

AL0760WP

7 x 60 W LED Bee Eye Moving Head IP65

RGBW BEE-EYE - RGB AURA FILAMENT - 7° TO 45° ZOOM

Outdoor beam, wash and pixel-effect moving-head fixture



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

English Edition - Specifications subject to change without notice

Contents

Section	Topic
1	Safety Information
2	Product Overview
3	Setup and Installation
4	Control Panel and Menu
5	Photometric Data
6	DMX Channel Reference
7	Routine Maintenance
8	Troubleshooting and Service

MODEL IDENTIFICATION This edition is organized for model AL0760WP, 7 x 60 W LED Bee Eye Moving Head IP65. Confirm the model, voltage rating and firmware shown on the actual fixture before installation or programming.

This edition uses the user-supplied AL0760WP model designation consistently throughout the manual.

1 Safety Information

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

- Use the fixture only with the voltage and frequency marked on its product label. Connect it to a properly grounded Class I supply.
- If the fixture has experienced a large temperature change, leave it disconnected until it reaches room temperature and condensation has evaporated.
- Protect power and data cables from crushing, sharp edges, heat and other damage. Disconnect by holding the plug, not by pulling the cable.
- Keep at least 0.5 m clearance from combustible materials and maintain clear ventilation around the fixture.
- Do not look directly into the output at close range and do not direct strong light into the fixture lens.
- Carry the fixture by its base, never by the moving head. Protect it from severe shock and vibration.
- Installation, operation and repair must be performed by qualified personnel. Do not modify the fixture.
- For suspended installation, use rated clamps, an omega bracket and an independently rated safety cable attached only to the designated point.

IP65 USE IP65 protection depends on intact seals, closed caps and correctly mated waterproof connectors. Do not immerse the fixture, open it while wet, or allow water to enter an uncapped connector interface.

LENS CONDITION Do not operate the fixture with a damaged, severely scratched or loose lens or cover. Replace damaged optical or structural parts before use.

2 Product Overview

The AL0760WP combines seven 60 W RGBW bee-eye emitters with twelve RGB filament/Aura sources in an IP65 moving-head platform. Motorized zoom, lens rotation, color macros and independent pixel control provide beam, wash, kaleidoscope and animated Aura effects.

2.1 Package Contents

Item	Quantity
AL0760WP fixture	1
Power cable	1
DMX signal cable	1
Safety cable	1
User manual	1

2.2 Technical Specifications

Parameter	Specification
Input voltage	AC 90-240 V, 50/60 Hz
Rated power	550 W
Main light source	7 x 60 W RGBW 4-in-1 LEDs
Aura / filament source	12 x 3 W RGB 3-in-1 LED filaments
Zoom	7°-45°, motorized
Strobe	1-25 Hz with multiple effects
Dimming	0-100%; Linear / Square / Inverse Square / S-curve
DMX personalities	21CH / 30CH / 36CH / 57CH / 78CH / 93CH
Control	DMX512 / Auto / RDM; Art-Net with optional additional interface
Pan / tilt	540° / 270°, both with 16-bit fine control
Display	1.77-inch OLED; Chinese/English menu; waterproof touch keys
Screen activation password	1111 (source specification)
Ingress protection	IP65
Cooling	Intelligent fan control and overheat protection
Construction	Die-cast aluminum and flame-retardant, UV-resistant engineering plastic
Fixture dimensions	386 x 291 x 533 mm
Carton size	630 x 470 x 360 mm
Net / gross weight	19.5 kg / 22.5 kg
Flight case (2 fixtures)	960 x 450 x 780 mm; case N.W. 31 kg; loaded G.W. 72 kg

2.3 Main Functions

- RGBW mixing with saturated colors, pastel tones, white output, tungsten emulation and virtual color wheel.
- High-precision PMMA optics and quartz light pipe for smooth wash coverage.
- Foreground/background macros with speed and direction control.
- Three-dimensional pixel mapping of the seven main beam pixels and twelve Aura filaments.
- High-speed pan, tilt, motorized zoom and rotating-lens effects.
- Automatic fan-speed adjustment and overheating protection.

