

AL1940WR

19 x 40 W LED Bee Eye Moving Head Mini

RGBW 4-IN-1 - 4°-60° ZOOM - CONTINUOUS FRONT-LENS ROTATION

Beam, wash, pixel-graphics and vortex effects in a compact moving-head fixture



READ BEFORE USE Keep this manual with the fixture. Installation, operation, rigging and service must be performed by qualified personnel.

English Edition | Professionally translated and technically standardized

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MODEL IDENTIFICATION This edition is organized for model AL1940WR. Before installation, confirm the model, mains rating, connector configuration and firmware shown on the actual fixture.

EDITORIAL NORMALIZATION The legacy source contains inconsistent family names and a dimension drawing that does not match the supplied product photograph. Editable text in this edition uses AL1940WR only, and unverified dimensions are omitted. The supplied photograph retains legacy badge artwork; confirm the final product-label artwork before publication. Confirmed technical and DMX data are retained.

Quick Reference

Item	Confirmed value
Input	AC 110-240 V, 50/60 Hz
Rated power	500 W
Light source	19 x 40 W RGBW 4-in-1 LEDs
DMX modes	21 / 35 / 78 / 92 / 97 channels
Movement	Pan 540° / Tilt 270°

1 Safety Information

DANGER Disconnect the fixture from AC power and allow it to cool before opening, cleaning, inspection or service.

- This is a professional entertainment-lighting fixture. Installation, operation and service must be performed by trained, qualified personnel.
- Use indoors in a dry location. The source does not state an ingress-protection rating; do not expose the fixture to rain, splashing water, condensation or corrosive environments.
- Connect only to AC 110-240 V, 50/60 Hz through a protected, correctly grounded Class I supply. Never defeat the protective earth connection.
- After a major temperature change, leave the fixture disconnected until it reaches room temperature and all condensation has evaporated.
- Do not operate the fixture with a damaged housing, lens, cable, connector, mounting point, bracket or secondary attachment.
- Do not look directly into the LEDs at close range. Intense light and strobe effects can cause eye discomfort and may affect photosensitive people.
- Keep illuminated combustible surfaces at least 0.5 m from the light output. Maintain at least 0.5 m of free space at ventilation openings and nearby walls.
- Keep cables away from sharp edges, hot surfaces, moving parts and public traffic. Disconnect power by holding the plug or connector, never by pulling the cable.
- Do not modify the fixture or bypass protective devices. Internal repair, calibration and component replacement require qualified service personnel.

1.1 Suspended Installation

- The supporting structure and every load-bearing component must be capable of supporting at least ten times the fixture load, or the higher factor required by local regulations.
- Use the two quick-lock/Omega brackets with correctly rated clamps and fully tightened M10 clamp fasteners.
- Lock every quarter-turn fastener completely and attach an independently rated safety cable to the designated safety point.
- Keep people clear of the area below the fixture during installation, focusing, inspection and removal.
- Allow unobstructed clearance for the full pan, tilt, zoom and front-lens rotation movement before applying power.

HOT SURFACES The housing and optical assembly can become hot during use. Allow adequate cooling time before handling.

2 Product Overview and Confirmed Specifications

The AL1940WR is a compact bee-eye moving head with nineteen individually controllable 40 W RGBW emitters, motorized zoom and continuous front-lens rotation. It combines narrow beams, broad washes, pixel graphics, color effects and vortex/kaleidoscope looks for stages, theatres, studios, clubs and rental productions.

2.1 Technical Specifications

Parameter	Confirmed specification
Input voltage	AC 110-240 V, 50/60 Hz
Rated power	500 W
Light source	19 x 40 W RGBW 4-in-1 LEDs; individual LED/pixel control
Nominal LED life	50,000 hours (source specification)
Color temperature	2,500-8,000 K
Zoom	Motorized 4°-60°
Front lens	Continuous motorized rotation; vortex/kaleidoscope effects
Dimming	0-100%; four selectable dimming curves (curve names not stated)
Strobe	1-25 Hz, including pulse and random effects
Color system	RGBW and virtual CMY color mixing
Pan / Tilt	540° / 270°
Control	DMX512; Auto, Sound and Art-Net options appear in the source menu
DMX personalities	21 CH / 35 CH / 78 CH / 92 CH / 97 CH
Data connection	3-pin DMX wiring documented; some versions may use 5-pin XLR
Electrical class / use	Protection Class I / indoor use

SOURCE LIMITATIONS The supplied source does not confirm fixture weight, shipping data, photometric output, cooling specification, ambient-temperature rating, fuse/current rating or ingress-protection rating. These values are omitted rather than estimated. The legacy dimension drawing is also omitted because its chassis details do not match the supplied photograph.

