

USER MANUAL

Expolite FresnelLED 150 TW

led27150TW



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Every fixture is fully tested and properly packed by the manufacturer. Before installation and use, make sure that the packaging and the fixture are in perfect condition. In case of transport damage, contact your dealer and do not operate the fixture.

As part of continuous product development, specifications are subject to change without notice.

1.1 Packing instructions

WARNING

Read these instructions carefully. They contain important information about the installation, operation and maintenance of the fixture.

1.1 Packing instructions

Carefully remove the fixture from the carton and check that all accessories are included and undamaged. If parts are missing or damaged, or if the fixture does not operate, inform your dealer and keep the carton and shipping documents complete.

1.2 AC power

Check the information in this manual before operating the fixture. The rated current listed corresponds to the average current consumption under normal conditions.

The fixture must be connected to a non-dimmed (shoot-through) circuit. It must not be connected to a dimmer circuit, even though the dimming channels cover the full 1–100 % range.

Confirm the correct mains voltage before switching on the fixture.

1.3 Safety instructions

- Make sure the mains voltage matches the voltage specified for the fixture.
- Make sure there is no flammable material near the fixture.
- Operate the fixture in a well-ventilated place only. Keep a distance of at least 51 cm from surrounding materials and check at all times that the air passages are clear.
- The maximum ambient temperature is 40 °C (104 °F).
- If the fixture malfunctions, stop using it and contact your dealer. Do not repair it yourself.
- Do not connect the fixture to a dimmer.
- Make sure the power cable is undamaged and not kinked. Do not pull on the cable.
- Do not look directly into the light source during operation.

1.4 Installation

1.4 Installation

The fixture must be bolted firmly to a quick-lock hook to prevent vibration and slipping during operation. Make sure the supporting structure can hold at least 10 times the weight of the fixture. In addition, use a safety line rated for 12 times the weight of the fixture.

Installation must be carried out by qualified professionals only. Install the fixture in places that are not accessible to people or where no one will pass by.

Note: Do not operate a damaged fixture; contact your dealer.

02 SPECIFICATIONS

2.1 Overview

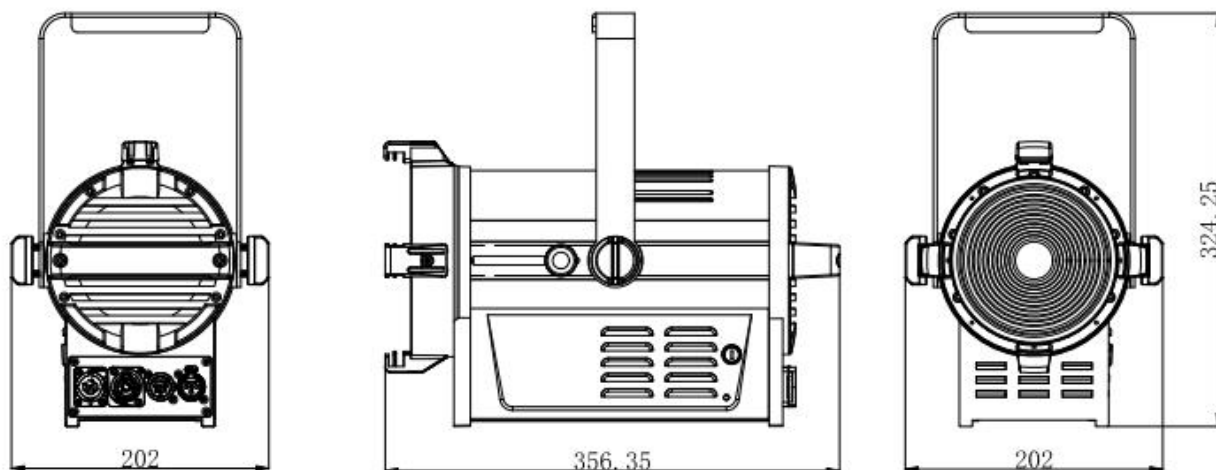
Optics	
Light source	150 W warm white + 150 W cool white LEDs, 50,000 h life expectancy
Colour temperature (CCT)	2600 K – 6000 K
CRI / TLCI / CQS (average)	CRI ≥ 96, TLCI ≥ 96, CQS ≥ 96
Beam angle	15° – 55°
Lens diameter	135 mm
PWM frequency (selectable)	2–25 kHz
Dynamic effects	
Shutter/strobe	Electronic
Zoom	Manual
Dimming	0–100 %
Dimming curves	4 (LINEAR, SQUARE, REVERSAL, S LINE)
Control	
Protocol	DMX, RDM
DMX channels	3 CH / 7 CH
Electrical	
Input voltage	100–240 V AC, 50/60 Hz
Power consumption	150 W
Power factor (PFC)	≥ 0.96 at 220 V
Construction	
Dimensions (W × D × H)	356 × 202 × 324 mm
Weight	6.8 kg (without barndoor)
Housing	Aluminium alloy, aluminium die-cast
Colour	Black/grey
Ingress protection	IP20
Cooling	PWM-controlled silent fan
Connections	
Power connectors	powerCON TRUE1 in/out
Data connectors	5-pin XLR in/out
Power cable length	1.5 m
Scope of delivery	Barndoor included

