

PROFESSIONAL IP65 LED MOVING HEAD

ALP0960WX

9 x 60 W LED WASH & STROBE

DOUBLE-SIDED MOVING HEAD | IP65

USER MANUAL | English Edition



9 x 60 W RGBW wash | RGB pixel effects | Warm-white strobe matrix

Wash LEDs	Pixel / Strobe Side	Ingress	DMX Personalities
9 x 60 W RGBW	RGB pixels + warm white	IP65	16 / 33 / 42 / 69 CH / 69 AH

IMPORTANT Read this manual completely before installing, powering, operating, or servicing the fixture. Retain it for future reference.

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EDITORIAL NOTE This English edition standardizes professional lighting terminology and uses the confirmed IP65 ingress-protection rating throughout.

1 Product Information & Safety

1.1 Intended Use

The ALP0960WX is a professional IP65 double-sided moving head. One side provides nine 60 W RGBW wash LEDs with motorized zoom; the reverse side combines addressable RGB pixel effects with a warm-white strobe matrix. The fixture supports DMX512, RDM, automatic programs, sound-active operation, and master/slave control.

Inspect the fixture immediately after unpacking. Do not operate it if the housing, lenses, seals, connectors, power cable, mounting points, or safety attachment appear damaged.

1.2 Safety Instructions

- Installation, operation, and service must be performed by qualified personnel familiar with professional entertainment-lighting equipment.
- Connect only to a properly grounded Protection Class I circuit within the rated AC input range. Disconnect mains power before cleaning, servicing, moving, or connecting the fixture.
- IP65 protection applies only when all covers, gaskets, and approved waterproof power and data connectors are correctly fitted and fully locked. Do not immerse the fixture or expose it to high-pressure water.
- Allow the fixture to reach ambient temperature and let condensation evaporate before applying power after a major temperature change.
- Keep ventilation paths unobstructed. Never operate the fixture outside the stated temperature range or with a failed fan.
- Do not look directly into the light source. Strobe lighting may trigger photosensitive seizures; follow venue and local warning requirements.
- Use a correctly rated independent safety attachment for overhead installation. Never use a carrying handle as the safety anchor.
- Stop operation immediately if the fixture overheats, takes in water, emits abnormal noise, reports repeated errors, or behaves unexpectedly.

WARNING Never stand directly below the fixture during installation, removal, or service. Observe the 0.5 m minimum distance marked on the product and all stricter local requirements.

2 Technical Specifications & Photometrics

Parameter	Specification
Model	ALP0960WX
Product type	9 x 60 W LED Wash & Strobe Double-Sided Moving Head, IP65
Wash light source	9 x 60 W RGBW LEDs
Pixel / strobe light source	324 x 0.3 W RGB 5050 LEDs + 288 x 2 W 3030 warm-white LEDs
LED service life	At least 20,000 hours under rated operating conditions
Zoom	Motorized, 4-32 degrees
Pan	540 degrees; magnetic position sensing; 16-bit control
Tilt	Continuous rotation; magnetic position sensing; 16-bit control
Color system	RGBW color mixing, color macros, and 2500-8000 K color-temperature control
Strobe	0-20 Hz; synchronous, random, and pulse effects
Dimming	0-100% electronic dimming
Control modes	DMX512, RDM, Auto, Sound-active, Master/Slave
DMX personalities	16 CH / 33 CH / 42 CH / 69 CH / 69 AH
Display	Touch interface; Chinese / English; temperature display
Input voltage	AC 90-240 V, 50/60 Hz
Power consumption	800 W
Power factor	0.85
Power / data connections	Locking waterproof power and signal input/output connectors
Operating temperature	-20 to 45 degrees C
Cooling	Ultra-quiet fan cooling with magnesium-alloy housing heat dissipation
Housing / finish	Magnesium alloy; black outdoor protective coating
Ingress protection	IP65
Dimensions (W x D x H)	415 x 240 x 613 mm
Net weight	22.5 kg

2.1 Photometric Data

The values below are transcribed from the supplied photometric chart. Actual output may vary with color mix, calibration, ambient conditions, mains voltage, optical cleanliness, and production tolerances.

