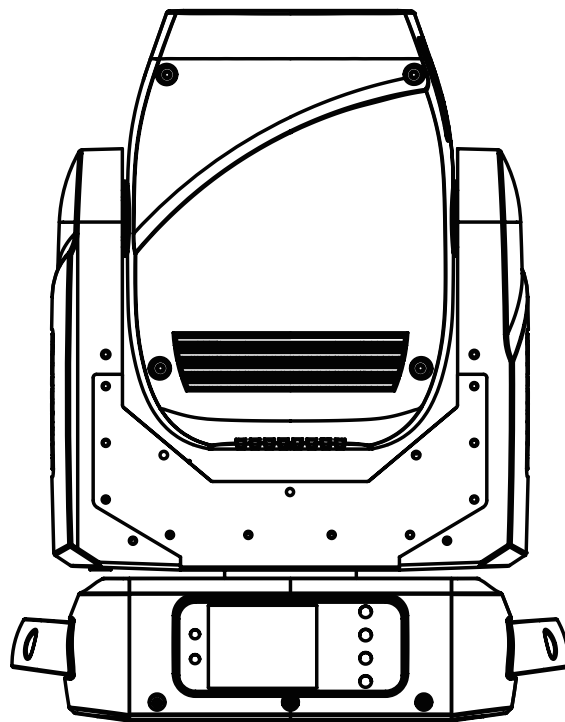


**CYCLOPS**  
LIGHTING

## LEDE 100B

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100 watts Compact LED Beam Moving Head



**USER MANUAL**

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## Caution!



Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!



Avoid looking directly into the light source!

Wear protective glasses and other PPE (personal protective equipment) when working on or near the fixture.



Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label. Make sure it is grounded when using it!

Unplug mains lead before opening the housing!

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the powercord from time to time.

Make sure to replace the fuse with another of the same type and rating.



For your own safety, please read this user manual carefully before you initial start-up.

Follow operating safety precautions and pay attention to warning signs methods and equipment on the user manual.



Warning! This symbol indicates a hot surface. Certain parts of the housing can become hot during operation. After use, wait for a cool-down period of at least 10 minutes before handling or transporting the device.



T =45°C

Indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. IP 20 rating.

The ambient temperature must always be between -5° C and +45° C.

Every person involved with the installation, operation and maintenance of this device has to

- be qualified
- follow the instructions of this manual
- consider this manual to be part of the total product
- keep this manual for the entire service life of the product
- pass this manual on to every further owner or user of the product
- download the latest version of the user manual from the Internet

## Introduction

Thank you for having chosen LEDE 100B. You will see you acquired a powerful and versatile device.

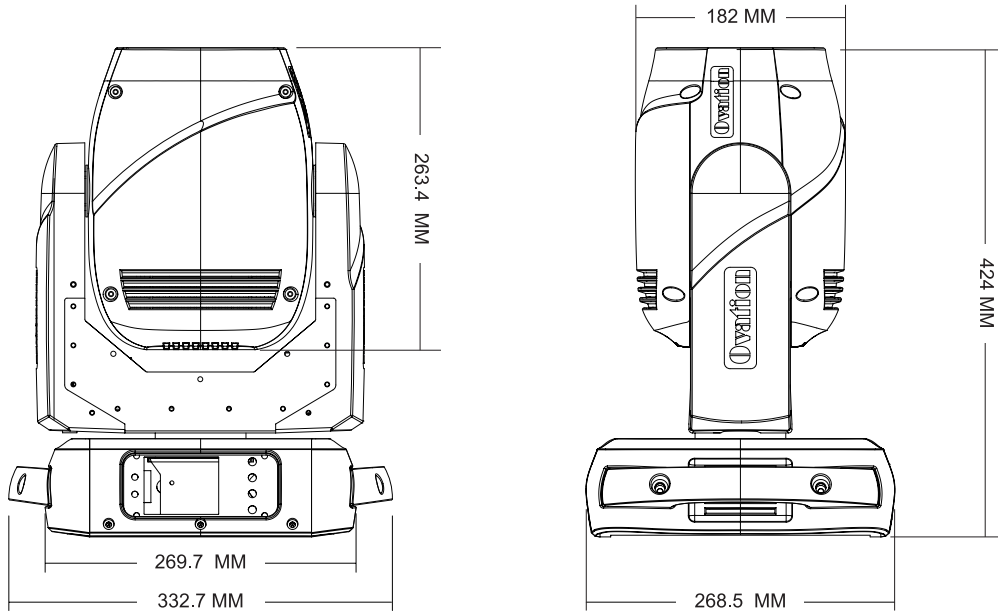
Unpack your item. Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

