USER MANUAL

Moving LED head 100W Beam,Gobo,Prism,DMX

LED519

Code LED519
EAN 8594224720599

1 About this manual

This user manual applies to the product Moving LED head 100W Beam,Gobo,Prism,DMX (code LED519).

Read this manual carefully before installing the product and putting it into operation for the first time, follow all of its instructions, and keep it for future reference. If you pass the product on to another person, include this manual.

Safety notices are marked with signal words according to the severity of the hazard: DANGER – an imminent hazard that will result in death or serious injury; WARNING – a potential hazard that could result in death or serious injury; CAUTION – a potential hazard that could result in minor injury or property damage; NOTE – additional information for correct and safe use.

NOTE This product is designed for stage and effect lighting. It is not suitable for household room illumination.

2 Safety instructions

WARNING

- This device is intended for professional use. Installation, connection, setup and maintenance must be carried out only by suitably qualified persons who have read this manual.
- Use the device only for its intended purpose and as described in this manual.
- Do not open the housing and do not modify or tamper with the device. Refer all repairs to an authorized service center.
- Do not use the device if its housing, power or data cable, or a connector is damaged, if the device has been dropped, or if liquid or a foreign object has entered it. In such a case, have it checked by a service center.
- Disconnect the device from the power supply before cleaning, maintenance or any work on the connections.
- After moving the device from a cold to a warm environment, let it reach room temperature before switching it on to prevent condensation inside.
- The device is not a toy; keep it out of the reach of children.

WARNING

- Connect the device only to a properly installed mains outlet with a protective earth (ground) contact. The outlet or other means of disconnection must remain easily accessible.
- Power supply: AC 230 V, 50/60 Hz. Before connecting, make sure that the mains voltage matches this value and the value on the rating plate of the device.
- Do not connect the device to a dimmer or to a dimmed circuit.
- Use only the original power cable or a cable with identical ratings. Protect the cable from damage, do not run it over sharp edges, and never unplug it by pulling on the cable.
- When connecting several devices to one circuit, do not exceed its permitted load.
- Do not touch the device with wet hands.

WARNING

- This device is designed for indoor use only. Protect it from rain, splashing water, moisture and dust, and do not place containers with liquids on it.
- Do not operate the device in high humidity, near water, or where condensation can form on it.

CAUTION

- This device emits intense light. Do not look directly into the light source or the beam at close range; doing so may damage your eyes.
- Do not aim the beam at the eyes of people or animals at close range, and do not view the light source through optical instruments (binoculars, camera lenses).
- Do not aim the beam at flammable or heat-sensitive materials at close range.

CAUTION

- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them longer than necessary.

WARNING

- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, move them by hand, or obstruct their movement; this can cause injury (pinching) and damage the drive.
- Do not carry the device by its moving parts. If the device has a transport lock, engage it before transport and release it before switching on.

CAUTION

- The surface of the device heats up during operation. Do not touch it during operation or immediately after switching off, and let it cool down before handling.
- The device is cooled by a fan. Do not cover the ventilation openings, do not obstruct the airflow, and leave enough free space around the device.
- Do not place the device near heat sources or flammable materials.

3 Product description

Package contents

- 1× Moving LED head 100W Beam,Gobo,Prism,DMX
- 1× 230 V power cable
- 1× Suspended ceiling mounting plate
- Brackets and screws
- 1× Base stand
- Brackets for recessed ceiling mounting

4 Installation

WARNING

- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 4 kg.
- Use suitable mounting hardware (for example truss clamps) and tighten all screw connections properly.

- Always secure the suspended device against falling with a safety cable of adequate load capacity, routed through a fixed point of the device and around the supporting structure.
- During installation and removal, keep people out of the area below the work position.
- Regularly inspect the fixings and the safety cable for damage, corrosion and loosening.

WARNING

- Ceiling installation must be carried out only by a qualified person.
- Cut a round hole with a diameter of 22 cm in the ceiling.
- Before cutting the hole, make sure there are no electrical wires, pipes or structural members at that location.
- The ceiling or supporting structure must safely carry the weight of the device, including forces that occur during operation.
- Weight of the device: 4 kg.
- In addition, secure the device with a safety cable to the load-bearing ceiling structure, not just to the ceiling panel.
- Leave free space above the device for heat dissipation, do not cover it with thermal insulation, and make sure it remains accessible for maintenance.

The unit supports suspended ceiling mounting using the supplied mounting plate and brackets.

