DMX REFERENCE

Azor B1

Azor B1 (CLAB1)

Cameo



Manufacturer	Cameo
GDTF file	Cameo_Azor_B1_164830.gdtf
GDTF revision	AzorB1-0 · 2026-10-15
Generated	2026-11-23

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 5
6 Connections 6
7 Operation 6
8 Functions at a glance 7
9 DMX channels 9
Mode 16-CH 9
Mode 13-CH 14
10 Technical specifications 15
11 Maintenance and cleaning 16
12 Troubleshooting 16
13 Disposal 17

1 About this manual

This document describes the Azor B1 (CLAB1) by Cameo. It was compiled from the GDTF file Cameo_Azor_B1_164830.gdtf from the GDTF-Share library.

File revision: “AzorB1-0”.

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	13.9 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
16-CH	16	32	1, 17, 33, 49, ...
13-CH	13	39	1, 14, 27, 40, ...

No light? Check these channels

- 16-CH: CH 5 Dimmer above 0; CH 7 Shutter at 0–5 or 251–255 “Open”; CH 15 Dimmer Curve above 5
- 13-CH: CH 5 Dimmer above 0; CH 7 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

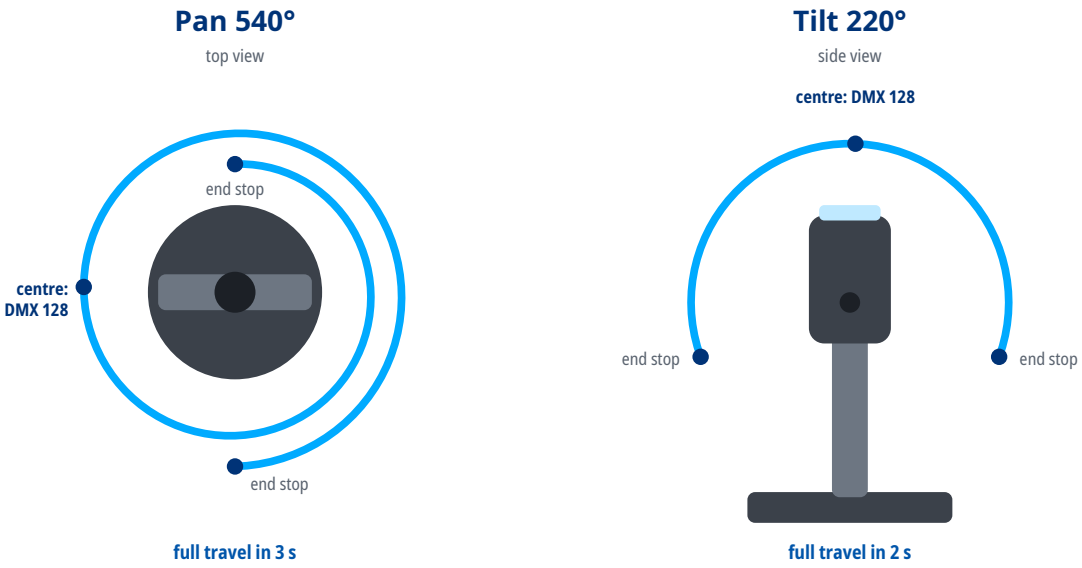
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts,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

“Beam (2°) LED Moving Head, 18.000 lm with 180.000 lx at 3m”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

