DMX REFERENCE

GF-1

Megalite



Manufacturer	Megalite
GDTF file	MegaLite_GF-1_156477.gdtf
GDTF revision	Revision_2 · 2026-08-20
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 2
3 Safety instructions 3
4 Product description 4
5 Installation 4
6 Connections 4
7 Operation 5
8 Functions at a glance 6
9 DMX channels 8
Mode 34Ch 9
10 Technical specifications 14
11 Maintenance and cleaning 15
12 Troubleshooting 15
13 Disposal 16

1 About this manual

This document describes the GF-1 by Megalite. It was compiled from the GDTF file MegaLite_GF-1_156477.gdtf from the GDTF-Share library.

File revision: “Revision_2”.

The DMX modes, the channel functions and the technical data are given as the GDTF file states them. Installation, operation from the device's control panel, service and safety instructions are described in the manufacturer's original user manual, which takes precedence over this document.

This document was not issued or endorsed by Megalite; product names and trademarks belong to their owners.

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
Weight	26.2 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
34Ch	34	15	1, 35, 69, 103, …

No light? Check these channels

- 34Ch: CH 6 Shutter at 0–3 or 252–255 “Open”



Read the manual before use



Do not stare into the light



Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ 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

- 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.

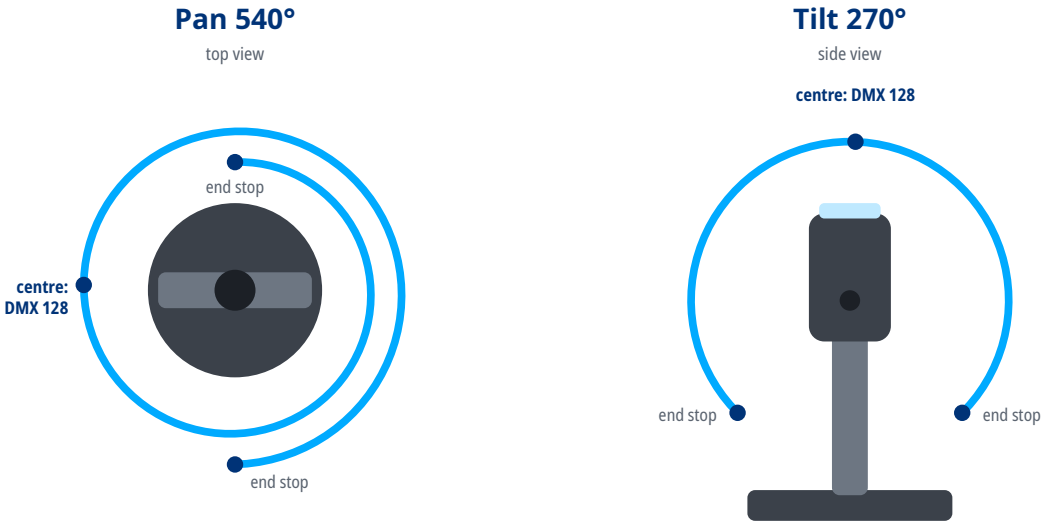
⚠ CAUTION

- 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.

4 Product description

Range of movement



5 Installation

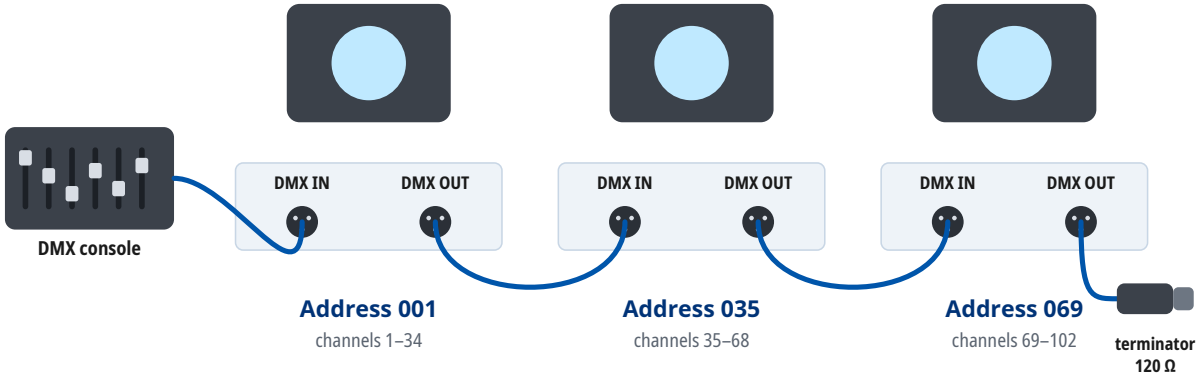
> ⚠ **WARNING**
>
> - Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
> - The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
> - Weight of the device: 26.2 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.