3 Setup and Installation

3.1 Rigging

STRUCTURAL RATING The support structure and attachment point must support at least 10 times the fixture weight. Keep people clear of the area below during installation and service.

1. Inspect the fixture, omega bracket, clamp, fasteners, safety cable and support structure.
2. Attach a correctly rated clamp to the omega bracket using an M10 fastener through the center hole.
3. Lock the omega bracket to the fixture base and tighten all fasteners.
4. Attach an independent rated safety cable to the designated safety point; never attach it to a carrying handle.
5. Confirm at least 0.5 m clearance from combustible materials and adequate clearance for the full pan, tilt and zoom range.

3.2 DMX512 Connection

Use shielded, twisted-pair cable intended for RS-485/DMX512. Connect the controller to DMX IN, then link DMX OUT to the next fixture. Keep data wiring away from mains cabling where practical.

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

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

4 Control Panel and Menu

Use MENU to select a function, ENTER to open or save it, and UP/DOWN to change the selected option or value. Menu labels may vary slightly with firmware revision.

Menu	Options	Operation
Address	001-255	Set the DMX start address (source menu range; verify firmware).
Running Mode	DMX / Auto Test / Manual Test / Auto / Channel Test	Select console, automatic or local test operation.
DMX Personality	21 / 30 / 36 / 57 / 78 / 93CH	Select the matching controller profile.
Pan / Tilt Reverse	Yes / No	Reverse movement direction.
Screen Reverse / Lock	Yes / No	Invert or lock the display.
No-Signal Hold	Yes / No	Retain or release the last state after signal loss.
Pan Angle	540 / 360 / 180	Limit pan travel.
Tilt Angle	270 / 180 / 90	Limit tilt travel.
Arefaction Time	085 (source label)	Source-listed timing parameter; verify firmware meaning.
Language	EN / CH	Select the display language.
Dimmer Speed	Fast / Smooth	Select dimmer response.
Dimmer Curve	Linear / Square / Inverse Square / S-curve	Select the dimmer curve.
Reset / Factory Reset	Confirm	Reset the fixture or restore factory settings.
System Information	Version / Mode / Address / Temperature / Hours	View operating and service information.

TEMPERATURE MESSAGES Thermistor Open indicates an open sensor circuit; Thermistor Short indicates a short circuit; Thermistor Hot indicates overheating. Stop operation and correct the fault before reuse.

5 Photometric Data

The following 7° beam-angle illuminance values are reproduced from the source manual. Measurements are nominal and can vary with LED binning, optical condition, voltage and measurement method.

Color	3 m	5 m	7 m	10 m
Red	12,400 lx	4,300 lx	2,200 lx	1,100 lx
Green	32,500 lx	12,000 lx	6,500 lx	3,200 lx
Blue	55,500 lx	21,800 lx	12,000 lx	6,000 lx
White	55,800 lx	22,000 lx	11,400 lx	5,800 lx
RGBW	10,800 lx*	54,000 lx	29,700 lx	14,600 lx

SOURCE INCONSISTENCY The source lists RGBW as 10,800 lx at 3 m but 54,000 lx at 5 m. The 3 m value is reproduced without alteration and must be verified before publication or photometric planning.

6 DMX Channel Reference

Select the matching personality on the fixture and controller. The 57CH and 93CH modes extend the 36CH core; the 78CH mode extends the 21CH core. Pixel-extension tables below complete those personalities without repeating the shared core channels.

