USER MANUAL

Waterproof moving head 350W Beam, outdoor, DMX

LIGHT138



Code LIGHT138

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1 About this manual

This user manual applies to the product Waterproof moving head 350W Beam, outdoor, DMX (code LIGHT138).

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 Quick reference

Parameter	Value
DMX address	Setting › DMX Address (001–512)
DMX mode	Setting › Channel Mode
Weight	32.000 g
Ingress protection	IP65 (dustproof and water jet-resistant), waterproof

DMX modes

Mode	On the display	Channels	Units in one universe	First start addresses
16CH	Std.16CH	16	32	1, 17, 33, 49, ...
20CH	Ext.20CH	20	25	1, 21, 41, 61, ...

No light? Check these channels

- 16CH: CH 2 Stop/Strobe at 0–5 “No function”; CH 3 Dimmer above 0
- 20CH: CH 2 Stop/Strobe at 0–5 “No function”; CH 3 Dimmer above 0


Read the manual before use


Risk of electric shock


Do not stare into the light



Distance from lit objects


Not household waste

3 Safety instructions


Read the manual before use


Risk of electric shock


Do not stare into the light



Distance from lit objects


Not household waste

⚠ 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: 100-240 V, 50 / 60 Hz, overheat protection, incl. waterproof cables. 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.

⚠ CAUTION

- The device is rated IP65 and may be used outdoors within the limits of this rating.
- This protection is effective only when all connectors are mated or closed with their protective caps and all seals are intact. Use cables and connectors with the same or a higher protection rating.
- Do not open the housing; opening it breaks the seals and the protection rating can no longer be guaranteed.
- Install the device so that water cannot collect around connectors and cable glands, and inspect seals and cables regularly.

⚠ **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** Do not place the unit on low-lying ground.

⚠ **WARNING** The minimum distance between the projector's light output and the illuminated surface must be more than 10 meters.

⚠ **WARNING** Do not project the beam onto combustible substances.

⚠ **CAUTION** Do not touch the device during operation; the housing may heat up.

⚠ **CAUTION** Replace the lamp if it is damaged or deformed.

⚠ **CAUTION** Do not install lamps with a higher wattage.

4 Product description

Powerful moving Beam head for outdoor use - waterproof !

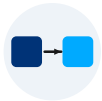
Ways to control the device


DMX mode



Auto mode


Sound mode


Master/Slave mode

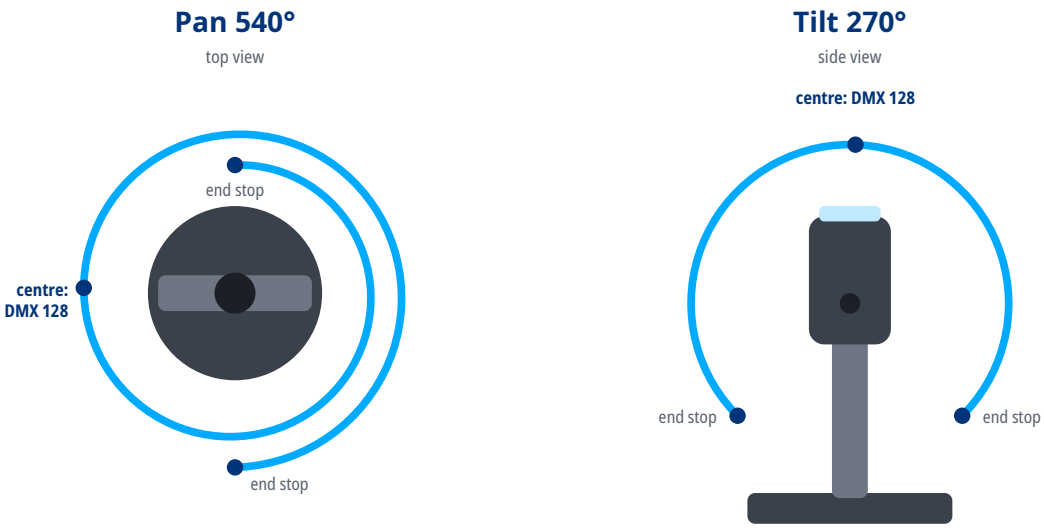
The chapter Operation describes each of them.

