DMX REFERENCE

Focus Spot 4Z

ADJ



Manufacturer	ADJ
GDTF file	ADJ_Focus_Spot_4Z_43795.gdtf
GDTF revision	2023-20-07 First Release · 2023-07-20
Generated	2026-11-23

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 8
9 DMX channels 10
Mode Extended Mode Pan540 11
Mode Standard Mode Pan540 14
Mode Basic Mode Pan540 16
Mode Extended Mode Pan630 17
Mode Standard Mode Pan630 18
Mode Basic Mode Pan630 19
10 Technical specifications 21
11 Maintenance and cleaning 21
12 Troubleshooting 22
13 Disposal 22

1 About this manual

This document describes the Focus Spot 4Z by ADJ. It was compiled from the GDTF file ADJ_Focus_Spot_4Z_43795.gdtf from the GDTF-Share library.

File revision: “2023-20-07 First Release”.

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 ADJ; 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	14.1 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Extended Mode Pan540	22	23	1, 23, 45, 67, ...
Standard Mode Pan540	18	28	1, 19, 37, 55, ...
Basic Mode Pan540	16	32	1, 17, 33, 49, ...
Extended Mode Pan630	22	23	1, 23, 45, 67, ...
Standard Mode Pan630	18	28	1, 19, 37, 55, ...
Basic Mode Pan630	16	32	1, 17, 33, 49, ...

No light? Check these channels

- Extended Mode Pan540: CH 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254
- Standard Mode Pan540: CH 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254
- Basic Mode Pan540: CH 6 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254
- Extended Mode Pan630: CH 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254
- Standard Mode Pan630: CH 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254
- Basic Mode Pan630: CH 6 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254



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

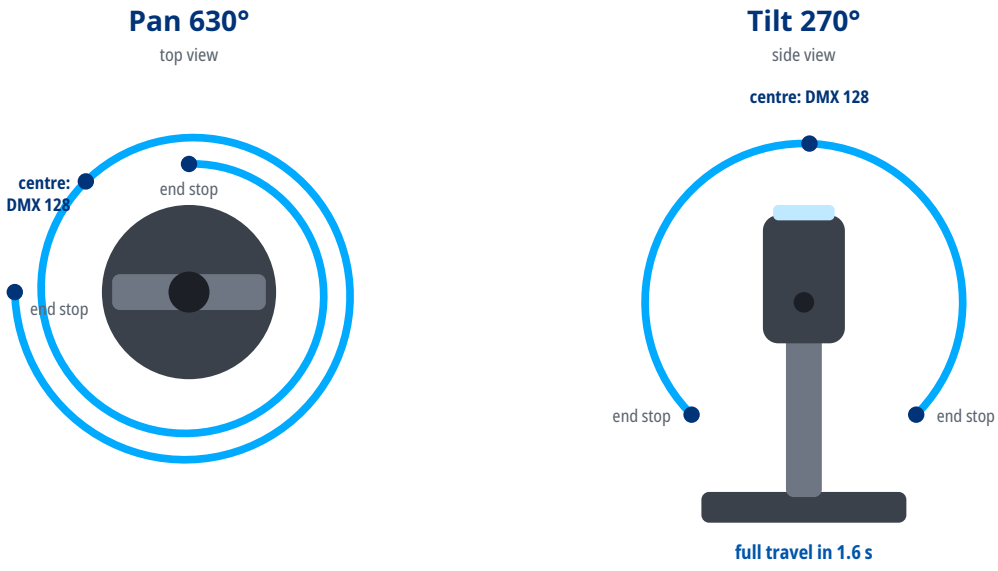
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts,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

“Offering an efficient 200W LED light source combined with an extensive feature set, the ADJ Focus Hybrid is a versatile moving head luminaire. It can function interchangeably as a spot, wash or beam fixture, making it ideal for rental and event production applications as well as for installation in venues that require a moving light which can deliver a high degree of flexibility. It features motorized zoom and focus, two GOBO wheels, an independent color wheel, two rotating prisms and a replaceable frost filter.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

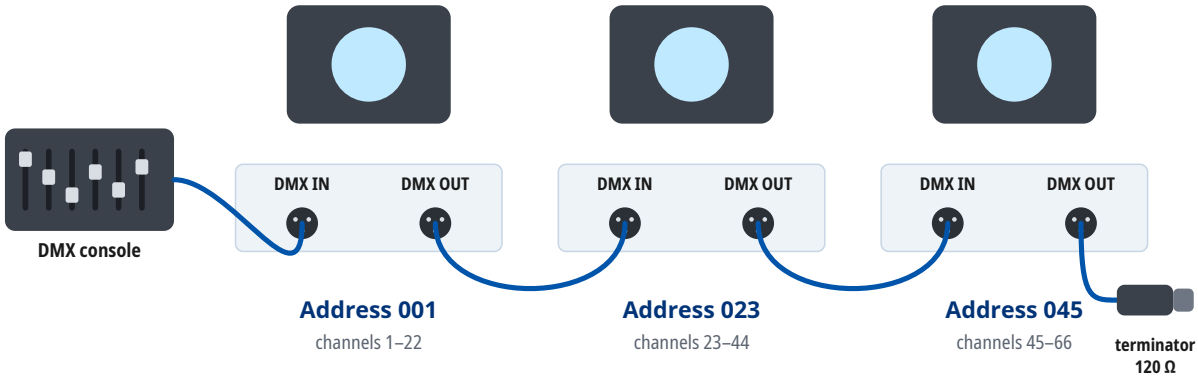
⚠ **WARNING**

- 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: 14.1 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 Extended Mode Pan540: every unit occupies 22 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

