DMX REFERENCE

AZOR S2

AZOR S2 (CLAZORS2)

Cameo



Manufacturer	Cameo
GDTF file	Cameo_AZOR_S2_42314.gdtf
GDTF revision	Firmware-1.1.1_GDTF-1.2_at GMA-3D Prism1 rot. not working · 2023-06-29
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1 About this manual

This document describes the AZOR S2 (CLAZORS2) by Cameo. It was compiled from the GDTF file Cameo_AZOR_S2_42314.gdtf from the GDTF-Share library.

File revision: “Firmware-1.1.1_GDTF-1.2_at GMA-3D Prism1 rot. not working”.

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 Cameo; 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	19.7 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
28 Channel Mode Extended	28	18	1, 29, 57, 85, ...
24-CH Standard	24	21	1, 25, 49, 73, ...
21-CH Basic	21	24	1, 22, 43, 64, ...

No light? Check these channels

- 28 Channel Mode Extended: CH 5 Dimmer above 0; CH 7 Shutter at 0–5 or 251–255 “Open”
- 24-CH Standard: CH 5 Dimmer above 0; CH 7 Shutter at 0–5 or 251–255 “Open”
- 21-CH Basic: CH 5 Dimmer above 0; CH 6 Shutter at 0–5 or 251–255 “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

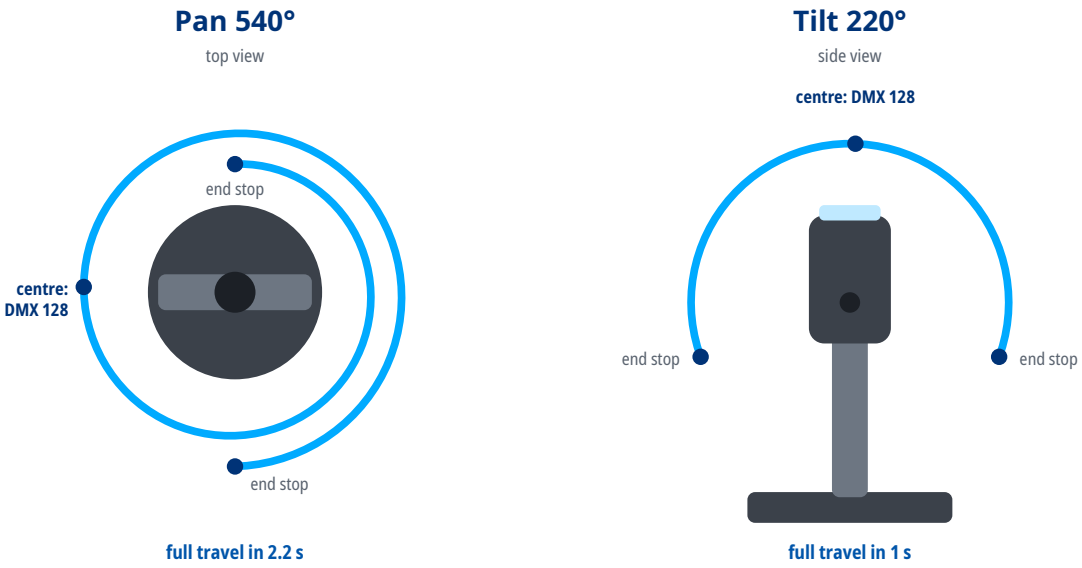
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, 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

Description in the GDTF file

“Compact Spot Moving Head for universal use in 13.000 lm Class”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

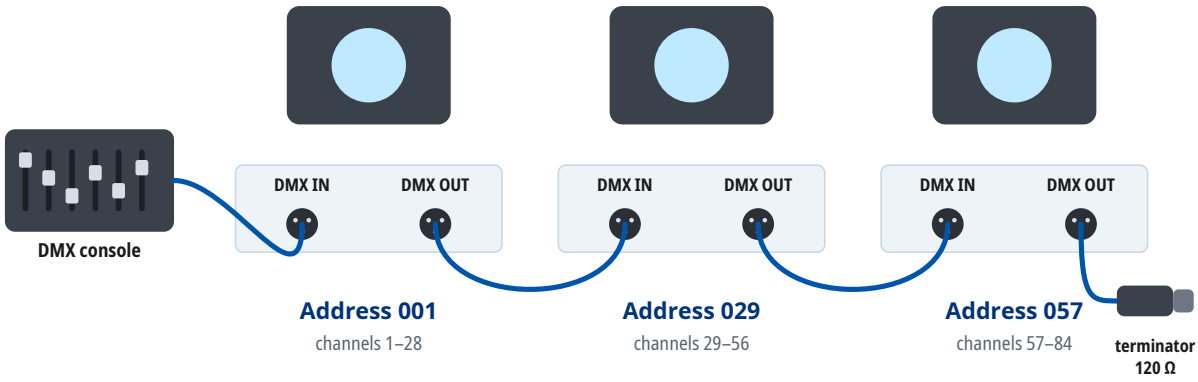
⚠ WARNING

- 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: 19.7 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 28 Channel Mode Extended: every unit occupies 28 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