Beam Setting	5 m	10 m	15 m
4-degree narrow beam	69,212 lux	17,772 lux	8,373 lux
32-degree wide wash	3,904 lux	1,036 lux	498 lux

SPECIFICATION NOTE The source specification also gives a nominal value of approximately 8,000 lux at 15 m with the zoom at 4 degrees; the chart value is 8,373 lux.

3 Installation, Connections & Display Menu

3.1 Rigging and Positioning

- Complete all rigging before connecting mains power. Verify that the supporting structure and all hardware can carry at least ten times the fixture weight, or the higher safety factor required locally.
- Use correctly rated clamps and fasteners at the designated mounting points. Attach a separately rated safety cable to the designated safety attachment point.
- Check that Pan, Tilt, and continuous-rotation movement cannot strike the structure, nearby equipment, cables, or people.
- Keep air intakes, exhausts, and drainage paths clear. Route power and data cables so that movement cannot crush, pull, or twist them.

3.2 Power and DMX512 Data

Connect the controller output to the first fixture's DMX input, then connect each fixture's DMX output to the next fixture's input. Use shielded twisted-pair DMX cable with a nominal 120 ohm characteristic impedance. Install a 120 ohm terminator at the output of the final fixture when required.

Set a unique DMX start address for each fixture unless identical synchronized response is intended. The address display stops flashing when valid DMX data is received. Use only waterproof power and data connectors approved for the fixture.

RDM RDM is supported according to the supplied specification. Use an RDM-compatible controller and bidirectional RDM splitters; conventional one-way DMX splitters block return data.

3.3 Main Menu

Menu Group	Option	Setting / Function	Default
System Settings	DMX Address	001-512	001
System Settings	Encoder	On / Off	On
System Settings	Pan Reverse	On / Off	Off
System Settings	Tilt Reverse	On / Off	Off
System Settings	Advanced Settings	Authorized service functions	-
Run Mode	Operating Mode	DMX / Sound / Auto	DMX
Run Mode	Channel Mode	16 CH / 33 CH / 42 CH / 69 CH / 69 AH	-
Display Settings	Language	Chinese / English	Chinese
Display Settings	Display Invert	Off / On	Off
Display Settings	Screen Saver	Off / On	On
Display Settings	Software Version	G45A in supplied source	Read only

3.4 Manual Control

Manual Control provides direct 000-255 adjustment of the parameters below. The available controls may vary with firmware. Use the display to confirm the selected value.

Control	Range	Control	Range
Pan	000-255	Pan Fine	000-255
Tilt	000-255	Tilt Fine	000-255
Tilt Continuous Rotation	000-255	Pan/Tilt Speed	000-255
Zoom	000-255	Wash Dimmer	000-255
Wash Strobe	000-255	Wash Red	000-255
Wash Green	000-255	Wash Blue	000-255
Wash White	000-255	Wash Effect Mode	000-255
Wash Effect Speed	000-255	Wash Background Color	000-255
Wash Background Dimmer	000-255	Pixel/Strobe Dimmer	000-255
Pixel RGB Strobe	000-255	Pixel Red	000-255
Pixel Green	000-255	Pixel Blue	000-255
Pixel RGB Effect Mode	000-255	Pixel RGB Effect Speed	000-255
Warm-White Strobe	000-255	Warm-White Dimmer	000-255
White Effect Mode	000-255	White Effect Speed	000-255
Character / Pattern	000-255	Background Color	000-255
Background Dimmer	000-255	Effect Direction	000-255
Reset	000-255		

3.5 Advanced Settings and Calibration

SERVICE ONLY Advanced Settings are intended for authorized technicians. Incorrect calibration can alter movement limits, cooling behavior, LED balance, or maximum output. The service password from the source is intentionally not reproduced.