Mode	Channel map
21CH	Complete compact RGBW, movement, zoom and lens-rotation control
30CH	Movement, effects, backlight color and resets
36CH	Fine RGB, effects and Aura/backlight control
57CH	36CH core + seven RGB main pixels (37-57)
78CH	21CH core + seven RGB main pixels (22-42) + twelve RGB Aura filaments (43-78)
93CH	36CH core + seven RGB main pixels (37-57) + twelve RGB Aura filaments (58-93)

SOURCE NORMALIZATION The source labels Channel 7 as 'g' in 36CH-derived tables; this edition restores Channel 7 Green Fine. 'Focus' is normalized to Zoom where it controls the stated 7°-45° zoom system. Reserved channels remain undocumented.

6.1 21-Channel Personality

Channel	Function	DMX Value	Description
1	Red	0-255	Coarse red dimmer
2	Red Fine	0-255	Fine red adjustment
3	Green	0-255	Coarse green dimmer
4	Green Fine	0-255	Fine green adjustment
5	Blue	0-255	Coarse blue dimmer
6	Blue Fine	0-255	Fine blue adjustment
7	White	0-255	Coarse white dimmer
8	White Fine	0-255	Fine white adjustment
9	CTO	0-255	Color temperature, high to low
10	Color Macro	0-255	Built-in color macro
11	Strobe	0-255	0-3 blackout; 4-103 strobe slow to fast; 104-107 open; 108-207 pulse fast to slow; 208-212 open; 213-251 random; 252-255 open
12	Master Dimmer	0-255	Linear dimming, dark to full
13	Dimmer Fine	0-255	Fine master-dimmer adjustment
14	Pan	0-255	Pan movement
15	Pan Fine	0-255	16-bit fine adjustment
16	Tilt	0-255	Tilt movement
17	Tilt Fine	0-255	16-bit fine adjustment
18	Reserved Macro	0-255	Reserved macro function
19	Reset / Fan	0-255	0-25 none; 26-76 effect reset; 77-127 pan/tilt reset; 128-129 none; 130-134 fan mute; 135-139 fan standard; 140-144 fan full; 145-191 none; 192-255 full reset
20	Zoom	0-255	Narrow to wide
21	Lens Rotation	0-255	0-127 position 0°-60°; 128-190 CCW fast to slow; 191-192 stop; 193-255 CW slow to fast

6.2 30-Channel Personality

Channel	Function	DMX Value	Description
1	Pan	0-255	Pan movement
2	Pan Fine	0-255	16-bit fine adjustment
3	Tilt	0-255	Tilt movement
4	Tilt Fine	0-255	16-bit fine adjustment
5	Pan/Tilt Speed	0-255	Fast to slow
6	Zoom	0-255	Narrow to wide
7	Lens Rotation	0-255	0-127 position 0°-60°; 128-190 CCW fast to slow; 191-192 stop; 193-255 CW slow to fast
8	Master Dimmer	0-255	Linear dimming, dark to full
9	Strobe	0-255	0-3 open; 4-200 strobe slow to fast; 201-255 random strobe slow to fast
10	Red	0-255	Red dimmer
11	Green	0-255	Green dimmer
12	Blue	0-255	Blue dimmer
13	White	0-255	White dimmer
14	CTO	0-255	0-9 none; 10-255 color temperature high to low
15	Color Macro	0-255	Built-in color macro
16	Static Effect	0-255	0-9 none; 10-255 one effect per 5 values
17	Dynamic Effect	0-255	0-4 none; 5-255 one effect per 5 values
18	Dynamic Effect Speed	0-255	0-127 CCW fast to slow; 128-255 CW slow to fast
19	Effect Background Red	0-255	Dynamic-effect background red
20	Effect Background Green	0-255	Dynamic-effect background green
21	Effect Background Blue	0-255	Dynamic-effect background blue
22	Effect Background White	0-255	Dynamic-effect background white
23	Backlight Master Dimmer	0-255	Backlight master dimmer
24	Backlight Strobe	0-255	0-3 open; 4-250 strobe slow to fast; 251-255 open
25	Backlight Red	0-255	Backlight red dimmer
26	Backlight Green	0-255	Backlight green dimmer
27	Backlight Blue	0-255	Backlight blue dimmer
28	Backlight Macro	0-255	0-1 none; 2-51 static colors, two values each; 52-255 dynamic effects, three values each
29	Backlight Macro Speed	0-255	Slow to fast
30	Reset / Fan	0-255	0-25 none; 26-76 effect reset; 77-127 pan/tilt reset; 128-129 none; 130-134 fan mute; 135-139 fan standard; 140-144 fan full; 145-191 none; 192-255 full reset

