



PROFESSIONAL MOVING-HEAD SERIES

M25

7-LENS RGBWBEE-EYEMOVING HEAD

WASH / STROBE / ROTATING OPTICS/AUXILIARY LIGHT STRIP



OPTICAL LAYOUT ILLUSTRATION

150 W	25 / 26 / 30 / 58 CH	7 x RGBW	RDM
RATED POWER	DMX PROFILES	4-IN-1 LED CELLS	REMOTE MANAGEMENT

READ BEFORE INSTALLATION OR OPERATION

Retain this manual with the fixture. Installation, rigging, electrical connection and internal service must be performed by competent personnel.

PRODUCT OVERVIEW

The M25 is a professional indoor moving-head effect fixture built around seven RGBW 4-in-1 LED cells, rotating bee-eye optics and an auxiliary RGB light strip. It combines wash color, high-impact strobe, motorized focus, pan/tilt movement and layered foreground/background effects. Four DMX profiles support fast programming, conventional control and individual pixel operation, while RDM enables compatible remote-management workflows.

BEFORE POWERING ON

Inspect the housing, mounting points, optical assembly, cables, connectors and ventilation. Confirm AC 100-240 V, 50/60 Hz and a protective earth connection.

HIGH-INTENSITY LIGHT

Do not stare into the LEDs. Keep the moving head clear of people and objects. Strobe effects may affect photosensitive persons; use responsibly.





TECHNICAL PARAMETERS

Item	Specification
Product Model	M25
Product Type	7-lens RGBW bee-eye moving head with auxiliary light strip
Power Supply	AC 100-240 V, 50/60 Hz
Rated Power	150 W
Main Light Source	7 x RGBW 4-in-1 LED cells
Auxiliary Light	RGB auxiliary light strip with dimmer, strobe and effects
Control Protocol	DMX512 with RDM support
Control Modes	DMX512, automatic, random, sound-active and master/slave
DMX Profiles	25CH / 26CH / 30CH / 58CH
Dimming	32-bit internal processing; 0-100% linear dimming
Strobe Frequency	1-30 Hz
Movement / Optics	Pan, tilt, motorized focus and rotating bee-eye optics
Operating Temperature	-30 C to 50 C
Connections	DMX input/output and power input/output
Housing	Black metal housing
Ingress Protection	IP20 - indoor, dry locations only
Dimensions / Weight	Refer to the current product label and packing list

CORE FUNCTIONS

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| <ul style="list-style-type: none"> - Seven-cell RGBW color mixing - Foreground and background color layers - Individual pixel control in 58CH mode - Rotating bee-eye optical effect - Motorized focus - Pan / tilt with 16-bit fine positioning | <ul style="list-style-type: none"> - 1-30 Hz main strobe - Auxiliary strip dimmer and strobe - Built-in LED and strip effects - Automatic, random and sound-active operation - Master/slave synchronization - RDM-capable DMX management |
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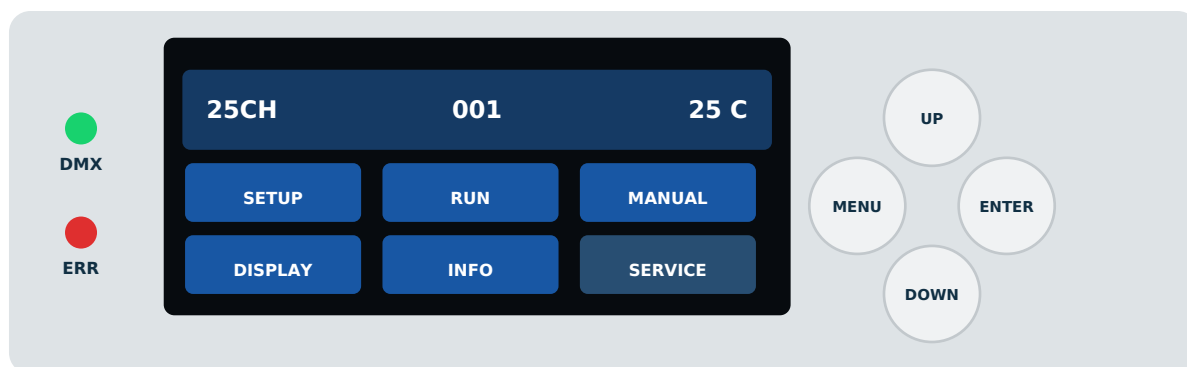
SPECIFICATION NOTE

Product firmware and production details may be updated without notice. Use the current fixture label and packing list for rigging loads, transport dimensions and exact connector ratings.