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 34Ch: every unit occupies 34 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.

7 Operation

Setting the DMX address

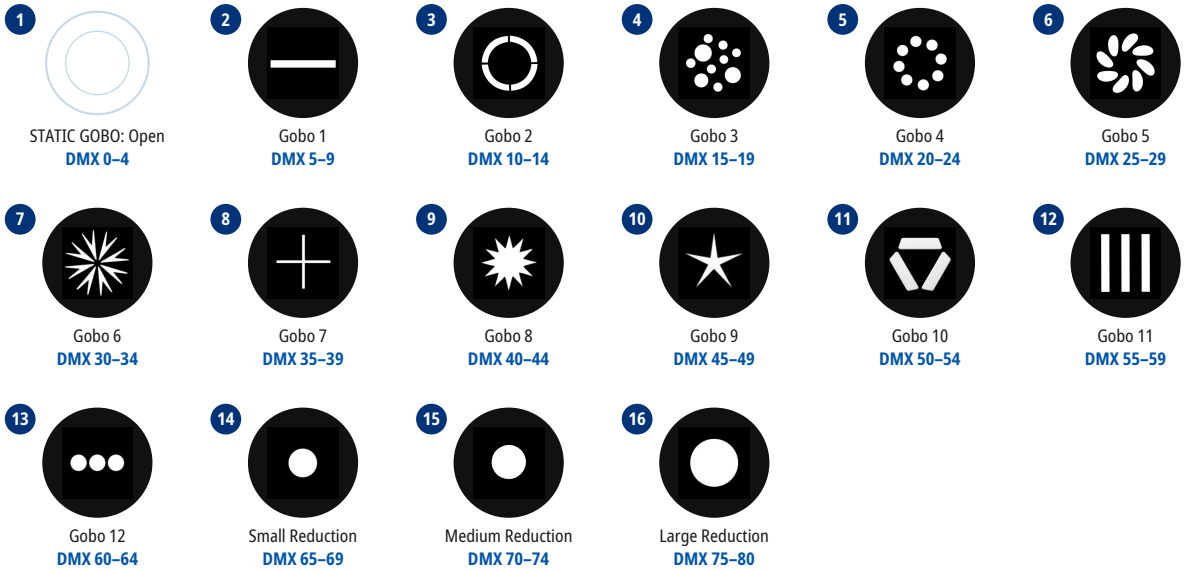
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “34Ch”: 34.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- For several devices in a row in the DMX mode “34Ch”, you can use, for example, the start addresses 1, 35, 69, 103.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

Functions in each DMX mode

	34Ch 34 channels
Pan / Tilt	1, 3
Dimmer	7
Shutter / strobe	6
Color mixing	8–10
Color temperature	11
Color wheel	12
Gobo wheel	13, 14
Gobo rotation	15
Prism	20, 21
Frost	22
Zoom	18
Focus	16
Iris	32
Effects / macros	33

Gobo wheel 1



Gobo wheel 2

1.
   ROTATING GOBO: Open
   DMX 0–9
2. 
   Gobo 1
   DMX 10–19
3. 
   Gobo 2
   DMX 20–29
4. 
   Gobo 3
   DMX 30–39
5. 
   Gobo 4
   DMX 40–49
6. 
   Gobo 5
   DMX 50–59
7. 
   Gobo 6
   DMX 60–69
8. 
   Gobo 7
   DMX 70–80

