DMX REFERENCE

Lusso

Starway



Manufacturer	Starway
GDTF file	Starway_Lusso_103246.gdtf
GDTF revision	V102 · 2025-07-09
Generated	2026-11-24

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1 About this manual

This document describes the Lusso by Starway. It was compiled from the GDTF file Starway_Lusso_103246.gdtf from the GDTF-Share library.

File revision: “V102”.

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 Starway; 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
Power consumption	450 W
Weight	19.9 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Standard 24CH	24	21	1, 25, 49, 73, ...
Extend 29CH	29	17	1, 30, 59, 88, ...

No light? Check these channels

- Standard 24CH: CH 20 Dimmer above 0; CH 22 Shutter at 32–63 or 224–255 “Open”
- Extend 29CH: CH 25 Dimmer above 0; CH 27 Shutter at 32–63 or 224–255 “Open”


Read the manual before use


Risk of electric shock


Do not stare into the light


Indoor use only

3 Safety instructions


Read the manual before use


Risk of electric shock


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

- 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: 120–240 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.

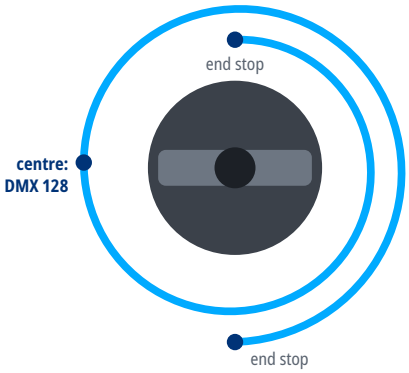
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do 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.

4 Product description

Range of movement

Pan 540°

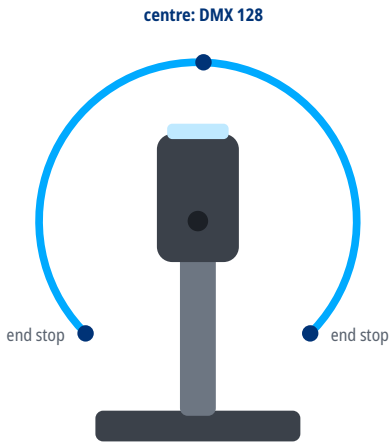
top view



full travel in 2.3 s

Tilt 270°

side view



full travel in 1.2 s

Full-travel times as stated in the GDTF file.

5 Installation

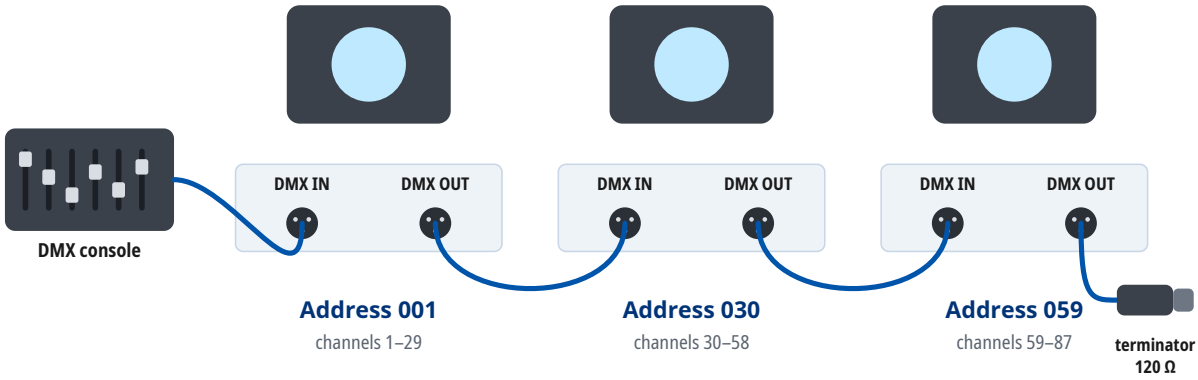
⚠ WARNING

- 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: 19.9 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 Extend 29CH: every unit occupies 29 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