Group	Available Service Functions
Movement	Pan calibration; Tilt calibration; continuous-Tilt calibration; Pan/Tilt speed; Pan/Tilt current
Optics	Zoom calibration and zoom travel
LED Output	LEDA / LEDB; A-side RGBW; B-side RGBW; LED quantity; maximum output
Fixture / Cooling	Logo; temperature calibration; temperature and fan parameters

3.6 DMX Personality Overview

Mode	Channels	Purpose
16 CH	1-16	Compact movement, Zoom, direct Wash RGBW, direct Pixel/Strobe RGBW, Reset
33 CH	1-33	Full master control, Wash effects, Pixel RGB and warm-white effects
42 CH	1-33 + 34-42	33 CH base plus individual intensity for Wash LEDs 1-9
69 CH	1-33 + 34-69	33 CH base plus 36 individual Pixel/Strobe segments
69 AH	1-33 + 34-69	33 CH base plus individual RGBW control for Wash LEDs 1-9

FIRMWARE NOTE The source labels the final personality AH69 in one location and 69AH in another. This manual standardizes the name as 69 AH.

4 DMX512 Control

Select the required personality and set the start address before operation. DMX values are decimal values from 000 to 255. Where the supplied source gives no subrange mapping, this manual preserves the full 000-255 range without inventing unsupported trigger points.

4.1 16 CH Mode

Channel	DMX Value	Function
1	000-255	Pan, 0-540 degrees
2	000-255	Pan Fine, 16-bit adjustment
3	000-255	Tilt position
4	000-255	Tilt Fine, 16-bit adjustment
5	000-255	Tilt Continuous Rotation
6	000-255	Pan/Tilt Speed
7	000-255	Zoom, narrow to wide
8	000-255	Wash Red, 0-100%
9	000-255	Wash Green, 0-100%
10	000-255	Wash Blue, 0-100%
11	000-255	Wash White, 0-100%
12	000-255	Pixel/Strobe Red, 0-100%
13	000-255	Pixel/Strobe Green, 0-100%
14	000-255	Pixel/Strobe Blue, 0-100%
15	000-255	Pixel/Strobe Warm White, 0-100%
16	000-255	Fixture Reset; trigger range not specified in source

OUTPUT NOTE In 16 CH mode the source provides direct color channels but does not define separate dimmer or strobe channels. Confirm installed-firmware behavior during commissioning.

4.2 33 CH Base Mode

Channel	DMX Value	Function
1	000-255	Pan, 0-540 degrees
2	000-255	Pan Fine, 16-bit adjustment
3	000-255	Tilt position
4	000-255	Tilt Fine, 16-bit adjustment
5	000-255	Tilt Continuous Rotation
6	000-255	Pan/Tilt Speed
7	000-255	Zoom, narrow to wide
8	000-255	Wash Master Dimmer, 0-100%
9	000-255	Wash Strobe, 0-20 Hz / effect control
10	000-255	Wash Red, 0-100%
11	000-255	Wash Green, 0-100%
12	000-255	Wash Blue, 0-100%
13	000-255	Wash White, 0-100%
14	000-255	Wash Effect Mode; mapping not specified in source
15	000-255	Wash Effect Speed
16	000-255	Wash Background Color
17	000-255	Wash Background Dimmer
18	000-255	Pixel/Strobe Master Dimmer, 0-100%
19	000-255	Pixel RGB Strobe
20	000-255	Pixel Red, 0-100%
21	000-255	Pixel Green, 0-100%
22	000-255	Pixel Blue, 0-100%
23	000-255	Pixel RGB Effect Mode; mapping not specified in source
24	000-255	Pixel RGB Effect Speed
25	000-255	Warm-White Strobe
26	000-255	Warm-White Dimmer, 0-100%
27	000-255	Warm-White Effect Mode; mapping not specified in source
28	000-255	Warm-White Effect Speed
29	000-255	Pixel/Strobe Character or Pattern
30	000-255	Pixel/Strobe Background Color
31	000-255	Pixel/Strobe Background Dimmer
32	000-255	Pixel/Strobe Effect Direction
33	000-255	Fixture Reset; trigger range not specified in source

4.3 42 CH Mode

Channels 1-33 are identical to the 33 CH Base Mode in section 4.2. Channels 34-42 add individual intensity control for the nine Wash lenses.