02 SPECIFICATIONS

2.2 Dimensions

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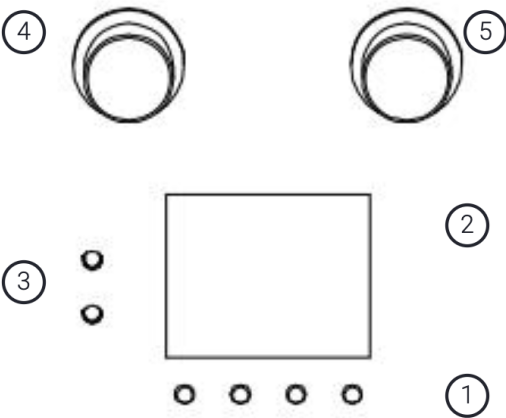
All dimensions in millimetres.



03 CONTROL PANEL

3.1 Controls

3.1 Controls



Element	Function
1 – Buttons	MENU: go to menu selection · DOWN: go to the next option · UP: go back to the previous option · ENTER: confirm the selected function
2 – Display	1.77" TFT LCD
3 – LED indicators	POWER: power indicator · DMX: DMX signal input active
4 – MENU knob	Menu selection, dimming function; press to confirm/save
5 – CANCEL knob	Press to return to the main menu

Note: Menu items and DMX function names correspond exactly to the fixture display and are not translated.

4.1 Menu overview

4.1 Menu overview

Switch on the fixture and press the MENU button to enter menu mode. Use the knob to find the desired menu item and press the MENU button to confirm. Then use the knob to select the sub-menu; pressing the knob saves the settings or automatically returns to the upper menu level.

Main menu	Sub-menu	Options	Default
DMX	ADDRESS	001–512	001
	CHANNEL	3CH / 7CH	7CH
MANUAL	WARM WHITE	000–255	000
	PURE WHITE	000–255	000
	DIMMING	000–255	255
CCT	CCT	2600K–6000K	2600K
	DIMMING	000–255	255
MACRO	MODE	JUMP / GRADIENT / PULSE / VOICE	JUMP
	SPEED	0–100%	90%
	DIMMING	000–255	255
SETTING	SIGNAL	CLEAR / KEEP	CLEAR
	BACKLITE	ON / OFF	ON
	DISPLOCK	ON / OFF	OFF
	DIM CURVE	LINEAR / SQUARE / REVERSAL / S LINE	LINEAR
	DIM HZ	2–25K	14K
	DIM BIT	8BIT / 16BIT	16BIT
	DIM MODE	STAGE / THEATRE / MEETING	STAGE
	FAN MODE	SMART / MAX	SMART
	RESET	YES / NO	NO
	DISPFLIP	YES / NO	NO
	VERSION	Displays the firmware version	

4.2 DMX settings and dimming curves

4.2 DMX settings

Select the DMX menu item and confirm with the MENU knob. Use the knob to choose between DMX Address and Channel Mode.