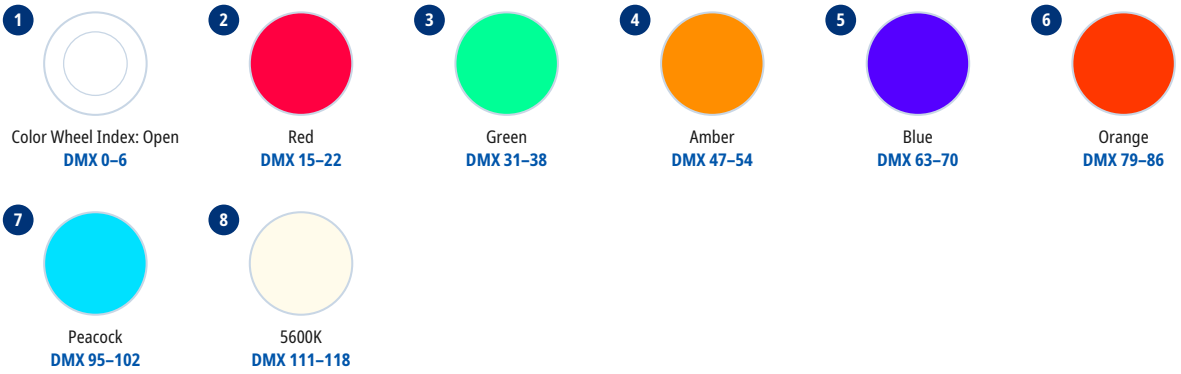
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Extend 29CH”: 29.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 “Extend 29CH”, you can use, for example, the start addresses 1, 30, 59, 88.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.
- The device supports RDM (Remote Device Management), two-way communication with the controller over the DMX line.

8 Functions at a glance

Functions in each DMX mode

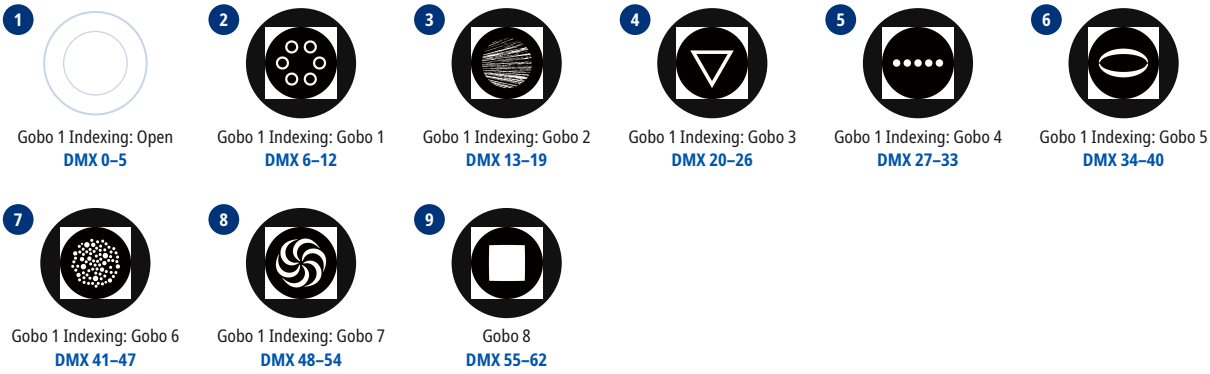
	Standard 24CH 24 channels	Extend 29CH 29 channels
Pan / Tilt	1, 3	1, 3
Dimmer	20	25
Shutter / strobe	22	27
Color mixing	6–8	6, 8, 10
Color wheel	9	12
Gobo wheel	10, 13	13, 16
Gobo rotation	11	14
Prism	14, 15	17, 18
Frost	19	24
Zoom	16	19
Focus	17	21
Iris	18	23