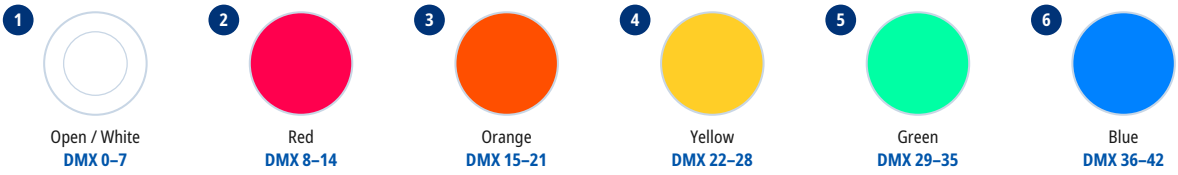
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Extended Mode Pan540”: 22.
- Choose start addresses so that the channels of individual devices do not overlap and the 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 “Extended Mode Pan540”, you can use, for example, the start addresses 1, 23, 45, 67.
- 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

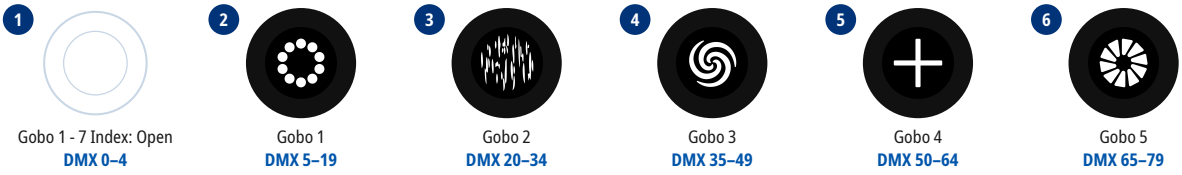
	Extended Mode Pan540 22 channels	Standard Mode Pan540 18 channels	Basic Mode Pan540 16 channels	Extended Mode Pan630 22 channels	Standard Mode Pan630 18 channels	Basic Mode Pan630 16 channels
Pan / Tilt	1, 3	1, 3	1, 2	1, 3	1, 3	1, 2
Pan / Tilt resolution	16 bit	16 bit	8 bit	16 bit	16 bit	8 bit
Dimmer	9	9	7	9	9	7
Dimmer resolution	16 bit	8 bit	8 bit	16 bit	8 bit	8 bit
Shutter / strobe	8	8	6	8	8	6
Color wheel	5	5	3	5	5	3
Gobo wheel	6, 7	6, 7	4, 5	6, 7	6, 7	4, 5
Gobo rotation	7	7	5	7	7	5
Prism	11, 12, 14, 15	10–13	8–11	11, 12, 14, 15	10–13	8–11
Zoom	18	15	13	18	15	13
Focus	17	14	12	17	14	12

Gobo wheel 1



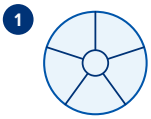
1. Open / White — DMX 0–7
2. Red — DMX 8–14
3. Orange — DMX 15–21
4. Yellow — DMX 22–28
5. Green — DMX 29–35
6. Blue — DMX 36–42
7. Pink — DMX 43–49
8. Cyan — DMX 50–56
9. Magenta — DMX 57–63
10. Color mix — DMX 64–128

Gobo wheel 2



1. Gobo 1 - 7 Index: Open — DMX 0–4
2. Gobo 1 — DMX 5–19
3. Gobo 2 — DMX 20–34
4. Gobo 3 — DMX 35–49
5. Gobo 4 — DMX 50–64
6. Gobo 5 — DMX 65–79
7. Gobo 6 — DMX 80–95

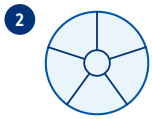
Prism



5 facets

6 Facet Circular Prism

CH 11: DMX 32–255

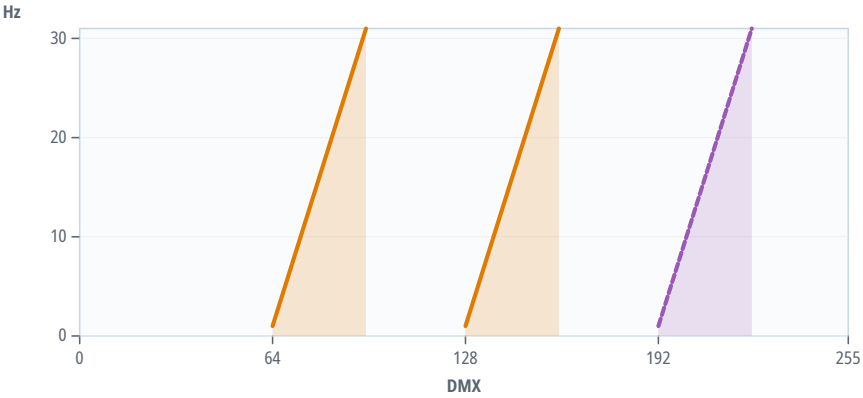


5 facets

Prism 2 (5 facet linear)

