DMX REFERENCE

PL-P1840BYL

Polarlights



Manufacturer	Polarlights
GDTF file	Polarlights_PL-P1840BYL_169632.gdtf
GDTF revision	PL-P1840BYL · 2026-11-17
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1 About this manual

This document describes the PL-P1840BYL by Polarlights. It was compiled from the GDTF file Polarlights_PL-P1840BYL_169632.gdtf from the GDTF-Share library.

File revision: “PL-P1840BYL”.

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 Polarlights; 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	22.4 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
148 Channel	148	3	1, 149, 297
76 Channel	76	6	1, 77, 153, 229, ...
52 Channel	52	9	1, 53, 105, 157, ...

No light? Check these channels

- 148 Channel: CH 11 Shutter at 0, 252–255 “Open” or 104–107 or 208–212; CH 12 Dimmer above 0; CH 33 Foreground Shutter at 255 “Open”
- 76 Channel: CH 11 Shutter at 0, 252–255 “Open” or 104–107 or 208–212; CH 12 Dimmer above 0; CH 33 Foreground Shutter at 255 “Open”
- 52 Channel: CH 11 Shutter at 0, 252–255 “Open” or 104–107 or 208–212; CH 12 Dimmer above 0; CH 33 Foreground Shutter at 255 “Open”


Read the manual before use


Do not stare into the light


Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

- This device is intended for professional use. Installation, connection, setup and maintenance must be carried out only by suitably qualified persons who have read this manual.
- Use the device only for its intended purpose and as described in this manual.
- Do not open the housing and do not modify or tamper with the device. Refer all repairs to an authorized service center.
- Do not use the device if its housing, power or data cable, or a connector is damaged, if the device has been dropped, or if liquid or a foreign object has entered it. In such a case, have it checked by a service center.
- Disconnect the device from the power supply before cleaning, maintenance or any work on the connections.
- After moving the device from a cold to a warm environment, let it reach room temperature before switching it on to prevent condensation inside.
- The device is not a toy; keep it out of the reach of children.

⚠ WARNING

- This device is designed for indoor use only. Protect it from rain, splashing water, moisture and dust, and do not place containers with liquids on it.
- Do not operate the device in high humidity, near water, or where condensation can form on it.

⚠ CAUTION

- This device emits intense light. Do not look directly into the light source or the beam at close range; doing so may damage your eyes.
- Do not aim the beam at the eyes of people or animals at close range, and do not view the light source through optical instruments (binoculars, camera lenses).
- Do not aim the beam at flammable or heat-sensitive materials at close range.

⚠ CAUTION

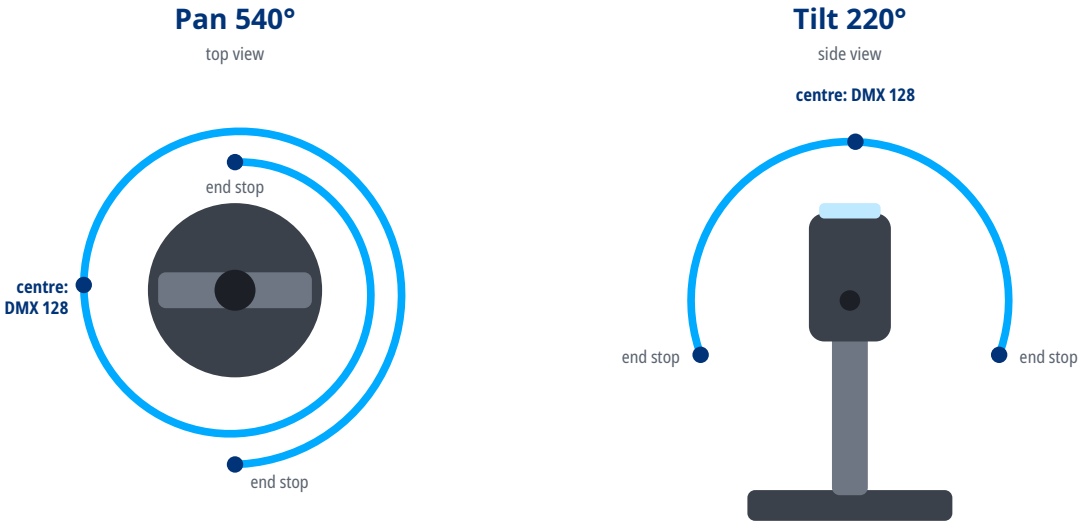
- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them longer than necessary.