## Safety instructions

This fixture is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

This device has left our premises in absolutely perfect condition. Always disconnect from the mains, when the device is not in use or before cleaning it. Keep away children and amateurs from the device! There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

## Fixture overview



## Installation

### Read 'Safety information' before installing the fixture

The fixture is designed for indoor use only and must be used in a dry location with adequate ventilation. Ensure that none of the fixture's ventilation slots are blocked.

Fasten the fixture to a secure structure or surface. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed in this user manual using a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

### Fastening the fixture to a flat surface

The fixture can be fastened to a hard, fixed, flat surface that is oriented at any angle. Ensure that the surface and all fasteners used can support at least 10 times the weight of all fixtures and equipment to be installed on it.

Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed below with a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

### Mounting the fixture on a truss

The fixture can be clamped to a truss or similar rigging structure in any orientation. When installing the fixture hanging vertically down, you can use an open-type clamp such as a G-clamp. When installing in any other orientation, you must use a half-coupler clamp that completely encircles the truss chord.

To clamp the fixture to a truss:

1. Check that the rigging structure can support at least 10 times the weight of all fixtures and equipment to be installed on it.
2. Block access under the work area.
3. Fold the legs of the mounting bracket together and bolt a rigging clamp securely to the mounting bracket. The bolt used must be M12. It must pass through both mounting bracket legs and be fastened with a self-locking nut.
4. Working from a stable platform, hang the fixture with its clamp on the truss and fasten the clamp

securely.

5. Secure the fixture with a safety cable as directed below.

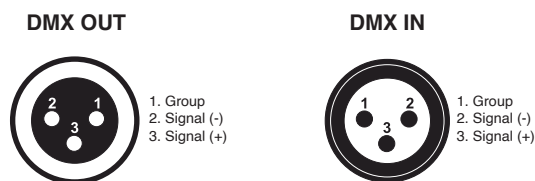
### Securing with a safety cable

Secure the fixture with a safety cable (or other secondary attachment) that is approved for the weight of the fixture so that the safety cable will hold the fixture if a primary attachment fails.

Loop the safety cable through the eyebolt in the back of the fixture and around a secure anchoring point. Do not loop the safety cable around the fixture's mounting bracket only, as this will leave the fixture unsecured if it separates from the bracket.

### DMX-512 connection/connection between fixtures

#### Occupation of the XLR-connection:



If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

#### Building a serial DMX-chain:

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

#### DMX-512 connection with DMX terminator:

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

**Caution:** At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 resistor between Signal (-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

#### Connection with the mains:

The LEDE 100B is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

This fixture must be earthed. To use the fixture, a plug must be fixed.

The correct assembly of a sufficient plug may be done by professional persons only.

Connect the device to the mains with the enclosed power supply cable.

The occupation of the connection cables as below:

Cable color	Connection	International
Brown	Live	L
Blue	Neutral	N

Yellow/green	Earth(Ground)	
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## Operation

The LEDE 100B can operate in three different modes. In each mode you can run the fixture as a stand alone fixture or in a master/slave configuration. This next section will detail the differences in the operating modes.

### Addressing

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to listen to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to listen to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to listen to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the LEDE 100B, which is 16 channels fixture. If you set, for example, the address in the 16 channel mode to channel 17, the device will use the channel 17 to 32 for control.

### Universal DMX Control

This function allows you to use a universal DMX-512 controller to control the chases and patterns, dimmer and strobe. A DMX controller allows you to create unique programs tailored to your individual needs.