2.2 Package Contents

Item	Quantity / note
AL1940WR fixture	1
Power input cable	1
3-pin DMX cable	1
Quick-lock/Omega mounting brackets	2
Safety cable	1
English user manual	1
Flight case and clamps	Optional / package-dependent

3 Setup, Rigging and Data Connections

3.1 Unpacking and Inspection

1. Unpack carefully and inspect the fixture, lenses, mounting points, cables and accessories for transport damage.
2. Confirm that the product-label voltage and frequency match the local mains supply.
3. Record the model, firmware version and connector configuration for the controller profile and service records.
4. Do not power a fixture that appears damaged or incomplete; retain the packaging and contact the supplier.

3.2 Rigging Procedure

1. Verify the load rating of the structure, clamps, fasteners, brackets and safety cable.
2. Attach rated clamps to the two Omega brackets using suitable M10 fasteners.
3. Insert the quarter-turn fasteners into the base and rotate each one fully to lock.
4. Attach the independently rated safety cable to the fixture's designated safety point and the supporting structure.
5. Check clearances and every attachment before applying power; inspect the installation regularly.

3.3 DMX512 Connection

Use shielded twisted-pair cable designed for RS-485/DMX512. Connect the controller to DMX IN, then link DMX OUT to the next fixture. Avoid star wiring unless an approved DMX splitter is used.

3-pin XLR	Signal
Pin 1	Shield / signal common
Pin 2	Data -
Pin 3	Data +

TERMINATION At the final fixture in a long or electrically noisy DMX line, connect a 120 ohm resistor between pins 2 and 3 of a male XLR plug and insert it into DMX OUT.

3.4 Addressing

Personality	Example consecutive start addresses
21 CH	001, 022, 043
35 CH	001, 036, 071
78 CH	001, 079, 157
92 CH	001, 093, 185
97 CH	001, 098, 195

ART-NET Art-Net appears as an operating option in the source menu, but the source does not document connector assignment, addressing workflow or network topology. Confirm the production hardware and firmware before network deployment.

4 Control Panel and Menu

Use the navigation keys or encoder to highlight an item, adjust its value and confirm/save the selection. Use Back/Left or the menu key to return to the previous level. The display can rotate automatically; button legends and menu order may vary with firmware.

Menu group	Item	Option / range	Purpose
Address	DMX Address	001-512	Set the DMX start address.
Operating Mode	Protocol / source	Art-Net / DMX / Sound / Auto	Select the operating source.
Channel Mode	21	21 CH	Core control.
Channel Mode	35	35 CH	Core plus shape engine.
Channel Mode	21+RGB	78 CH	Core plus 19-pixel RGB.
Channel Mode	35+RGB	92 CH	Shape engine plus 19-pixel RGB.
Channel Mode	21+RGBW	97 CH	Core plus 19-pixel RGBW.
System	Pan Default Position	000-255	Set the pan startup position.
System	Tilt Default Position	000-255	Set the tilt startup position.
System	Pan Invert	Off / On	Reverse pan direction.
System	Tilt Invert	Off / On	Reverse tilt direction.
System	Pan/Tilt Swap	Off / On	Exchange pan and tilt control.
System	Fast Pan/Tilt	Off / On	Select faster movement response.
System	Signal Hold	Off / On	Hold the last state after control loss.
System	Optical Sensor Correction	Off / On	Enable optical position correction.
System	Hall Sensor Correction	Off / On	Enable Hall-sensor correction.
System	Synchronized Update	Off / On	Apply received parameters together.
Display	Backlight	15 / 30 / 60 s / Always On	Set the display timeout.
Reset	Fixture Reset	Confirm / Cancel	Reinitialize the fixture.

SIGNAL HOLD Choose the loss-of-signal behavior required by the production safety plan. Test it before the fixture is placed in service.