DISPLAY PANEL AND BUTTON OPERATION



CONTROL PANEL - ENGLISH REFERENCE

Button	Function	Description
MENU	Menu / Return	Enter the menu system or return to the previous level.
UP	Increase / Next	Move upward through options or increase a value.
DOWN	Decrease / Previous	Move downward through options or decrease a value.
ENTER	Confirm / Save	Open the selected item and save the edited value.

After power-on and the automatic reset sequence, the display opens to six main icons: Setup, Run, Manual, Display, Information and Factory Service. Changed user settings are stored in non-volatile memory when confirmed with ENTER.

SETUP MENU

Menu Item	Options / Range	Default	Function
DMX Address	001-512	001	Sets the DMX starting address.
Sound Sensitivity	Adjustable	-	Sets microphone response sensitivity.
Pan Reverse	Off / On	Off	Reverses horizontal movement.
Tilt Reverse	Off / On	Off	Reverses vertical movement.
Pan/Tilt Swap	Off / On	Off	Swaps the pan and tilt control axes.
Encoder	Off / On	On	Enables movement-position feedback.
No DMX Signal	Blackout / Hold	Blackout	Chooses behavior after DMX loss.
Restore Defaults	Confirm	-	Restores factory default user settings.
Reset	Confirm	-	Performs a full fixture reset.

RUN MENU

Menu Item	Options	Default	Function
Run Mode	DMX / Sound / Auto / Random	DMX	Selects the operating mode.
Channel Mode	25CH / 26CH / 30CH / 58CH	25CH	Selects the DMX profile.





MANUAL CONTROL

Manual mode provides direct 000-255 test values for the principal functions. Use it for bench checks and focusing before DMX programming.

No.	Manual Function	Range	Default
1	Pan	000-255	000
2	Pan Fine	000-255	000
3	Tilt	000-255	128
4	Tilt Fine	000-255	000
5	Pan/Tilt Speed	000-255	000
6	Focus	000-255	000
7	Bee-Eye Rotation	000-255	000
8	Master Dimmer	000-255	255
9	Main Strobe	000-255	000
10	Foreground Red	000-255	255
11	Foreground Green	000-255	255
12	Foreground Blue	000-255	255
13	Foreground White	000-255	255

No.	Manual Function	Range	Default
14	Color Temperature	000-255	000
15	LED Effect Select	000-255	000
16	LED Effect Speed	000-255	000
17	Background Red	000-255	000
18	Background Green	000-255	000
19	Background Blue	000-255	000
20	Background White	000-255	000
21	Reset	000-255	000
22	Aux Strip Dimmer	000-255	000
23	Aux Strip Strobe	000-255	000
24	Aux Strip Effect	000-255	000
25	Aux Effect Speed	000-255	000

DISPLAY AND INFORMATION MENUS

Group	Item	Function
Display	Screen-On Time	Selects the display timeout; default 60 seconds.
Display	Screen Brightness	Adjusts display brightness; default: Off.
Display	Display Invert	Rotates the display orientation; default Off.
Display	Language	Selects Chinese or English; default: Chinese.
Information	DMX Value Monitor	Shows received DMX channel values.
Information	System Error Log	Shows recorded system errors.
Information	LED Temperature	Shows LED-board temperature.
Information	Fixture Hours	Shows total operating time.
Information	Current Lamp Hours	Shows light-output time for the current power cycle.
Information	DP / MT / XY	Shows display-board, driver-board and movement firmware versions.

FACTORY SERVICE MENU

Access sequence: UP, UP, UP, DOWN, DOWN, DOWN, ENTER. These parameters affect calibration and thermal protection. Change them only under manufacturer or qualified-service guidance.

Service Item	Range / Default	Function
Sensor Test	Status display	Checks encoder and Hall-sensor status.
Reset Calibration	Service calibration	Calibrates home positions and RGBW power configuration.
LED Maximum Power	000-255 / 230	Sets the internal maximum LED power value.
Maximum LED Temperature	50-80 C / 70 C	Sets the thermal protection threshold.
Focus Travel	000-255 / 128	Sets the focus-motor travel value.
Encoder Disc Test	Test mode	Checks the optical-coupler reading.