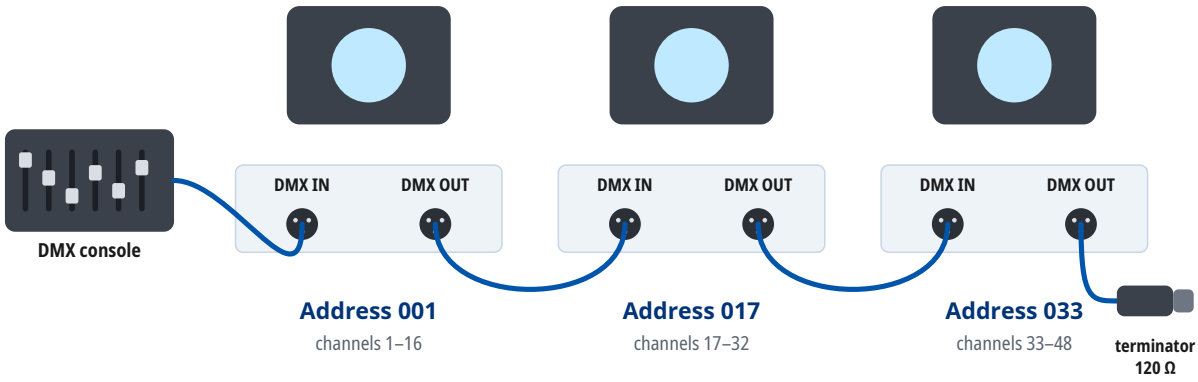
⚠ WARNING

- 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: 13.9 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 16-CH: every unit occupies 16 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 “16-CH”: 16.
- 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 “16-CH”, you can use, for example, the start addresses 1, 17, 33, 49.
- 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

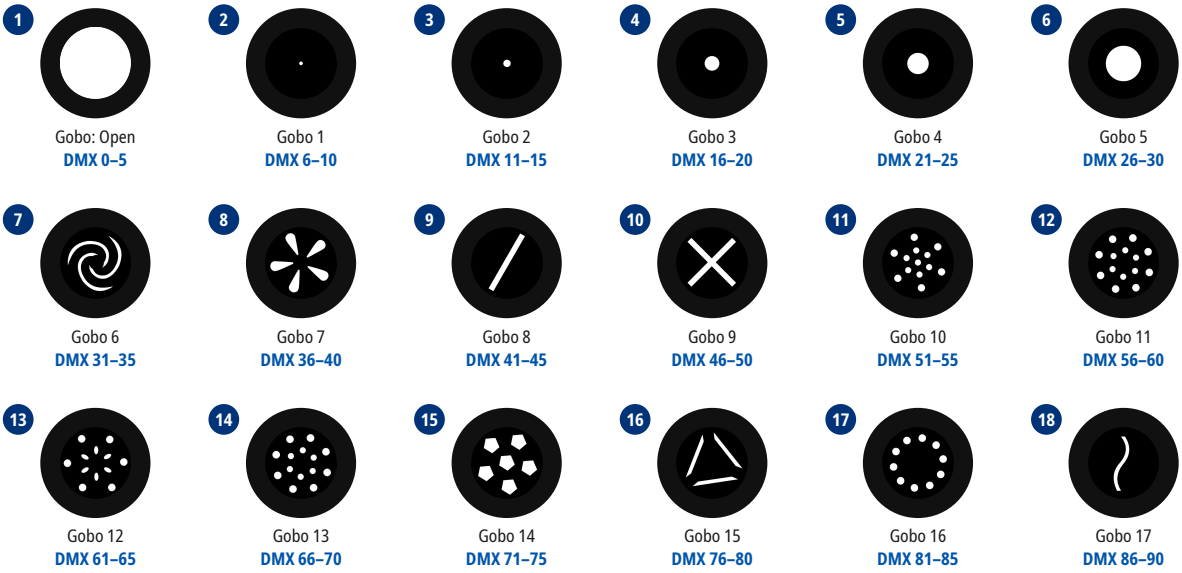
Functions in each DMX mode

	16-CH 16 channels	13-CH 13 channels
Pan / Tilt	1, 3	1, 3
Dimmer	5	5
Shutter / strobe	7	7
Color wheel	8	8
Gobo wheel	9	9
Prism	11, 12	11, 12
Focus	10	10

Color wheel

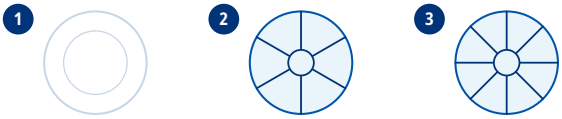
1. Color open — DMX 0–5
2. Deep Red — DMX 12–17
3. Medium Blue — DMX 24–29
4. Yellow — DMX 36–41
5. Magenta — DMX 48–53
6. Deep Green — DMX 60–65
7. Lavender — DMX 72–77
8. Peackock — DMX 84–89
9. Orange — DMX 96–101
10. Lime — DMX 108–113
11. Pink — DMX 120–125
12. Amber — DMX 132–137
13. Deep Blue — DMX 144–149
14. CTO — DMX 156–161
15. Congo Blue — DMX 168–173
16. Color open 1 — DMX 180–193

