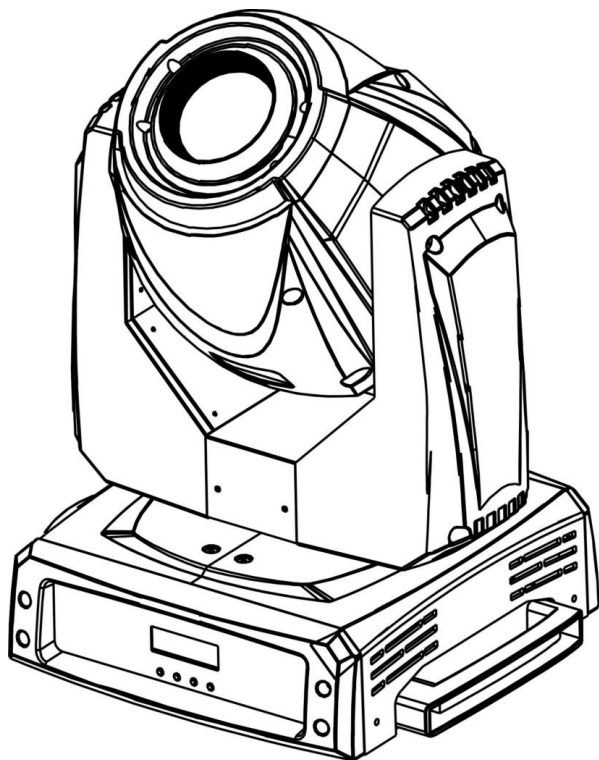


Equinox MS550



User Manual

Order codes: EQLED003

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1. Safety Instruction



Please read the instructions carefully as they include important information about installation, usage and maintenance.

Please keep this User Guide for future consultation. If you sell the unit to another user be sure that they also receive this.

Unpack and check carefully that there is no transportation damage before using the unit.

- Before operating, ensure that the voltage and frequency of the power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only. Use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect the mains power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as they may cause a fire hazard.
- Always use a safety cable when installing this unit. Do not carry the unit with its head only; always carry it using the base.
- The maximum ambient temperature is: 40°. Don't operate it where the temperature is higher than this.
- In the event of a serious operating problem stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction.
Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Do not touch any power cables during operation as the high voltage may cause an electric shock.

Warning

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
Do not open the unit within five minutes after switching off.
- The housing and lenses must be replaced if they are visibly damaged.
- 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.

Installation

The unit should be mounted via its screw holes onto the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Make sure that the structure to which you are attaching the unit to is secure and is able to support a weight of 10 times of the unit's weight. Always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be installed by professionals and it must be installed in a place where is out of the reach of people and no one can pass by or under it.

2. Technical Specifications

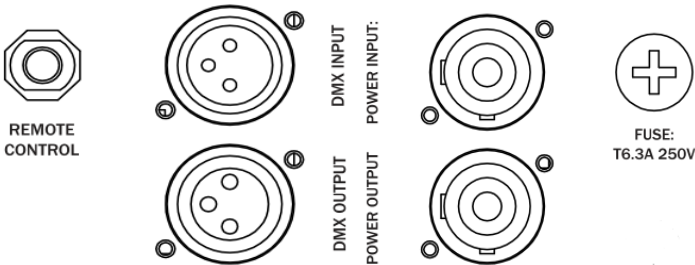
- DMX Control: 15 channels
- Motorized focus via DMX control
- Operation Modes: DMX, Master/Slave, Sound Active
- Built-in programs under Master/Slave triggered by music
- Smooth 0 - 100% dimming and variable strobe speeds
- One rotating gobo wheel with seven gobos and white

- One Color wheel with seven colors plus white
- Rotating prism and iris
- Automatic pan/tilt position correction
- Power Voltage: AC 100 - 240V~50/60Hz
- Power Consumption: 330W
- Light Source: 1 x 180W LED
- Beam Angle: 13°
- Weight: 17.5Kgs
- Dimension: 436 x 344 x 588mm