Package contents

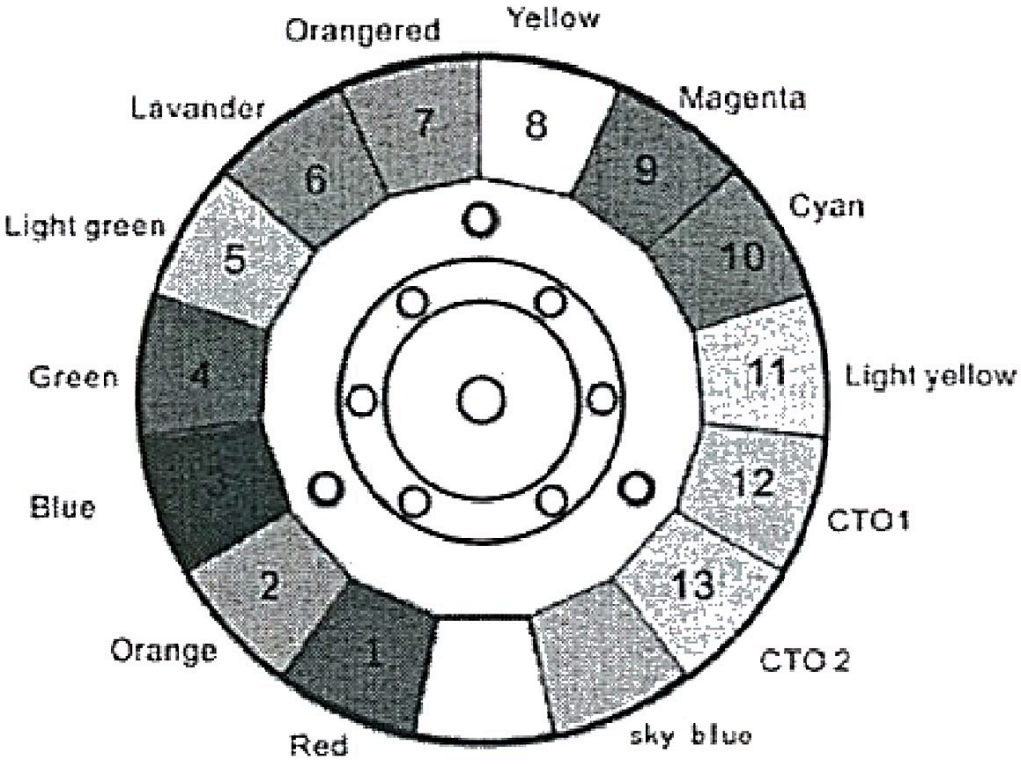
- 1× Waterproof moving head 350W Beam, outdoor, DMX

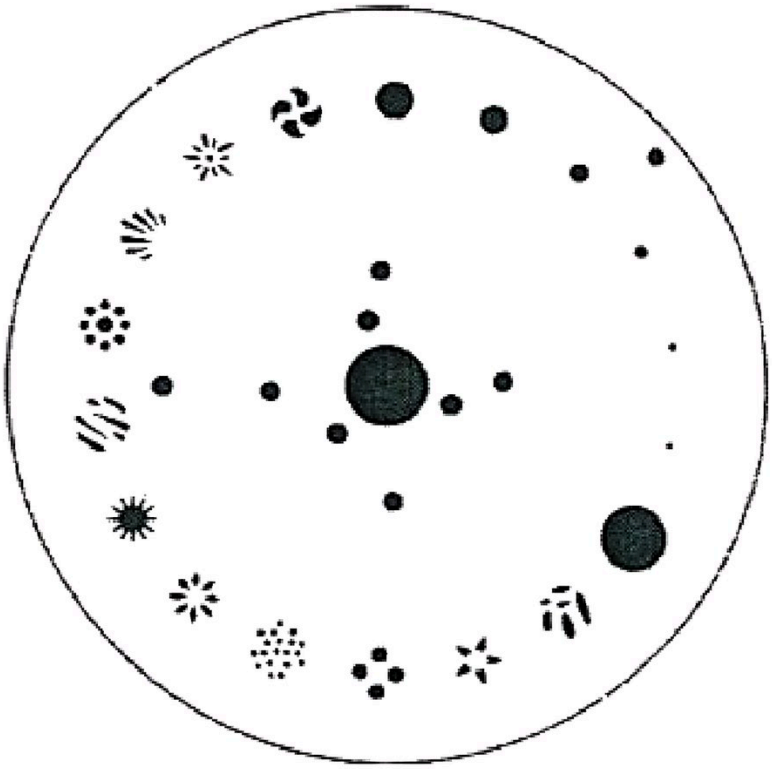
- 1× Power cable
- 1× 3pin DMX cable
- 1× User manual