6.3 36-Channel Core Personality

Channel	Function	DMX Value	Description
1	Strobe	0-255	0-19 blackout; 20-49 open; 50-200 strobe slow to fast; 201-210 open; 211-255 random
2	Master Dimmer	0-255	Linear dimming
3	Dimmer Fine	0-255	Fine master dimmer
4	Red	0-255	Coarse red
5	Red Fine	0-255	Fine red
6	Green	0-255	Coarse green
7	Green Fine	0-255	Fine green
8	Blue	0-255	Coarse blue
9	Blue Fine	0-255	Fine blue
10	CTO	0-255	Color temperature high to low
11	Reserved	0-255	Reserved

Channel	Function	DMX Value	Description
12	Color Macro	0-255	Built-in color macro
13	Zoom	0-255	Narrow to wide
14	Zoom Fine	0-255	Fine zoom
15	Pan	0-255	Pan movement
16	Pan Fine	0-255	16-bit fine adjustment
17	Tilt	0-255	Tilt movement
18	Tilt Fine	0-255	16-bit fine adjustment
19	Reset / Fan	0-255	0-25 none; 26-76 effect reset; 77-127 pan/tilt reset; 128-129 none; 130-134 fan mute; 135-139 fan standard; 140-144 fan full; 145-191 none; 192-255 full reset
20	Frequency	0-255	Output/PWM frequency control
21	Reserved	0-255	Reserved
22	LED Built-in Effect	0-255	0-4 none; 5-255 one effect per 5 values
23	LED Effect Speed	0-255	0-127 CCW fast to slow; 128-255 CW slow to fast
24	Backlight Built-in	0-255	0-1 none; 2-51 static colors, two values each; 52-255 dynamic effects, three values each
25	Backlight Effect Speed	0-255	Slow to fast
26	LED Effect Translation	0-255	Effect translation/offset
27	Backlight Strobe	0-255	0-3 open; 4-250 strobe slow to fast; 251-255 open
28	Backlight Dimmer	0-255	Coarse backlight dimmer
29	Backlight Dimmer Fine	0-255	Fine backlight dimmer
30	Backlight Red	0-255	Red dimmer
31	Backlight Green	0-255	Green dimmer
32	Backlight Blue	0-255	Blue dimmer
33	Backlight CTO	0-255	0-18 none; 19-255 color temperature low to high
34	Reserved	0-255	Reserved
35	Backlight Color Macro	0-255	Built-in backlight color macro
36	Reserved	0-255	Reserved

6.4 57CH / 93CH Main-Pixel Extension

Both modes use Channels 37-57 for the seven RGB main pixels. The 57CH personality ends at Channel 57; the 93CH personality continues with the Aura extension below.