4.1 Calibration, Diagnostics and Service Menus

Menu	Item	Range / credential	Purpose / note
Manual Test	Current channel	000-255	Manually test one channel at a time.
Calibration	Password	0000	Access source-documented calibration.
Calibration	Pan / Tilt / Zoom / Front-Lens Rotation	000-255; 127 neutral	Home-position offset.
Calibration	LED 1-19 Output	000-255; 255 maximum	Per-emitter maximum-output calibration.
Calibration	Overall RGBW White Balance	000-255; 255 maximum	Global color balance.
Calibration	LED 1-19 RGBW White Balance	000-255; 255 maximum	Per-emitter color balance.
Calibration	Sound Sensitivity / Password	Source service parameters	Adjust sensitivity or change the calibration password.
Advanced	Password	988	Access source-documented advanced menu.
Network	IP-MS	Source label; MS undefined	Network parameter shown by the source.
Network	Data Packet	Net 000-127 / Sub-Uni	Art-Net universe-related parameters; workflow not documented.
Reset	Effect Motor Reset	Execute	Reset motors except pan and tilt.
Reset	Pan/Tilt Reset	Execute	Reset pan and tilt motors.
Reset	Reset All	Execute	Reset all fixture systems.
Diagnostics	Error Log	View / clear	Review stored fault information.
Diagnostics	DMX Monitor	Live values	View received channel data.
Diagnostics	Sensors	Hall / X optical / Y optical	View source-listed sensor states.
Information	Versions / Operating Hours	Hardware / firmware / total hours	Record before service or profile work.

CALIBRATION WARNING Record every original value before adjustment. Incorrect offsets, output limits or white-balance values can cause abnormal movement, reduced output or uneven color. Calibration should be performed only by qualified service personnel.

5 DMX512 Channel Reference

Select the same personality on the fixture and controller. Each channel accepts an 8-bit DMX value from 000 to 255. The source provides the channel names but does not provide semantic sub-ranges for several functions; do not import value bands from a related fixture profile.

5.1 21-Channel Personality

CH	Function	DMX Value	Description
1	Red	000-255	Red intensity
2	Red Fine	000-255	16-bit red fine
3	Green	000-255	Green intensity
4	Green Fine	000-255	16-bit green fine
5	Blue	000-255	Blue intensity
6	Blue Fine	000-255	16-bit blue fine
7	White	000-255	White intensity
8	White Fine	000-255	16-bit white fine
9	Linear CTO	000-255	Linear color-temperature control; bands not supplied
10	Color Macro	000-255	Built-in colors; map not supplied
11	Strobe	000-255	Strobe control; detailed bands not supplied
12	Master Dimmer	000-255	Overall intensity
13	Dimmer Fine	000-255	16-bit master-dimmer fine
14	Pan	000-255	Pan position
15	Pan Fine	000-255	16-bit pan fine
16	Tilt	000-255	Tilt position
17	Tilt Fine	000-255	16-bit tilt fine
18	Function	000-255	Function bands not supplied
19	Reset	000-255	Reset bands / hold time not supplied
20	Zoom	000-255	Motorized zoom; direction not specified
21	Front-Lens Rotation	000-255	Rotation behavior / direction bands not supplied

5.2 35-Channel Personality

Channels 1-21 are identical to the 21-channel personality. Channels 22-35 add the shape engine.

CH	Function	DMX Value	Description
1	Red	000-255	Red intensity
2	Red Fine	000-255	16-bit red fine
3	Green	000-255	Green intensity
4	Green Fine	000-255	16-bit green fine
5	Blue	000-255	Blue intensity
6	Blue Fine	000-255	16-bit blue fine
7	White	000-255	White intensity
8	White Fine	000-255	16-bit white fine
9	Linear CTO	000-255	Linear color-temperature control; bands not supplied
10	Color Macro	000-255	Built-in colors; map not supplied
11	Strobe	000-255	Strobe control; detailed bands not supplied
12	Master Dimmer	000-255	Overall intensity
13	Dimmer Fine	000-255	16-bit master-dimmer fine
14	Pan	000-255	Pan position
15	Pan Fine	000-255	16-bit pan fine
16	Tilt	000-255	Tilt position
17	Tilt Fine	000-255	16-bit tilt fine
18	Function	000-255	Function bands not supplied
19	Reset	000-255	Reset bands / hold time not supplied
20	Zoom	000-255	Motorized zoom; direction not specified
21	Front-Lens Rotation	000-255	Rotation behavior / direction bands not supplied
22	Shape Selection	000-255	Select a built-in shape; complete map not supplied
23	Shape Speed	000-255	Shape animation speed
24	Shape Fade	000-255	Shape fade / gamma; selected anchors in 6.2
25	Shape Red	000-255	Foreground red
26	Shape Green	000-255	Foreground green
27	Shape Blue	000-255	Foreground blue
28	Shape White	000-255	Foreground white
29	Shape Dimmer	000-255	Foreground intensity
30	Background Dimmer	000-255	Background intensity
31	Shape Transition	000-255	Internal transition time; anchors in 6.2
32	Shape Offset	000-255	Pattern density / fixture distribution offset
33	Foreground Strobe	000-255	Foreground strobe
34	Background Strobe	000-255	Background strobe
35	Background Selection	000-255	Background group selection; map in 6.2