Gobo wheel



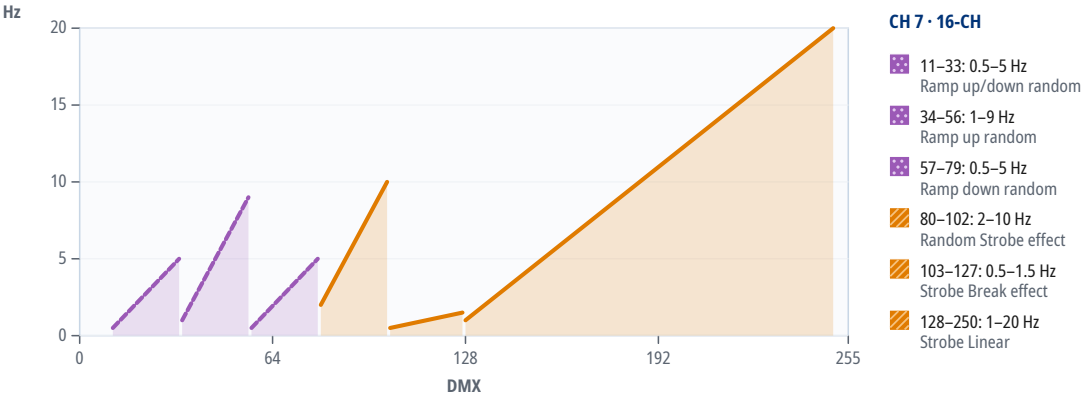
1 Gobo: Open — DMX 0–5
2 Gobo 1 — DMX 6–10
3 Gobo 2 — DMX 11–15
4 Gobo 3 — DMX 16–20
5 Gobo 4 — DMX 21–25
6 Gobo 5 — DMX 26–30
7 Gobo 6 — DMX 31–35
8 Gobo 7 — DMX 36–40
9 Gobo 8 — DMX 41–45
10 Gobo 9 — DMX 46–50
11 Gobo 10 — DMX 51–55
12 Gobo 11 — DMX 56–60
13 Gobo 12 — DMX 61–65
14 Gobo 13 — DMX 66–70
15 Gobo 14 — DMX 71–75
16 Gobo 15 — DMX 76–80
17 Gobo 16 — DMX 81–85
18 Gobo 17 — DMX 86–90

Prism



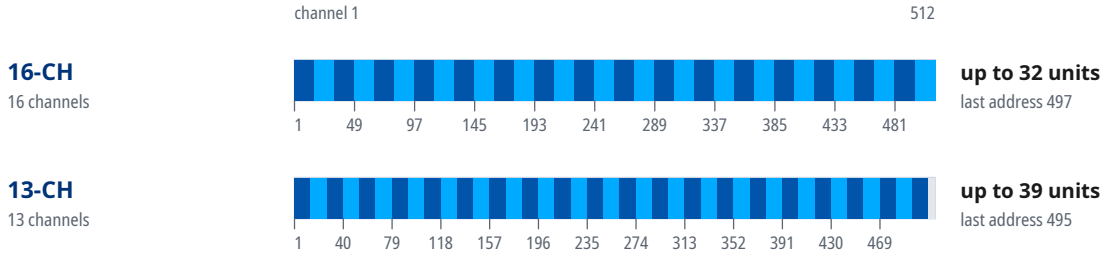
1 Open — DMX 0–5
2 6 facets — Prism 1 linear — DMX 6–127
3 8 facets — Prism 2 circular — DMX 128–255

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “16-CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	81	11	161	16	241
2	17	7	97	12	177	17	257
3	33	8	113	13	193	18	273
4	49	9	129	14	209	19	289
5	65	10	145	15	225	20	305

Mode 16-CH

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”; CH 15 Dimmer Curve above 5. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 8 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan
		128	Home
		128–255	Pan