CH 14: DMX 32–255

Strobe rate

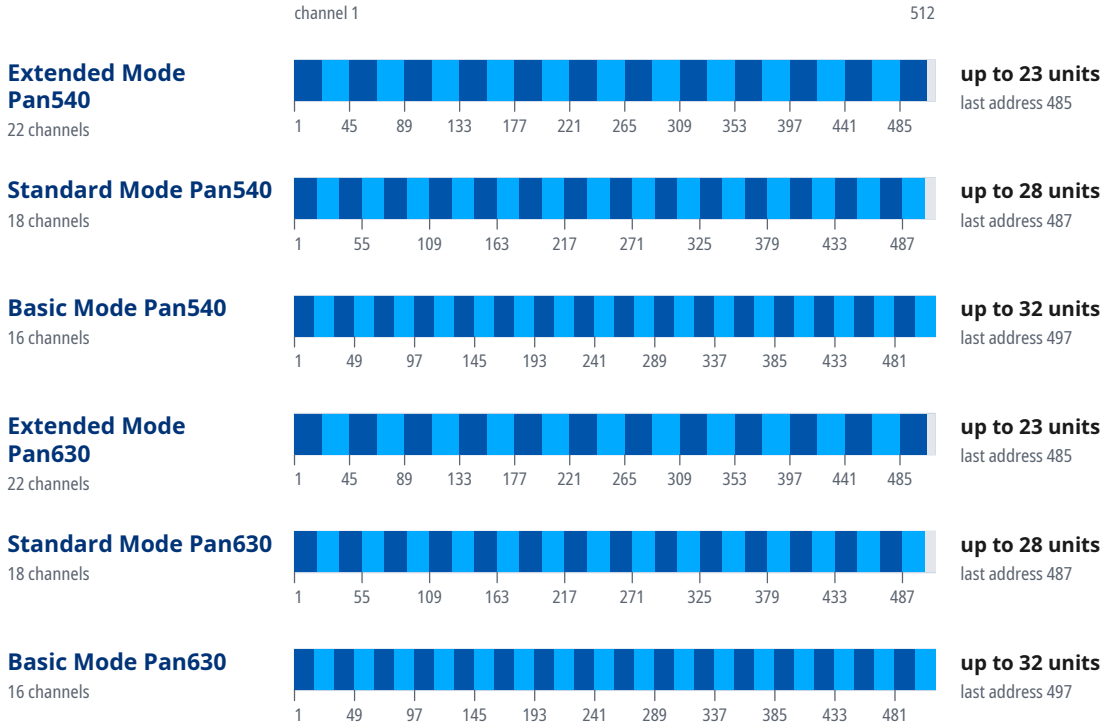


CH 8 · Extended Mode Pan540

- 64–95: 1–31 Hz
  Strobe Slow to Fast
- 128–159: 1–31 Hz
  Pulse Effect Slow to Fast
- 192–223: 1–31 Hz
  Random Strobe Slow to Fast 1

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extended Mode Pan540”

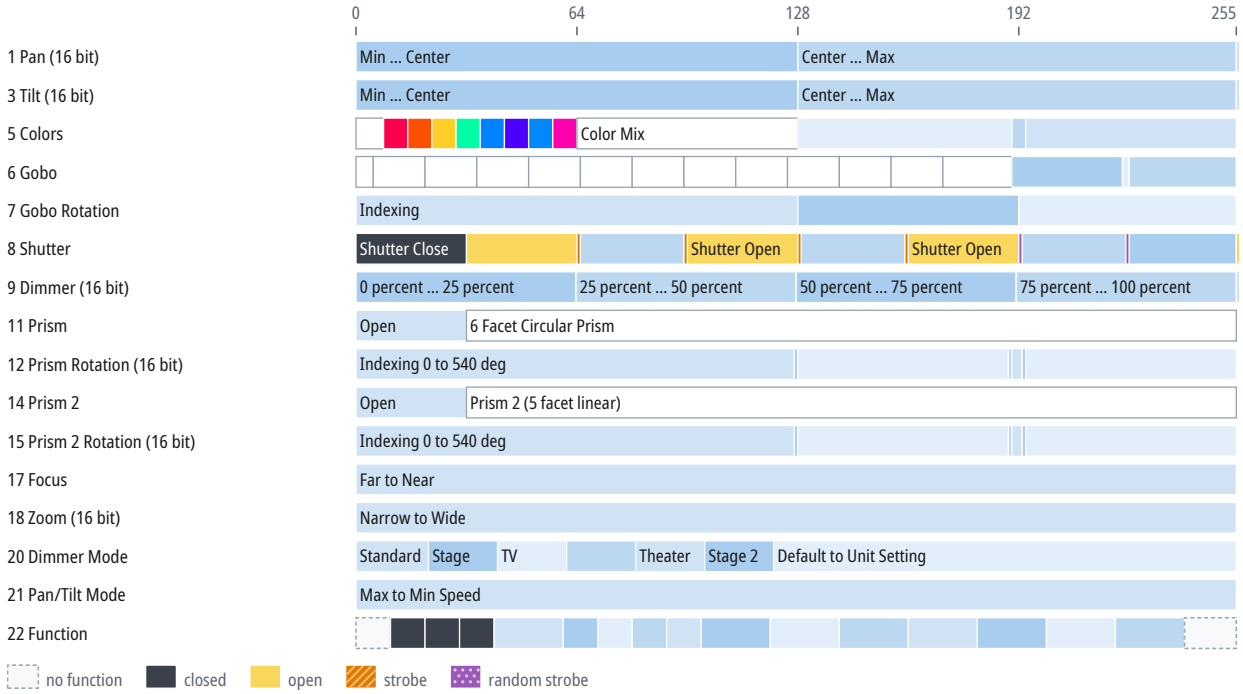
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	111	11	221	16	331
2	23	7	133	12	243	17	353
3	45	8	155	13	265	18	375
4	67	9	177	14	287	19	397
5	89	10	199	15	309	20	419

Mode Extended Mode Pan540

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 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254. The GDTF file gives these values for a console's Highlight function: CH 8 Shutter 32, CH 9 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–128	Min ... Center
		128–255	Center ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–128	Min ... Center
		128–255	Center ... Max
		255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Colors	0–7	Open / White
		8–14	Red
		15–21	Orange
		22–28	Yellow
		29–35	Green
		36–42	Blue
		43–49	Pink
		50–56	Cyan
		57–63	Magenta
		64–127	Color Mix