Color wheel



1. Color Wheel Index: Open — DMX 0–6
2. Red — DMX 15–22
3. Green — DMX 31–38
4. Amber — DMX 47–54
5. Blue — DMX 63–70
6. Orange — DMX 79–86
7. Peacock — DMX 95–102
8. 5600K — DMX 111–118

Gobo wheel 1



1. Gobo 1 Indexing: Open — DMX 0–5
2. Gobo 1 Indexing: Gobo 1 — DMX 6–12
3. Gobo 1 Indexing: Gobo 2 — DMX 13–19
4. Gobo 1 Indexing: Gobo 3 — DMX 20–26
5. Gobo 1 Indexing: Gobo 4 — DMX 27–33
6. Gobo 1 Indexing: Gobo 5 — DMX 34–40
7. Gobo 1 Indexing: Gobo 6 — DMX 41–47
8. Gobo 1 Indexing: Gobo 7 — DMX 48–54
9. Gobo 8 — DMX 55–62

Gobo wheel 2

1
Gobo 2 Wheel Index: Open
DMX 0–5

2 
Gobo 2 Wheel Index: Gobo 1
DMX 6–14

3 
Gobo 2 Wheel Index: Gobo 2
DMX 15–23

4 
Gobo 2 Wheel Index: Gobo 3
DMX 24–32

5 
Gobo 2 Wheel Index: Gobo 4
DMX 33–41

6 
Gobo 2 Wheel Index: Gobo 5
DMX 42–50

7 
Gobo 2 Wheel Index: Gobo 6
DMX 51–59

8 
Gobo 2 Wheel Index: Gobo 7
DMX 60–68

9 
Gobo 2 Wheel Index: Gobo 8
DMX 69–77

10 
Gobo 2 Wheel Index: Gobo 9
DMX 78–86

11 
Gobo 10
DMX 87–96

Prism 1

1
Open
DMX 0–5

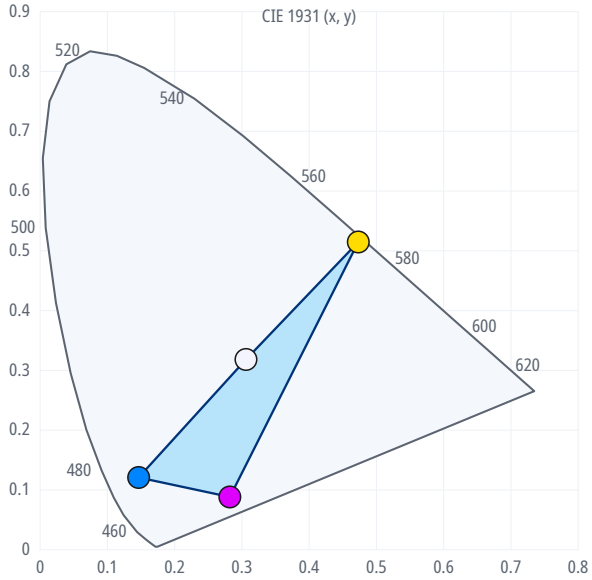
2 
6 facets
6 liner Prism
DMX 6–134

Prism 2

1
Open
DMX 0–5

2 
6 facets
6 Facet Prism
DMX 6–134

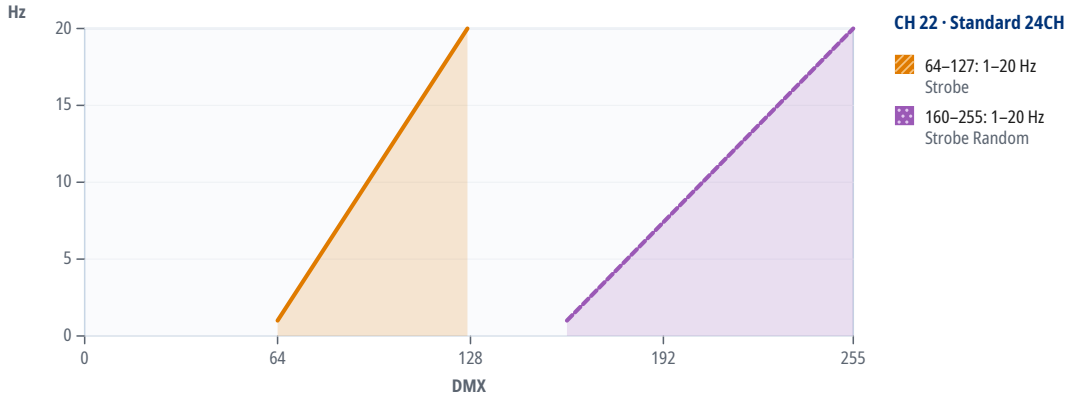
LED colors and the colors they mix



LED	x	y
White	0.306	0.318
Cyan	0.146	0.121
Magenta	0.282	0.088
Yellow	0.473	0.515