CONTROL MODE SUMMARY

Mode	How to Select	Primary Use
DMX512	Run > DMX, then select 25/26/30/58CH and address 001-512.	Full console control.
Automatic	Run > Auto.	Built-in effect playback without a controller.
Random	Run > Random.	Varied stand-alone effect playback.
Sound-Active	Run > Sound; set microphone sensitivity in Setup.	Effects respond to music.
Master/Slave	One unit in Auto, Random or Sound; other identical units linked by DMX.	Synchronized multi-fixture playback.
RDM	Use a compatible RDM controller on the DMX data line.	Remote discovery and supported device management.

DMX512 CONNECTION



Use shielded DMX cable. Terminate the final fixture on long or unstable data runs.

- Connect controller DMX OUT to the first M25 DMX IN.
- Link DMX OUT to DMX IN for subsequent fixtures.
- Use shielded DMX cable, not an audio microphone cable.

- Set each fixture to the same channel mode used in the console patch.
- Avoid overlapping addresses unless identical behavior is intentional.
- Terminate the final fixture when cable length or signal conditions require it.

QUICK DMX ADDRESS EXAMPLES

Profile	Fixture 1	Fixture 2	Fixture 3	Fixture 4
25CH	001	026	051	076
26CH	001	027	053	079
30CH	001	031	061	091
58CH	001	059	117	175

MASTER/SLAVE RULE

Use only one master in a linked group. Master/slave playback is intended for operation without an active external DMX controller. Multiple masters or simultaneous console data can cause unstable or unsynchronized output.

RDM NOTE

The M25 supports RDM. Available RDM parameters depend on the fixture firmware and the controller. Do not assume unsupported PIDs or remote functions.





DMX512 CHANNEL FUNCTIONS - 25CH

General control with foreground/background color layers and auxiliary strip effects.

CH	DMX Value	Function	Description / Remark
1	000-255	Pan	Horizontal movement.
2	000-255	Pan Fine	16-bit fine horizontal positioning.
3	000-255	Tilt	Vertical movement.
4	000-255	Tilt Fine	16-bit fine vertical positioning.
5	000-255	Pan/Tilt Speed	Movement speed adjustment.
6	000-255	Focus	Motorized focus adjustment.
7	000-255	Bee-Eye Rotation	Controls the optical rotation motor.
8	000-255	Master Dimmer	Main output from dark to full.
9	000-255	Main Strobe	Strobe control; physical range up to 30 Hz.
10	000-255	Foreground Red	Red component of the foreground color.
11	000-255	Foreground Green	Green component of the foreground color.
12	000-255	Foreground Blue	Blue component of the foreground color.
13	000-255	Foreground White	White component of the foreground color.
14	000-255	Color Temperature	Color-temperature adjustment.
15	000-255	LED Effect Select	Selects a built-in LED effect.
16	000-255	LED Effect Speed	Adjusts the selected effect speed.
17	000-255	Background Red	Red component of the background color.
18	000-255	Background Green	Green component of the background color.
19	000-255	Background Blue	Blue component of the background color.
20	000-255	Background White	White component of the background color.
21	250-255 for 3 s	Fixture Reset	Hold for 3 seconds to reset. Other values have no function.
22	000-255	Aux Strip Dimmer	Auxiliary light-strip intensity.
23	000-255	Aux Strip Strobe	Auxiliary light-strip strobe.
24	000-255	Aux Strip Effect	Selects a strip effect.
25	000-255	Aux Effect Speed	Adjusts the strip-effect speed.

All values are decimal (000-255). Program selections may vary slightly by firmware revision; verify operation before live programming.





DMX512 CHANNEL FUNCTIONS - 26CH

Compact RGBW control with conventional movement and expanded auxiliary-strip color channels.