CH	Function	DMX	Description
5	Colors (continued)	128–189	Clockwise Color Wheel Rotation: Fast to Slow (0–360 °/s)
		190–193	No Rotation
		194–255	Counter Clockwise Color Wheel Rotation: Slow to Fast (0–360 °/s)
6	Gobo	0–4	Gobo 1 - 7 Index: Open
		5–19	Gobo 1
		20–34	Gobo 2
		35–49	Gobo 3
		50–64	Gobo 4
		65–79	Gobo 5
		80–94	Gobo 6
		95–109	Gobo Shake 1
		110–124	Gobo Shake 2
		125–139	Gobo Shake 3
		140–154	Gobo Shake 4
		155–169	Gobo Shake 5
		170–189	Gobo Shake 6
		190–221	Clockwise Gobo Wheel Rotation: Fast to Slow (0–360 °/s)
		222–223	No Rotation
		224–255	Counter-Clockwise Gobo Wheel Rotation: Slow to Fast (0–360 °/s)
7	Gobo Rotation	0–127	Indexing (540°)
		128–191	Clockwise Gobo Rotation: Fast to slow (0–360 °/s)
		192–255	Counter-Clockwise Gobo Rotation: Slow to fast (0–540 °/s)
8	Shutter	0–31	Shutter Close
		32–63	Shutter Open/Close: Shutter Open
		64	Strobe Slow to Fast: Slowest Strobe
		65–94	Strobe Slow to Fast: Slowest Strobe ... Fastest Strobe
		95	Strobe Slow to Fast: Fastest Strobe
		96–127	Shutter Open
		128	Slowest Pulse
		129–158	Slowest Pulse ... Fastest Pulse
		159	Fastest Pulse
		160–191	Shutter Open
		192	Random Strobe Slow to Fast: Slowest Strobe
		193–222	Random Strobe Slow to Fast: Slowest Strobe ... Fastest Strobe
		223	Random Strobe Slow to Fast: Fastest Strobe
		224–254	Shutter Open 2
		255	Shutter Open
9	Dimmer	0–63	0 percent ... 25 percent
		63	25 percent
		64–127	25 percent ... 50 percent
		127	50 percent

CH	Function	DMX	Description
9	Dimmer (continued)	128–191	50 percent ... 75 percent
		191	75 percent
		192–255	75 percent ... 100 percent
		255	100 percent
10	Dimmer Fine	0–255	Fine adjustment of CH 9
11	Prism	0–31	Open
		32–255	6 Facet Circular Prism
12	Prism Rotation	0–127	Indexing 0 to 540 deg
		127–128	Prism 1 Indexing
		128–189	Clockwise Prism Rotation: Fast to Slow (0–540 °/s)
		189–190	Clockwise Prism Rotation fast to slow
		190–194	No Rotation
		194–255	Prism 1 Pos Rotate: Slow to Fast (0–540 °/s)
13	Prism Rotation Fine	0–255	Fine adjustment of CH 12
14	Prism 2	0–31	Open
		32–255	Prism 2 (5 facet linear)
15	Prism 2 Rotation	0–127	Indexing 0 to 540 deg
		127–128	Prism 1 Indexing
		128–189	Clockwise Prism Rotation: Fast to Slow (0–540 °/s)
		189–190	Clockwise Prism Rotation fast to slow
		190–194	No Rotation
		194–255	Prism 1 Pos Rotate: Slow to Fast (0–540 °/s)
16	Prism 2 Rotation Fine	0–255	Fine adjustment of CH 15
17	Focus	0–255	Far to Near
18	Zoom	0–255	Narrow to Wide (11–22°)
19	Zoom Fine	0–255	Fine adjustment of CH 18
20	Dimmer Mode	0–20	Standard
		21–40	Stage
		41–60	TV
		61–80	Architectural
		81–100	Theater
		101–120	Stage 2
		121–255	Default to Unit Setting
21	Pan/Tilt Mode		Pan/Tilt Speed
		0–255	Max to Min Speed
22	Function	0–9	No Function
		10–19	Blackout with Pan/Tilt Movement
		20–29	Blackout with Color Wheel Movement
		30–39	Blackout with Gobo Wheel Movement
		40–59	Color and Gobo Motor Reset
		60–69	Prism Motor Reset
		70–79	Pan /Tilt Motor Reset

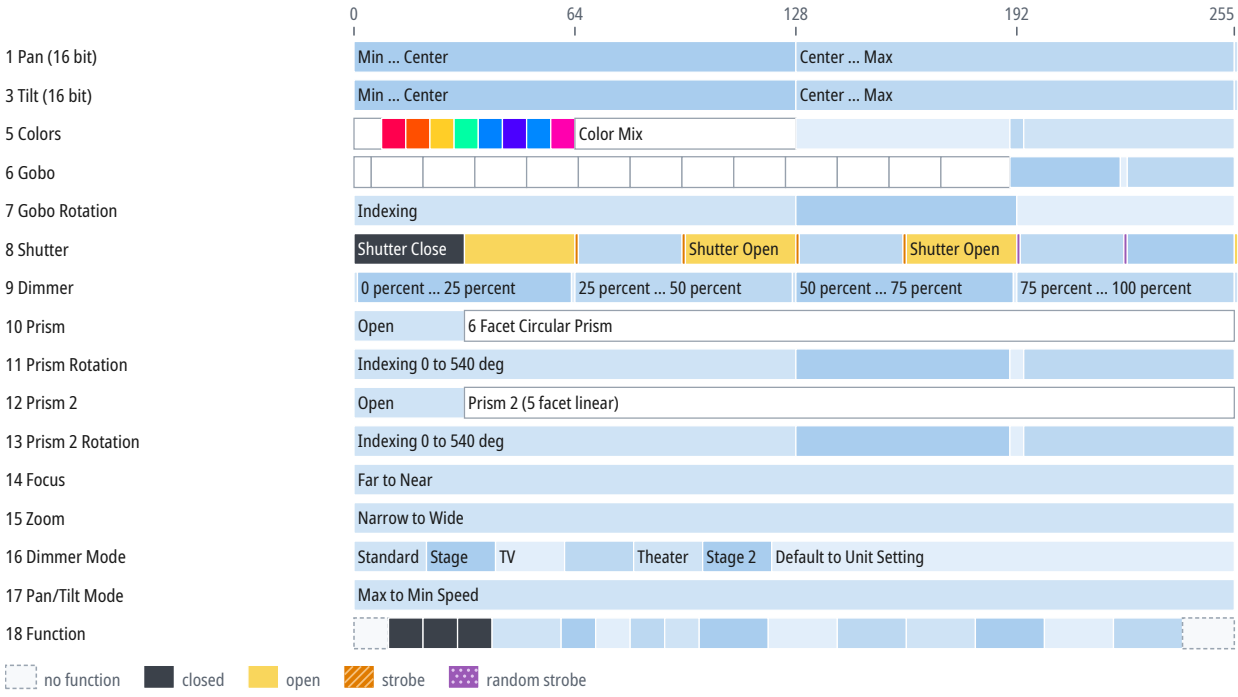
CH	Function	DMX	Description
22	Function (continued)	80–89	Focus Motor Reset
		90–99	All Motors Reset
		100–119	Internal program 1
		120–139	Internal program 2
		140–159	Internal program 3
		160–179	Internal program 4
		180–199	Internal program 5
		200–219	Internal program 6
		220–239	Internal program 7
		240–255	Internal Programs: No Function