5.3 78-Channel Personality - 21 CH + RGB Pixel

Channels 1-21 use the 21-channel core. Channels 22-78 provide RGB control of all 19 pixels. Formula for pixel n: $R = 22 + 3(n-1)$, $G = 23 + 3(n-1)$, $B = 24 + 3(n-1)$.

CH Range	Pixel	Component Channels	DMX Value
22-24	LED 1	R 22, G 23, B 24	000-255 per component
25-27	LED 2	R 25, G 26, B 27	000-255 per component
28-30	LED 3	R 28, G 29, B 30	000-255 per component
31-33	LED 4	R 31, G 32, B 33	000-255 per component
34-36	LED 5	R 34, G 35, B 36	000-255 per component
37-39	LED 6	R 37, G 38, B 39	000-255 per component
40-42	LED 7	R 40, G 41, B 42	000-255 per component
43-45	LED 8	R 43, G 44, B 45	000-255 per component
46-48	LED 9	R 46, G 47, B 48	000-255 per component
49-51	LED 10	R 49, G 50, B 51	000-255 per component
52-54	LED 11	R 52, G 53, B 54	000-255 per component
55-57	LED 12	R 55, G 56, B 57	000-255 per component
58-60	LED 13	R 58, G 59, B 60	000-255 per component
61-63	LED 14	R 61, G 62, B 63	000-255 per component
64-66	LED 15	R 64, G 65, B 66	000-255 per component
67-69	LED 16	R 67, G 68, B 69	000-255 per component
70-72	LED 17	R 70, G 71, B 72	000-255 per component
73-75	LED 18	R 73, G 74, B 75	000-255 per component
76-78	LED 19	R 76, G 77, B 78	000-255 per component

PIXEL ORDER Confirm physical LED numbering with a low-level test scene before creating position-dependent graphics.

5.4 92-Channel Personality - 35 CH + RGB Pixel

Channels 1-35 use the 35-channel core and shape engine. Channels 36-92 provide RGB control of all 19 pixels. Formula for pixel n: R = 36 + 3(n-1), G = 37 + 3(n-1), B = 38 + 3(n-1).

CH Range	Pixel	Component Channels	DMX Value
36-38	LED 1	R 36, G 37, B 38	000-255 per component
39-41	LED 2	R 39, G 40, B 41	000-255 per component
42-44	LED 3	R 42, G 43, B 44	000-255 per component
45-47	LED 4	R 45, G 46, B 47	000-255 per component
48-50	LED 5	R 48, G 49, B 50	000-255 per component
51-53	LED 6	R 51, G 52, B 53	000-255 per component
54-56	LED 7	R 54, G 55, B 56	000-255 per component
57-59	LED 8	R 57, G 58, B 59	000-255 per component
60-62	LED 9	R 60, G 61, B 62	000-255 per component
63-65	LED 10	R 63, G 64, B 65	000-255 per component
66-68	LED 11	R 66, G 67, B 68	000-255 per component
69-71	LED 12	R 69, G 70, B 71	000-255 per component
72-74	LED 13	R 72, G 73, B 74	000-255 per component
75-77	LED 14	R 75, G 76, B 77	000-255 per component
78-80	LED 15	R 78, G 79, B 80	000-255 per component
81-83	LED 16	R 81, G 82, B 83	000-255 per component
84-86	LED 17	R 84, G 85, B 86	000-255 per component
87-89	LED 18	R 87, G 88, B 89	000-255 per component
90-92	LED 19	R 90, G 91, B 92	000-255 per component

CORRECTED LABEL The legacy table incorrectly labels this footprint as RGBW. Its 57 pixel channels provide 19 x RGB, so this edition identifies it as 35 CH + RGB Pixel.

5.5 97-Channel Personality - 21 CH + RGBW Pixel

Channels 1-21 use the 21-channel core. Channels 22-97 provide RGBW control of all 19 pixels. Formula for pixel n: R = 22 + 4(n-1), G = 23 + 4(n-1), B = 24 + 4(n-1), W = 25 + 4(n-1).