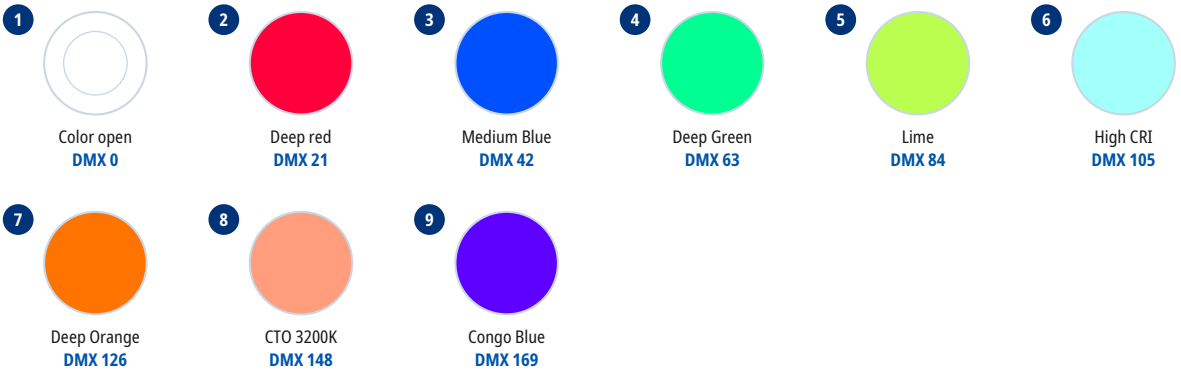
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “28 Channel Mode Extended”: 28.
- Choose start addresses so that the channels of individual devices do not overlap and 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 “28 Channel Mode Extended”, you can use, for example, the start addresses 1, 29, 57, 85.
- 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

	28 Channel Mode Extended 28 channels	24-CH Standard 24 channels	21-CH Basic 21 channels
Pan / Tilt	1, 3	1, 3	1, 3
Dimmer	5	5	5
Dimmer resolution	16 bit	16 bit	8 bit
Shutter / strobe	7	7	6
Color mixing	8, 10, 12	8–10	7–9
Color wheel	14	11	10
Gobo wheel	15, 18	12, 15	11, 13
Gobo rotation	16	13	12
Prism	24–26	20–22	17–19
Frost	27	23	20
Zoom	19	16	14
Focus	21	17	15
Iris	23	19	16

Color wheel



1. Color open — DMX 0
2. Deep red — DMX 21
3. Medium Blue — DMX 42
4. Deep Green — DMX 63
5. Lime — DMX 84
6. High CRI — DMX 105
7. Deep Orange — DMX 126
8. CTO 3200K — DMX 148
9. Congo Blue — DMX 169

Gobo wheel 1



1. Select: open — DMX 0–5
2. Select: Gobo 1 — DMX 22
3. Select: Gobo 2 — DMX 39
4. Select: Gobo 3 — DMX 56
5. Select: Gobo 4 — DMX 73
6. Select: Gobo 5 — DMX 90
7. Select: Gobo 6 — DMX 107
8. Select: Gobo 7 — DMX 124
9. Select: Gobo 8 — DMX 141