Range of movement



Device detail



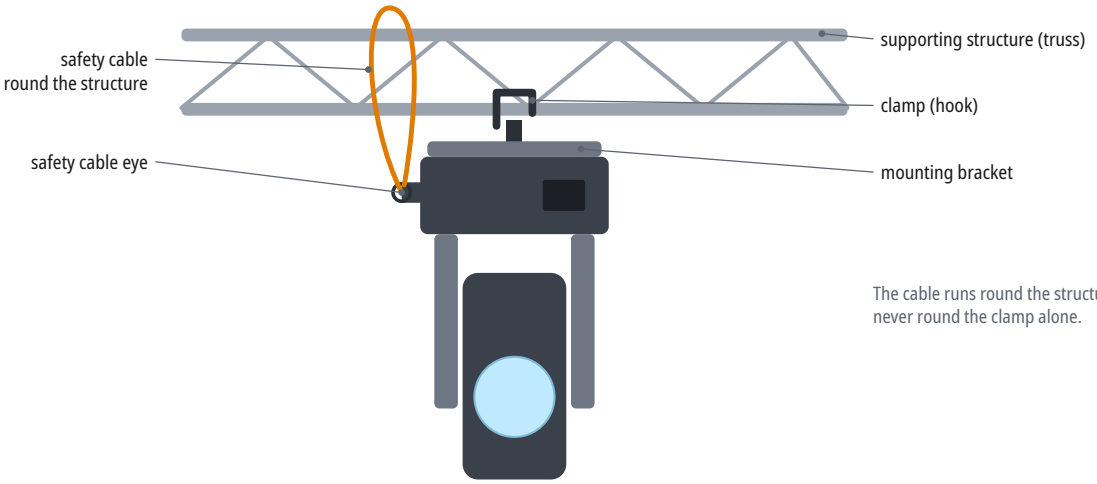


5 Installation

⚠ 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: 32 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.

Mounting on a truss



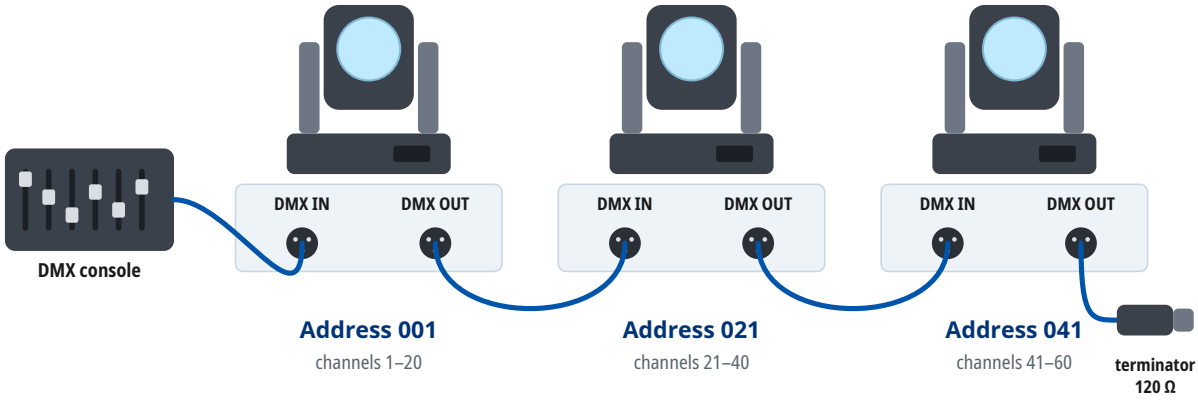
Install the unit in a safe and stable manner.

Install the fixture in a well-ventilated location at least 50 cm away from walls, and ensure the fan and ventilation holes are unobstructed.

6 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.

DMX line

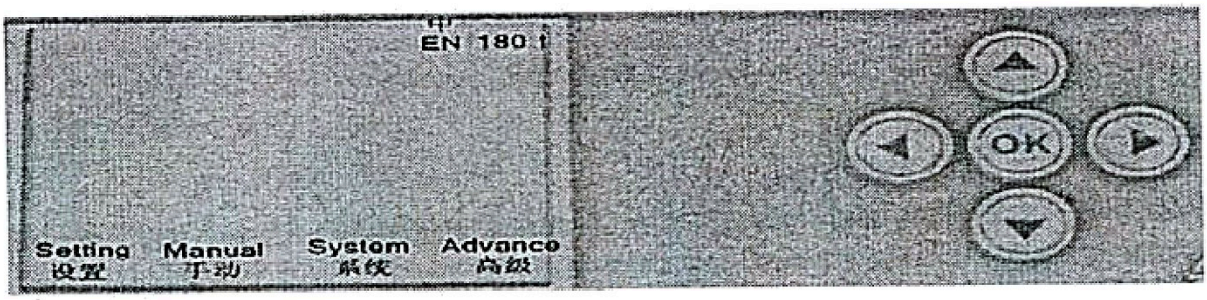


Mode 20CH: every unit occupies 20 channels from its address. At most 32 units on one line; for more units or longer runs use a DMX splitter. A 120 Ω terminator closes the last DMX OUT.