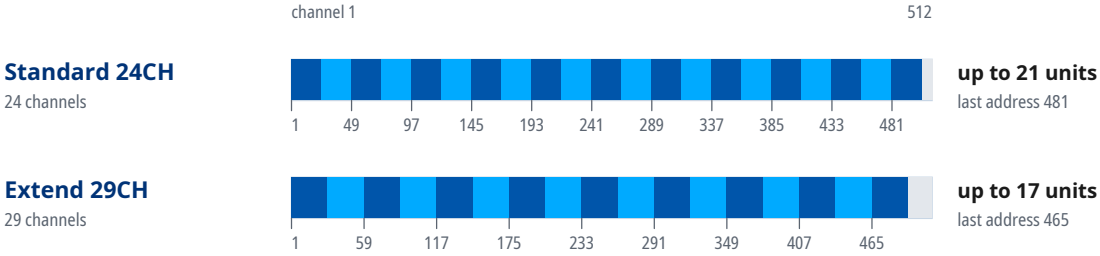
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extend 29CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	146	11	291	16	436
2	30	7	175	12	320	17	465
3	59	8	204	13	349	18	U2 · 1
4	88	9	233	14	378	19	U2 · 30
5	117	10	262	15	407	20	U2 · 59

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 Standard 24CH

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 20 Dimmer above 0; CH 22 Shutter at 32–63 or 224–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 6 Cyan 0, CH 7 Magenta 0, CH 8 Yellow 0, CH 9 Colors 0, CH 20 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0	Pan Tilt Speed Max
		1–224	Pan Tilt Speed Max ... Pan Tilt Speed Min
		225	Pan Tilt Speed Min
		226–235	Move In Black
		236–255	No Function
6	Cyan	0	Min

CH	Function	DMX	Description
6	Cyan (continued)	1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
7	Magenta	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
8	Yellow	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
9	Colors	0–6	Color Wheel Index: Open
		7–14	White/Red
		15–22	Red
		23–30	Red/Green
		31–38	Green
		39–46	Green/Amber
		47–54	Amber
		55–62	Amber/blue
		63–70	Blue
		71–78	blue/ Orange
		79–86	Orange
		87–94	Orange/Peacock
		95–102	Peacock
		103–110	Peacock /5600K
		111–118	5600K
		119–127	5600K/White

