection and leads |
| | 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.

Errors and omissions excepted.

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