Connector	Purpose
DMX output (3 PIN)	DMX signal connection

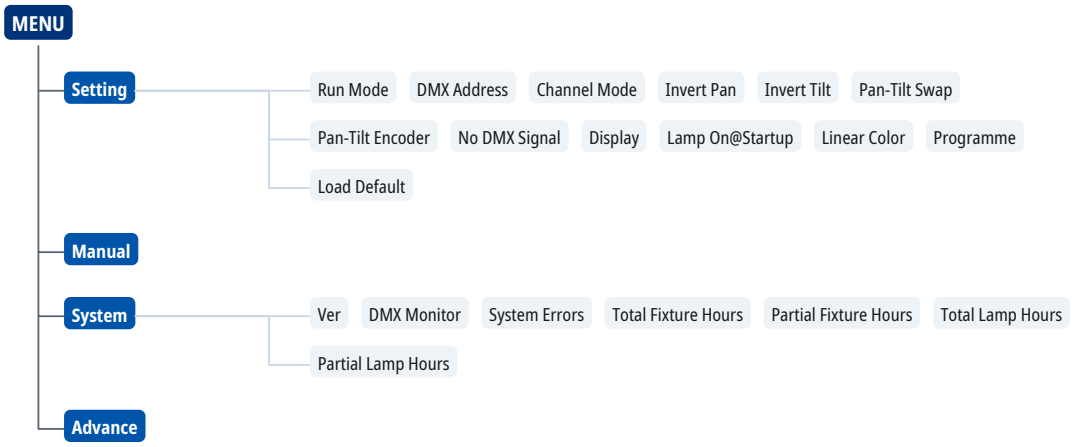
7 Operation

Control panel



Button	Function
OK	Confirm or enter menu / toggle operation and value editing mode
Up	–
Down	–
Back	–

Display menu



Code	Values	Function
Setting		Settings menu. Access settings options.
– Run Mode	DMX512, Sound, Random, F-Sleep8, F-Stand8, Forward 0, Drawup8, Aoto1-4, Program1-6	Select the operating mode.
– DMX Address	001–512	Set DMX address. Set the DMX start address from 001 to 512.
– Channel Mode	Std.16CH, Ext.20CH	Select DMX-channel mode. Select between standard 16-channel mode and extended 20-channel mode.
– Invert Pan	OFF, ON	Invert Pan movement.
– Invert Tilt	OFF, ON	Invert Tilt movement.
– Pan-Tilt Swap	OFF, ON	Swap Pan and Tilt.
– Pan-Tilt Encoder	OFF, ON	Pan/Tilt encoder setting. Enable or disable Pan/Tilt optical encoder correction.
– No DMX Signal	KEEP, CLEAR	Behavior on DMX signal loss. Choose the fixture state when DMX signal is lost: KEEP or CLEAR.
– Display	OFF, ON	Display backlight shutoff. Set display auto-off.
– Lamp On@Startup	OFF, ON	Lamp on at startup. Automatically strike lamp upon power on.
– Linear Color	OFF, ON	Linear color setting. Enable or disable linear color wheel positioning.
– Programme	Program1-6	Select program. Select internal program 1 through 6.
– Load Default		Restore factory defaults. Restore factory default settings.
Manual		Manual control menu. Manual control of fixture functions.
System		System information menu. Display system information.
– Ver		Firmware version. Displays the software version.
– DMX Monitor		Monitor received DMX values. Shows real-time incoming DMX values.
– System Errors		System error logs. Shows system error status.
– Total Fixture Hours		Total fixture operating time. Displays the total accumulated fixture operating hours.
– Partial Fixture Hours		Partial fixture operating time. Displays the resettable fixture operating hours.
– Total Lamp Hours		Total lamp operating time. Displays the total accumulated lamp operating hours.
– Partial Lamp Hours		Partial lamp operating time. Displays the resettable lamp operating hours.
Advance		Advanced settings menu. Advanced settings options.

DMX mode (DMX512)

Standard DMX512 control mode.

Sound mode

Selected on the display: Setting › Run Mode › Sound

Auto mode (Random)

Random automated movement.