CH	Function	DMX	Description
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	Closed … Open
		255	Open
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter	0–5	Strobe: Open
		6–10	Strobe: Closed
		11	Ramp up/down random: Slow
		12–32	Ramp up/down random: Slow … Fast
		33	Ramp up/down random: Fast
		34	Ramp up random: Slow
		35–55	Ramp up random: Slow … Fast
		56	Ramp up random: Fast
		57	Ramp down random: Slow
		58–78	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	1-20Hz (0.31–19.9 Hz)
		250	Fast 20Hz
		251–255	Strobe open: Open
8	Colors	0–5	Color open
		6–11	Open/Deep Red
		12–17	Deep Red
		18–23	Deep Red / Medium Blue
		24–29	Medium Blue
		30–35	Medium Blue / Yellow
		36–41	Yellow
		42–47	Yellow / Magenta
		48–53	Magenta
		54–59	Magenta / Deep Green
		60–65	Deep Green
		66–71	Deep Green / Lavender
		72–77	Lavender

CH	Function	DMX	Description
8	Colors (continued)	78–83	Lavender / Peacock
		84–89	Peackock
		90–95	Peackock / Orange
		96–101	Orange
		102–107	Orange / Lime
		108–113	Lime
		114–119	Lime / Pink
		120–125	Pink
		126–131	Pink / Amber
		132–137	Amber
		138–143	Amber / Deep Blue
		144–149	Deep Blue
		150–155	Deep Blue / CTO
		156–161	CTO
		162–167	Deep Blue / CTO
		168–173	Congo Blue
		174–179	Congo Blue / Open
		180–192	Color open 1
		193–223	Rot Slow -> Fast; CW (400–12.9 °/s)
		224	Colour Wheel rotation: Stop
		225–255	Rot Slow -> Fast; CW (12.9–400 °/s)
9	Gobo	0–5	Gobo: Open
		6–10	Gobo 1
		11–15	Gobo 2
		16–20	Gobo 3
		21–25	Gobo 4
		26–30	Gobo 5
		31–35	Gobo 6
		36–40	Gobo 7
		41–45	Gobo 8
		46–50	Gobo 9
		51–55	Gobo 10
		56–60	Gobo 11
		61–65	Gobo 12
		66–70	Gobo 13
		71–75	Gobo 14
		76–80	Gobo 15
		81–85	Gobo 16
		86–90	Gobo 17
		91–95	Gobo: open
		96–100	Gobo 1 slow to fast (1–10 Hz)
		101–105	Gobo 2 slow to fast (1–10 Hz)

CH	Function	DMX	Description
9	Gobo (continued)	106–110	Gobo 3 slow to fast (1–10 Hz)
		111–115	Gobo 4 slow to fast (1–10 Hz)
		116–120	Gobo 5 slow to fast (1–10 Hz)
		121–125	Gobo 6 slow to fast (1–10 Hz)
		126–130	Gobo 7 slow to fast (1–10 Hz)
		131–135	Gobo 8 slow to fast (1–10 Hz)
		136–140	Gobo 9 slow to fast (1–10 Hz)
		141–145	Gobo 10 slow to fast (1–10 Hz)
		146–150	Gobo 11 slow to fast (1–10 Hz)
		151–155	Gobo 12 slow to fast
		156–160	Gobo 13 slow to fast (1–10 Hz)
		161–165	Gobo 14 slow to fast (1–10 Hz)
		166–170	Gobo 15 slow to fast (1–10 Hz)
		171–175	Gobo 16 slow to fast (1–10 Hz)
		176–180	Gobo 17 slow to fast (1–10 Hz)
		181–192	Wheel rotation: Open
		193–223	Wheel rotation: forward (800–1 °/s)
		224	Wheel rotation: Stop
		225–255	Wheel rotation: backward (1–800 °/s)
10	Focus	0–255	Focus
11	Prism		Prisma select
		0–5	Open
		6–127	Prism 1 linear
		128–255	Prism 2 circular
12	Prism 2	0–5	Prism Rotation off
		6–128	Prism Position 0 to 540
		129–191	Prism Rotation in Slow to Fast in CW (0–400 °/s)
		192	Prism Rotation Stop
		193–255	Prism Rotation in Fast to Slow in CCW (400–0 °/s)
13	Position Effect		Pan/Tilt Macro
		0	Off
		1–5	Off ... Pan small > big
		6–40	Pan small > big
		41–75	Tilt small > big
		76–110	Pan / Tilt small > big
		111–145	Pan / Tilt (invers) small > big
		146–180	Circle small > big
		181–215	Circle (invers) small > big
		216–255	Random small > big
14	Position Effect Speed		Pan/Tilt Speed
		0	Fast
		1–254	Fast ... Slow