Channel	Function	DMX Value	Description
37	Main Pixel 1 Red	0-255	Main Pixel 1 red dimmer
38	Main Pixel 1 Green	0-255	Main Pixel 1 green dimmer
39	Main Pixel 1 Blue	0-255	Main Pixel 1 blue dimmer
40	Main Pixel 2 Red	0-255	Main Pixel 2 red dimmer
41	Main Pixel 2 Green	0-255	Main Pixel 2 green dimmer
42	Main Pixel 2 Blue	0-255	Main Pixel 2 blue dimmer
43	Main Pixel 3 Red	0-255	Main Pixel 3 red dimmer
44	Main Pixel 3 Green	0-255	Main Pixel 3 green dimmer
45	Main Pixel 3 Blue	0-255	Main Pixel 3 blue dimmer
46	Main Pixel 4 Red	0-255	Main Pixel 4 red dimmer
47	Main Pixel 4 Green	0-255	Main Pixel 4 green dimmer
48	Main Pixel 4 Blue	0-255	Main Pixel 4 blue dimmer
49	Main Pixel 5 Red	0-255	Main Pixel 5 red dimmer
50	Main Pixel 5 Green	0-255	Main Pixel 5 green dimmer
51	Main Pixel 5 Blue	0-255	Main Pixel 5 blue dimmer
52	Main Pixel 6 Red	0-255	Main Pixel 6 red dimmer
53	Main Pixel 6 Green	0-255	Main Pixel 6 green dimmer

Channel	Function	DMX Value	Description
54	Main Pixel 6 Blue	0-255	Main Pixel 6 blue dimmer
55	Main Pixel 7 Red	0-255	Main Pixel 7 red dimmer
56	Main Pixel 7 Green	0-255	Main Pixel 7 green dimmer
57	Main Pixel 7 Blue	0-255	Main Pixel 7 blue dimmer

6.5 78CH Main-Pixel Extension - Channels 22-42

Channel	Function	DMX Value	Description
22	Main Pixel 1 Red	0-255	Main Pixel 1 red dimmer
23	Main Pixel 1 Green	0-255	Main Pixel 1 green dimmer
24	Main Pixel 1 Blue	0-255	Main Pixel 1 blue dimmer
25	Main Pixel 2 Red	0-255	Main Pixel 2 red dimmer
26	Main Pixel 2 Green	0-255	Main Pixel 2 green dimmer
27	Main Pixel 2 Blue	0-255	Main Pixel 2 blue dimmer
28	Main Pixel 3 Red	0-255	Main Pixel 3 red dimmer
29	Main Pixel 3 Green	0-255	Main Pixel 3 green dimmer
30	Main Pixel 3 Blue	0-255	Main Pixel 3 blue dimmer
31	Main Pixel 4 Red	0-255	Main Pixel 4 red dimmer
32	Main Pixel 4 Green	0-255	Main Pixel 4 green dimmer
33	Main Pixel 4 Blue	0-255	Main Pixel 4 blue dimmer
34	Main Pixel 5 Red	0-255	Main Pixel 5 red dimmer
35	Main Pixel 5 Green	0-255	Main Pixel 5 green dimmer
36	Main Pixel 5 Blue	0-255	Main Pixel 5 blue dimmer
37	Main Pixel 6 Red	0-255	Main Pixel 6 red dimmer
38	Main Pixel 6 Green	0-255	Main Pixel 6 green dimmer
39	Main Pixel 6 Blue	0-255	Main Pixel 6 blue dimmer
40	Main Pixel 7 Red	0-255	Main Pixel 7 red dimmer
41	Main Pixel 7 Green	0-255	Main Pixel 7 green dimmer
42	Main Pixel 7 Blue	0-255	Main Pixel 7 blue dimmer

6.6 78CH Aura Extension - Channels 43-78

Channel	Function	DMX Value	Description
43	Aura Filament 1 Red	0-255	Aura Filament 1 red dimmer
44	Aura Filament 1 Green	0-255	Aura Filament 1 green dimmer
45	Aura Filament 1 Blue	0-255	Aura Filament 1 blue dimmer
46	Aura Filament 2 Red	0-255	Aura Filament 2 red dimmer
47	Aura Filament 2 Green	0-255	Aura Filament 2 green dimmer
48	Aura Filament 2 Blue	0-255	Aura Filament 2 blue dimmer
49	Aura Filament 3 Red	0-255	Aura Filament 3 red dimmer
50	Aura Filament 3 Green	0-255	Aura Filament 3 green dimmer
51	Aura Filament 3 Blue	0-255	Aura Filament 3 blue dimmer
52	Aura Filament 4 Red	0-255	Aura Filament 4 red dimmer
53	Aura Filament 4 Green	0-255	Aura Filament 4 green dimmer
54	Aura Filament 4 Blue	0-255	Aura Filament 4 blue dimmer
55	Aura Filament 5 Red	0-255	Aura Filament 5 red dimmer