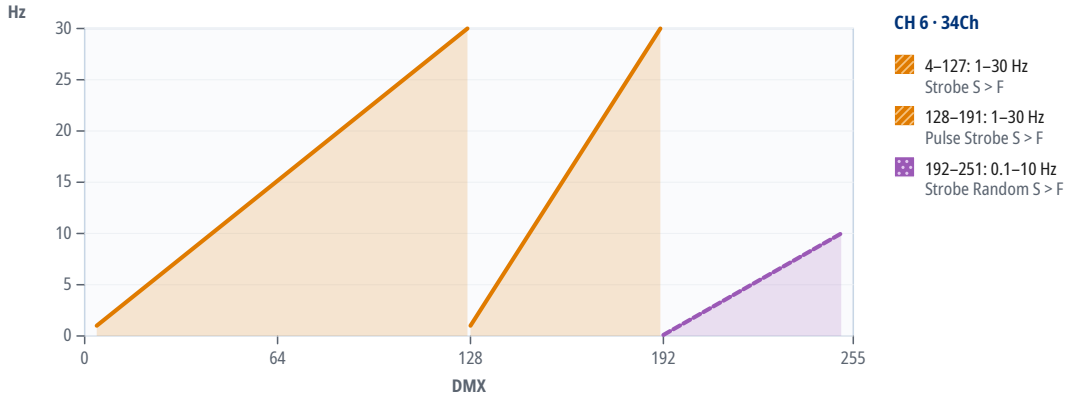
Prism

1. 
   6 facets
   Prism
   DMX 128–255

Color wheel

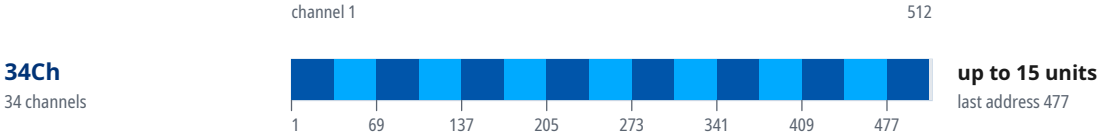
1. White
   DMX 0–4
2. White + Red
   DMX 5–9
3. Red
   DMX 10–14
4. Red + Yellow
   DMX 15–19
5. Yellow
   DMX 20–24
6. Yellow + Green
   DMX 25–29
7. Green
   DMX 30–34
8. Green + Blue
   DMX 35–39
9. Blue
   DMX 40–44
10. Blue + Orange
    DMX 45–49
11. Orange
    DMX 50–54
12. Orange + Dark Blue
    DMX 55–59
13. Dark Blue
    DMX 60–64
14. Dark Blue + Neon Green
    DMX 65–69
15. Neon Green
    DMX 70–75

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “34Ch”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	171	11	341	16	U2 · 1
2	35	7	205	12	375	17	U2 · 35
3	69	8	239	13	409	18	U2 · 69
4	103	9	273	14	443	19	U2 · 103
5	137	10	307	15	477	20	U2 · 137