Auto mode (F-Sleep8)

Selected on the display: Setting › Run Mode › F-Sleep8

Auto mode (F-Stand8)

Selected on the display: Setting › Run Mode › F-Stand8

Auto mode (Forward 0)

Selected on the display: Setting › Run Mode › Forward 0

Auto mode (Drawup8)

Selected on the display: Setting › Run Mode › Drawup8

Auto mode (Aoto1-4)

Selected on the display: Setting › Run Mode › Aoto1-4

Auto mode (Program1-6)

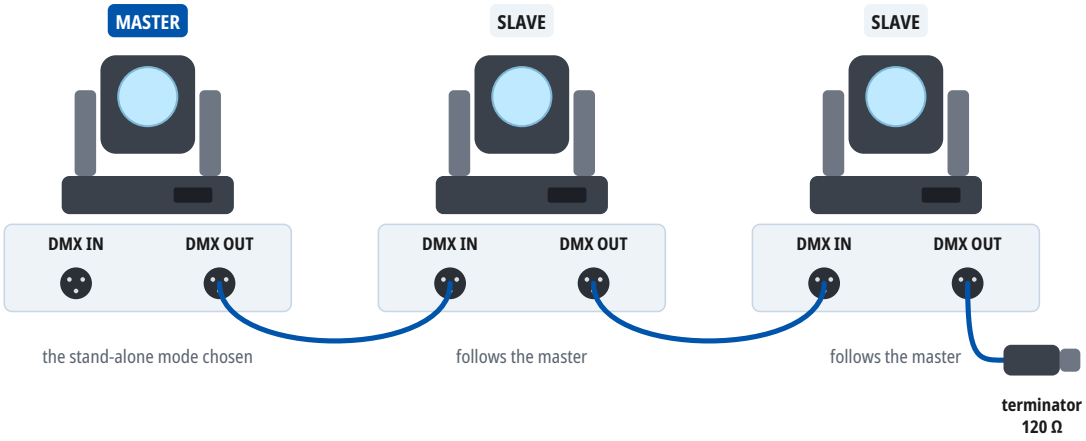
User-programmed internal sequence.

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 the DMX mode “20CH”: 20.
- 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 the DMX mode “20CH”, you can use, for example, the start addresses 1, 21, 41, 61.
- 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.



One master and no DMX console on the line; link units of the same type.

NOTE Lighting effects are not designed for continuous operation; regular operating breaks ensure a longer service life.

NOTE If the device is exposed to environmental temperature changes, do not turn it on immediately; leave it switched off until it reaches room temperature to avoid damage from condensation.

NOTE Power voltage variations should remain within +/-10%; excessive voltage shortens lamp life, while insufficient voltage darkens the lamp.

NOTE After turning off the fixture, wait 20 minutes for it to cool down completely before restarting. Frequent switching reduces lamp life.

NOTE Smoke or odor may occur during initial startup; this is normal and will diminish gradually.

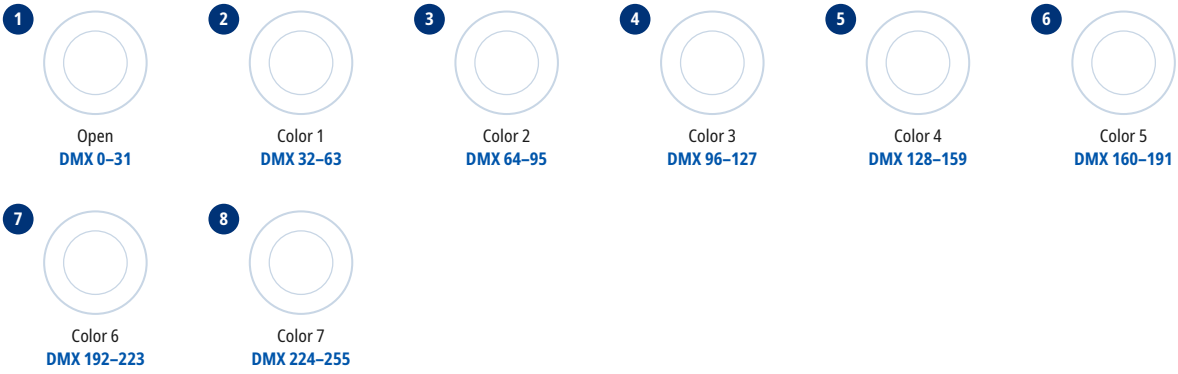
NOTE In the manual program menu, up to 6 programs with up to 20 scenes per program can be configured. Cf Time sets schedule step time and Total Time sets scene time; larger values result in slower speeds.

