

USER MANUAL

Beam moving head, LED ribbon, 295 W Phoenix, DMX, new

LIGHT330



Code LIGHT330

1 About this manual

This user manual applies to the product Beam moving head, LED ribbon, 295 W Phoenix, DMX, new (code LIGHT330).

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: 230 V AC, 50/60 Hz, PowerCon IN/OUT. 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.
- Ingress protection rating: IP20.
- 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.

3 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: 11 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.

4 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.

5 Operation

Control panel

Button	Function
Up key	Move up the menu, toggle the selected parameter, or increase the value
Down key	Move down the menu, toggle the selected parameter, or decrease the value
OK key	Executes the function, starts editing, and exits editing (or enters the next menu or confirms and saves the selected parameters)
Left key	Return to the previous screen
Right key	Return to the previous screen
MENU	Cycle through the main menu or return to the previous menu
ENTER	Enter the next menu or confirm and save the selected parameters
UP	Move up the menu, toggle the selected parameter, or increase the value
DOWN	Move down the menu, toggle the selected parameter, or decrease the value

Switches and indicators

Control	Function
DMX signal indicator	Flashes when the DMX signal is normal
Error indicator	–

Display menu

Code	Values	Function
Set up		Setup menu. Setup configuration options.
– Address code	1 - 512	Set DMX start address. Set the DMX address code from 1 to 512.
– passageway	16CH	Set DMX channel mode. Select channel mode (16CH).
– Operating mode	DMX512/go one's own way/ Voice control/Manual	Set operating mode. Choose the operating mode: DMX512, auto (standalone), sound, or manual.
– Address,code Auto	Open/shut	Automatically calculate the next address based on the channel count. When enabled, pressing the address setting automatically adds the current channel count (for example, in 16CH mode, address 1 becomes 17).
– Signal hold	open/shut	Hold last state on DMX signal loss. Maintain the current state if there is no DMX signal when enabled.
– XYexchange	open/shut	Swap pan and tilt channels. Swap X and Y axes.
– X-axis reversal	open/shut	Reverse X-axis direction. Invert pan movement.
– Y-axis reversal	open/shut	Reverse Y-axis direction. Invert tilt movement.
– Encoder error correction	open/shut	Enable or disable optical encoder error correction.
– Hall error correction	open/shut	Enable or disable Hall sensor error correction.
– Restore settings	Yes / no	Restore factory settings (does not reset calibration data) Reset parameters to factory defaults, excluding calibration trim data.

Code	Values	Function
Manual		Manual control of channels. Manual control over individual fixture channels.
Calibration		Sensor and position calibration menu. Calibration settings, protected by a 4-digit password.
Display		Display settings. Display options including screensaver, backlight, inversion, and language.
– Screen saver time	15 seconds / 30 seconds / 60 seconds / off	Set idle time before returning to the home screen. Duration of inactivity before the display returns to the home screen.
– backlight time	15 seconds / 30 seconds / 60 seconds / off	Set backlight auto-off time. The Display backlight turns off after the selected duration of inactivity.
– Screen reversal	On / off	Invert display orientation. Invert the display orientation.
– language	Chinese / English	Select interface language. Switch between Chinese and English.
Reset		Motor reset menu. Reset individual motors.
– reset all	Yes / no	Reset all motors.
– XY reset	Yes / no	Reset pan and tilt motors. Reset the X and Y movement motors.
– Head reduction	Yes / no	Reset small head motors.
Bulb setting		Lamp control settings. Lamp power and strike configuration.
– Power on bright bubble	Yes / no	Automatically strike the lamp after startup reset. Automatically strike the lamp after completing the power-on reset routine.
– Manual light bubble	Yes / no	Strike the lamp manually. Manually switch the lamp on.
– Half power	Yes / no	Toggle lamp half-power mode. Select whether half-power mode is enabled.
DMX data monitoring		Monitor incoming DMX values. Monitor the DMX512 value received on each channel.
Reset information		View system reset status and error messages. Shows whether the system reset was normal or displays corresponding error messages.
Sensor information		View sensor states and counts. Shows encoder counts, encoder signal status, and Hall sensor states.
Usage record		Display usage statistics. Displays operating times, run time, and lamp strike time.
System version		Display system firmware versions. Displays hardware version and software version number.

DMX mode

Standard DMX512 control mode.

Auto mode

Executes internal automatic program.

Sound mode

Internal program controlled by sound input.

Manual

Manual channel adjustment mode via the display board.

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 18CH mode: 18.
- 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 18CH mode, you can use, for example, the start addresses 1, 19, 37, 55.
- 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 When restoring factory settings, only underlined parameters in the menu will be restored; other parameters are not automatically restored or reset.

NOTE In the Send local parameters menu, you can send the parameter settings of underlined items across the DMX line to another fixture or multiple fixtures to avoid repeating setup work. A reset will occur on receiving fixtures when the parameters are received correctly.