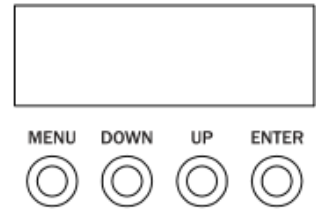
3. How To Set The Unit

3.1 Control Panel

3.1.1. Rear Panel:



3.1.2. Front Panel

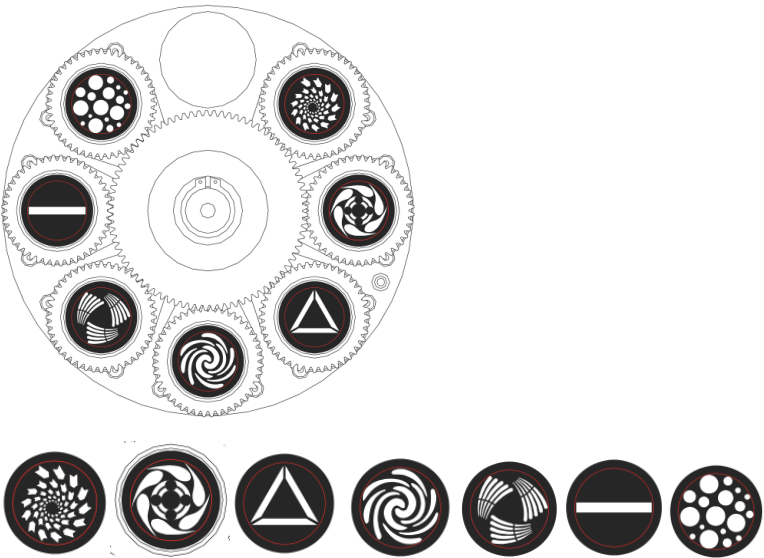


- Display: To show the various menus and the selected functions
- Button:

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

- DMX IN:
DMX 512 link, use 3pin XLR cable to link the fixture and the DMX controller
- DMX OUT:
DMX 512 link, use 3pin XLR cable to link the next fixture
- Fuse (T 6.3A):
Protects the unit from over voltage or short circuit
- MAINS IN:
PowerCON connection to mains power supply
- MAINS OUT:
PowerCon loop connection for main power supply to the next unit

3.2 Gobo Wheel



3.3 Main Function

To select any of the given functions, press the **MENU** button up to where the required function is showing on the display. Select the function by pressing the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to change the mode. Once the required mode has been selected, press the **ENTER** button to confirm. To go back to the functions without any changes, press the **MENU** button

again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

The main functions are shown as below:

Menu	DMX address	001-512
	Show mode	Show1
		Show2
		Show3
		Show4
	Slave mode	master
		Slave1
		Slave2
	Blackout	M/s
		Hold
		Black out
	Sound sate	On
		Off
	Sound sense	000-100
	PAN INVERT	Yes
		No
	TILT INVERT	Yes
		No
	Back light	On
		Off
	Display inverse	Yes
		No
	Focus adjust	000-255
	Auto-test	
	Temperature	
	Fixture Time	
	Fixture Version	
	Reset	

DMX Address

To select DMX Address, press the **ENTER** button to confirm. Use the **DOWN** and **UP** buttons to choose the required address to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Show Mode

To select Show Mode, press the **ENTER** button to confirm. Press the **UP** and **DOWN** buttons to select Show 1, Show 2, Show 3 or Show4, press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Slave Mode

To select the Master/Slave Mode, press the **ENTER** button to confirm. Press the **UP** and **DOWN** button to select Slave 1 or Slave 2. Press the **ENTER** buttons to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

BLACKOUT MODE

To select the blackout Mode, mode, use UP and DOWN buttons to select the M/S, HOLD or Blackout mode. Once the mode has been selected, press the ENTER button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

SOUND State

To select the sound state, press the enter button and then use the DOWN and UP buttons to select **ON** or **OFF** and press the **ENTER** button to confirm. Press the **ENTER** button to store. To go back to the functions without any

changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Sound Sense

To select Sound Sense, press the **ENTER** button and then use the **UP** and **DOWN** buttons to adjust the sound sensitivity from 0 to 100. Press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Pan Inverse

To select Pan Inverse, press the **ENTER** button to confirm. Use the **UP** and **DOWN** buttons to select **No** (normal) or **Yes** (Pan Inverse). Press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Tilt Inverse

To select Tilt Inverse, press the **ENTER** button to confirm. Use the **UP** and **DOWN** buttons to select **No** (normal) or **Yes** (Tilt Inverse). Press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Back light

To select back light state, use the **UP/DOWN** buttons to select **No** (Display always on) or **Yes** (Display goes off after one minute after existing menu mode), press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Display Inverse

To select Display Inverse, use the **UP/DOWN** buttons to select **No** (normal display) or **Yes** (inverse display), press the **ENTER** button to confirm.

To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second to go back to the main menu.

Focus adjust

Select Focus, press the **ENTER** button to confirm. Adjust the value from 0 to 255 via the **UP/DOWN** buttons and press the **ENTER** to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second to go back to the main menu.

Auto Test

To select Auto Test, press the **ENTER** button to confirm, the unit will run the built-in programs automatically to test the pan, tilt, colour, gobo, gobo rotation, prism, prism rotation, iris and focus. Press and hold the **MENU** button for one second to go back to the main menu.

Unit Temperature

To select Temperature Unit, press the **ENTER** button to confirm. Use the **UP** and **DOWN** buttons to select $^{\circ}\text{C}$ or $^{\circ}\text{F}$, and press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second to go back to the main menu.

Fixture time

To select Fixture time, press the **ENTER** button to confirm, the fixture working hours will show on the display. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second to go back to the main menu.

Fixture Version

To select Fixture Version, press the **ENTER** button to confirm, firmware version will show on the display. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second to go back to the main menu.