### Auto run mode

In this mode, you can run internal program without a controller.

1. Press the MENU button until “**MODE**” is displayed, and press ENTER.
2. Press the UP or DOWN button so that “**Auto run**” is displayed.
3. The unit will now run auto mode without a DMX controller.

### Sound Mode

This mode allows either single unit or several units linked together, to run to the beat of the music.

1. Press the MENU button until “**MODE**” is displayed, and press ENTER.
2. Press the UP or DOWN button so that “**Sound ctrl**” is displayed.
3. The unit will now run to the beat of the music.

### Master-Slave Operation

This function will allow you to link up to 16 units together and operate without a controller. In a Master-Slave set up one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear

of the units.

2. For the Master unit select "**MODE**" - "**Auto Run**".
3. For the slave units select "**MODE**" - "**M/S choose**" - "**Slave**".
4. The slave units will now follow the Master unit.

## Control Menu Map

Default settings=**bold** print

Main Menu	Level 1	Level 2	Function	
Addr	001-497		DMX address setting	
	Prev		Previous address, address -16	
	Next		Next address, address +16	
	Chan		Channel mode	
MODE	DMX Ctrl	√	Control mode, DMX mode	
	Auto Run		Control mode, Auto mode	
	Sound Ctrl		Control mode, Sound mode	
	Scene Mode	Auto		Scene mode, please refer to "SCENE" - "Scene select" menu
		01		
		...		
		10		
M/S choose	Auto		Master-slave select	
	Slave			
	Master			
Theater Mod	<b>off</b> / on		Fan mode, low fan speed	
DISP	Screen saver	Off	Display shut off time, always on	
		Mod 1	Display blackout	
		Mod 2	Show DMX address and control mode	
		Mod 3	Show brand icons	
	Screen Rot	Auto	Screen reverse	
		Reverse		
		Forward		
	DMX Indicate	Mode 1	LED indicator always on	
		Mode 2	LED indicator off	
		Mode 3	LED indicator flash	
Screen light	01-10	Screen brightness		
SCENE	Scene Select	1-10	Scene Select	
	Scene Time	000-255	Scene time, ms	
	01. Pan	000-255	Manual setting	
	02. Pan fine	000-255		
	03. Tilt	000-255		
	04. Tilt fine	000-255		
	...	...		
	15. Focus	000-255		
16. Reset	000-255			
ADVA	Pan Invert	<b>off</b> / on		Pan reverse
	Tilt Invert	<b>off</b> / on	Tilt reverse	
	P/T Rectify	<b>off</b> / on	Pan/Tilt opticalcoupler calibration	
	Pan offset	004-150	Pan offset	
	Tilt offset	004-048	Tilt offset	
	Data hold	<b>off</b> / on	Hold last value if no signal	
	Reset	Sure / no	Fixture reset	
	Factory setting	Sure / no	Reset setting to factory default	

STAT	Stepper info		Status
	Error logging		
	Fixture status		
	Version		
	Light time		
	Total time		

## DMX Protocol

16 CHANNEL	DMX value	Function
CH1		<b>Pan</b>
	000-255	0-540°
CH2		<b>Pan fine</b>
	000-255	Fine control of pan movement
CH3		<b>Tilt</b>
	000-255	Tilt movement by 270°
CH4		<b>Tilt fine</b>
	000-255	Fine control of tilt movement
CH5		<b>Pan/Tilt speed</b>
	000-255	Pan/Tilt speed, decreasing
CH6		<b>Strobe</b>
	000-003	Closed
	004-127	Pulse strobe, slow - fast
	128-191	Fade strobe, slow - fast
CH6	192-255	Random strobe, slow - fast
		<b>Dimmer</b>
	000-255	0-100% dimmer
		<b>Color wheel</b>
CH8	000-005	Open/hole
		<b>Color</b>
	006-011	Color 1
	012-017	Color 2
	018-023	Color 3
	024-028	Color 4
	029-034	Color 5
	035-040	Color 6
	041-046	Color 7
	047-051	Color 8
	052-057	Color 9
	058-063	Color 10
		<b>Half color</b>
	064-069	Color1+white
	070-075	Color1+color2
	076-080	Color2+color3
	081-086	Color3+color4
	087-092	Color4+color5
	093-098	Color5+color6
	099-103	Color6+color7
	104-109	Color7+color8
	110-115	Color8+color9
	116-121	Color9+color10
	122-127	Color10+open
	128-191	Backwards rainbow effect slow to fast
	192-255	Forwards rainbow effect slow to fast