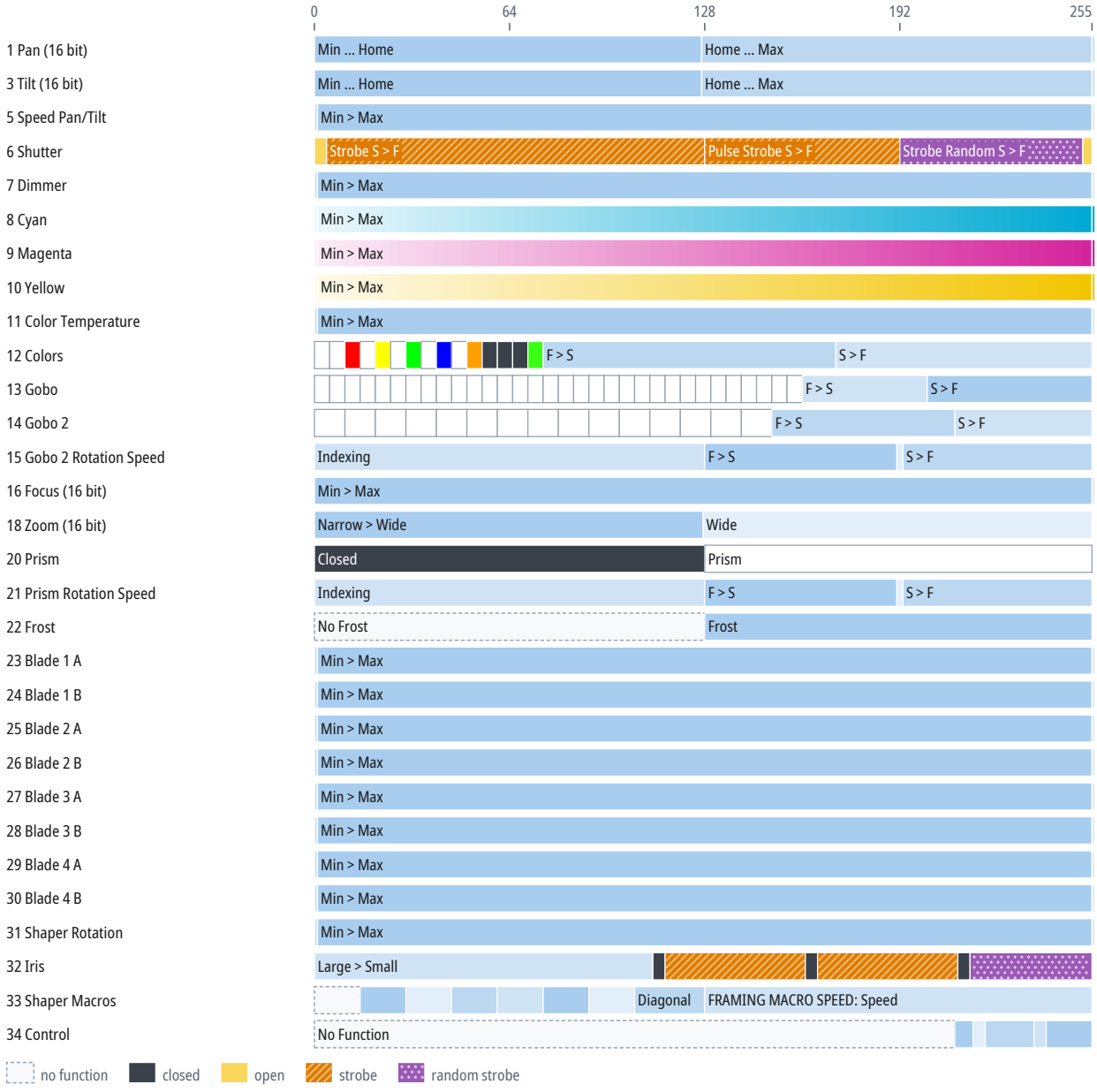
Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode 34Ch

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 6 Shutter at 0–3 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 7 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Min ... Home
		127–255	Home ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Min ... Home
		127–255	Home ... Max

CH	Function	DMX	Description
3	Tilt (continued)	255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		P/T SPEED
		0	Min
		1–254	Min > Max
		255	Max
6	Shutter	0–3	Open
		4–127	Strobe S > F (1–30 Hz)
		128–191	Pulse Strobe S > F (1–30 Hz)
		192–251	Strobe Random S > F (0.1–10 Hz)
		252–255	Open
7	Dimmer	0	Min
		1–254	Min > Max
		255	Max
8	Cyan	0	Min
		1–254	Min > Max
		255	Max
9	Magenta	0	Min
		1–254	Min > Max
		255	Max
10	Yellow	0	Min
		1–254	Min > Max
		255	Max
11	Color Temperature	0	Min
		1–254	Min > Max
		255	Max
12	Colors	0–4	White
		5–9	White + Red
		10–14	Red
		15–19	Red + Yellow
		20–24	Yellow
		25–29	Yellow + Green
		30–34	Green
		35–39	Green + Blue
		40–44	Blue
		45–49	Blue + Orange
		50–54	Orange
		55–59	Orange + Dark Blue
		60–64	Dark Blue
		65–69	Dark Blue + Neon Green
		70–74	Neon Green
		75–170	F > S (80–0.1 °/s)