CH	Function	DMX	Description
9	Colors (continued)	128–134	CTO color mixing
		135–142	CTB Color mixing
		143–150	UV Color mixing
		151	CW Max
		152–200	CW Max ... CW Min
		201	CW Min
		202–204	Color Wheel Spin: Stop
		205	CCW Min
		206–254	CCW Min ... CCW Max
		255	CCW Max
10	Gobo	0–5	Gobo 1 Indexing: Open
		6–12	Gobo 1 Indexing: Gobo 1
		13–19	Gobo 1 Indexing: Gobo 2
		20–26	Gobo 1 Indexing: Gobo 3
		27–33	Gobo 1 Indexing: Gobo 4
		34–40	Gobo 1 Indexing: Gobo 5
		41–47	Gobo 1 Indexing: Gobo 6
		48–54	Gobo 1 Indexing: Gobo 7
		55–61	Gobo 1 Indexing: Gobo 8
		62–77	Gobo 1 Shake: Gobo 1 (0.857–8.62 Hz)
		78–93	Gobo 1 Shake: Gobo 2 (0.857–8.62 Hz)
		94–109	Gobo 1 Shake: Gobo 3 (0.857–8.62 Hz)
		110–125	Gobo 1 Shake: Gobo 4 (0.857–8.62 Hz)
		126–141	Gobo 1 Shake: Gobo 5 (0.857–8.62 Hz)
		142–157	Gobo 1 Shake: Gobo 6 (0.857–8.62 Hz)
		158–173	Gobo 1 Shake: Gobo 7 (0.857–8.62 Hz)
		174–189	Gobo 1 Shake: Gobo 8 (0.857–8.62 Hz)
		190	CW Max
		191–220	CW Max ... CW Min
		221	CW Min
		222–223	Gobo 1 Wheel Rotation: Stop
		224	CCW Min
		225–254	CCW Min ... CCW Max
		255	CCW Max
11	Gobo Rotation Speed	0	Rot Off ... index
		1–127	Index
		128–189	Fast to Slow CW
		189	Fast to Slow CW ... Stop
		190–193	Gobo 1 Pos Rotate: Stop
		193	Stop ... slow to fast CCW
		194–255	Slow to fast CCW
12	Gobo Rotation Speed Fine	0–255	Fine adjustment of CH 11

CH	Function	DMX	Description
13	Gobo 2	0–5	Gobo 2 Wheel Index: Open
		6–14	Gobo 2 Wheel Index: Gobo 1
		15–23	Gobo 2 Wheel Index: Gobo 2
		24–32	Gobo 2 Wheel Index: Gobo 3
		33–41	Gobo 2 Wheel Index: Gobo 4
		42–50	Gobo 2 Wheel Index: Gobo 5
		51–59	Gobo 2 Wheel Index: Gobo 6
		60–68	Gobo 2 Wheel Index: Gobo 7
		69–77	Gobo 2 Wheel Index: Gobo 8
		78–86	Gobo 2 Wheel Index: Gobo 9
		87–95	Gobo 2 Wheel Index: Gobo 10
		96–104	Gobo 2 Shake: Gobo 1 (0.857–8.62 Hz)
		105–113	Gobo 2 Shake: Gobo 2 (0.857–8.62 Hz)
		114–122	Gobo 2 Shake: Gobo 3 (0.857–8.62 Hz)
		123–131	Gobo 2 Shake: Gobo 4 (0.857–8.62 Hz)
		132–140	Gobo 2 Shake: Gobo 5 (0.857–8.62 Hz)
		141–149	Gobo 2 Shake: Gobo 6 (0.857–8.62 Hz)
		150–158	Gobo 2 Shake: Gobo 7 (0.857–8.62 Hz)
		159–167	Gobo 2 Shake: Gobo 8 (0.857–8.62 Hz)
		168–176	Gobo 2 Shake: Gobo 9 (0.857–8.62 Hz)
		177–185	Gobo 2 Shake: Gobo 10 (0.857–8.62 Hz)
		186	CW Max
		187–216	CW Max … CW Min
		217	CW Min
		218–223	Gobo 2 Wheel Rotation: Stop
		224	CCW Min
		225–254	CCW Min … CCW Max
		255	CCW Max
14	Prism	0–5	Open
		6–133	6 linear
		134–192	Fast to slow CW
		193–196	No rotation
		197–255	Slow to fast CCW
15	Prism 2	0–5	Open
		6–133	6 linear
		134–192	Fast to slow CW
		193–196	No rotation
		197–255	Slow to fast CCW
16	Zoom	0	Wide
		1–127	Wide … Medium
		128	Medium
		129–254	Medium … Narrow