8 Functions at a glance

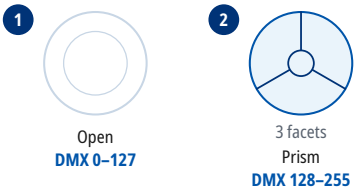
Functions in each DMX mode

	16CH 16 channels	20CH 20 channels
Pan / Tilt	10, 12	10, 12
Dimmer	3	3
Shutter / strobe	2	2
Color wheel	1	1
Gobo wheel	4	4
Prism	5, 6	5, 6
Frost	8	8
Focus	9	9
Effects / macros	7	7

Color wheel

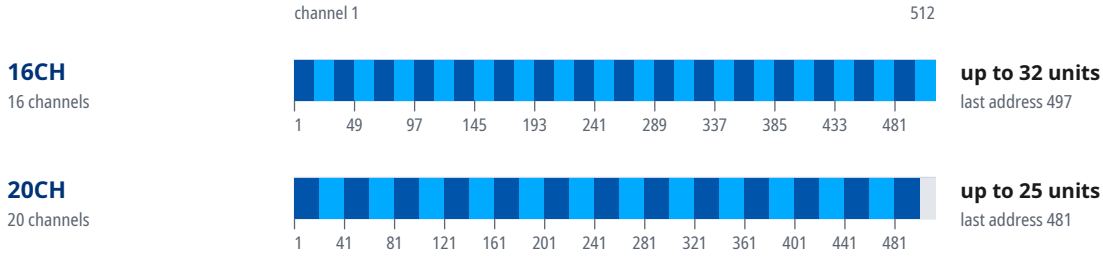


Prism



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “20CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	101	11	201	16	301
2	21	7	121	12	221	17	321
3	41	8	141	13	241	18	341
4	61	9	161	14	261	19	361
5	81	10	181	15	281	20	381

Console profiles

In the grandMA2, Avolites Titan and GDTF libraries, search for the code LIGHT138.

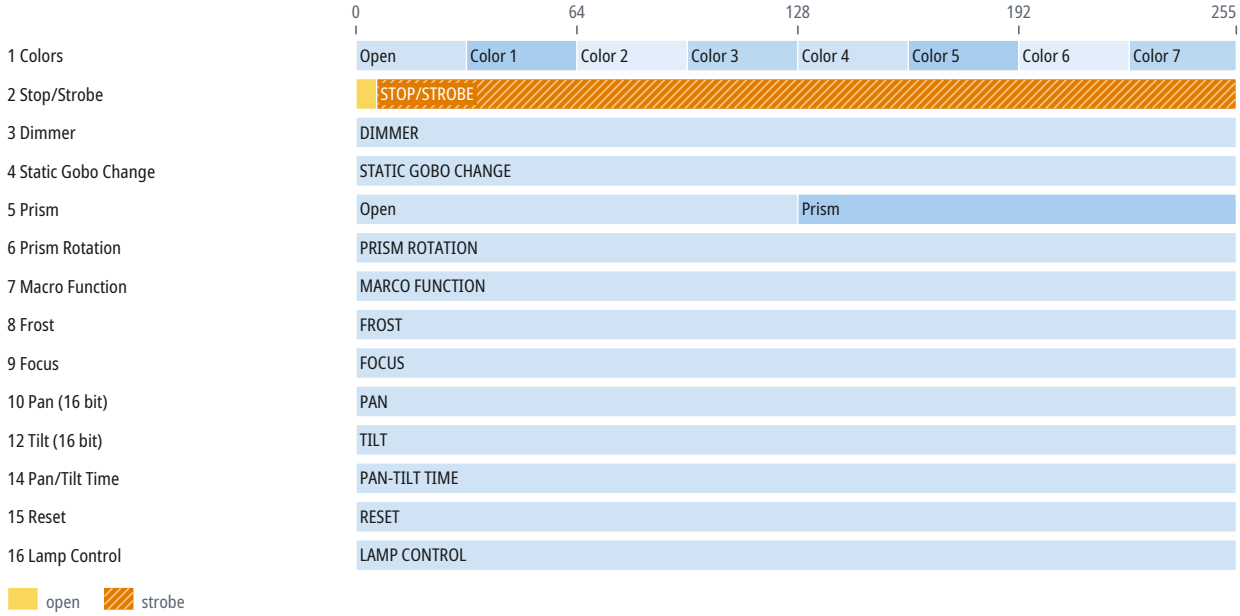
Parameter	Value
Manufacturer in the library	SOH
Fixture type (GDTF, grandMA2)	Waterproof moving head 350W Beam outdoor DMX
Fixture type (Avolites Titan)	Waterproof moving head 350W Beam, outdoor, DMX
GDTF file	SOH_Waterproof_moving_head_350W_Beam_outdoor_DMX_LIGHT138.gdtf
Avolites Titan file	SOH_Waterproof_moving_head_350W_Beam_outdoor_DMX_LIGHT138.d4
grandMA2 file, mode 16CH (16 channels)	SOH@Waterproof moving head 350W Beam outdoor DMX@16CH.xml
grandMA2 file, mode 20CH (20 channels)	SOH@Waterproof moving head 350W Beam outdoor DMX@20CH.xml
Library dated	19 November 2026

