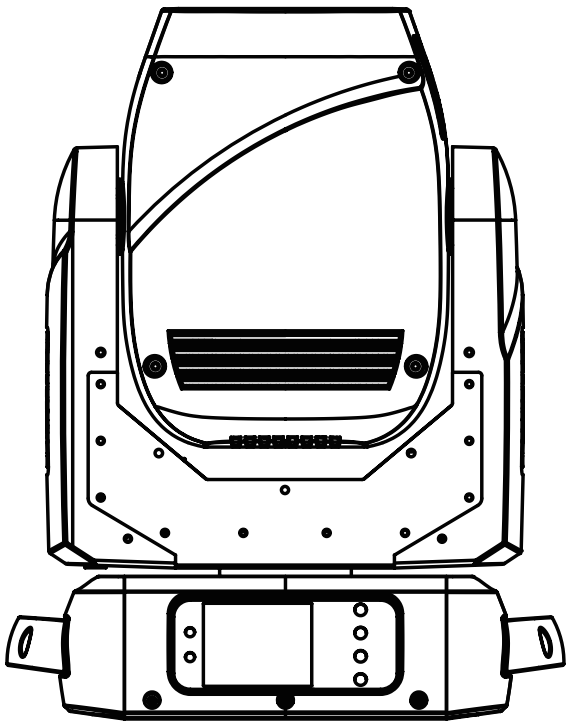
CYCLOPS LIGHTING

# LEDE 100B

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.


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

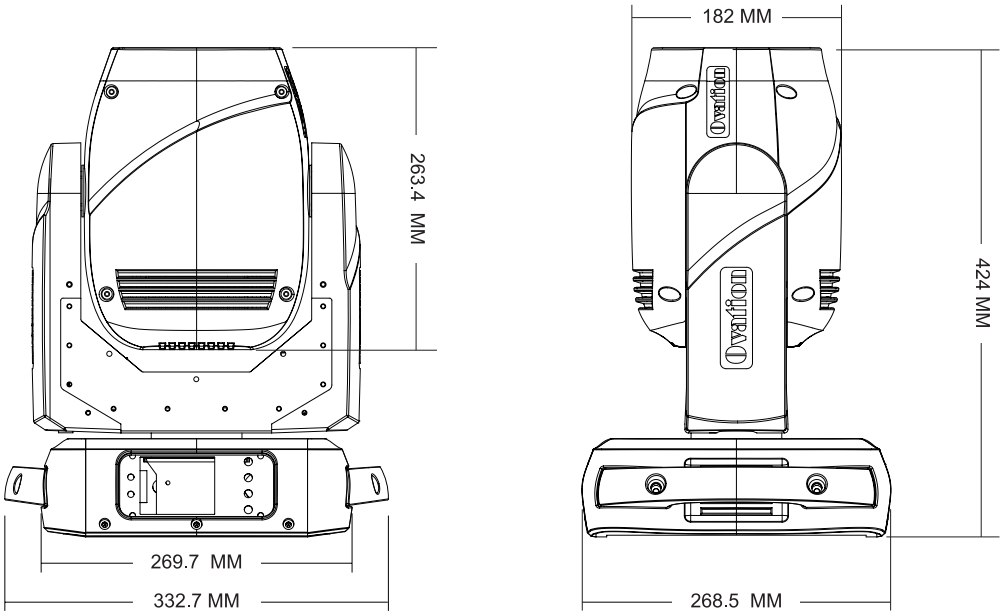
Thank you for having chosen LEDE 100B. You will see you acquired a powerful and versatile device.
Unpack your item. Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

## 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.

## Fxiture 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

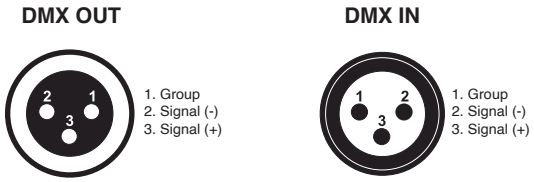
securely.
5. Secure the fixture with a safety cable as directed below.

**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) | ⏚ |

## 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 confiugration. This next section will detail the dif-ferences 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 selcet **"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 | **off** / 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 | **off** / on | Pan reverse |
| | Tilt Invert | **off** / on | Tilt reverse |
| | P/T Rectify | **off** / on | Pan/Tilt opticalcoupler calibration |
| | Pan offset | 004-150 | Pan offset |
| | Tilt offset | 004-048 | Tilt offset |
| | Data hold | **off** / 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 | | **Pan** |
| | 000-255 | 0-540° |
| CH2 | | **Pan fine** |
| | 000-255 | Fine control of pan movement |
| CH3 | | **Tilt** |
| | 000-255 | Tilt movement by 270° |
| CH4 | | **Tilt fine** |
| | 000-255 | Fine control of tilt movement |
| CH5 | | **Pan/Tilt speed** |
| | 000-255 | Pan/Tilt speed, decreasing |
| CH6 | | **Strobe** |
| | 000-003 | Closed |
| | 004-127 | Pulse strobe, slow - fast |
| | 128-191 | Fade strobe, slow - fast |
| | 192-255 | Random strobe, slow - fast |
| CH7 | | **Dimmer** |
| | 000-255 | 0-100% dimmer |
| CH8 | | **Color wheel** |
| | 000-005 | Open/hole |
| | | **Color** |
| | 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 |
| | | **Half color** |
| | 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 | | **6 colors color wheel** |
| | 000-127 | No function |
| | 128-255 | 6 colors color effect |
| CH10 | | **Gobo Wheel** |
| | 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 | | **Gobo shake** |
| | 000-191 | Shaking gobos from slow to fast |
| | 192-255 | No function |
| CH12 | | **Prism** |
| | 000-127 | Open position (hole) |
| | 0128-255 | Prism effect |
| CH13 | | **Prism rotation and indexing** |
| | 000-127 | Prism indexing |
| | 128-190 | Backwards rotation from slow to fast |
| | 191-192 | Stop |
| | 193-255 | Forwards rotation from fast to slow |
| CH14 | | **Frost** |
| | 000-127 | No function |
| | 128-255 | Frost effect |
| CH15 | | **Focus** |
| | 000-255 | Focus |
| CH16 | | **Reset** |
| | 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

| Model | LEDE 100B |
|---|---|
| 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 |