6 DMX channels

Mode	Channels
18CH	18

Mode 18CH

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

CH	Function	DMX	Description
1	Pan	0–255	0-540 degrees
2	Tilt	0–255	0-270 degrees
3	Pan Fine	0–255	Fine adjustment of CH 1
4	Tilt Fine	0–255	Fine adjustment of CH 2
5	Speed Pan/Tilt	0–255	From fast to slow
6	Atomization	0–127	No effect
		128–255	Cut into atomization
7	Strobe Light	0–3	No effect
		4–103	Ordinary strobe light
		104–107	Dimming
		108–207	Pulse flicker
		208–212	Dimming
		213–251	Random flicker
		252–255	Dimming
8	Dimmer	0–255	0-100% linear dimming
9	Color Palette	0–4	White light
		5–9	White light+Color 1
		10–14	Color 1
		15–19	Color 1+Color 2
		20–24	Color 2
		25–29	Color 2+Color 3
		30–34	Color 3
		35–39	Color 3+Color 4
		40–44	Color 4
		45–49	Color 4+Color 5
		50–54	Color 5
		55–59	Color 5+Color 6
		60–64	Color 6
		65–69	Color 6+Color 7
		70–74	Color 7
		75–79	Color 7+Color 8
		80–84	Color 8
		85–89	Color 8+Color 9
		90–94	Color 9

CH	Function	DMX	Description
		95–99	Color 9+Color 10
		100–104	Color 10
		105–109	Color 10+Color 11
		110–114	Color 11
		115–119	Color 11+Color 12
		120–124	Color 12
		125–129	Color 12+Color 13
		130–134	Color 13
		135–139	Color 13+Color 14
		140–144	Color 14
		145–149	Color 14+White Light
		150–200	Clockwise rotation from slow to fast
		201–255	Rotate counterclockwise from slow to fast
10	Gobo	0–4	Circular hole
		5–9	Pattern 1
		10–14	Pattern 2
		15–19	Pattern 3
		20–24	Pattern 4
		25–29	Pattern 5
		30–34	Pattern 6
		35–39	Pattern 7
		40–44	Pattern 8
		45–49	Pattern 9
		50–54	Pattern 10
		55–59	Pattern 11
		60–64	Pattern 12
		65–69	Pattern 13
		70–125	Clockwise rotation from fast to slow
		126–130	Circular hole
		131–190	Rotate counterclockwise from slow to fast
		191–195	Pattern 1 Shake
		196–200	Pattern 2 Shake
		201–205	Pattern 3 Shake
		206–210	Pattern 4 Shake
		211–215	Pattern 5 Shake
		216–220	Pattern 6 Shake
		221–225	Pattern 7 Shake
		226–230	Pattern 8 Shake
		231–235	Pattern 9 Shake
		236–240	Pattern 10 Shake
		241–245	Pattern 11 Shake
		246–250	Pattern 12 jitter

CH	Function	DMX	Description
		251–255	Pattern 13 Shake
11	Prism 1	0–127	No effect
		128–255	Cut in Prism 1
12	Prism 2	0–127	No effect
		128–255	Cut in Prism 2
13	Prism 1 Rotation	0–127	Linear rotation
		128–187	Clockwise rotation from fast to slow
		188–195	Stop rotating
		196–255	Rotate counterclockwise from slow to fast
14	Colorful	0–127	No effect
		128–255	Cut into Rainbow
15	Focusing	0–255	0-255
16	Reset	0–99	No effect
		100–105	Extinguish bubbles
		106–199	No effect
		200–205	Bright Bubble
		206–240	No effect
		241–255	Reset
17	Strip Effect	0–255	0-255
18	Light With Effect Speed	0–255	0-255

7 Technical specifications

Parameter	Value
Effects	strobe, smooth flicker-free dimming, frost, separate color
Lamp	295 W Phoenix lampa (Japan)
Digital LED ring	SMD5050 LEDs, continuously adjustable speed
Color wheel	14 colors + white, smooth color transition and split color
Gobos	13 gobos + white, shaking and rolling water effect, gobo shake
Prism	1x separate 8-facet and 1x separate 48-facet, can be combined into
Pan	540°, precision: 2.11°/step, fine tuning precision: 0,008°
Tilt	270°, precision: 1.05°/step, fine tuning precision: 0,004°
Operating modes	Auto, Sound, Master/Slave, DMX512
DMX channels	18 CH mode
DMX connection	3-pin XLR / DMX IN/OUT connectors
Controls	LCD display with 4 buttons
Power supply	230 V AC, 50/60 Hz, PowerCon IN/OUT
Power consumption	450 W
Dimensions	295 x 490 x 235 mm (W x H x D)
Weight	11000 g
Ingress protection	IP20

8 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.

9 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.

Problem	Remedy
The fixture does not power on and does not respond at all	Check the fuse for damage. Check whether the AC voltage is normal. The switching power supply inside the fixture housing may be damaged. The internal mainboard of the fixture housing may be damaged.
Fixtures not responding to control	Check whether the DMX signal is normal (when normal, the DMX signal indicator on the display board flashes). Check whether the address code is set correctly. Check whether the channel mode is set correctly. Check whether the DMX signal cable is too long, or whether too many fixtures are connected in series.
Abnormal movement of the XY axes	The optical sensor may be damaged or improperly installed. Set [XY error correction enable] to no in the menu, adjust the optical sensor circuit board to the proper position, or replace the circuit board.

10 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.

11 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.

Company ID: 07894791

Web: www.soh.cz

Email: servis@soh.cz

Phone: +420 272 272 500