Reset

Enter **MENU** mode, select **Reset** Functions, press the **ENTER** button to confirm. Use the **UP/DOWN** buttons to select Pan/Tilt, Colour, Gobo, Prism, Iris, Focus or All. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second to go back to the main menu.

3.4 Home Position Adjustment

Press the **MENU** button, then press and hold the **ENTER** button for about 3 seconds to go into the **offset** mode to adjust the home position. Use the **UP** and **DOWN** buttons to choose the submenu, press the **ENTER** button to confirm and then it will go back to the previous menu automatically. Press the **MENU** button to exit.

Menu	Pan offset	-127 - 127
	Tilt offset	-127 - 127
	Colour offset	-127 - 127
	Gobo offset	-127 - 127
	Prism offset	-127 - 127
	Focus offset	-127 - 127

4. Control By Universal DMX Controller

4.1 DMX 512 Connection

4.1.1. In last unit, the DMX cable has to be terminated with a terminator. Solder a 120 ohm 1/4W resistor between pin 2(DMX -) and pin 3(DMX+) into a 3-Pin XLR plug and plug it in the DMX output of the last unit.

4.1.2. Connect the units together in a `daisy chain` using the XLR plug from the output of the unit to the input of the next unit. The cable can not be branched or split to a `Y` cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables can easily corrupt the signal.

4.1.3. The DMX output and input connectors are a pass-through type to maintain the DMX circuit, when power is disconnected to the unit.

4.1.4. Each lighting unit needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).

4.2 DMX Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press **MENU** button to enter the menu mode, select **DMX Functions**, press the **ENTER** button to confirm, use the **UP** and **DOWN** buttons to select **DMX Address**, press the **ENTER** button to confirm, the present address will blink on the display, use the **UP** and **DOWN** buttons to adjust the address from 0 to 512, press the **ENTER** button to store. Press and hold the **MENU** button for one second to go back to the main menu.

Please refer to the following diagram to address your first 4 units:

Channel Mode	Unit 1	Unit 2	Unit 3	Unit 4
15 channels	1	16	31	46

5.3 DMX512 Configuration

15 Channels Mode:

Channel	Value	Function
1	0-255	Pan
2	0-255	Pan fine
3	0-255	Tilt
4	0-255	Tilt fine
5	0-7	White

	8-125	Orange
	16-23	Blue
	24-31	Red
	32-39	Purple
	40-47	Green
	48-55	Light Blue
	56-63	Yellow
	64-127	Colour mixing
	128-189	Clockwise Slow-Fast
	190-193	Stop
	194-255	Counter Clockwise Rotation Slow-Fast
6	0-7	Stop
	008-125	Gobo1
	16-23	Gobo2
	24-31	Gobo3
	32-39	Gobo4
	40-47	Gobo5
	48-55	Gobo6
	56-63	Gobo7
	64-73	Gobo1 Shaking
	74-82	Gobo2 Shaking
	83-91	Gobo3 Shaking
	92-100	Gobo4 Shaking
	101-109	Gobo5 Shaking
	110-118	Gobo6 Shaking
	119-127	Gobo7 Shaking
	128-189	Gobo wheel rotation Fast-Slow
	190-193	Stop
	194-255	Gobo Wheel rotation Slow-Fast

7	0-127	Counter-clockwise index 0°-360°
	128-189	Counter-clockwise Fast-Slow
	190-193	Stop
	194-255	Counter Slow-Fast
8	0-7	No Prism effect
	8-255	Prism effect
9	0-127	Counter-clockwise index 0°-360°
	128-189	Clockwise Fast-Slow
	190-193	Stop
	194-255	Clockwise Slow-Fast
10	0-255	Iris(MAX - MIN)
11	0-255	Focus
12	0-7	Blackout
	008-125	Shutter open
	16-131	Strobing Slow-Fast
	132-139	Shutter open
	140-181	Shutter slow open fast close
	182-189	Shutter open
	190-231	Shutter slow close fast open
	232-239	Shutter open
	240-247	Random Strobe
	248-255	Shutter open
13	0-255	Dimmer 0%-100%
14	0-255	Movement speed fast-slow
15	0-69	No function
	70-79	Blackout /Pan/Tilt movement
	80-89	No Blackout Pan tilt movement
	90-99	Blackout W/Colour change
	100-109	NO Blackout W/Colour change

	110-119	Blackout W/Gobo change
	120-129	No Blackout W/Gobo change
	130-199	No function
	200-209	Reset all
	210-255	No function

5. Troubleshooting

Following are a few common problems that may occur during operation.

Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connection of power and main fuse.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors and cables to see if linked correctly.
2. If the DMX LED is on and no response to the DMX desk, check the address settings and DMX polarity.
3. Try another DMX controller.
4. Check if the DMX cables run near or run alongside high voltage cables that may cause damage or interference to DMX signal.

C. No response to the sound

1. Make sure the unit is not receiving a DMX signal.

6. Fixture Cleaning

The cleaning of external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause a greater accumulation of dirt on the unit's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 30 days.