CH	Function	DMX	Description
12	Colors (continued)	171–255	S > F (0.1–80 °/s)
13	Gobo	0–4	STATIC GOBO: Open
		5–9	Gobo 1
		10–14	Gobo 2
		15–19	Gobo 3
		20–24	Gobo 4
		25–29	Gobo 5
		30–34	Gobo 6
		35–39	Gobo 7
		40–44	Gobo 8
		45–49	Gobo 9
		50–54	Gobo 10
		55–59	Gobo 11
		60–64	Gobo 12
		65–69	Small Reduction
		70–74	Medium Reduction
		75–79	Large Reduction
		80–84	Open Shake (0.1–10 Hz)
		85–89	Gobo 1 Shake (0.1–10 Hz)
		90–94	Gobo 2 Shake (0.1–10 Hz)
		95–99	Gobo 3 Shake (0.1–10 Hz)
		100–104	Gobo 4 Shake (0.1–10 Hz)
		105–109	Gobo 5 Shake (0.1–10 Hz)
		110–114	Gobo 6 Shake (0.1–10 Hz)
		115–119	Gobo 7 Shake (0.1–10 Hz)
		120–124	Gobo 8 Shake (0.1–10 Hz)
		125–129	Gobo 9 Shake (0.1–10 Hz)
		130–134	Gobo 10 Shake (0.1–10 Hz)
		135–139	Gobo 11 Shake (0.1–10 Hz)
		140–144	Gobo 12 Shake (0.1–10 Hz)
		145–149	Small Reduction Shake (0.1–10 Hz)
		150–154	Medium Reduction Shake (0.1–10 Hz)
		155–159	Large Reduction Shake (0.1–10 Hz)
		160–200	F > S (80–0.1 °/s)
		201–255	S > F (0.1–80 °/s)
14	Gobo 2	0–9	ROTATING GOBO: Open
		10–19	Gobo 1
		20–29	Gobo 2
		30–39	Gobo 3
		40–49	Gobo 4
		50–59	Gobo 5
		60–69	Gobo 6

CH	Function	DMX	Description
14	Gobo 2 (continued)	70–79	Gobo 7
		80–89	Gobo 1 Shake (0.1–10 Hz)
		90–99	Gobo 2 Shake (0.1–10 Hz)
		100–109	Gobo 3 Shake (0.1–10 Hz)
		110–119	Gobo 4 Shake (0.1–10 Hz)
		120–129	Gobo 5 Shake (0.1–10 Hz)
		130–139	Gobo 6 Shake (0.1–10 Hz)
		140–149	Gobo 7 Shake (0.1–10 Hz)
		150–209	F > S (80–0.1 °/s)
		210–255	S > F (0.1–80 °/s)
15	Gobo 2 Rotation Speed	0–127	Indexing (360°)
		128–190	F > S (655–0.1 °/s)
		191–192	ROTATION: Stop
		193–255	S > F (0.1–655 °/s)
16	Focus	0	Min
		0–255	Min > Max
		255	Max
17	Focus Fine	0–255	Fine adjustment of CH 16
18	Zoom	0	Narrow
		0–127	Narrow > Wide
		127–255	Wide
19	Zoom Fine	0–255	Fine adjustment of CH 18
20	Prism	0–127	Closed
		128–255	Prism
21	Prism Rotation Speed	0–127	Indexing (360°)
		128–190	F > S (655–0.1 °/s)
		191–192	ROTATION: Stop
		193–255	S > F (0.1–655 °/s)
22	Frost	0–127	No Frost
		128–255	Frost
23	Blade 1 A		FRAME 1 A
		0	Min
		1–254	Min > Max
		255	Max
24	Blade 1 B		FRAME 1 B
		0	Min
		1–254	Min > Max
		255	Max
25	Blade 2 A		FRAME 2 A
		0	Min
		1–254	Min > Max
		255	Max