Gobo wheel 2



1 Fix Gobos: open
DMX 0–5

2 Fix Gobos: Gobo 1
DMX 10

3 Fix Gobos: Gobo 2
DMX 23

4 Fix Gobos: Gobo 3
DMX 36

5 Fix Gobos: Gobo 4
DMX 49

6 Fix Gobos: Gobo 5
DMX 62

7 Fix Gobos: Gobo 6
DMX 75

8 Fix Gobos: Gobo 7
DMX 88

9 Fix Gobos: Gobo 8
DMX 101

10 Fix Gobos: Gobo 9
DMX 114

11 Fix Gobos: Gobo 10
DMX 127

12 Fix Gobos: Gobo 11
DMX 140

Prism



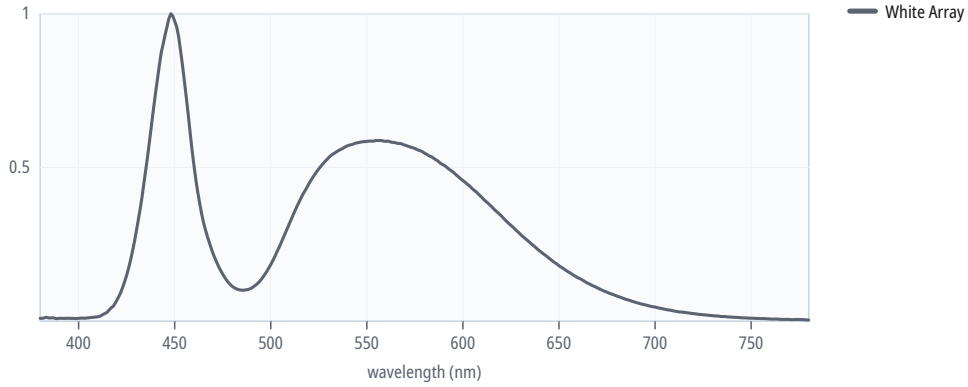
1 Open
DMX 0–5

2 5 facets
Prisma 5 Faset
DMX 6–91

3 8 facets
Prisma 8 Faset
DMX 92–175

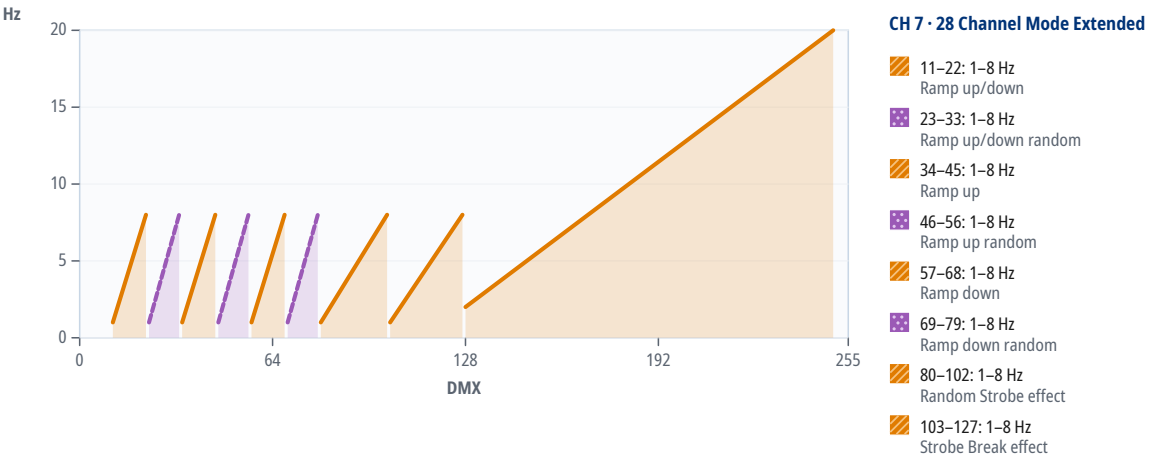
4 15 facets
Prisma 8 and 5 Faset
DMX 176–255

Spectra of the light sources



Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “28 Channel Mode Extended”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	141	11	281	16	421
2	29	7	169	12	309	17	449
3	57	8	197	13	337	18	477
4	85	9	225	14	365	19	U2 · 1
5	113	10	253	15	393	20	U2 · 29

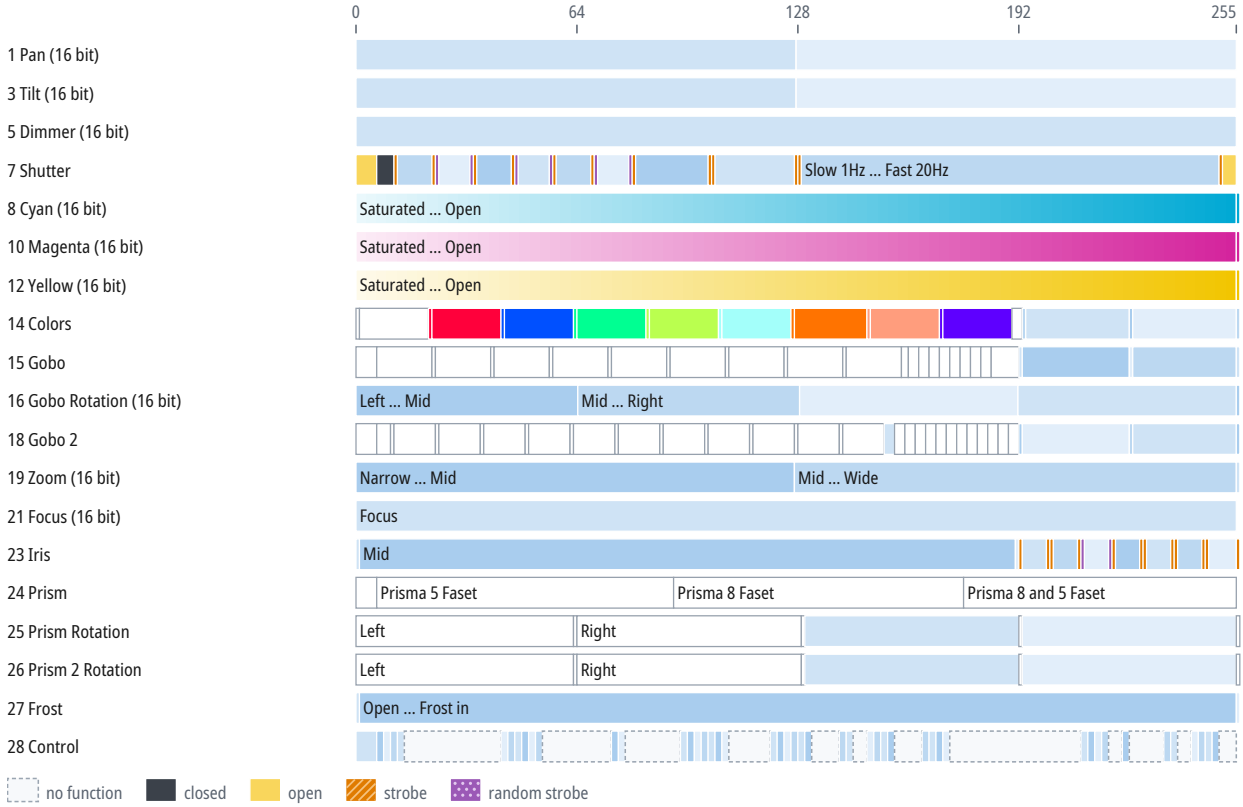
Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode 28 Channel Mode Extended