CH	DMX Value	Function	Description / Remark
1	000-255	Red	Main LED red intensity.
2	000-255	Green	Main LED green intensity.
3	000-255	Blue	Main LED blue intensity.
4	000-255	White	Main LED white intensity.
5	000-255	Color Temperature	Color-temperature adjustment.
6	000-255	LED Color Select	Selects a programmed LED color.
7	000-255	Main Strobe	Main LED strobe control.
8	000-255	Master Dimmer	Main output from dark to full.
9	000-255	Reserved	No assigned function.
10	000-255	Pan	Horizontal movement.
11	000-255	Pan Fine	16-bit fine horizontal positioning.
12	000-255	Tilt	Vertical movement.
13	000-255	Tilt Fine	16-bit fine vertical positioning.
14	000-255	Focus	Motorized focus adjustment.
15	000-255	Bee-Eye Rotation	Controls the optical rotation motor.
16	000-255	Reserved	No assigned function.
17	250-255 for 3 s	Fixture Reset	Hold for 3 seconds to reset. Other values have no function.
18	000-255	Aux Strip Dimmer	Auxiliary light-strip intensity.
19	000-255	Aux Strip Strobe	Auxiliary light-strip strobe.
20	000-255	Aux Strip Red	Strip red intensity.
21	000-255	Aux Strip Green	Strip green intensity.
22	000-255	Aux Strip Blue	Strip blue intensity.
23	000-255	Aux Strip Effect	Selects a strip effect.
24	000-255	Aux Effect Speed	Adjusts strip-effect speed.
25	000-255	Aux Background Color	Selects the strip background color.
26	000-255	Aux Background Dimmer	Adjusts strip background intensity.

All values are decimal (000-255). Program selections may vary slightly by firmware revision; verify operation before live programming.





DMX512 CHANNEL FUNCTIONS - 30CH

Expanded general control with foreground/background layers and direct RGB auxiliary-strip control.

CH	DMX Value	Function	Description / Remark
1	000-255	Pan	Horizontal movement.
2	000-255	Pan Fine	16-bit fine horizontal positioning.
3	000-255	Tilt	Vertical movement.
4	000-255	Tilt Fine	16-bit fine vertical positioning.
5	000-255	Pan/Tilt Speed	Movement speed adjustment.
6	000-255	Focus	Motorized focus adjustment.
7	000-255	Bee-Eye Rotation	Controls the optical rotation motor.
8	000-255	Master Dimmer	Main output from dark to full.
9	000-255	Main Strobe	Strobe control; physical range up to 30 Hz.
10	000-255	Foreground Red	Red component of the foreground color.
11	000-255	Foreground Green	Green component of the foreground color.
12	000-255	Foreground Blue	Blue component of the foreground color.
13	000-255	Foreground White	White component of the foreground color. Color-
14	000-255	Color Temperature	temperature adjustment.
15	000-255	LED Effect Select	Selects a built-in LED effect.
16	000-255	LED Effect Speed	Adjusts the selected effect speed.
17	000-255	Background Red	Red component of the background color.
18	000-255	Background Green	Green component of the background color.
19	000-255	Background Blue	Blue component of the background color.
20	000-255	Background White	White component of the background color.
21	250-255 for 3 s	Fixture Reset	Hold for 3 seconds to reset. Other values have no function.
22	000-255	Aux Strip Dimmer	Auxiliary light-strip intensity.
23	000-255	Aux Strip Strobe	Auxiliary light-strip strobe.
24	000-255	Aux Strip Red	Strip red intensity.
25	000-255	Aux Strip Green	Strip green intensity.
26	000-255	Aux Strip Blue	Strip blue intensity.
27	000-255	Aux Strip Effect	Selects a strip effect.
28	000-255	Aux Effect Speed	Adjusts strip-effect speed.
29	000-255	Aux Background Color	Selects the strip background color.
30	000-255	Aux Background Dimmer	Adjusts strip background intensity.

All values are decimal (000-255). Program selections may vary slightly by firmware revision; verify operation before live programming.





DMX512 CHANNEL FUNCTIONS - 58CH - CHANNELS 1-29

Individual RGBW pixel control. Channels 22-49 map four color channels to each of these seven LED cells.