Mode Standard Mode Pan540

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 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254. The GDTF file gives these values for a console's Highlight function: CH 8 Shutter 32, CH 9 Dimmer 255.

Channel functions at a glance



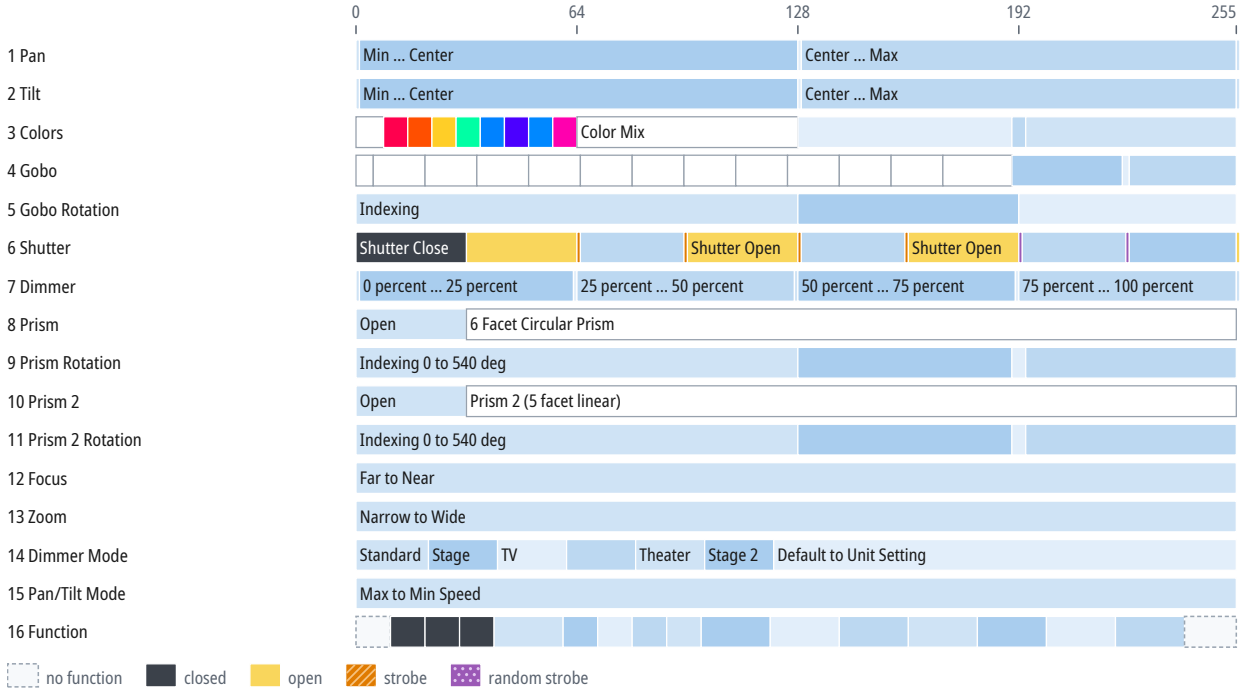
CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended Mode Pan540” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended Mode Pan540” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Colors		Same as CH 5 in the mode “Extended Mode Pan540” (p. 11)
6	Gobo		Same as CH 6 in the mode “Extended Mode Pan540” (p. 12)
7	Gobo Rotation		Same as CH 7 in the mode “Extended Mode Pan540” (p. 12)

CH	Function	DMX	Description
8	Shutter		Same as CH 8 in the mode “Extended Mode Pan540” (p. 12)
9	Dimmer	0	0 percent
		1–62	0 percent … 25 percent
		63	25 percent
		64–126	25 percent … 50 percent
		127	50 percent
		128–190	50 percent … 75 percent
		191	75 percent
		192–254	75 percent … 100 percent
		255	100 percent
10	Prism		Same as CH 11 in the mode “Extended Mode Pan540” (p. 13)
11	Prism Rotation	0–127	Indexing 0 to 540 deg (540°)
		128–189	Clockwise Prism Rotation: Fast to Slow (0–540 °/s)
		190–193	No Rotation
		194–255	Prism 1 Pos Rotate: Slow to Fast (0–540 °/s)
12	Prism 2		Same as CH 14 in the mode “Extended Mode Pan540” (p. 13)
13	Prism 2 Rotation	0–127	Indexing 0 to 540 deg (540°)
		128–189	Clockwise Prism Rotation: Fast to Slow (0–540 °/s)
		190–193	No Rotation
		194–255	Prism 1 Pos Rotate: Slow to Fast (0–540 °/s)
14	Focus	0–255	Far to Near
15	Zoom	0–255	Narrow to Wide (11–22°)
16	Dimmer Mode		Same as CH 20 in the mode “Extended Mode Pan540” (p. 13)
17	Pan/Tilt Mode		Same as CH 21 in the mode “Extended Mode Pan540” (p. 13)
18	Function		Same as CH 22 in the mode “Extended Mode Pan540” (p. 13)