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 5 Dimmer above 0; CH 7 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 8 Cyan 0, CH 10 Magenta 0, CH 12 Yellow 0, CH 14 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan
		128	Home
		128–255	Pan
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Tilt
		128	Home
		128–255	Tilt
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer	0–255	
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter	0–5	Strobe: Open
		6–10	Strobe: Closed
		11	Ramp up/down: Slow
		12–21	Ramp up/down: Slow ... Fast
		22	Ramp up/down: Fast

CH	Function	DMX	Description
7	Shutter (continued)	23	Ramp up/down random: Slow
		24–32	Ramp up/down random: Slow ... Fast
		33	Ramp up/down random: Fast
		34	Ramp up: Slow
		35–44	Ramp up: Slow ... Fast
		45	Ramp up: Fast
		46	Ramp up random: Slow
		47–55	Ramp up random: Slow ... Fast
		56	Ramp up random: Fast
		57	Ramp down: Slow
		58–67	Ramp down: Slow ... Fast
		68	Ramp down: Fast
		69	Ramp down random: Slow
		70–78	Ramp down random: Slow ... Fast
		79	Ramp down random: Fast
		80	Random Strobe effect: Slow
		81–101	Random Strobe effect: Slow ... Fast
		102	Random Strobe effect: Fast
		103	5s short burst with break
		104–126	5s short burst with break ... 1s short burst with break
		127	1s short burst with break
		128	Slow 1Hz
		129–249	Slow 1Hz ... Fast 20Hz
		250	Fast 20Hz
		251–255	Strobe open: Open
8	Cyan	0–255	Saturated ... Open
		255	Open
9	Cyan Fine	0–255	Fine adjustment of CH 8
10	Magenta	0–255	Saturated ... Open
		255	Open
11	Magenta Fine	0–255	Fine adjustment of CH 10
12	Yellow	0–255	Saturated ... Open
		255	Open
13	Yellow Fine	0–255	Fine adjustment of CH 12
14	Colors	0	Color open
		1–20	Open/Deep Red
		21	Deep red
		22–41	Deep Red / Medium Blue
		42	Medium Blue
		43–62	Medium Blue / Deep Green
		63	Deep Green
		64–83	Depp Green / Lime

CH	Function	DMX	Description
14	Colors (continued)	84	Lime
		85–104	Lime / High CRI
		105	High CRI
		106–125	High CRI / Deep Orange
		126	Deep Orange
		127–147	Deep Orange / CTO 3200K
		148	CTO 3200K
		149–168	CTO 3200K / Congo Blue
		169	Congo Blue
		170–189	Congo Blue / Open
		190–192	Color open
		193	Spin: forward slow
		194–223	Spin: forward slow ... stop
		224	Spin: stop
		225–254	Spin: stop ... backwards slow
		255	Spin: backwards slow
15	Gobo	0–5	Select: open
		6–21	Open / Gobo 1
		22	Select: Gobo 1
		23–38	Gobo 1 / Gobo 2
		39	Select: Gobo 2
		40–55	Gobo 2 / Gobo 3
		56	Select: Gobo 3
		57–72	Gobo 3 / Gobo 4
		73	Select: Gobo 4
		74–89	Gobo 4 / Gobo 5
		90	Select: Gobo 5
		91–106	Gobo 5 / Gobo 6
		107	Select: Gobo 6
		108–123	Gobo 6 / Gobo 7
		124	Select: Gobo 7
		125–140	Gobo 7 / Gobo 8
		141	Select: Gobo 8
		142–157	Gobo 8 / open
		158–159	Select: open
		160–162	Shake: Gobo 1 (1–10 Hz)
		163–165	Shake: Gobo 2 (1–10 Hz)
		166–168	Shake: Gobo 3 (1–10 Hz)
		169–171	Shake: Gobo 4 (1–10 Hz)
		172–174	Shake: Gobo 5 (1–10 Hz)
		175–177	Shake: Gobo 6 (1–10 Hz)
		178–180	Shake: Gobo 7 (1–10 Hz)