CH	DMX Value	Function	Description / Remark
1	000-255	Pan	Horizontal movement.
2	000-255	Pan Fine	16-bit fine horizontal positioning.
3	000-255	Tilt	Vertical movement.
4	000-255	Tilt Fine	16-bit fine vertical positioning.
5	000-255	Pan/Tilt Speed	Movement speed adjustment.
6	000-255	Focus	Motorized focus adjustment.
7	000-255	Bee-Eye Rotation	Controls the optical rotation motor.
8	000-255	Master Dimmer	Main output from dark to full.
9	000-255	Main Strobe	Strobe control; physical range up to 30 Hz.
10	000-255	Foreground Red	Red component of the foreground color.
11	000-255	Foreground Green	Green component of the foreground color.
12	000-255	Foreground Blue	Blue component of the foreground color.
13	000-255	Foreground White	White component of the foreground color. Color-
14	000-255	Color Temperature	temperature adjustment.
15	000-255	LED Effect Select	Selects a built-in LED effect.
16	000-255	LED Effect Speed	Adjusts the selected effect speed.
17	000-255	Background Red	Red component of the background color.
18	000-255	Background Green	Green component of the background color.
19	000-255	Background Blue	Blue component of the background color.
20	000-255	Background White	White component of the background color.
21	250-255 for 3 s	Fixture Reset	Hold for 3 seconds to reset. Other values have no function.
22	000-255	Pixel 1 Red	Individual RGBW control for LED cell 1.
23	000-255	Pixel 1 Green	Individual RGBW control for LED cell 1.
24	000-255	Pixel 1 Blue	Individual RGBW control for LED cell 1.
25	000-255	Pixel 1 White	Individual RGBW control for LED cell 1.
26	000-255	Pixel 2 Red	Individual RGBW control for LED cell 2.
27	000-255	Pixel 2 Green	Individual RGBW control for LED cell 2.
28	000-255	Pixel 2 Blue	Individual RGBW control for LED cell 2.
29	000-255	Pixel 2 White	Individual RGBW control for LED cell 2.

All values are decimal (000-255). Program selections may vary slightly by firmware revision; verify operation before live programming.





DMX512 CHANNEL FUNCTIONS - 58CH - CHANNELS 30-58

Continuation of individual RGBW pixel control, followed by auxiliary-strip channels 50-58.

CH	DMX Value	Function	Description / Remark
30	000-255	Pixel 3 Red	Individual RGBW control for LED cell 3.
31	000-255	Pixel 3 Green	Individual RGBW control for LED cell 3.
32	000-255	Pixel 3 Blue	Individual RGBW control for LED cell 3.
33	000-255	Pixel 3 White	Individual RGBW control for LED cell 3.
34	000-255	Pixel 4 Red	Individual RGBW control for LED cell 4.
35	000-255	Pixel 4 Green	Individual RGBW control for LED cell 4.
36	000-255	Pixel 4 Blue	Individual RGBW control for LED cell 4.
37	000-255	Pixel 4 White	Individual RGBW control for LED cell 4.
38	000-255	Pixel 5 Red	Individual RGBW control for LED cell 5.
39	000-255	Pixel 5 Green	Individual RGBW control for LED cell 5.
40	000-255	Pixel 5 Blue	Individual RGBW control for LED cell 5.
41	000-255	Pixel 5 White	Individual RGBW control for LED cell 5.
42	000-255	Pixel 6 Red	Individual RGBW control for LED cell 6.
43	000-255	Pixel 6 Green	Individual RGBW control for LED cell 6.
44	000-255	Pixel 6 Blue	Individual RGBW control for LED cell 6.
45	000-255	Pixel 6 White	Individual RGBW control for LED cell 6.
46	000-255	Pixel 7 Red	Individual RGBW control for LED cell 7.
47	000-255	Pixel 7 Green	Individual RGBW control for LED cell 7.
48	000-255	Pixel 7 Blue	Individual RGBW control for LED cell 7.
49	000-255	Pixel 7 White	Individual RGBW control for LED cell 7.
50	000-255	Aux Strip Dimmer	Auxiliary light-strip intensity.
51	000-255	Aux Strip Strobe	Auxiliary light-strip strobe.
52	000-255	Aux Strip Red	Strip red intensity.
53	000-255	Aux Strip Green	Strip green intensity.
54	000-255	Aux Strip Blue	Strip blue intensity.
55	000-255	Aux Strip Effect	Selects a strip effect.
56	000-255	Aux Effect Speed	Adjusts strip-effect speed.
57	000-255	Aux Background Color	Selects the strip background color.
58	000-255	Aux Background Dimmer	Adjusts strip background intensity.