CH	Function	DMX	Description
16	Zoom (continued)	255	Narrow
17	Focus	0	Near
		1–127	Near … Medium
		128	Medium
		129–254	Medium … Far
		255	Far
18	Iris	0	Iris: Open
		1–190	Iris: Open … Closed
		191	Iris: Closed
		192	Iris Pulse Open: Fast
		193–222	Iris Pulse Open: Fast … Slow
		223	Iris Pulse Open: Slow
		224–225	Iris Pulse Close: Slow
		226–254	Iris Pulse Close: Slow … Fast
		255	Iris Pulse Close: Fast
19	Frost	0	Frost 0%
		1–254	Frost 0% … Frost 100%
		255	Frost 100%
20	Dimmer	0–255	Closed … Open
		255	Open
21	Dimmer Fine	0–255	Fine adjustment of CH 20
22	Shutter	0–31	Shutter: Closed
		32–63	Shutter: Open
		64	Strobe: Slow
		65–94	Strobe: Slow … Fast
		95	Strobe: Fast
		96–127	Strobe
		128–159	Pulse In Sequences
		160–191	Strobe Random
		192	Strobe Random: Slow
		193–222	Strobe Random: Slow … Fast
		223	Strobe Random: Fast
		224–255	Strobe Random: Open
23	Dimmer Mode	0–20	Standard
		21–40	Scene
		41–60	TV
		61–80	Architectural
		81–100	Theatre
		101–255	Default
24	Control	0–5	No Function
		6–11	Invert Pan On (3s)
		12–17	Invert Pan Off (3s)

CH	Function	DMX	Description
24	Control (continued)	18–23	Invert Tilt On (3s)
		24–29	Invert Tilt Off (3s)
		30–47	Gobo CTO On
		48–53	Gobo CTO Off
		54–59	No Function
		60–65	Fan Silent (3s)
		66–71	Fan Auto (3s)
		72–77	Fan Max (3s)
		78–89	Dim Linear (3s)
		90–101	Dim Square (3s)
		102–113	Dim Square Inverse (3s)
		114–125	Dim S
		126–131	LED Freq 900 Hz (3s)
		132–137	LED Freq 1 000 Hz (3s)
		138–143	LED Freq 1 100 Hz (3s)
		144–149	LED Freq 1 200 Hz (3s)
		150–155	LED Freq 1 300 Hz (3s)
		156–161	LED Freq 1 400 Hz (3s)
		162–167	LED Freq 1 500 Hz (3s)
		168–173	LED Freq 2 500 Hz (3s)
		174–179	LED Freq 4 000 Hz (3s)
		180–185	LED Freq 5 000 Hz (3s)
		186–191	LED Freq 10 000 Hz (3s)
		192–197	LED Freq 15 000 Hz (3s)
		198–203	LED Freq 20 000 Hz (3s)
		204–209	LED Freq 25 000 Hz (3s)
		210–221	Reset Pan / Tilt (3s)
		222–233	Reset Head (3s)
		234–255	Global Fixture Reset (3s)

Mode Extend 29CH

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 25 Dimmer above 0; CH 27 Shutter at 32–63 or 224–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 6 Cyan 0, CH 8 Magenta 0, CH 10 Yellow 0, CH 12 Colors 0, CH 25 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Standard 24CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Standard 24CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Standard 24CH” (p. 11)
6	Cyan	0–64	Min ... 25%
		64–128	25% ... 50%
		128–192	50% ... 75%
		192–255	75% ... Max
		255	Max
7	Cyan Fine	0–255	Fine adjustment of CH 6
8	Magenta	0–64	Min ... 25%
		64–128	25% ... 50%
		128–192	50% ... 75%