CH	Function	DMX	Description
15	Gobo (continued)	181–183	Shake: Gobo 8 (1–10 Hz)
		184–191	Open
		192	Wheel rotation: forward fast
		193–223	Wheel rotation: forward fast ... stop
		224	Wheel rotation: stop
		225–254	Wheel rotation: stop ... backward fast
		255	Wheel rotation: backward fast
16	Gobo Rotation	0–64	Left ... Mid
		64–128	Mid ... Right
		128	Right
		129–192	Gobo Pos Rotate: forward fast ... stop
		192–255	Gobo Pos Rotate: stop ... backward fast
		255	Gobo Pos Rotate: backward fast
17	Gobo Rotation Fine	0–255	Fine adjustment of CH 16
18	Gobo 2	0–5	Fix Gobos: open
		6–9	Open / Gobo 1
		10	Fix Gobos: Gobo 1
		11–22	Gobo 1 / Gobo 2
		23	Fix Gobos: Gobo 2
		24–35	Gobo 2 / Gobo 3
		36	Fix Gobos: Gobo 3
		37–48	Gobo 3 / Gobo 4
		49	Fix Gobos: Gobo 4
		50–61	Gobo 4 / Gobo 5
		62	Fix Gobos: Gobo 5
		63–74	Gobo 5 / Gobo 6
		75	Fix Gobos: Gobo 6
		76–87	Gobo 6 / Gobo 7
		88	Fix Gobos: Gobo 7
		89–100	Gobo 7 / Gobo 8
		101	Fix Gobos: Gobo 8
		102–113	Gobo 8 / Gobo9
		114	Fix Gobos: Gobo 9
		115–126	Gobo 9 / Gobo 10
		127	Fix Gobos: Gobo 10
		128–139	Gobo 10 / Gobo 11
		140	Fix Gobos: Gobo 11
		141–152	Gobo 11 / open
		153–155	Open
		156–158	Shake: Gobo 1
		159–161	Shake: Gobo 2
		162–164	Shake: Gobo 3

CH	Function	DMX	Description
18	Gobo 2 (continued)	165–167	Shake: Gobo 4
		168–170	Shake: Gobo 5
		171–173	Shake: Gobo 6
		174–176	Shake: Gobo 7
		177–179	Shake: Gobo 8
		180–182	Shake: Gobo 9
		183–185	Shake: Gobo 10
		186–188	Shake: Gobo 11
		189–191	Open
		192	Wheel rotation: forward fast
		193–223	Wheel rotation: forward fast ... stop
		224	Wheel rotation: stop
		225–254	Wheel rotation: stop ... backward fast
		255	Wheel rotation: backward fast
19	Zoom	0–127	Narrow ... Mid
		127–255	Mid ... Wide
		255	Wide
20	Zoom Fine	0–255	Fine adjustment of CH 19
21	Focus	0–255	Focus
22	Focus Fine	0–255	Fine adjustment of CH 21
23	Iris	0	Iris: Open
		1–190	Mid
		191	Iris: Close
		192	Puls with Dim: slow
		193–199	Puls with Dim: slow ... fast
		200	Puls with Dim: fast
		201	Puls without Dim: slow
		202–208	Puls without Dim: slow ... fast
		209	Puls without Dim: fast
		210	Puls Random without Dim: slow
		211–217	Puls Random without Dim: slow ... fast
		218	Puls Random without Dim: fast
		219	Ramp up with Dim: slow
		220–226	Ramp up with Dim: slow ... fast
		227	Ramp up with Dim: fast
		228	Ramp up without Dim: slow
		229–235	Ramp up without Dim: slow ... fast
		236	Ramp up without Dim: fast
		237	Ramp down with Dim: slow
		238–244	Ramp down with Dim: slow ... fast
		245	Ramp down with Dim: fast
		246	Ramp down without Dim: slow

CH	Function	DMX	Description
23	Iris (continued)	247–254	Ramp down without Dim: slow ... fast
		255	Ramp down without Dim: fast
24	Prism		Prism Selection
		0–5	Open
		6–91	Prisma 5 Faset
		92–175	Prisma 8 Faset
		176–255	Prisma 8 and 5 Faset
25	Prism Rotation	0–62	Left
		63	Mid
		64–128	Right
		129	Prism 1 Pos Rotate: forward fast
		130–191	Prism 1 Pos Rotate: forward fast ... stop
		192	Prism 1 Pos Rotate: stop
		193–254	Prism 1 Pos Rotate: stop ... backward fast
		255	Prism 1 Pos Rotate: backward fast
26	Prism 2 Rotation	0–62	Left
		63	Mid
		64–128	Right
		129	Prism 2 Pos Rotate: forward fast
		130–191	Prism 2 Pos Rotate: forward fast ... stop
		192	Prism 2 Pos Rotate: stop
		193–254	Prism 2 Pos Rotate: stop ... backward fast
		255	Prism 2 Pos Rotate: backward fast
27	Frost	0	Open
		1–254	Open ... Frost in
		255	Frost in
28	Control	0–5	Control off
		6–7	While P/T moving on (hold 3s)
		8–9	While P/T moving off (hold 3s)
		10–11	While wheels moving on (hold 3s)
		12–13	While wheels moving off (hold 3s)
		14–41	Move in Black: No function
		42–43	Invert Pan on (hold 3s)
		44–45	Invert Pan off (hold 3s)
		46–47	Invert Tilt on (hold 3s)
		48–49	Invert Tilt off (hold 3s)
		50–51	Pan Angle 540 (hold 3s)
		52–53	Pan Angle 630 (hold 3s)
		54–73	Pan Tilt: No function
		74–75	LED (hold 3s)
		76–77	Halogen (hold 3s)
		78–93	Dimmer Response: No function