All values are decimal (000-255). Program selections may vary slightly by firmware revision; verify operation before live programming.





SAFETY AND INSTALLATION

Read this section before mounting, connecting or operating the fixture.

DISCONNECT POWER

Isolate the fixture from the mains before rigging, inspection, cable changes, cleaning or maintenance. Allow the fixture to cool before touching optical or housing components.

Hazard Area	Required Practice
Power	Use only AC 100-240 V, 50/60 Hz with protective earth. Disconnect power before installation, cleaning or service.
Rigging	Use a rated clamp on the approved mounting point and an independent safety cable. Verify the structure can support the installed load.
Movement	Provide unobstructed clearance for the full pan/tilt range. Keep hands, cables, scenery and audience members outside the movement envelope.
Optical Output	Do not stare into the LEDs or view them through magnifying optics. Aim the fixture so the audience is not exposed at close range.
Strobe	Rapid flashing can affect photosensitive persons. Announce or limit strobe use where appropriate.
Environment	IP20: indoor dry locations only. Protect from rain, condensation, liquids, excessive dust and corrosive atmospheres.
Ventilation	Keep air inlets and outlets unobstructed. Do not cover the fixture while operating.
Service	Do not open the housing or defeat protection systems. Internal service is for qualified personnel only.

INSTALLATION CHECKLIST

- | | |
|---|---|
| <ul style="list-style-type: none"> - Confirm the fixture and accessories are undamaged. - Verify mains voltage and protective earth. - Secure the clamp to the approved mounting point. - Attach an independent safety cable. - Check full pan/tilt clearance before applying power. | <ul style="list-style-type: none"> - Keep ventilation paths open. - Connect power and DMX with strain relief. - Select the correct channel mode and DMX address. - Test movement, focus, dimmer and reset at low intensity. - Recheck all fasteners after the first operating cycle. |
|---|---|

POWER AND DATA LINKING

The M25 provides power input/output and DMX input/output connections. Do not exceed the rating printed on the fixture, connector or branch circuit. The number of fixtures that can be power-linked depends on local mains voltage, cable rating and connector rating. DMX and mains cables should be routed separately where practical to reduce interference and mechanical strain.





RECOMMENDED CLEANING AND INSPECTION

Interval	Recommended Procedure
Before Each Use	Inspect the power cable, DMX connectors, mounting hardware, safety cable, housing and visible optical components.
Weekly / As Needed	Wipe the housing with a soft, slightly damp, lint-free cloth. Do not allow liquid into openings.
Monthly	Clean lenses carefully with appropriate optical cleaner and a soft lint-free cloth. Remove dust from ventilation openings.
Before Overhead Use	Check all screws, yoke/base mounting points, clamp and independent safety cable.
After Abnormal Operation	Stop use immediately if there is abnormal noise, odor, temperature, light output, error indication or movement.

TROUBLESHOOTING

Symptom	Checks / Corrective Action
No Power	Check mains supply, plug, cable, connector seating and the fixture/circuit protection. Use a qualified technician if protection trips again.
No DMX Response	Confirm DMX mode, start address, channel profile, cable direction and controller patch. Check the DMX indicator and test with a known-good cable.
Unstable DMX	Use shielded DMX cable, inspect connectors, remove address conflicts and terminate the final fixture on long runs.
No Light Output	Raise master dimmer and color channels, cancel blackout, check strobe values and verify the no-DMX behavior setting.
Movement Error	Clear obstructions, power-cycle once and review the error log/sensor status. Do not force the head by hand.
Overtemperature	Stop operation, allow cooling, clear vents and confirm ambient temperature is within -30 C to 50 C.
Master/Slave Not Syncing	Remove active console data, use one master only, connect identical fixtures correctly and select compatible run/channel settings.

SERVICE AND SUPPORT

Product model: M25

Keep the serial number, purchase information, fixture firmware versions (DP / MT / XY) and a description of the operating conditions available when requesting technical support.

STARSHINE LIGHTS SUPPORT

Website: www.starshinelights.com

Disconnect the fixture and contact qualified service personnel if the housing, power components, movement system, optics or thermal protection are damaged or operate abnormally.

Specifications and firmware behavior are subject to change without notice. This manual is written for the M25 only.