Channel	DMX Value	Function
34	000-255	Wash LED 1 intensity, 0-100%
35	000-255	Wash LED 2 intensity, 0-100%
36	000-255	Wash LED 3 intensity, 0-100%
37	000-255	Wash LED 4 intensity, 0-100%
38	000-255	Wash LED 5 intensity, 0-100%
39	000-255	Wash LED 6 intensity, 0-100%
40	000-255	Wash LED 7 intensity, 0-100%
41	000-255	Wash LED 8 intensity, 0-100%
42	000-255	Wash LED 9 intensity, 0-100%

4.4 69 CH Mode - Pixel/Strobe Segments 1-18

Channels 1-33 are identical to the 33 CH Base Mode. Channels 34-69 control 36 individual Pixel/Strobe segments. Segment order follows the fixture firmware and physical pixel map.

Channel	DMX Value	Function
34	000-255	Pixel/Strobe Segment 1 intensity, 0-100%
35	000-255	Pixel/Strobe Segment 2 intensity, 0-100%
36	000-255	Pixel/Strobe Segment 3 intensity, 0-100%
37	000-255	Pixel/Strobe Segment 4 intensity, 0-100%
38	000-255	Pixel/Strobe Segment 5 intensity, 0-100%
39	000-255	Pixel/Strobe Segment 6 intensity, 0-100%
40	000-255	Pixel/Strobe Segment 7 intensity, 0-100%
41	000-255	Pixel/Strobe Segment 8 intensity, 0-100%
42	000-255	Pixel/Strobe Segment 9 intensity, 0-100%
43	000-255	Pixel/Strobe Segment 10 intensity, 0-100%
44	000-255	Pixel/Strobe Segment 11 intensity, 0-100%
45	000-255	Pixel/Strobe Segment 12 intensity, 0-100%
46	000-255	Pixel/Strobe Segment 13 intensity, 0-100%
47	000-255	Pixel/Strobe Segment 14 intensity, 0-100%
48	000-255	Pixel/Strobe Segment 15 intensity, 0-100%
49	000-255	Pixel/Strobe Segment 16 intensity, 0-100%
50	000-255	Pixel/Strobe Segment 17 intensity, 0-100%
51	000-255	Pixel/Strobe Segment 18 intensity, 0-100%

4.4 69 CH Mode - Pixel/Strobe Segments 19-36

Channel	DMX Value	Function
52	000-255	Pixel/Strobe Segment 19 intensity, 0-100%
53	000-255	Pixel/Strobe Segment 20 intensity, 0-100%
54	000-255	Pixel/Strobe Segment 21 intensity, 0-100%
55	000-255	Pixel/Strobe Segment 22 intensity, 0-100%
56	000-255	Pixel/Strobe Segment 23 intensity, 0-100%
57	000-255	Pixel/Strobe Segment 24 intensity, 0-100%
58	000-255	Pixel/Strobe Segment 25 intensity, 0-100%
59	000-255	Pixel/Strobe Segment 26 intensity, 0-100%
60	000-255	Pixel/Strobe Segment 27 intensity, 0-100%
61	000-255	Pixel/Strobe Segment 28 intensity, 0-100%
62	000-255	Pixel/Strobe Segment 29 intensity, 0-100%
63	000-255	Pixel/Strobe Segment 30 intensity, 0-100%
64	000-255	Pixel/Strobe Segment 31 intensity, 0-100%
65	000-255	Pixel/Strobe Segment 32 intensity, 0-100%
66	000-255	Pixel/Strobe Segment 33 intensity, 0-100%
67	000-255	Pixel/Strobe Segment 34 intensity, 0-100%
68	000-255	Pixel/Strobe Segment 35 intensity, 0-100%
69	000-255	Pixel/Strobe Segment 36 intensity, 0-100%

ADDRESSING EXAMPLE In 69 CH mode, a fixture starting at address 001 occupies addresses 001-069. The next fixture may start at 070 when its personality and controller patch allow.

SEGMENT MAP The supplied source identifies the additional channels as FLED1 through FLED36 but does not provide a physical segment-number diagram. Confirm orientation and segment order during programming.

4.5 69 AH Mode - Individual Wash RGBW

Channels 1-33 are identical to the 33 CH Base Mode. Channels 34-69 provide individual RGBW control for Wash LEDs 1-9.