Mode Basic Mode Pan540

If the device receives DMX in this mode but gives no light, check these channels: CH 6 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254. The GDTF file gives these values for a console's Highlight function: CH 6 Shutter 32, CH 7 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0	Min
		1–127	Min ... Center
		128	Center
		129–254	Center ... Max
		255	Max
2	Tilt	0	Min
		1–127	Min ... Center
		128	Center
		129–254	Center ... Max
		255	Max
3	Colors		Same as CH 5 in the mode “Extended Mode Pan540” (p. 11)
4	Gobo		Same as CH 6 in the mode “Extended Mode Pan540” (p. 12)
5	Gobo Rotation		Same as CH 7 in the mode “Extended Mode Pan540” (p. 12)
6	Shutter		Same as CH 8 in the mode “Extended Mode Pan540” (p. 12)
7	Dimmer		Same as CH 9 in the mode “Standard Mode Pan540” (p. 15)
8	Prism		Same as CH 11 in the mode “Extended Mode Pan540” (p. 13)
9	Prism Rotation		Same as CH 11 in the mode “Standard Mode Pan540” (p. 15)
10	Prism 2		Same as CH 14 in the mode “Extended Mode Pan540” (p. 13)
11	Prism 2 Rotation		Same as CH 13 in the mode “Standard Mode Pan540” (p. 15)

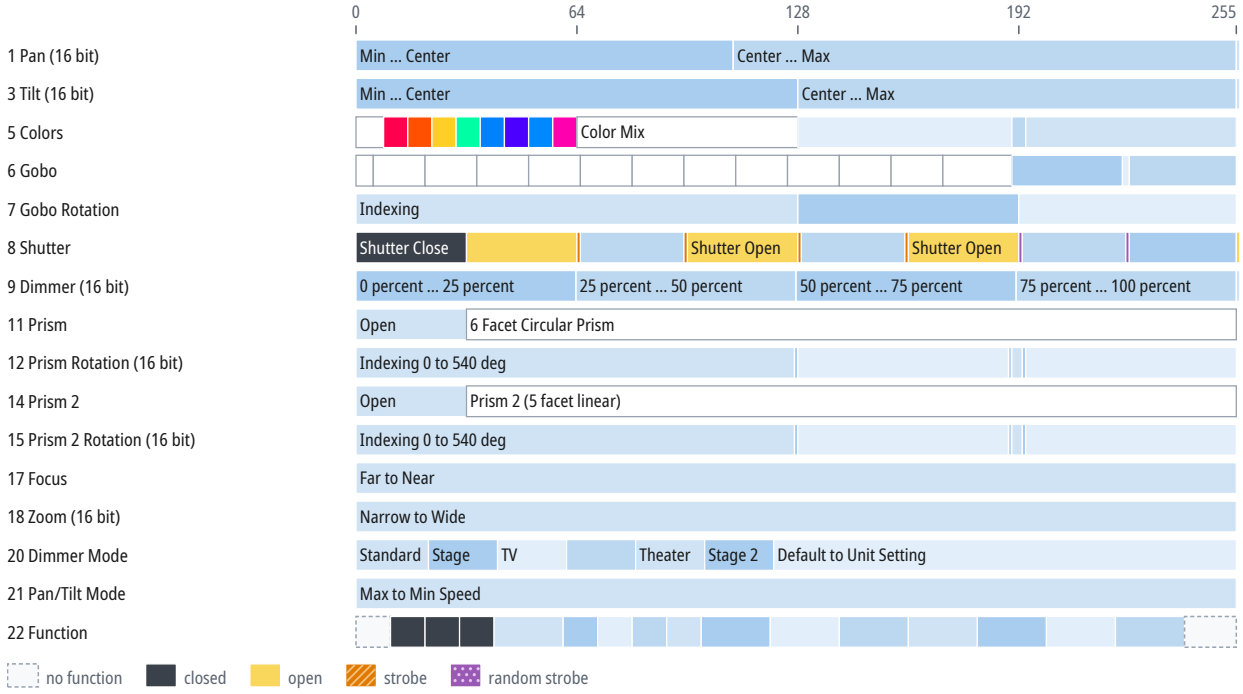
CH	Function	DMX	Description
12	Focus	0–255	Far to Near
13	Zoom	0–255	Narrow to Wide (11–22°)
14	Dimmer Mode		Same as CH 20 in the mode “Extended Mode Pan540” (p. 13)
15	Pan/Tilt Mode		Same as CH 21 in the mode “Extended Mode Pan540” (p. 13)
16	Function		Same as CH 22 in the mode “Extended Mode Pan540” (p. 13)

Mode Extended Mode Pan630

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 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254. The GDTF file gives these values for a console's Highlight function: CH 8 Shutter 32, CH 9 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–109	Min ... Center
		109–255	Center ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended Mode Pan540” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Colors		Same as CH 5 in the mode “Extended Mode Pan540” (p. 11)
6	Gobo		Same as CH 6 in the mode “Extended Mode Pan540” (p. 12)
7	Gobo Rotation	0–127	Indexing (540°)
		128–191	Clockwise Gobo Rotation: Fast to slow (0–360 °/s)
		192–255	Counter-Clockwise Gobo Rotation: Slow to fast (0–360 °/s)
8	Shutter		Same as CH 8 in the mode “Extended Mode Pan540” (p. 12)