CH	Function	DMX	Description
28	Control (continued)	94–95	Silent movement (slow) on (hold 3s)
		96–97	Silent movement (slow) off (hold 5s)
		98–99	Fan Auto (hold 3s)
		100–101	Fan Off (hold 3s)
		102–103	Fan Constant Low (hold 3s)
		104–105	Fan Constant Mid (hold 3s)
		106–107	Fan Constant High (hold 3s)
		108–119	Noise: No function
		120–121	1 (650 Hz) (hold 3s)
		122–123	2 (1530 Hz) (hold 3s)
		124–125	3 (3600 Hz) (hold 3s)
		126–127	4 (12000 Hz) (hold 3s)
		128–129	5 (18900 Hz) (hold 3s)
		130–131	6 (25000 Hz) (hold 3s)
		132–139	PWM: No function
		140–141	Always On (hold 3s)
		142–143	Off after 20s (hold 3s)
		144–147	Display: No function
		148–149	Colour Wheel snap (hold 3s)
		150–151	Colour Wheel scroll (hold 3s)
		152–153	Gobo Wheels snap (hold 3s)
		154–155	Gobo Wheels scroll (hold 3s)
		156–163	Snap / continue: No function
		164–165	Linear (hold 3s)
		166–167	Exponential (hold 3s)
		168–169	Logarithmic (hold 3s)
		170–171	Curve S-Curve (hold 3s)
		172–209	Dimmer curve: No function
		210–211	Colourwheel Pos shortest way (hold 3s)
		212–213	Colourwheel Pos Clockwise (hold 3s)
		214–215	Gobowheel Pos shortest way (hold 3s)
		216–217	Gobowheel Pos Clockwise (hold 3s)
		218–221	Wheel shortest way: No function
		222–223	Reset Pan / Tilt (hold 3s)
		224–233	Default / Reset: No function
		234–235	Reset Head (Hold 3s)
		236–237	Reset all (Hold 3s)
		238–241	Default / Reset: No function
		242–243	Default Factory (hold 3s)
		244–245	Default A (hold 3s)

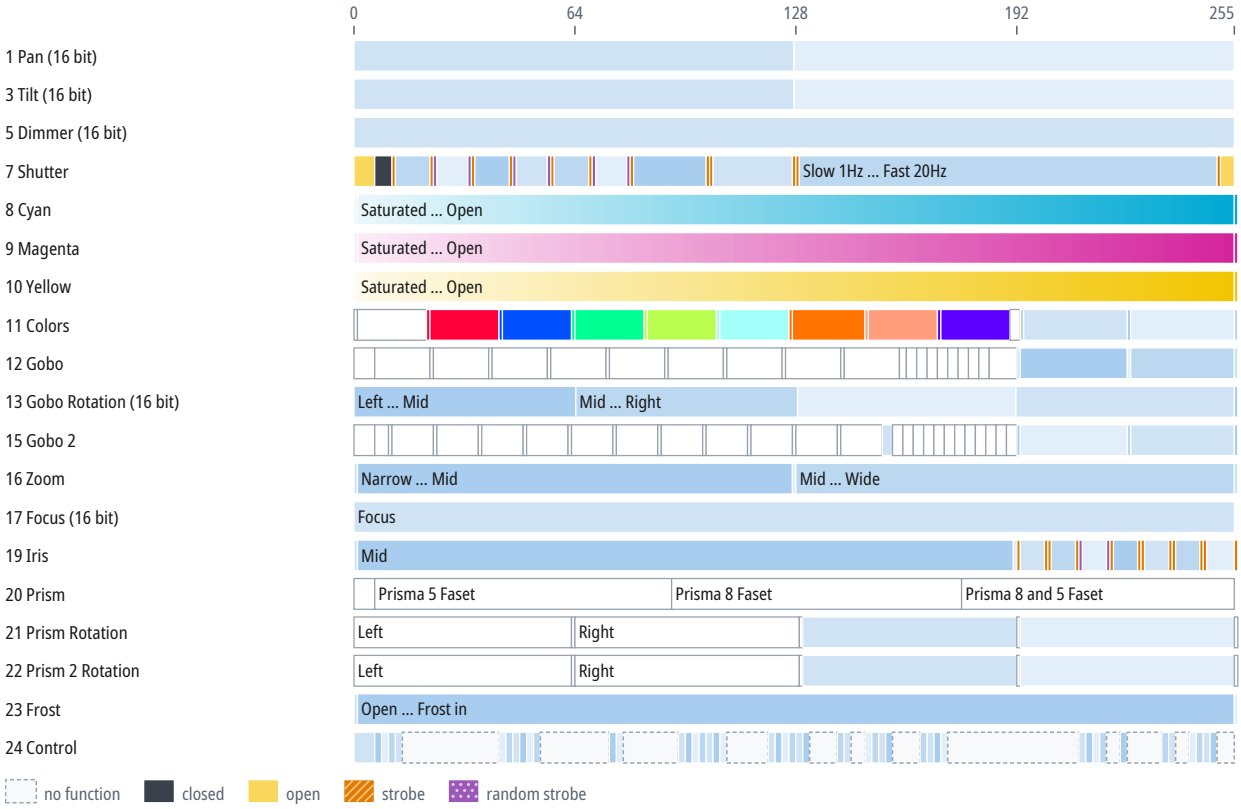
CH	Function	DMX	Description
28	Control (continued)	246–247	Default B (hold 3s)
		248–249	Default C (hold 3s)
		250–255	Default / Reset: No function