⚠ WARNING

- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, move them by hand, or obstruct their movement; this can cause injury (pinching) and damage the drive.
- Do not carry the device by its moving parts. If the device has a transport lock, engage it before transport and release it before switching on.

4 Product description

Range of movement



5 Installation

⚠ WARNING

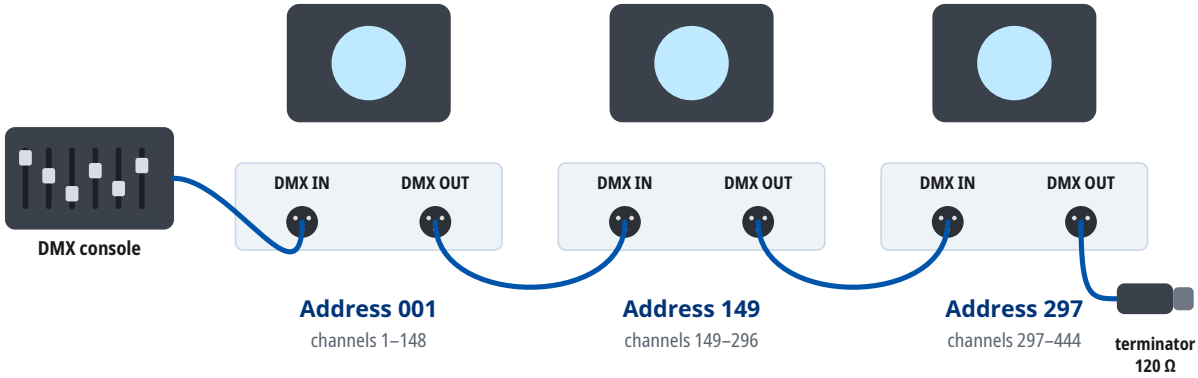
- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 22.4 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 148 Channel: every unit occupies 148 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

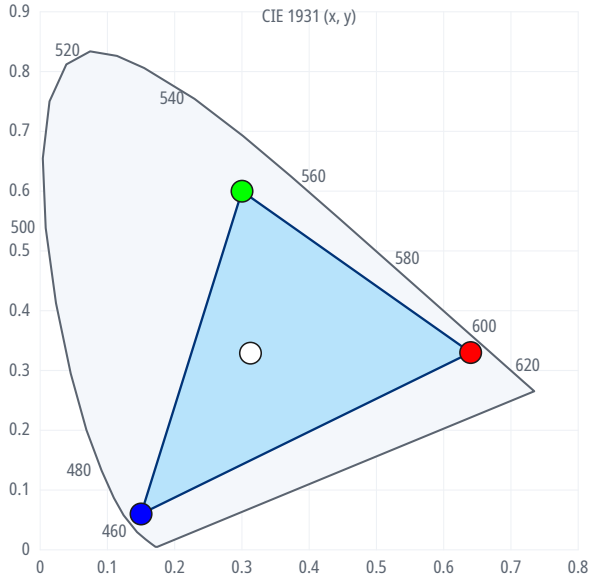
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “148 Channel”: 148.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 “148 Channel”, you can use, for example, the start addresses 1, 149, 297.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

Functions in each DMX mode

	148 Channel 148 channels	76 Channel 76 channels	52 Channel 52 channels
Pan / Tilt	14, 16	14, 16	14, 16
Dimmer	12	12	12
Shutter / strobe	11	11	11
Color mixing	76 channels (1–148)	4× (1–7)	4× (1–7)
Color temperature	9	9	9
Color wheel	10	10	10
Zoom	20	20	20
Effects / macros	18	18	18
Pixel control	18 cells		

