User manual



LFS2000

2000W LED Follow Spot

1. Introduction

Thank you for choosing our LFS2000 LED Follow Spot.
Please read this user manual carefully before installation and operation to ensure safe and proper use of the fixture. Keep this manual for future reference.

2. General Information

Each fixture undergoes quality inspection and testing before leaving the factory to ensure proper operation.
Upon receiving the product, carefully inspect the fixture and its packaging for any visible damage. Check that all supplied accessories are included.
If any components are missing or damaged, please contact your supplier before installation or operation.

3. Unpacking and Installation

Unpacking

1. Carefully open the packaging and remove the protective materials and accessories.
2. Lift the fixture out of the packaging using its designated handles.
3. Place the fixture on a stable, flat surface and inspect it for any visible damage.

Installation

1. Assemble the fixture and its tripod stand according to the installation illustration provided in this manual.
2. Ensure that all mounting connections and locking mechanisms are properly secured.
3. Position the fixture on a stable, level surface before connecting the power supply.

4. Product Description

The LFS2000 LED Follow Spot is designed for professional stage and event lighting applications.
It features a high-power LED light source with high color rendering performance. The aluminum alloy housing provides a durable structure, while the fan-assisted cooling system helps maintain stable operation during extended use.
The fixture is suitable for theaters, live performances, television productions, stadiums, and other venues requiring precise spotlight illumination of performers or subjects.

5. Technical Specifications

Input Voltage: AC 100V – 240V, 50/60Hz
Power Consumption: 2000W
Light Source: 2000W high-power LED engine
LED Chip: OSRAM chips
LED Lifespan: Up to 50,000 hours
Color Temperature: 3200K / 5600K / 8500K adjustable
CRI: >90
Color System: Red, Yellow, Blue, Green, Orange, White
Control Mode: Manual / DMX512 control
DMX Channels: 8
DMX Input/Output: 3-pin XLR
Dimming: 0 – 100% linear dimming
Beam Angle: 5° – 10° linear zoom
Maximum Throw Distance: Up to 200 m
Recommended Working Distance: Approx. 120 m
Housing Material: Full aluminum alloy housing
Protection Rating: IP20
Cooling System: Cooling fans, 16 pcs of 8mm copper heat pipes with large-area aluminum heat sinks
Fixture Size: 120 × 38 × 46 cm
Fixture Weight: 46 kg
Tripod Weight: 10 kg
Flight Case Size: 135 × 43 × 80 cm
Gross Weight with Flight Case: 86 kg

6. Control Panel Operation

1. Automatic Reset: The follow spot automatically resets when powered on.
2. Color Selection: Press the corresponding color buttons to select the desired colors on the color wheel.
3. Shutter Control: Press the black button to turn the light output on or off.
4. Fader Controls (from left to right):
   - Fader 1 – Dimmer: Adjusts the light intensity.
   - Fader 2 – Strobe: Adjusts the strobe speed.
   - Fader 3 – Iris: Adjusts the iris aperture.
   - Fader 4 – CTO: Adjusts the color temperature.
   - Fader 5 – Zoom: Adjusts the beam angle.
   - Fader 6 – Focus: Adjusts the beam focus.


LED
DMX
ERR
MENU
DIMMER
STROBE
IRIS
COLOR TEMP FROST
ZOOM
FOCUS
FROST
3200K
5600K
LAMP
ON/OFF
WHITE
RED
YELLOW
BLUE
GREEN
ORANGE
OFF
FUSE
POWER IN
DMX IN
DMX OUT

7. DMX Control Mode

DMX Priority: When a DMX signal is detected, DMX control takes priority over manual control.
DMX Address Setting: The DMX start address can be adjusted via the OLED display.