CH	Function	DMX	Description
8	Magenta (continued)	192–255	75% ... Max
		255	Max
9	Magenta Fine	0–255	Fine adjustment of CH 8
10	Yellow	0–64	Min ... 25%
		64–128	25% ... 50%
		128–192	50% ... 75%
		192–255	75% ... Max
		255	Max
11	Yellow Fine	0–255	Fine adjustment of CH 10
12	Colors		Same as CH 9 in the mode “Standard 24CH” (p. 12)
13	Gobo		Same as CH 10 in the mode “Standard 24CH” (p. 13)
14	Gobo Rotation Speed		Same as CH 11 in the mode “Standard 24CH” (p. 13)
15	Gobo Rotation Speed Fine	0–255	Fine adjustment of CH 14
16	Gobo 2		Same as CH 13 in the mode “Standard 24CH” (p. 14)
17	Prism		Same as CH 14 in the mode “Standard 24CH” (p. 14)
18	Prism 2		Same as CH 15 in the mode “Standard 24CH” (p. 14)
19	Zoom	0–128	Wide ... Medium
		128–255	Medium ... Narrow
		255	Narrow
20	Zoom Fine	0–255	Fine adjustment of CH 19
21	Focus	0–128	Near ... Medium
		128–255	Medium ... Far
		255	Far
22	Focus Fine	0–255	Fine adjustment of CH 21
23	Iris		Same as CH 18 in the mode “Standard 24CH” (p. 15)
24	Frost		Same as CH 19 in the mode “Standard 24CH” (p. 15)
25	Dimmer		Same as CH 20 in the mode “Standard 24CH” (p. 15)
26	Dimmer Fine	0–255	Fine adjustment of CH 25
27	Shutter		Same as CH 22 in the mode “Standard 24CH” (p. 15)
28	Dimmer Mode		Same as CH 23 in the mode “Standard 24CH” (p. 15)
29	Control		Same as CH 24 in the mode “Standard 24CH” (p. 15)

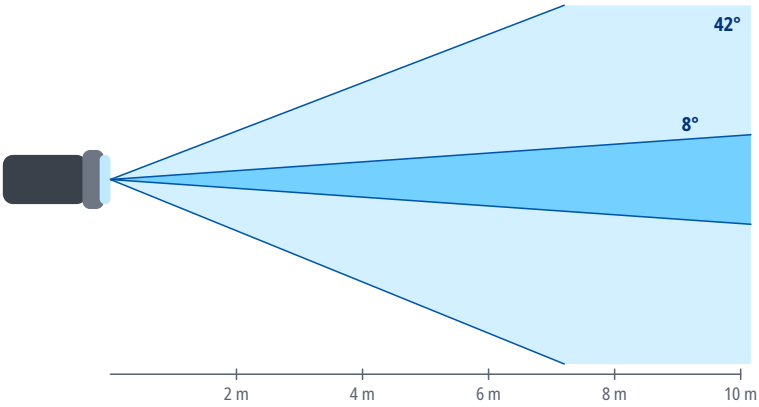
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	300 W
Luminous flux	21,500 lm
Color temperature	7,600 K
Color rendering index (CRI)	70
Optics	
Zoom	8–42°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT
RJ45 connectors	RJ45 IN/OUT
RDM	yes (manufacturer ID 0x09E9, device model ID 0x4754)
Electrical	
Power supply	120–240 V, 50/60 Hz
Power consumption	450 W
Power connectors	powerCON TRUE1 IN, powerCONTRUE1TOP IN
Dimensions and construction	
Weight	19.9 kg
Operating environment	
Operating temperature	-40 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	1–20 Hz
Color wheel rotation	up to 180 °/s (30 rpm)
Gobo wheel 1 rotation	up to 1150 °/s (192 rpm)
Gobo wheel 2 rotation	up to 360 °/s (60 rpm)
Gobo 1 rotation	up to 180 °/s (30 rpm)
Prism 1 rotation	up to 180 °/s (30 rpm)
Prism 2 rotation	up to 180 °/s (30 rpm)

Spot diameter



Distance	Ø 8°	Ø 42°
2 m	0.28 m	1.5 m
4 m	0.56 m	3.1 m
6 m	0.84 m	4.6 m
8 m	1.1 m	6.1 m
10 m	1.4 m	7.7 m
15 m	2.1 m	11.5 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.