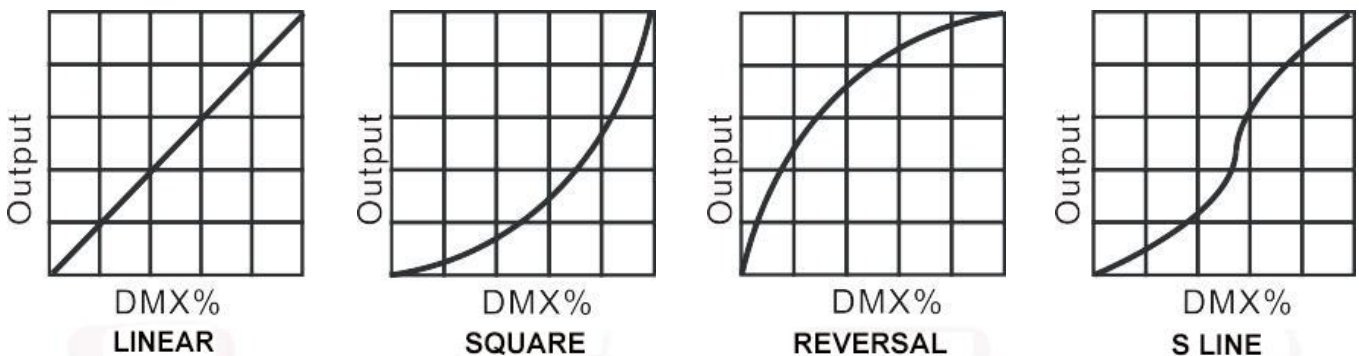
DMX Address: Confirm the selection, then use the knob to set the DMX address (1–512). Press the MENU knob to save.

Channel Mode: Confirm the selection, then use the knob to select the channel mode: 3CH or 7CH.

4.3 Dimming curves

Select the DIM CURVE menu item and confirm with the MENU knob. Use the knob to choose between LINEAR, SQUARE, REVERSAL and S LINE.

- | | |
|-----------------|--|
| LINEAR | Light intensity increases linearly with the DMX value. |
| SQUARE | Fine resolution at low intensity values, coarser resolution at high values. |
| REVERSAL | Coarser resolution at low intensity values, fine resolution at high values. |
| S LINE | Fine resolution at low and high intensity values, coarser resolution at intermediate values. |



4.4 DMX addressing and channel assignment

4.4 DMX addressing

When using a DMX controller, a starting address (1–512) must be set for each fixture so that it can receive the DMX signal. The table below shows the addressing of the first four fixtures:

Channel mode	Fixture 1	Fixture 2	Fixture 3	Fixture 4
3CH	1	4	7	10
7CH	1	8	15	22

4.5 Channel assignment – 3CH mode

Channel	Function	Description
1	WW dim	From dark to bright
2	CW dim	From dark to bright
3	CCT	2600 K – 6000 K

4.6 Channel assignment – 7CH mode

Channel	Function	Description
1	Dim all	From dark to bright
2	Strobe all	From slow to fast
3	Function selection	0–5 empty 6–100 jump 101–150 gradient 151–200 pulsation 201–255 sound active
4	Function speed	From slow to fast
5	WW dim	From dark to bright
6	CW dim	From dark to bright
7	CCT	2600 K – 6000 K

5.1 Common problems

The following are a few common problems that may occur during operation, along with suggestions for easy troubleshooting:

The fixture does not work, no light

1. Check the power connection and the main fuse.
2. Measure the mains voltage on the main connector.

Not responding to the DMX controller

1. The DMX LED should be on. If not, check the DMX connectors and cables for proper connection.
2. If the DMX LED is on and there is no response to the channel, check the address settings and the DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on the connectors or on the PCB of the fixture or the previous one.
4. Try using another DMX controller.
5. Check whether the DMX cables run near or alongside high-voltage cables, which may damage or interfere with the DMX interface circuit.

A channel is faulty

1. The stepper motor or its lead may be damaged.
2. The drive circuit of the motor may be damaged.

6.1 Fixture cleaning

The fixture must be cleaned periodically to optimise light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings cause greater accumulation of dirt on the fixture's optics.

- Clean with a soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external and internal optics at least every 20 days.



QUESTIONS OR FEEDBACK?

Scan the QR code to get in touch – we're happy to help!