7.1. DMX Channel Overview

DMX Mode: 8 channels (8 CH)

Channel	Function	Description
1	Color Wheel	Color selection
2	Dimmer	Light intensity
3	OTC	OTC color selection (manufacturer designation)
4	Blackout Flag	Mechanical blackout flag
5	Shutter / Strobe	Shutter open/closed and strobe effect
6	Zoom	Beam angle adjustment
7	Focus	Beam focus adjustment
8	Reset	Fixture reset

7.2. DMX Channel Details

Channel 1 — Color Wheel

DMX Value	Effect	Notes
250–255	Orange	
200–249	Green	
150–199	Blue	
100–149	Yellow	
50–99	Red	
0–49	White	

Channel 2 — Dimmer

DMX Value	Effect	Notes
0	0%	Light output at 0%
1–254	Variable	Progressive dimming
255	100%	Light output at 100%

Channel 3 — OTC

DMX Value	Effect	Notes
193–255	OTC 3	
129–192	OTC 2	
65–128	OTC 1	
0–64	White	

Channel 4 — Blackout Flag

DMX Value	Effect	Notes

128–255	100%	Blackout flag inserted
0–127	0%	Blackout flag retracted

Channel 5 — Shutter / Strobe

DMX Value	Effect	Notes
251–255	Open	Light output controlled by Channel 2 (Dimmer)
250	Fast Strobe	
4–249	Strobe Speed	Slow to fast (based on the provided endpoints)
0–3	Closed	

Channel 6 — Zoom

DMX Value	Effect	Notes
0–255	0–100%	Zoom adjustment

Channel 7 — Focus

DMX Value	Effect	Notes
0–255	0–100%	Focus adjustment

Channel 8 — Reset

DMX Value	Effect	Notes
128–255	Complete Reset	Hold the DMX value in this range for 5 seconds to initiate a reset of all motors.
0–127	Unused Range	No reset command

8. Control Panel Buttons

The rotary control knob is located to the right of the display.

Control	Function
Rotary knob	Navigate menus and adjust settings.
Black button	Open or close the light output (shutter control).
White button	Switch to white light.
Red button	Switch to red light.
Yellow button	Switch to yellow light.
Blue button	Switch to blue light.
Cyan button	Switch to cyan light.
Orange button	Switch to orange light.

9. Menu Structure

Main Menu	Setting / Option	Description
DMX Address	Adjustable	Set the DMX start address.
DMX Fail	Hold	Maintain the last DMX values when the DMX signal is lost.
DMX Fail	Blackout	Set the DMX output state to blackout when the signal is lost.
Dimmer Curve	Linear	Linear dimming curve.
Dimmer Curve	Exp	Exponential dimming curve.
Dimmer Curve	Log	Logarithmic dimming curve.
Dimmer Curve	S-Curve	S-shaped dimming curve.

Dimmer Resp	LED	Dimming delay disabled.
Dimmer Resp	Halogen	Dimming delay enabled (halogen-style response).
Auto Lock	No	Screen saver disabled.
Auto Lock	Yes	Screen saver enabled.
Temperature	—	Displays the current fixture temperature.
Fixture Hours	Power On	Total fixture operating time.
Fixture Hours	Lamp On	Total light-source operating time.
Fixture Hours	Strikes	Light-source operating time for the current session (as described in the source manual).
Firmware	—	Displays the firmware version.
Exit	—	Exit the menu.

10. Safety Precautions

1. Do not look directly into the light beam while the follow spot is operating. High-intensity light may cause eye discomfort or injury.

2. The fixture is designed for continuous operation. After switching off the power, wait at least 10 seconds before turning it on again.

3. LED light source replacement must be performed by qualified service technicians. Do not attempt to replace the LED light source yourself.

4. Always disconnect the fixture from the power supply before cleaning, maintenance, or servicing.

5. Do not disassemble or modify the fixture without authorization.

6. Keep the fixture away from water and other liquids. Prevent metal objects from entering the housing.

7. Do not install or operate the fixture in excessively hot environments.

8. Do not direct the light beam toward flammable materials. Maintain a minimum distance of 2 m between the fixture and flammable materials.

9. Maintain a minimum clearance of 0.5 m between the fixture and surrounding surfaces or objects to allow adequate ventilation and heat dissipation.

11. Cleaning and Maintenance

Regular cleaning and maintenance help maintain reliable performance and extend the service life of the fixture.

1. Disconnect the fixture from the power supply before performing any cleaning or maintenance.

2. Clean the exterior surfaces using a soft, dry cloth.

3. Clean the optical lens with a soft, lint-free cloth and a suitable optical glass cleaner when necessary.

4. Do not use alcohol, aggressive chemicals, or solvents to clean the fixture.

5. Have the internal components cleaned with a suitable vacuum cleaner at least once a year. Internal cleaning must be performed by qualified service personnel.

6. Keep the lens and other optical components clean to maintain consistent light output.