Channel	Function	DMX Value	Description
56	Aura Filament 5 Green	0-255	Aura Filament 5 green dimmer
57	Aura Filament 5 Blue	0-255	Aura Filament 5 blue dimmer
58	Aura Filament 6 Red	0-255	Aura Filament 6 red dimmer
59	Aura Filament 6 Green	0-255	Aura Filament 6 green dimmer
60	Aura Filament 6 Blue	0-255	Aura Filament 6 blue dimmer
61	Aura Filament 7 Red	0-255	Aura Filament 7 red dimmer
62	Aura Filament 7 Green	0-255	Aura Filament 7 green dimmer
63	Aura Filament 7 Blue	0-255	Aura Filament 7 blue dimmer
64	Aura Filament 8 Red	0-255	Aura Filament 8 red dimmer
65	Aura Filament 8 Green	0-255	Aura Filament 8 green dimmer
66	Aura Filament 8 Blue	0-255	Aura Filament 8 blue dimmer
67	Aura Filament 9 Red	0-255	Aura Filament 9 red dimmer
68	Aura Filament 9 Green	0-255	Aura Filament 9 green dimmer
69	Aura Filament 9 Blue	0-255	Aura Filament 9 blue dimmer
70	Aura Filament 10 Red	0-255	Aura Filament 10 red dimmer
71	Aura Filament 10 Green	0-255	Aura Filament 10 green dimmer
72	Aura Filament 10 Blue	0-255	Aura Filament 10 blue dimmer
73	Aura Filament 11 Red	0-255	Aura Filament 11 red dimmer
74	Aura Filament 11 Green	0-255	Aura Filament 11 green dimmer
75	Aura Filament 11 Blue	0-255	Aura Filament 11 blue dimmer
76	Aura Filament 12 Red	0-255	Aura Filament 12 red dimmer
77	Aura Filament 12 Green	0-255	Aura Filament 12 green dimmer
78	Aura Filament 12 Blue	0-255	Aura Filament 12 blue dimmer

6.7 93CH Aura Extension - Channels 58-93

Channel	Function	DMX Value	Description
58	Aura Filament 1 Red	0-255	Aura Filament 1 red dimmer
59	Aura Filament 1 Green	0-255	Aura Filament 1 green dimmer
60	Aura Filament 1 Blue	0-255	Aura Filament 1 blue dimmer
61	Aura Filament 2 Red	0-255	Aura Filament 2 red dimmer
62	Aura Filament 2 Green	0-255	Aura Filament 2 green dimmer
63	Aura Filament 2 Blue	0-255	Aura Filament 2 blue dimmer
64	Aura Filament 3 Red	0-255	Aura Filament 3 red dimmer
65	Aura Filament 3 Green	0-255	Aura Filament 3 green dimmer
66	Aura Filament 3 Blue	0-255	Aura Filament 3 blue dimmer
67	Aura Filament 4 Red	0-255	Aura Filament 4 red dimmer
68	Aura Filament 4 Green	0-255	Aura Filament 4 green dimmer
69	Aura Filament 4 Blue	0-255	Aura Filament 4 blue dimmer
70	Aura Filament 5 Red	0-255	Aura Filament 5 red dimmer
71	Aura Filament 5 Green	0-255	Aura Filament 5 green dimmer
72	Aura Filament 5 Blue	0-255	Aura Filament 5 blue dimmer
73	Aura Filament 6 Red	0-255	Aura Filament 6 red dimmer
74	Aura Filament 6 Green	0-255	Aura Filament 6 green dimmer
75	Aura Filament 6 Blue	0-255	Aura Filament 6 blue dimmer
76	Aura Filament 7 Red	0-255	Aura Filament 7 red dimmer
77	Aura Filament 7 Green	0-255	Aura Filament 7 green dimmer
78	Aura Filament 7 Blue	0-255	Aura Filament 7 blue dimmer