CH	Function	DMX	Description
14	Position Effect Speed (continued)	255	Slow
15	Dimmer Curve	0–5	No function
		6–63	Dimmer Curve Linear (Hold 3s)
		64–127	Dimmer Curve Exponential (Hold 3s)
		128–191	Dimmer Curve Logarithmic (Hold 3s)
		192–255	Dimmer Curve S-Curve (Hold 3s)
16	Control	0–5	Control off
		6	Blackout while moving on (hold 3s)
		7–50	Blackout while moving on (hold 3s) ... Blackout while moving off (hold 3s)
		51	Blackout while moving off (hold 3s)
		52	Invert Pan on (hold 3s)
		53–74	Invert Pan on (hold 3s) ... Invert Pan off (hold 3s)
		75	Invert Pan off (hold 3s)
		76–97	Invert Pan off (hold 3s) ... Invert Tilt on (hold 3s)
		98	Invert Tilt on (hold 3s)
		99–120	Invert Tilt on (hold 3s) ... Invert Tilt off (hold 3s)
		121	Invert Tilt off (hold 3s)
		122–143	Pan Tilt
		144	Silent Fan on (Hold 3s)
		145–166	Silent Fan on (Hold 3s) ... Silent Fan off (Hold 3s)
		167	Silent Fan off (Hold 3s)
		168–189	Fan
		190	Reset Pan / Tilt (Hold 3s)
		191–212	Reset Pan / Tilt (Hold 3s) ... Reset Head complete (Hold 3s)
		213	Reset Head complete (Hold 3s)
		214–235	Reset Head complete (Hold 3s) ... Reset All Functions (Hold 3s)
		236	Reset All Functions (Hold 3s)
		237–255	Control / Reset

Mode 13-CH

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 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “16-CH” (p. 9)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “16-CH” (p. 10)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer		Same as CH 5 in the mode “16-CH” (p. 10)
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter		Same as CH 7 in the mode “16-CH” (p. 10)
8	Colors		Same as CH 8 in the mode “16-CH” (p. 10)
9	Gobo		Same as CH 9 in the mode “16-CH” (p. 11)
10	Focus	0–255	Focus
11	Prism		Same as CH 11 in the mode “16-CH” (p. 12)
12	Prism 2		Same as CH 12 in the mode “16-CH” (p. 12)
13	Control		Same as CH 16 in the mode “16-CH” (p. 13)

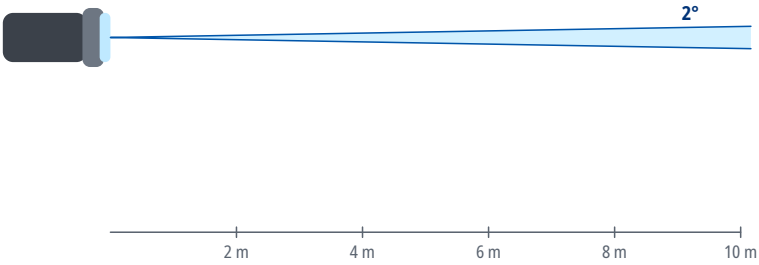
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	100 W
Luminous flux	18,000 lm
Color temperature	9,400 K
Optics	
Beam angle	2°
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 0x0107)
Electrical	
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	13.9 kg
Operating environment	
Operating temperature	-15 to 45 °C

Speeds and ranges

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

Spot diameter



Distance	Ø 2°
2 m	0.07 m
4 m	0.14 m
6 m	0.21 m
8 m	0.28 m
10 m	0.35 m
15 m	0.52 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.