5 Connections

- Use shielded cable designed for DMX512 with an impedance of 110 Ω. Ordinary microphone cable is not suitable for DMX, especially over longer distances.
- Connect the devices in a daisy chain: connect the DMX OUT of one device to the DMX IN of the next. Do not split the line with Y-cables or wire it in a star; the line may be split only with a DMX splitter.
- Connect the shield to pin 1 only. Do not connect the shield (ground) to the metal shell of the connector; this can cause short circuits or erratic behavior.
- XLR pin assignment: pin 1 – shield (ground), pin 2 – Data- (Data Complement), pin 3 – Data+ (Data True). On 5-pin connectors, pins 4 and 5 are not connected; a 5-pin connector can be connected to a 3-pin one with a cable adapter.
- Terminate the end of the line (for impedance matching): plug an XLR connector with a 120 Ω, ¼ W resistor between pins 2 and 3 into the DMX OUT of the last device. This reduces the risk of erratic behavior.
- Connect no more than 32 devices to one DMX line. For more devices or longer runs, use a DMX splitter or booster.

Connector	Purpose
DMX IN (3-pin XLR)	DMX input
DMX OUT (3-pin XLR)	DMX output

6 Operation

Control panel

Button	Function
MENU	Select mode
UP	Next/previous value
DOWN	Next/previous value
ENTER	Confirm and save selected value

Switches and indicators

Control	Function
Microphone	Sound input for sound mode, with sensitivity setting via display menu SEnS (0-100)

Display menu

Code	Values	Function
addr	001-512	DMX address setting
CHNd	12	sets the 12-channel DMX mode
SLnd / Soud		switches between Slave mode and Sound mode
SEnS	0-100	microphone sensitivity setting
LED	on / off	LED on / off
diSP	on / off	display on / off
tEMp		current unit temperature (°C)
vEr		software version
Fact	yes / no	factory settings (default, reset)

Setting the DMX address

- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in 12CH mode: 12.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- For several devices in a row in 12CH mode, you can use, for example, the start addresses 1, 13, 25, 37.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

Master/Slave mode

- In Master/Slave mode, one device (Master) controls the other devices (Slaves), which copy its behavior in sync. No controller is needed.
- Connect the devices with DMX cable in a daisy chain, just as for control from a desk (DMX OUT to the DMX IN of the next device), and terminate the end of the line.
- On the master device, select the desired standalone mode (auto mode or sound mode, depending on the device), and set all other devices to Slave mode.
- Only one master device may be on the line; do not connect a DMX controller to the line in Master/Slave mode.
- For reliable synchronization, link only devices of the same type.

NOTE Values are DMX 0–255. Channels 1–4 are 16-bit pairs (coarse + fine byte).

7 DMX channels

Mode	Channels
12CH	12

Mode 12CH

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

CH	Function	DMX	Description
1	Pan	0–255	540° rotation, coarse byte (16-bit, fine byte on channel 2)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–255	255° tilt, coarse byte (16-bit, fine byte on channel 4)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	Fast to slow
6	Dimmer	0–255	Dimmer
7	Strobe	0–255	Slow to fast
8	Colors	0–15	White
		16–31	Red
		32–47	Yellow
		48–63	Green
		64–79	Magenta
		80–95	Blue
		96–111	Orange
		112–127	Azure
		128–191	Colour wheel rotation left
		192–255	Colour wheel rotation right
9	Gobo	0–7	Open
		8–15	Small circle
		16–23	Wavy line
		24–31	Four point star
		32–39	Eight petal flower
		40–47	Five point star
		48–55	Six blade propeller
		56–63	Eight circle flower
		64–73	Eight circle flower shake
		74–83	Six blade propeller shake
		84–93	Five point star shake
		94–103	Eight petal flower shake
		104–113	Four point star shake
		114–123	Wavy line shake
		124–127	Small circle shake
		128–191	Gobo wheel rotation down
		192–255	Gobo wheel rotation up slow to fast

CH	Function	DMX	Description
10	Prism	0–7	Prism Off
		8–127	Prism On
		128–255	Prism Rotation slow to fast
11	Macro	0–149	Macro Mode
		150–255	Sound mode
12	Reset	0–255	Fixture reset