Channel	Function	DMX Value	Description
79	Aura Filament 8 Red	0-255	Aura Filament 8 red dimmer
80	Aura Filament 8 Green	0-255	Aura Filament 8 green dimmer
81	Aura Filament 8 Blue	0-255	Aura Filament 8 blue dimmer
82	Aura Filament 9 Red	0-255	Aura Filament 9 red dimmer
83	Aura Filament 9 Green	0-255	Aura Filament 9 green dimmer
84	Aura Filament 9 Blue	0-255	Aura Filament 9 blue dimmer
85	Aura Filament 10 Red	0-255	Aura Filament 10 red dimmer
86	Aura Filament 10 Green	0-255	Aura Filament 10 green dimmer
87	Aura Filament 10 Blue	0-255	Aura Filament 10 blue dimmer
88	Aura Filament 11 Red	0-255	Aura Filament 11 red dimmer
89	Aura Filament 11 Green	0-255	Aura Filament 11 green dimmer
90	Aura Filament 11 Blue	0-255	Aura Filament 11 blue dimmer
91	Aura Filament 12 Red	0-255	Aura Filament 12 red dimmer
92	Aura Filament 12 Green	0-255	Aura Filament 12 green dimmer
93	Aura Filament 12 Blue	0-255	Aura Filament 12 blue dimmer

7 Routine Maintenance

ATTENTION Disconnect power, allow the fixture to cool and ensure all connector interfaces are dry before inspection or cleaning.

- Inspect mounting screws, clamps, brackets and safety attachments for tightness, corrosion or deformation.
- Inspect the housing, lenses, seals, suspension points and moving parts for damage, wear or imbalance.
- Inspect power and data cables for cuts, crushing, fatigue, overheating or contamination.
- Clean internal and external optical surfaces regularly with a moist, lint-free cloth suitable for the coating. Never use alcohol or aggressive solvents.
- Remove dust from fans and ventilation openings. The source recommends weekly cleaning in demanding environments.
- Arrange a detailed electrical inspection by a qualified engineer approximately every three months, adjusted to usage and local requirements.

Cleaning frequency must reflect operating hours, dust, fog-fluid residue, airflow and outdoor exposure. Correct every safety issue before returning the fixture to service.

8 Troubleshooting and Service

Symptom	Check
Fixture does not power on	Verify supply voltage, protective earth, circuit protection, cable, connector and product-label rating.
No DMX response	Confirm DMX mode, address, selected personality, controller patch, cable polarity and termination.
Unexpected channel behavior	Confirm the controller profile matches 21/30/36/57/78/93CH and verify firmware.
Movement or rotation error	Remove obstructions, run the correct reset and inspect pan, tilt, zoom and lens-rotation operation.
Thermistor warning	Stop operation. Inspect temperature, cooling and sensor status; refer open/short/hot faults to qualified service.
Reduced or unstable output	Check temperature, ventilation, fan operation, optical cleanliness and supply quality.
Water or condensation suspected	Disconnect power, move the fixture to a dry service area and have seals/connectors inspected before reuse.

SERVICE There are no user-serviceable high-voltage or sealed parts inside. Refer internal repair, seal replacement and calibration to qualified personnel, and use genuine replacement parts.

8.1 Warranty and Support

Damage caused by misuse, ignored warnings, unauthorized modification, impact, incorrect installation or operation outside the specified conditions may be excluded from warranty coverage. Include the model, serial number, firmware version, selected personality and a clear fault description when requesting support.

End of manual