Mode 24-CH Standard

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 5 Dimmer above 0; CH 7 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 8 Cyan 0, CH 9 Magenta 0, CH 10 Yellow 0, CH 11 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “28 Channel Mode Extended” (p. 10)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “28 Channel Mode Extended” (p. 10)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer	0–255	
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter		Same as CH 7 in the mode “28 Channel Mode Extended” (p. 10)

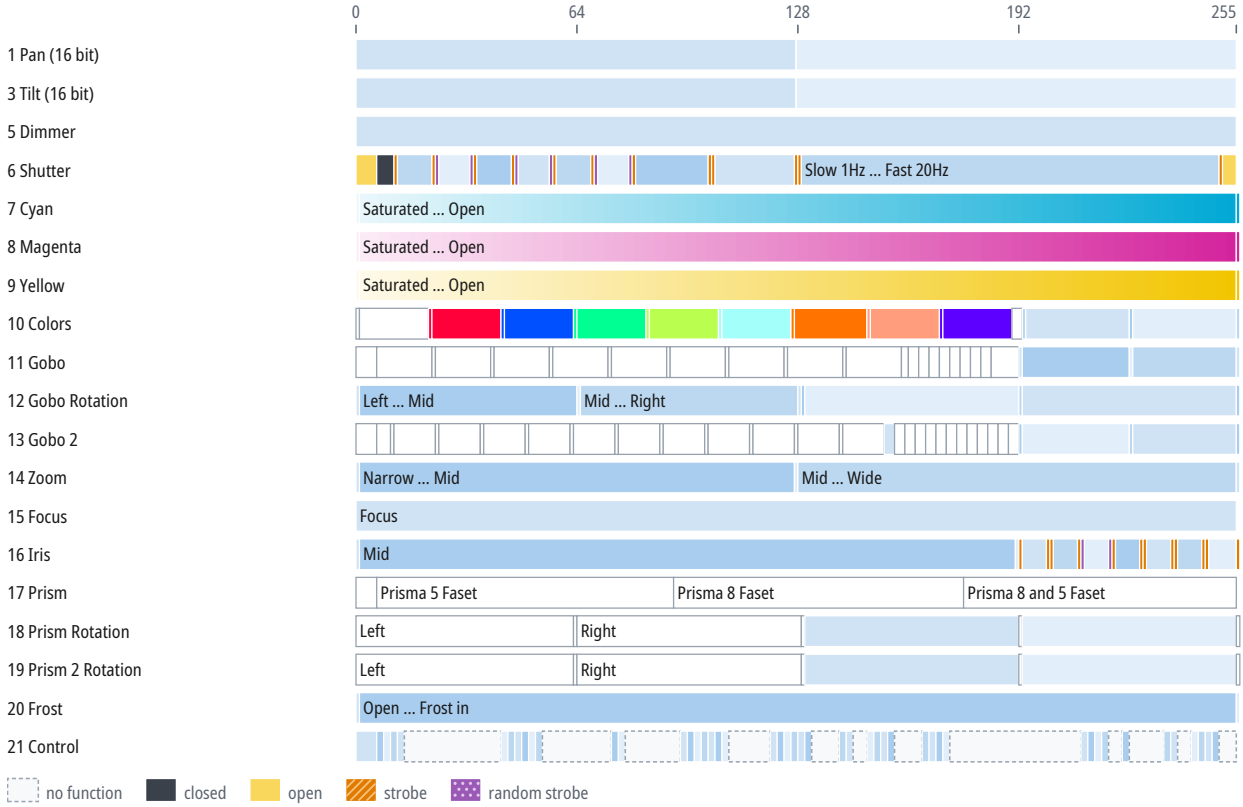
CH	Function	DMX	Description
8	Cyan	0	Saturated
		1–254	Saturated ... Open
		255	Open
9	Magenta	0	Saturated
		1–254	Saturated ... Open
		255	Open
10	Yellow	0	Saturated
		1–254	Saturated ... Open
		255	Open
11	Colors		Same as CH 14 in the mode “28 Channel Mode Extended” (p. 11)
12	Gobo		Same as CH 15 in the mode “28 Channel Mode Extended” (p. 12)
13	Gobo Rotation		Same as CH 16 in the mode “28 Channel Mode Extended” (p. 13)
14	Gobo Rotation Fine	0–255	Fine adjustment of CH 13
15	Gobo 2		Same as CH 18 in the mode “28 Channel Mode Extended” (p. 13)
16	Zoom	0	Narrow
		1–126	Narrow ... Mid
		127	Mid
		128–254	Mid ... Wide
		255	Wide
17	Focus	0–255	Focus
18	Focus Fine	0–255	Fine adjustment of CH 17
19	Iris		Same as CH 23 in the mode “28 Channel Mode Extended” (p. 14)
20	Prism		Same as CH 24 in the mode “28 Channel Mode Extended” (p. 15)
21	Prism Rotation		Same as CH 25 in the mode “28 Channel Mode Extended” (p. 15)
22	Prism 2 Rotation		Same as CH 26 in the mode “28 Channel Mode Extended” (p. 15)
23	Frost		Same as CH 27 in the mode “28 Channel Mode Extended” (p. 15)
24	Control		Same as CH 28 in the mode “28 Channel Mode Extended” (p. 15)