CH	Function	DMX	Description
26	Blade 2 B		FRAME 2 B
		0	Min
		1–254	Min > Max
		255	Max
27	Blade 3 A		FRAME 3 A
		0	Min
		1–254	Min > Max
		255	Max
28	Blade 3 B		FRAME 3 B
		0	Min
		1–254	Min > Max
		255	Max
29	Blade 4 A		FRAME 4 A
		0	Min
		1–254	Min > Max
		255	Max
30	Blade 4 B		FRAME 4 B
		0	Min
		1–254	Min > Max
		255	Max
31	Shaper Rotation		FRAME ROT
		0	Min
		1–254	Min > Max
		255	Max
32	Iris	0–110	Large > Small
		111–114	LARGE > SMALL: Iris Closed
		115–160	SLOW CLOSE FAST OPEN: Slow Close Fast Open (0.1–10 Hz)
		161–164	OPEN: Iris Closed
		165–210	FAST CLOSE SLOW OPEN: Fast Close Slow Open (0.1–10 Hz)
		211–214	OPEN: Iris Closed
		215–255	Medium Open Closing (0.1–10 Hz)
33	Shaper Macros	0–14	No Function
		15–29	Square
		30–44	Rectange
		45–59	Triangle
		60–74	Wedge
		75–89	Triangle Invert
		90–104	Half Moon
		105–127	Diagonal
		128–255	FRAMING MACRO SPEED: Speed
34	Control	0–209	No Function
		210–215	P/T Reset

CH	Function	DMX	Description
34	Control (continued)	216–219	P/T RESET
		220–235	Head Reset
		236–239	Head Reset ... Full Reset
		240–255	Full Reset

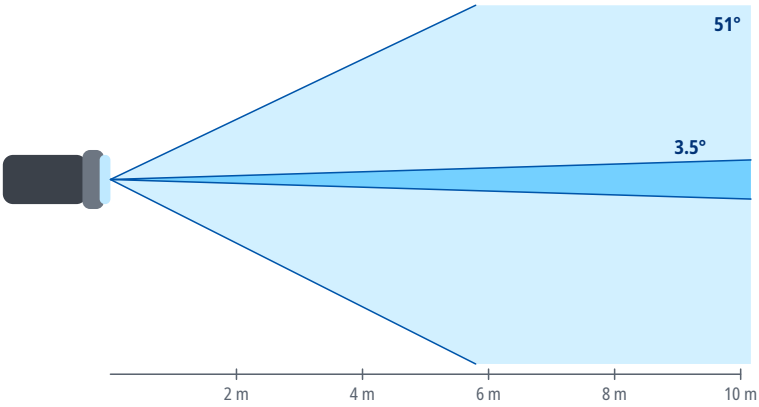
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	550 W
Luminous flux	10,000 lm
Color temperature	6,800 K
Color rendering index (CRI)	65
Optics	
Zoom	3.5–51°
Movement	
Pan	540°
Tilt	270°
Dimensions and construction	
Weight	26.2 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–6800 K
Strobe frequency	1–30 Hz
Color wheel rotation	up to 80 °/s (13 rpm)
Gobo wheel 1 rotation	up to 80 °/s (13 rpm)
Gobo wheel 2 rotation	up to 80 °/s (13 rpm)
Gobo 2 rotation	up to 655 °/s (109 rpm)
Prism rotation	up to 655 °/s (109 rpm)

Spot diameter



Distance	Ø 3.5°	Ø 51°
2 m	0.12 m	1.9 m
4 m	0.24 m	3.8 m
6 m	0.37 m	5.7 m
8 m	0.49 m	7.6 m
10 m	0.61 m	9.5 m
15 m	0.92 m	14.3 m

Spot diameter square to the beam axis, calculated from the beam angle.

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.

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.
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.

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.

Recycle the packaging materials according to their type.