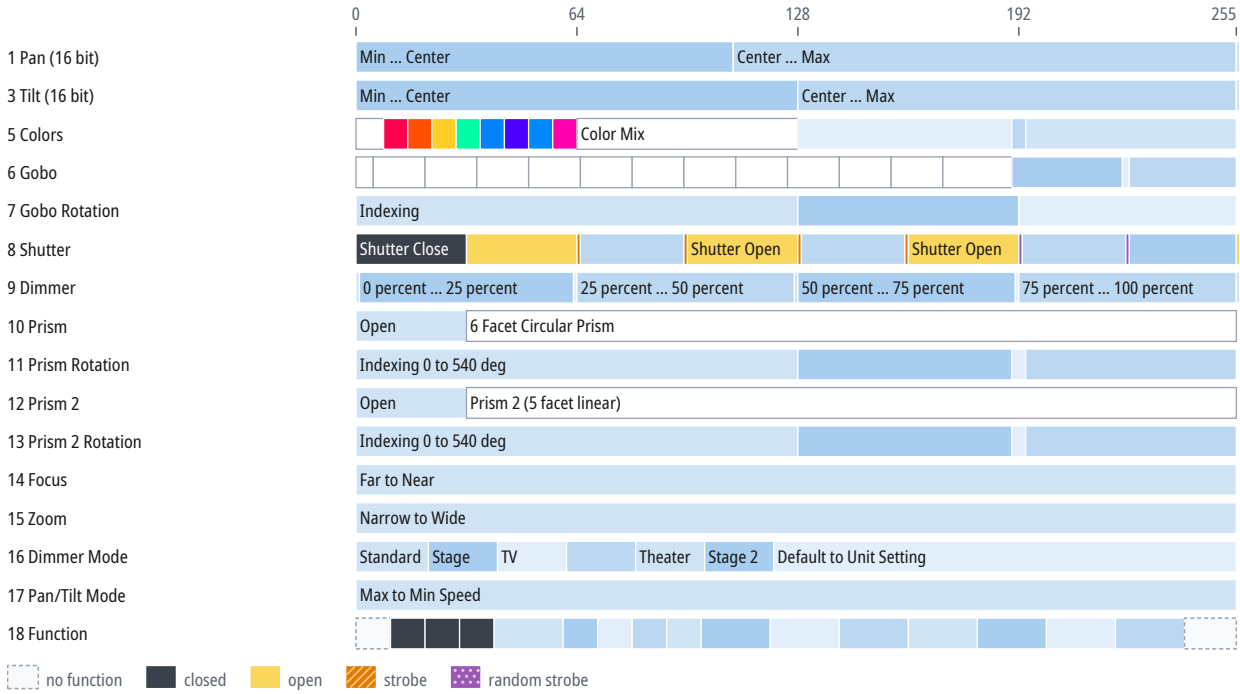
CH	Function	DMX	Description
9	Dimmer		Same as CH 9 in the mode “Extended Mode Pan540” (p. 12)
10	Dimmer Fine	0–255	Fine adjustment of CH 9
11	Prism		Same as CH 11 in the mode “Extended Mode Pan540” (p. 13)
12	Prism Rotation		Same as CH 12 in the mode “Extended Mode Pan540” (p. 13)
13	Prism Rotation Fine	0–255	Fine adjustment of CH 12
14	Prism 2		Same as CH 14 in the mode “Extended Mode Pan540” (p. 13)
15	Prism 2 Rotation		Same as CH 15 in the mode “Extended Mode Pan540” (p. 13)
16	Prism 2 Rotation Fine	0–255	Fine adjustment of CH 15
17	Focus	0–255	Far to Near
18	Zoom	0–255	Narrow to Wide (11–22°)
19	Zoom Fine	0–255	Fine adjustment of CH 18
20	Dimmer Mode		Same as CH 20 in the mode “Extended Mode Pan540” (p. 13)
21	Pan/Tilt Mode		Same as CH 21 in the mode “Extended Mode Pan540” (p. 13)
22	Function		Same as CH 22 in the mode “Extended Mode Pan540” (p. 13)

Mode Standard Mode Pan630

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 8 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254. The GDTF file gives these values for a console's Highlight function: CH 8 Shutter 32, CH 9 Dimmer 255.

Channel functions at a glance



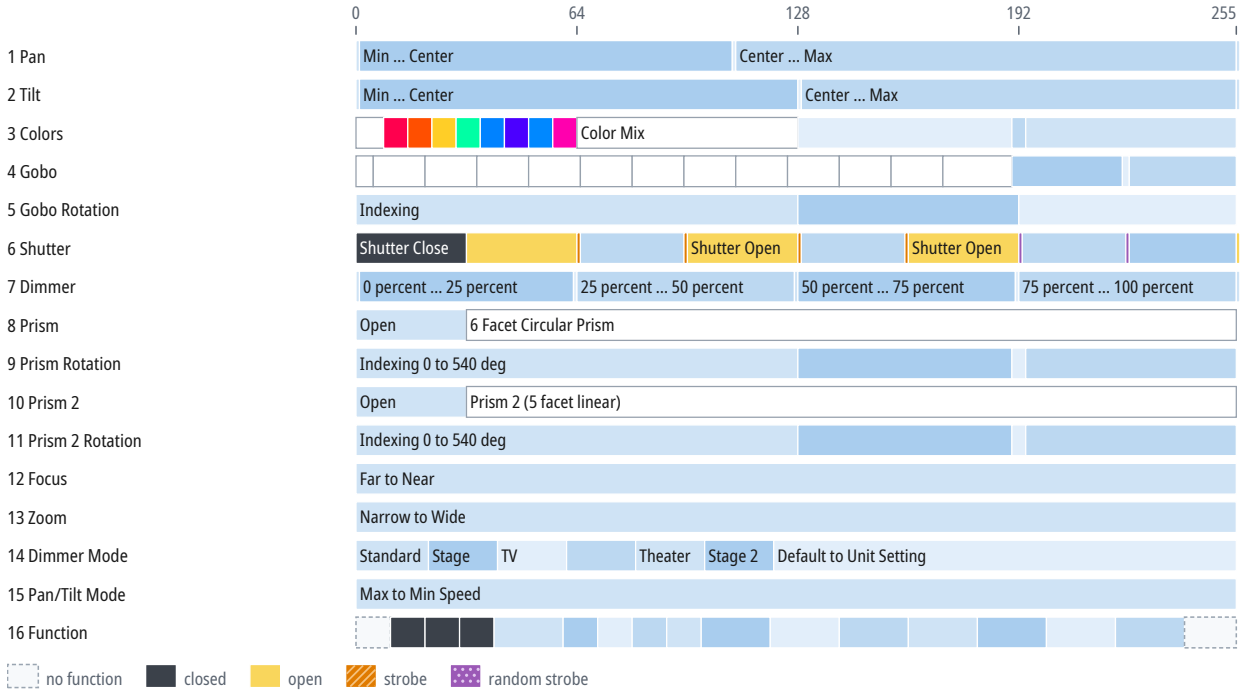
CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended Mode Pan630” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended Mode Pan540” (p. 11)