Mode 16CH

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

If the device receives DMX in this mode but gives no light, check these channels: CH 2 Stop/Strobe at 0–5 “No function”; CH 3 Dimmer above 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Colors	0–31	Open
		32–63	Color 1
		64–95	Color 2
		96–127	Color 3
		128–159	Color 4
		160–191	Color 5
		192–223	Color 6
		224–255	Color 7
2	Stop/Strobe	0–5	No function
		6–255	STOP/STROBE
3	Dimmer	0–255	DIMMER
4	Static Gobo Change	0–255	STATIC GOBO CHANGE
5	Prism	0–127	Open
		128–255	Prism
6	Prism Rotation	0–255	PRISM ROTATION
7	Macro Function	0–255	MARCO FUNCTION
8	Frost	0–255	FROST
9	Focus	0–255	FOCUS
10	Pan	0–255	PAN
11	Pan Fine	0–255	Fine adjustment of CH 10

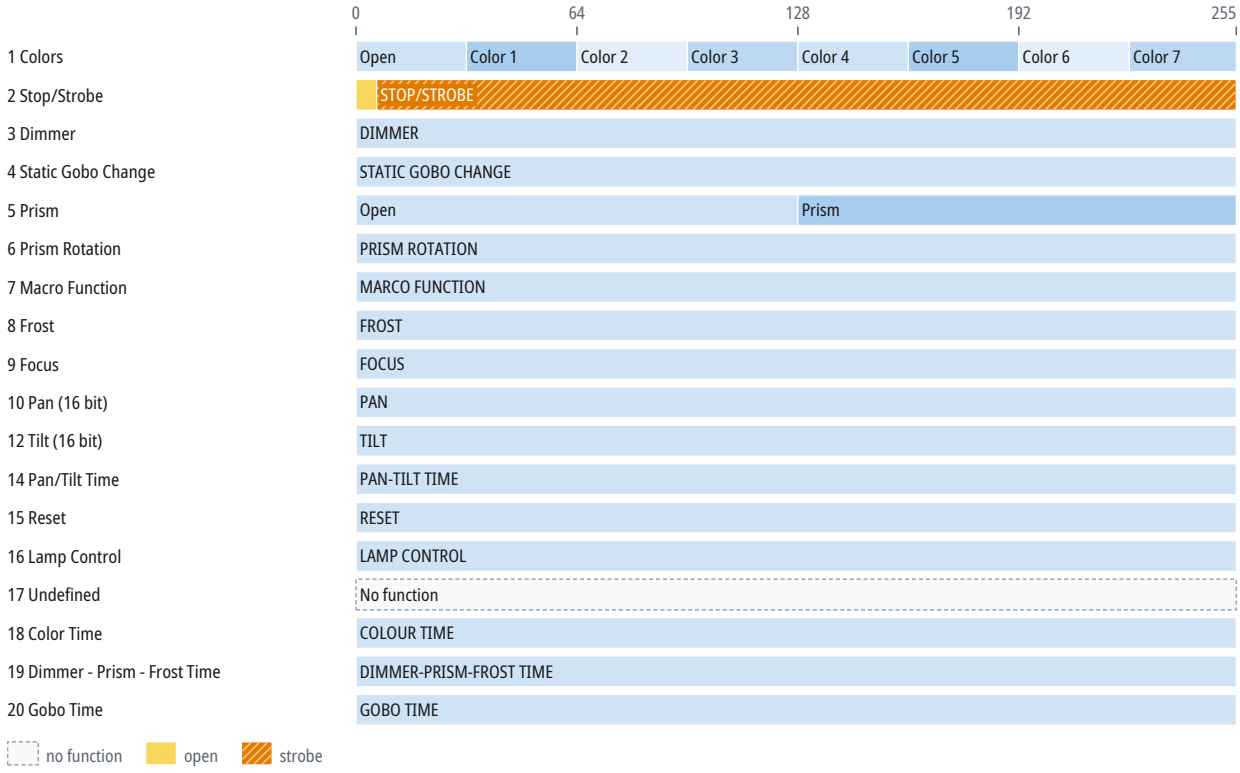
CH	Function	DMX	Description
12	Tilt	0–255	TILT
13	Tilt Fine	0–255	Fine adjustment of CH 12
14	Pan/Tilt Time	0–255	PAN-TILT TIME
15	Reset	0–255	RESET
16	Lamp Control	0–255	LAMP CONTROL