Mode 21-CH Basic

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 5 Dimmer above 0; CH 6 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 7 Cyan 0, CH 8 Magenta 0, CH 9 Yellow 0, CH 10 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “28 Channel Mode Extended” (p. 10)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “28 Channel Mode Extended” (p. 10)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer	0–255	
6	Shutter		Same as CH 7 in the mode “28 Channel Mode Extended” (p. 10)
7	Cyan		Same as CH 8 in the mode “24-CH Standard” (p. 18)
8	Magenta		Same as CH 9 in the mode “24-CH Standard” (p. 18)
9	Yellow		Same as CH 10 in the mode “24-CH Standard” (p. 18)
10	Colors		Same as CH 14 in the mode “28 Channel Mode Extended” (p. 11)
11	Gobo		Same as CH 15 in the mode “28 Channel Mode Extended” (p. 12)
12	Gobo Rotation	0	Left

CH	Function	DMX	Description
12	Gobo Rotation (continued)	1–63	Left ... Mid
		64	Mid
		65–127	Mid ... Right
		128	Right
		129	Gobo Pos Rotate: forward fast
		130–191	Gobo Pos Rotate: forward fast ... stop
		192	Gobo Pos Rotate: stop
		193–254	Gobo Pos Rotate: stop ... backward fast
		255	Gobo Pos Rotate: backward fast
13	Gobo 2		Same as CH 18 in the mode “28 Channel Mode Extended” (p. 13)
14	Zoom		Same as CH 16 in the mode “24-CH Standard” (p. 18)
15	Focus	0–255	Focus
16	Iris		Same as CH 23 in the mode “28 Channel Mode Extended” (p. 14)
17	Prism		Same as CH 24 in the mode “28 Channel Mode Extended” (p. 15)
18	Prism Rotation		Same as CH 25 in the mode “28 Channel Mode Extended” (p. 15)
19	Prism 2 Rotation		Same as CH 26 in the mode “28 Channel Mode Extended” (p. 15)
20	Frost		Same as CH 27 in the mode “28 Channel Mode Extended” (p. 15)
21	Control		Same as CH 28 in the mode “28 Channel Mode Extended” (p. 15)

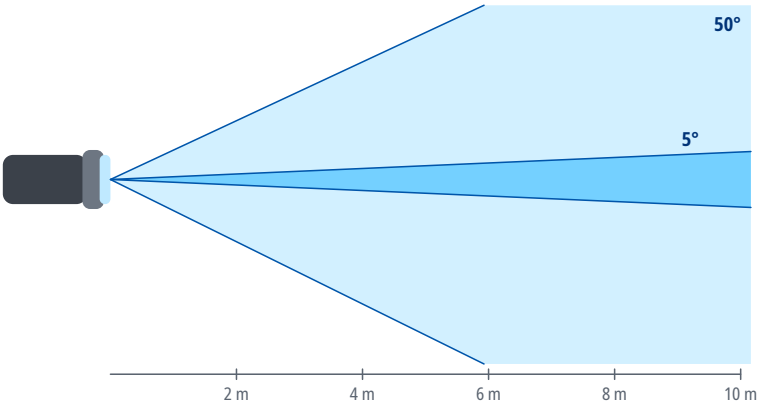
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	300 W
Luminous flux	13,000 lm
Color temperature	6,800 K
Color rendering index (CRI)	70
Optics	
Zoom	5–50°
Movement	
Pan	540°
Tilt	220°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45 IN/OUT
RDM	yes (manufacturer ID 0x08A4, device model ID 0x003B)
Electrical	
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	19.7 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Strobe frequency	2–20 Hz
Color wheel rotation	up to 800 °/s (133 rpm)
Gobo wheel 1 rotation	up to 800 °/s (133 rpm)
Gobo wheel 2 rotation	up to 800 °/s (133 rpm)
Gobo 1 rotation	up to 800 °/s (133 rpm)
Prism rotation	up to 400 °/s (67 rpm)

Spot diameter



Distance	Ø 5°	Ø 50°
2 m	0.17 m	1.9 m
4 m	0.35 m	3.7 m
6 m	0.52 m	5.6 m
8 m	0.7 m	7.5 m
10 m	0.87 m	9.3 m
15 m	1.3 m	14 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.