CH	Function	DMX	Description
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Colors		Same as CH 5 in the mode “Extended Mode Pan540” (p. 11)
6	Gobo		Same as CH 6 in the mode “Extended Mode Pan540” (p. 12)
7	Gobo Rotation		Same as CH 7 in the mode “Extended Mode Pan540” (p. 12)
8	Shutter		Same as CH 8 in the mode “Extended Mode Pan540” (p. 12)
9	Dimmer		Same as CH 9 in the mode “Standard Mode Pan540” (p. 15)
10	Prism		Same as CH 11 in the mode “Extended Mode Pan540” (p. 13)
11	Prism Rotation		Same as CH 11 in the mode “Standard Mode Pan540” (p. 15)
12	Prism 2		Same as CH 14 in the mode “Extended Mode Pan540” (p. 13)
13	Prism 2 Rotation		Same as CH 13 in the mode “Standard Mode Pan540” (p. 15)
14	Focus	0–255	Far to Near
15	Zoom	0–255	Narrow to Wide (11–22°)
16	Dimmer Mode		Same as CH 20 in the mode “Extended Mode Pan540” (p. 13)
17	Pan/Tilt Mode		Same as CH 21 in the mode “Extended Mode Pan540” (p. 13)
18	Function		Same as CH 22 in the mode “Extended Mode Pan540” (p. 13)

Mode Basic Mode Pan630

If the device receives DMX in this mode but gives no light, check these channels: CH 6 Shutter at 32–63, 96–127, 160–191, 255 “Shutter Open” or 224–254. The GDTF file gives these values for a console's Highlight function: CH 6 Shutter 32, CH 7 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0	Min
		1–108	Min ... Center
		109	Center

CH	Function	DMX	Description
1	Pan (continued)	110–254	Center ... Max
		255	Max
2	Tilt		Same as CH 2 in the mode “Basic Mode Pan540” (p. 16)
3	Colors		Same as CH 5 in the mode “Extended Mode Pan540” (p. 11)
4	Gobo		Same as CH 6 in the mode “Extended Mode Pan540” (p. 12)
5	Gobo Rotation		Same as CH 7 in the mode “Extended Mode Pan540” (p. 12)
6	Shutter		Same as CH 8 in the mode “Extended Mode Pan540” (p. 12)
7	Dimmer		Same as CH 9 in the mode “Standard Mode Pan540” (p. 15)
8	Prism		Same as CH 11 in the mode “Extended Mode Pan540” (p. 13)
9	Prism Rotation		Same as CH 11 in the mode “Standard Mode Pan540” (p. 15)
10	Prism 2		Same as CH 14 in the mode “Extended Mode Pan540” (p. 13)
11	Prism 2 Rotation		Same as CH 13 in the mode “Standard Mode Pan540” (p. 15)
12	Focus	0–255	Far to Near
13	Zoom	0–255	Narrow to Wide (11–22°)
14	Dimmer Mode		Same as CH 20 in the mode “Extended Mode Pan540” (p. 13)
15	Pan/Tilt Mode		Same as CH 21 in the mode “Extended Mode Pan540” (p. 13)
16	Function		Same as CH 22 in the mode “Extended Mode Pan540” (p. 13)

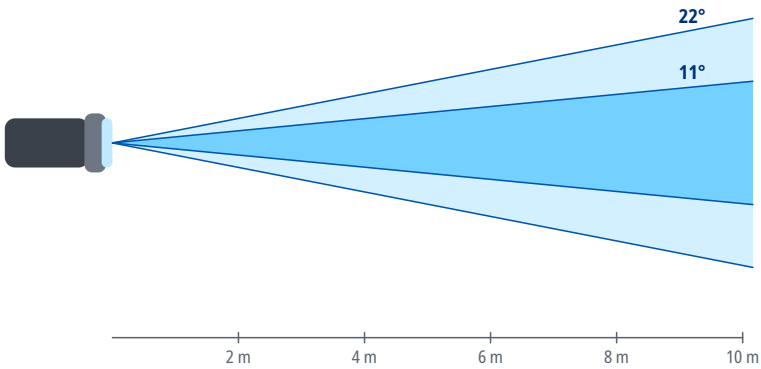
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	200 W
Luminous flux	147,132 lm
Color temperature	21,333 K
Color rendering index (CRI)	76
Optics	
Zoom	11–22°
Movement	
Pan	630°
Tilt	270°
Control	
RDM	yes (manufacturer ID 0x1900, device model ID 0x001C)
Dimensions and construction	
Weight	14.1 kg
Operating environment	
Operating temperature	-25 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	1–31 Hz
Color wheel 1 rotation	up to 360 °/s (60 rpm)
Gobo wheel 2 rotation	up to 540 °/s (90 rpm)
Prism rotation	up to 540 °/s (90 rpm)

Spot diameter



Distance	Ø 11°	Ø 22°
2 m	0.39 m	0.78 m
4 m	0.77 m	1.6 m
6 m	1.2 m	2.3 m
8 m	1.5 m	3.1 m
10 m	1.9 m	3.9 m
15 m	2.9 m	5.8 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.