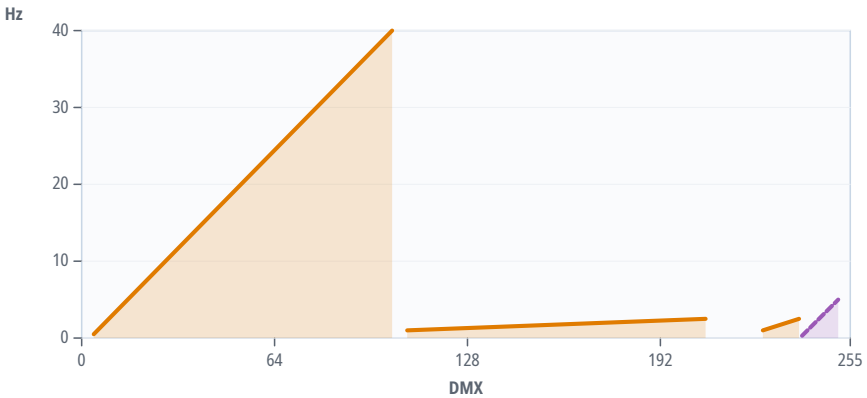
LED colors and the colors they mix



LED	x	y
Red	0.640	0.330
Green	0.300	0.600
Blue	0.150	0.060
White	0.313	0.329

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

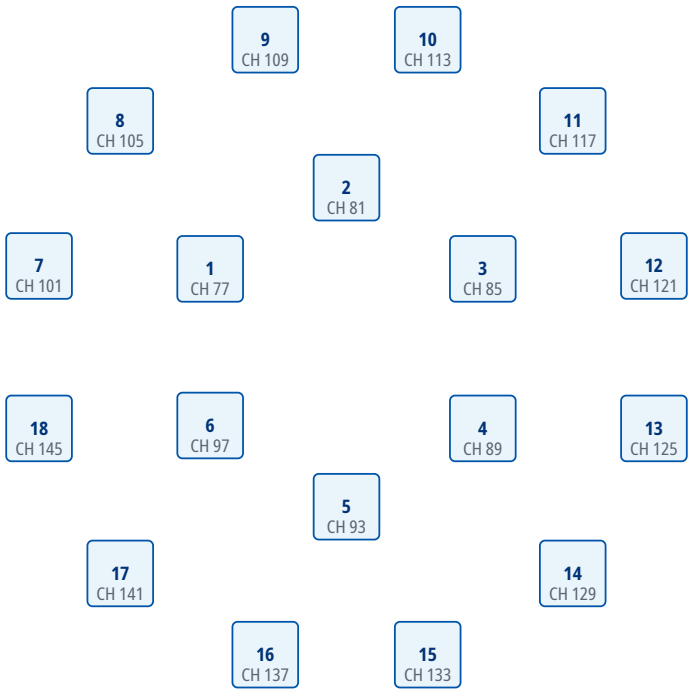
Strobe rate



CH 11 · 148 Channel

- 4–103: 0.5–40 Hz
  Strobe
- 108–207: 1–2.5 Hz
  Strobe 1
- 226–238: 1–2.5 Hz
  Medium Random Strobe
- 239–251: 0.3–5 Hz
  Fast Random Strobe

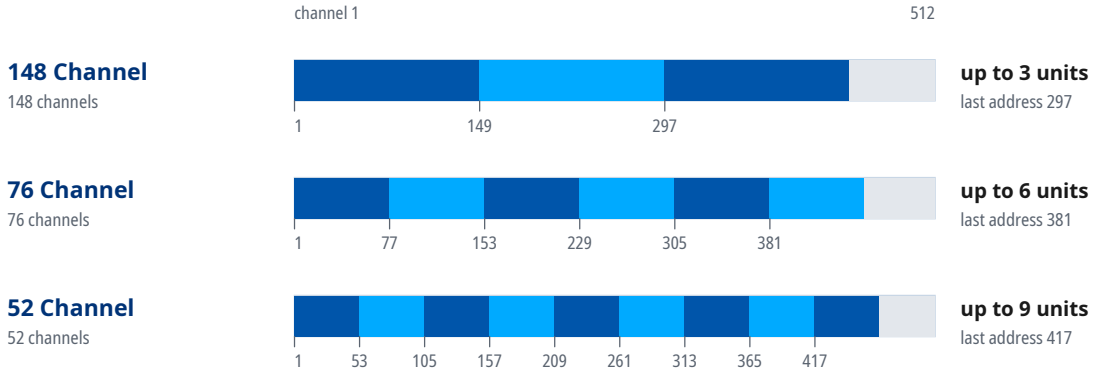
Cells (pixels)