CH Range	Pixel	Component Channels	DMX Value
22-25	LED 1	R 22, G 23, B 24, W 25	000-255 per component
26-29	LED 2	R 26, G 27, B 28, W 29	000-255 per component
30-33	LED 3	R 30, G 31, B 32, W 33	000-255 per component
34-37	LED 4	R 34, G 35, B 36, W 37	000-255 per component
38-41	LED 5	R 38, G 39, B 40, W 41	000-255 per component
42-45	LED 6	R 42, G 43, B 44, W 45	000-255 per component
46-49	LED 7	R 46, G 47, B 48, W 49	000-255 per component
50-53	LED 8	R 50, G 51, B 52, W 53	000-255 per component
54-57	LED 9	R 54, G 55, B 56, W 57	000-255 per component
58-61	LED 10	R 58, G 59, B 60, W 61	000-255 per component
62-65	LED 11	R 62, G 63, B 64, W 65	000-255 per component
66-69	LED 12	R 66, G 67, B 68, W 69	000-255 per component
70-73	LED 13	R 70, G 71, B 72, W 73	000-255 per component
74-77	LED 14	R 74, G 75, B 76, W 77	000-255 per component
78-81	LED 15	R 78, G 79, B 80, W 81	000-255 per component
82-85	LED 16	R 82, G 83, B 84, W 85	000-255 per component
86-89	LED 17	R 86, G 87, B 88, W 89	000-255 per component
90-93	LED 18	R 90, G 91, B 92, W 93	000-255 per component
94-97	LED 19	R 94, G 95, B 96, W 97	000-255 per component

OUTPUT BALANCE Per-pixel RGBW values are affected by the master dimmer and any stored calibration/output-limit settings.

6 Shape Engine

FIRMWARE VERIFICATION The legacy shape-engine prose was written for another fixture family. The channel names below match the AL1940WR source table, but shape selection, numbering and animation behavior must be verified on the production firmware before show programming.

The selected shape divides the LED face into foreground pixels and background pixels. The source states that 63 shapes are available, but it does not provide a complete shape-to-value map.

Layer / task	Relevant channels	Programming guidance
Overall output	CH 12 Master Dimmer; CH 11 Strobe	Open the common output before evaluating foreground or background layers.
Foreground color	CH 25-28 Shape RGBW	Set the color of pixels inside the selected shape.
Foreground level	CH 29 Shape Dimmer; CH 33 Foreground Strobe	Control foreground intensity and strobe independently.
Shape selection	CH 22 Shape Selection	Select the built-in shape; complete value map is not supplied.
Animation	CH 23 Shape Speed; CH 24 Shape Fade	Set motion speed and the source-defined fade/gamma response.
Background color	CH 1 / 3 / 5 / 7 RGBW	The common RGBW coarse channels set background color in the source workflow.
Background level	CH 30 Background Dimmer; CH 34 Background Strobe	Control the pixels outside the foreground shape.
Background group	CH 35 Background Selection	Select the center pixel and/or LED rings using the documented values.
Transition	CH 31 Shape Transition	Sets the internal crossfade between shapes; set console fades to zero when using this function.
Offset	CH 32 Shape Offset	Adjust pattern density or distribute the effect across fixtures with different start addresses.
Vortex example	CH 22 value 010 + CH 21 Front-Lens Rotation	Source example only; verify the selected shape and rotation behavior on the fixture.

6.1 Basic Programming Sequence

1. Select the 35 CH or 92 CH personality and set CH 12 Master Dimmer above zero.
2. Choose a shape on CH 22, then set CH 25-29 for foreground color and level.
3. Set CH 1, 3, 5 and 7 for background color, then raise CH 30 Background Dimmer.
4. Add shape speed, fade, transition, offset and layer strobes as required.
5. Test the complete cue on every installed firmware version before public operation.

6.2 Source-Documented Value Anchors

Only the values explicitly printed in the supplied source are listed. Unprinted intermediate mappings are identified rather than reconstructed.