Channel	DMX Value	Function
34	000-255	Wash LED 1 Red, 0-100%
35	000-255	Wash LED 1 Green, 0-100%
36	000-255	Wash LED 1 Blue, 0-100%
37	000-255	Wash LED 1 White, 0-100%
38	000-255	Wash LED 2 Red, 0-100%
39	000-255	Wash LED 2 Green, 0-100%
40	000-255	Wash LED 2 Blue, 0-100%
41	000-255	Wash LED 2 White, 0-100%
42	000-255	Wash LED 3 Red, 0-100%
43	000-255	Wash LED 3 Green, 0-100%
44	000-255	Wash LED 3 Blue, 0-100%
45	000-255	Wash LED 3 White, 0-100%
46	000-255	Wash LED 4 Red, 0-100%
47	000-255	Wash LED 4 Green, 0-100%
48	000-255	Wash LED 4 Blue, 0-100%
49	000-255	Wash LED 4 White, 0-100%
50	000-255	Wash LED 5 Red, 0-100%
51	000-255	Wash LED 5 Green, 0-100%
52	000-255	Wash LED 5 Blue, 0-100%
53	000-255	Wash LED 5 White, 0-100%
54	000-255	Wash LED 6 Red, 0-100%
55	000-255	Wash LED 6 Green, 0-100%
56	000-255	Wash LED 6 Blue, 0-100%
57	000-255	Wash LED 6 White, 0-100%
58	000-255	Wash LED 7 Red, 0-100%
59	000-255	Wash LED 7 Green, 0-100%
60	000-255	Wash LED 7 Blue, 0-100%
61	000-255	Wash LED 7 White, 0-100%
62	000-255	Wash LED 8 Red, 0-100%
63	000-255	Wash LED 8 Green, 0-100%
64	000-255	Wash LED 8 Blue, 0-100%
65	000-255	Wash LED 8 White, 0-100%
66	000-255	Wash LED 9 Red, 0-100%
67	000-255	Wash LED 9 Green, 0-100%
68	000-255	Wash LED 9 Blue, 0-100%
69	000-255	Wash LED 9 White, 0-100%

5 Troubleshooting, Inspection & Maintenance

Symptom	Checks and Corrective Action
Fixture does not power on	Confirm rated mains supply, locked power connector, upstream protection, and cable condition. Disconnect power before inspection.
No light output	Raise the relevant master dimmer and color channels; check strobe/effect state, operating mode, address, and blackout status.
No DMX response	Check DMX mode, start address, personality, controller patch, cable polarity, connectors, splitter type, and end-of-line termination.
Movement is incorrect	Check Pan/Tilt reverse settings and clear obstructions. Run a fixture reset. If the fault returns, record the error and arrange qualified service.
Uneven color or output	Confirm direct color channels, effect/background channels, calibration, lens cleanliness, temperature, and firmware personality.
Overtemperature or fan warning	Stop output, allow the fixture to cool, inspect ventilation paths and fans, and clean safely. Do not bypass temperature protection.
Water or condensation inside	Disconnect mains power immediately. Do not re-energize until the seals, connectors, and internal components have been inspected and dried by qualified service personnel.

5.1 Routine Inspection

- Before every use, inspect the housing, lenses, seals, waterproof connectors, power cable, mounting points, clamps, fasteners, and secondary safety attachment.
- Check that Pan and Tilt movement is free and that cables cannot enter the movement path.
- Clean optical surfaces and ventilation openings with a soft, lint-free cloth. Do not use solvents, abrasive cleaners, or high-pressure water.
- Keep connector caps clean and fitted when a connector is unused. Replace damaged gaskets, caps, cables, or connectors only with approved parts.
- Record repeated errors, abnormal temperatures, fan noise, water exposure, or impact damage and arrange qualified service before further use.

5.2 Storage and Service

Store the fixture clean and dry with connector caps fitted. Protect it from impact, corrosive chemicals, and extreme temperatures. There are no user-serviceable internal parts. Disconnect mains power and refer internal repairs, waterproofing work, calibration, and firmware service to qualified personnel.

FINAL CHECK After installation or service, verify secure rigging, independent safety attachment, free movement, sealed connectors, correct DMX personality and address, normal temperature, and stable operation before admitting people below or near the fixture.