CH9		<b>6 colors color wheel</b>
	000-127	No function
	128-255	6 colors color effect
CH10		<b>Gobo Wheel</b>
	000-009	Open/hole
	010-018	Gobo 1
	019-027	Gobo 2
	028-036	Gobo 3
	037-045	Gobo 4
	046-054	Gobo 5
	055-063	Gobo 6
	064-072	Gobo 7
	073-081	Gobo 8
	082-090	Gobo 9
	091-099	Gobo 10
	100-108	Gobo 11
	109-117	Gobo 12
	118-127	Gobo 13
	128-191	Backwards rainbow effect slow to fast
192-255	Forwards rainbow effect slow to fast	
CH11		<b>Gobo shake</b>
	000-191	Shaking gobos from slow to fast
	192-255	No function
CH12		<b>Prism</b>
	000-127	Open position (hole)
	0128-255	Prism effect
CH13		<b>Prism rotation and indexing</b>
	000-127	Prism indexing
	128-190	Backwards rotation from slow to fast
	191-192	Stop
	193-255	Forwards rotation from fast to slow
CH14		<b>Frost</b>
	000-127	No function
	128-255	Frost effect
CH15		<b>Focus</b>
	000-255	Focus
CH16		<b>Reset</b>
	000-127	No function
	128-255	Reset(in 3sec)

## Fixture Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

To clean the fixture:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture with
3. low-pressure compressed air.
4. Clean the surfaces by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Do not rub glass surfaces hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an

- unscented tissue or cotton swab moistened with glass cleaner or distilled water.
5. Check that the fixture is dry before reapplying power.

## **Fuse Replacement**

This fuse is located in a fuseholder next to the MAINS OUT socket on the connections panel.

To replace a fuse:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Unscrew the cap of the fuseholder and remove the fuse. Replace with a fuse of the same size and rating only.
3. Reinstall the fuseholder cap before reapplying power.

## **Troubleshooting**

Listed below are a few common problems that you may encounter, with solutions.

### ***The fixture does not work, no light***

- Check the connection of power and main fuse. Be sure the external fuse has not blown.
- Measure the mains voltage on the main connector.

### ***No response to the sound***

- Make sure the fixture does not receive DMX signal.
- Low frequencies (bass) should cause the unit to react to sound. Tapping on the microphone, quiet or high pitched sounds may not activate the unit.
- Check the sound sensitivity level. Make sure it is not set to a low sensitivity level.

## Specifications

<b>Model</b>	<b>LEDE 100B</b>
Light source:	100 watts white LED
LED life expectancy:	50,000 Hrs.
Color temperature:	6600K
	CRI 73
Beam angle:	3°
Light output:	70,000 Lux @ 4m @ 3°
	Electronic focus
Dimmer:	linear adjustment
Color wheel:	10 colors + open
Effect color wheel:	6 colors
	Electronic variable strobe
Static gobo:	13 gobos +open
Rotating gobo:	7 gobos + open
	Gobo shake function
Prism:	16-facet circular prism
	Frost
Control protocols:	DMX , Sound, Master-Slave, Auto Run
Control channels:	16 CHs
Pan:	540°
Tilt:	270°
Resolution:	16 bit
Input voltage:	100-240V/50-60Hz
Power consumption:	100 watts
DMX connections:	3 pin XLR In/Out male and female
Power connections:	PowerCon In
Dimensions:	333 x 270 x 424mm
Net weight:	12.7 Kg
Color:	Black
IP rating:	20