8 Technical specifications

Parameter	Value
Light source	1x 100 W white LED + color wheel
Number of colors	7 + white
Beam angle	3.5°
Gobos	open (circle) + 7 gobo effects, static gobos
Prism	double 6+12-facet rotating prism
Pan	540°
Tilt	255°
Operating modes	Auto, Sound, Master/Slave
DMX channels	12 channels
DMX connection	3-pin XLR IN/OUT connectors
Controls	LCD display
Microphone sensitivity adjustment	yes
Power supply	AC 230 V, 50/60 Hz
Power	100 W
Dimensions	20 x 20 x 32 (L x D x H)
Weight	4000 g
Housing color	white
Ceiling recess mounting	yes
Ceiling cut-out size	22 cm
Cooling	active air cooling. Fan turns off with LED

9 Maintenance and cleaning

- Before cleaning and maintenance, switch the device off, disconnect it from the power supply and let it cool down.
- Clean the housing with a soft, dry or slightly damp cloth. Do not use solvents, abrasive cleaners or pressure washers, and make sure no liquid gets into the device.
- Clean optical parts (lenses, front glass), if the device has any, with a soft lint-free cloth and a cleaner intended for optics or glass.
- Regularly inspect the housing, cables, connectors and fixings. Have damaged parts replaced by a service center.
- How often to clean depends on the environment; dust, smoke and fog make the device dirty much faster.

NOTE

- Keep fans and ventilation openings free of dust. Clogged cooling can lead to overheating, reduced output and a shorter service life.
- Remove dust with a soft brush or a vacuum cleaner. When using compressed air, hold the fan blades so that they do not spin at excessive speed.

10 Troubleshooting

- The device does not switch on – check the supply voltage, the cables and the fuse, if the device has

one.

- The device does not respond to DMX – check the start address, the selected DMX mode and whether it matches the profile in the controller, the cable connection to DMX IN, and the controller output (universe).
- The device behaves erratically or flickers – check the terminator at the end of the line, the condition and wiring of the cables (shield on pin 1 only), the number of devices on the line (32 at most), and that the line is not split without a splitter.
- Only some devices on the line respond – check the cable and connectors between the last working and the first non-working device, and make sure all devices on the line are switched on.
- Devices respond to the wrong channels or affect each other – check that the addresses do not overlap and that the DMX mode on the devices matches the patch in the controller.
- The device or the connected load does not light up although it receives DMX – check the values of the dimmer, shutter and strobe channels against the DMX channel table.
- Movement is reversed – check whether Pan/Tilt inversion is enabled in the device menu or in the controller.
- Moving parts do not reach the correct position after power-on or transport – switch the device off and on again to reset the position, and make sure the transport lock, if any, is released. If this does not help, contact a service center.
- Movement is jerky – check the value of the Pan/Tilt speed channel, if the device has one, and the stability of the DMX signal.

11 Disposal

The crossed-out wheeled bin symbol on the product, in the manual or on the packaging means that the product must not be disposed of with unsorted household waste at the end of its life.

Take the end-of-life equipment to a collection point, for example a municipal collection site or a retailer. Proper disposal enables materials to be recycled and helps prevent possible negative effects on the environment and human health.

Follow the regulations applicable in your country; in the Czech Republic, take-back is governed by Act No. 542/2020 Coll., on End-of-Life Products.

SOH Sound & Lights s.r.o. provides take-back through the collective compliance scheme ASEKOL a.s. (Československého exilu 2062/8, 143 00 Praha 4 – Modřany, www.asekol.cz).

Recycle the packaging materials according to their type.

12 Warranty and service

For products purchased from SOH, a buyer who is a consumer may, under the Czech Civil Code, notify the seller of a defect that becomes apparent within 24 months of taking delivery; this statutory right is not affected by any warranty. Defect claims for these products and out-of-warranty repairs are handled by sending the goods to SOH's premises or bringing them in person: SOH, Antala Staška 242/14, 140 00 Praha 4, Czech Republic. Further information (in Czech) is available at eshop.soh.cz/casto-kladene-otazky.

Statutory rights in respect of defects and the warranty are governed by applicable law and the seller's terms and conditions.

Submit any claim to the seller from whom you purchased the product. Enclose proof of purchase and as precise a description of the fault as possible.

Neither the statutory rights nor the warranty cover defects caused by the buyer, for example by installation or operation contrary to this manual, mechanical damage or unskilled tampering. Wear caused by normal use is not a defect either.

Service and technical support are provided by SOH Sound & Lights s.r.o., Antala Staška 242/14, 140 00 Praha 4.

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