Mode 20CH

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

If the device receives DMX in this mode but gives no light, check these channels: CH 2 Stop/Strobe at 0–5 “No function”; CH 3 Dimmer above 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Colors	0–31	Open
		32–63	Color 1
		64–95	Color 2
		96–127	Color 3
		128–159	Color 4
		160–191	Color 5
		192–223	Color 6
		224–255	Color 7
2	Stop/Strobe	0–5	No function
		6–255	STOP/STROBE
3	Dimmer	0–255	DIMMER

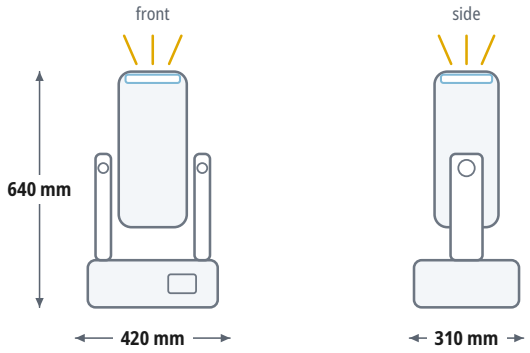
CH	Function	DMX	Description
4	Static Gobo Change	0–255	STATIC GOBO CHANGE
5	Prism	0–127	Open
		128–255	Prism
6	Prism Rotation	0–255	PRISM ROTATION
7	Macro Function	0–255	MARCO FUNCTION
8	Frost	0–255	FROST
9	Focus	0–255	FOCUS
10	Pan	0–255	PAN
11	Pan Fine	0–255	Fine adjustment of CH 10
12	Tilt	0–255	TILT
13	Tilt Fine	0–255	Fine adjustment of CH 12
14	Pan/Tilt Time	0–255	PAN-TILT TIME
15	Reset	0–255	RESET
16	Lamp Control	0–255	LAMP CONTROL
17	Undefined	0–255	No function
18	Color Time	0–255	COLOUR TIME
19	Dimmer - Prism - Frost Time	0–255	DIMMER-PRISM-FROST TIME
20	Gobo Time	0–255	GOBO TIME

10 Technical specifications

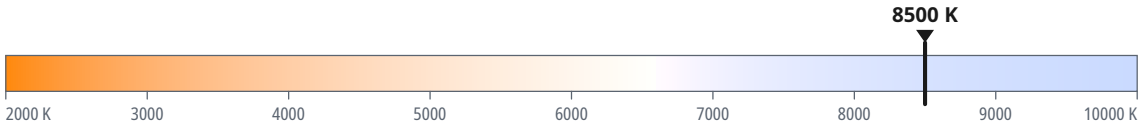
Parameter	Value
Light	
Lamp	OSRAM SIRIUS HRI350E
Lamp power	350 W
Color temperature	8500 K
Movement	
Pan	540° (resolution 8 Bit/16 Bit)
Tilt	270° (resolution 8 Bit/16 Bit)
Control	
Operating modes	9 Auto modes, 1 sound mode, and 6 user-programmable modes, Master/Slave.
DMX channels	16/20 CH
Controls	LCD display, reversible by 180°
Electrical	
Power supply	100-240 V, 50 / 60 Hz, overheat protection, incl. waterproof cables
Dimensions and construction	
Dimensions	64 cm x 42 cm x 31 cm (H x W x D)
Weight	32.000 g
Weight incl. packaging	40000 g
Operating environment	
Ingress protection	IP65 (dustproof and water jet-resistant), waterproof
Meaning of the IP code (IEC 60529)	Dust-tight; protected against water jets

Dimensions

weight 32.000 g



Color temperature



Color temperature as the product specification states it; the color strip only illustrates the scale.

11 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.

Clean the inside and outside lenses to avoid dust accumulation. (Weekly)

Clean the fan. (Weekly)

Have an approved electrical engineer inspect the electrical system to verify circuit contacts and prevent overheating. (Every three months)

Check mounting screws, housing, mechanical parts, and cables.

Lamp replacement

12 Troubleshooting

Problem	Remedy
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. For the DMX modes for which the sources state it, the chapter DMX channels gives under the mode's heading which channels must be open.

Problem	Remedy
Movement is reversed	Check whether Pan/Tilt inversion is enabled in the device menu or in the controller. In this device's menu: Invert Pan, Invert Tilt.
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.

13 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.

14 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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