CH 24 Shape Fade	Documented behavior
000-015	Snap / no fade
016	Gamma 0.500
017	Gamma 0.506
018	Gamma 0.513
019-242	Progressive gamma; exact intermediate value map not fully printed
243	Gamma 1.986
244	Gamma 1.993
245	Gamma 2.000
246-255	Automatic gamma

CH 31 Shape Transition	Documented time anchor
000-004	No fade
005	100 ms
073	0.5 s
113	1 s
171	2 s
216	3 s
255	4 s

CH 35 Background Selection	Selected background group
000-007	Not documented
008	None
009	Pixel 1
010	Ring 2
011	Ring 3
012	Pixel 1 + Ring 3
013	Pixel 1 + Ring 2
014	Pixel 1 + Ring 2 + Ring 3
015	Ring 2 + Ring 3
016-255	None

LEVEL CONVENTION For Shape RGBW, Shape Dimmer and Background Dimmer, the source uses 000 = off and 255 = full output. Intermediate values provide proportional control.

7 Inspection, Maintenance and Cleaning

DISCONNECT POWER Isolate the fixture from AC power, prevent reconnection and allow all parts to cool before inspection or cleaning.

7.1 Condition-Based Inspection

Inspection frequency depends on operating hours, environment, mounting method, transport and venue conditions. Increase the frequency for touring, dusty, smoky or high-vibration use.

- Check the power and data cables, connectors, housing, lens, vents and control panel for damage or contamination.
- Inspect clamps, M10 fasteners, Omega brackets, quarter-turn locks, mounting points and the safety cable for wear, deformation or corrosion.
- Check that pan, tilt, zoom and front-lens rotation move smoothly without impact, grinding noise or obstruction.
- Verify that all 19 LEDs produce consistent RGBW output at matched test values.
- Review the error log, sensor status, total operating hours and firmware version when diagnosing recurrent faults.

7.2 External Cleaning

1. Remove loose dust with clean, dry, low-pressure air or a soft brush while preventing debris from entering the fixture.
2. Wipe the housing with a soft, lint-free cloth lightly dampened with water or a mild suitable cleaner.
3. Clean the optical surface gently with a clean optical-grade cloth. Do not use abrasive materials, aggressive solvents or excessive liquid.
4. Allow the fixture to dry completely, then inspect all connectors and attachments before reconnecting power.

7.3 Service and Calibration

There are no user-serviceable internal parts documented in the supplied source. Internal cleaning, fan or power-supply service, motor work, firmware service and calibration must be performed by qualified personnel. Record original calibration values and service actions.

RETURN TO SERVICE Do not return the fixture to use until every cover, connector, mounting component and safety attachment has been correctly reinstalled and function-tested.

8 Troubleshooting and Service

Symptom	Checks / corrective action
No power or display	Verify the branch supply, product-label rating, power connector seating and cable condition. Disconnect immediately if a cable or connector is damaged.
No DMX response	Confirm DMX mode, start address and personality; inspect polarity and cable continuity; test directly from the controller; terminate the final fixture when required.
Incorrect channels	Confirm that the controller profile matches 21, 35, 78, 92 or 97 CH. Do not use an unverified profile from another fixture family.
Output is dark	Raise Master Dimmer, check Strobe and color levels, then review Signal Hold, manual-test values and stored output calibration.
Uneven pixel color	Send equal RGBW test values; inspect the lens; review per-LED output limits and white-balance calibration. Record values before adjustment.
Pan / tilt fault	Remove mechanical obstructions, verify invert/swap settings, execute Pan/Tilt Reset and review Hall/optical sensor and error-log information.
Zoom or front lens does not move	Remove obstructions, execute Effect Motor Reset, review calibration offsets and refer persistent mechanical faults to qualified service.
Unexpected shape behavior	Verify 35 or 92 CH mode, foreground/background dimmers, console fades and firmware-specific shape mapping.
Art-Net does not respond	Confirm that the production fixture has the required network hardware and obtain the firmware-specific IP, Net and Sub-Uni workflow from the supplier.
Fixture overheats or shuts down	Disconnect power, allow cooling, clear external airflow paths and refer persistent temperature or fan faults to qualified service.

8.1 Information to Record Before Service

- Model and serial number from the actual product label.
- Mains voltage, firmware and hardware versions, operating hours and selected personality.
- Exact error-log message, sensor status and the steps required to reproduce the fault.
- Controller model/profile, start address, cabling layout and a copy of the affected cue values.

PRODUCTION-VERSION VERIFICATION Before publication or sale, confirm the final product-label artwork, dimensions, net weight, connector configuration, ingress-protection claim (if any), Art-Net hardware/workflow and firmware-specific DMX sub-ranges. These items are not established by the supplied source package.