18 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “148 Channel”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “148 Channel”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	U2 · 297	11	U4 · 149	16	U6 · 1
2	149	7	U3 · 1	12	U4 · 297	17	U6 · 149
3	297	8	U3 · 149	13	U5 · 1	18	U6 · 297
4	U2 · 1	9	U3 · 297	14	U5 · 149	19	U7 · 1
5	U2 · 149	10	U4 · 1	15	U5 · 297	20	U7 · 149

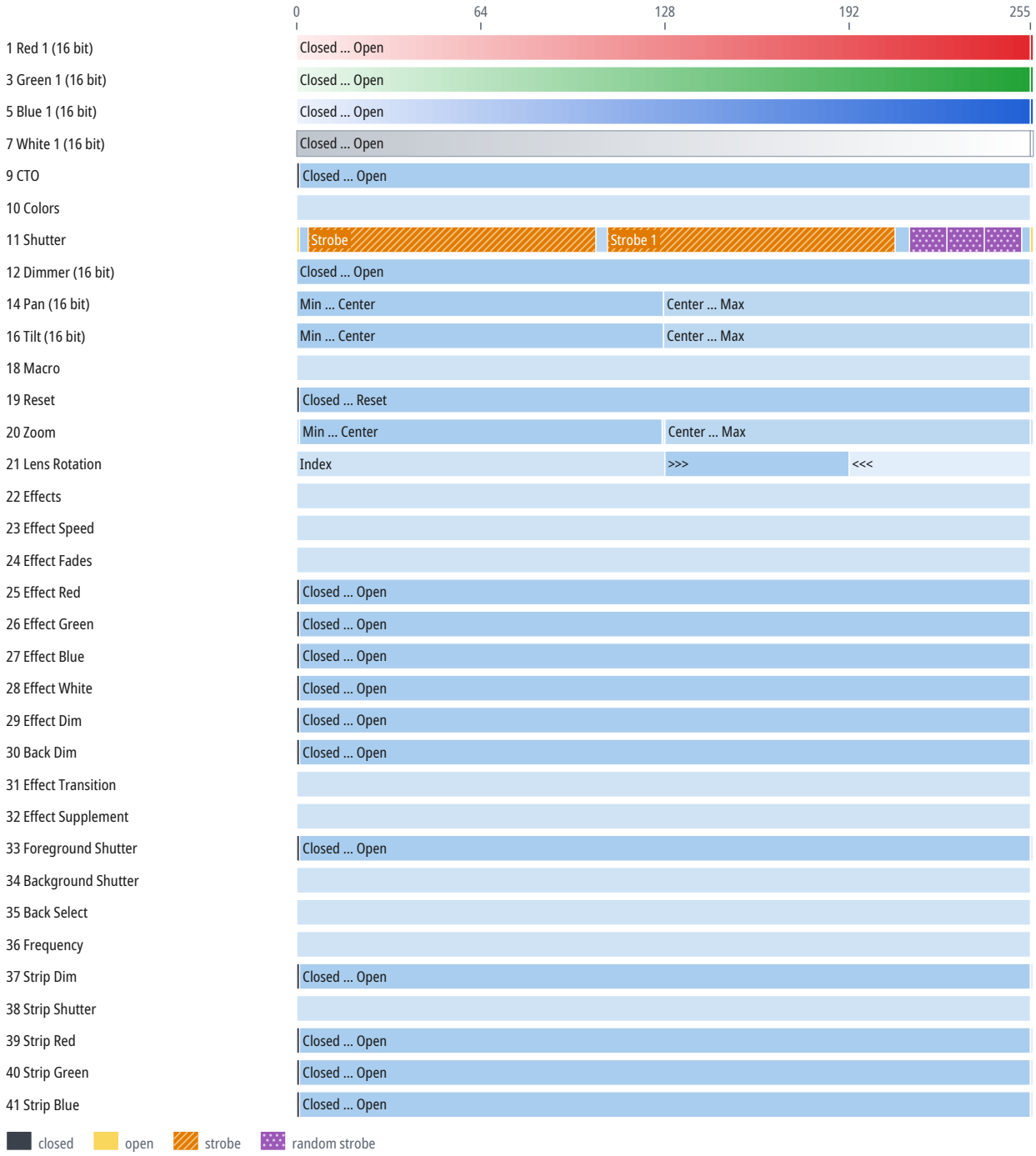
Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode 148 Channel

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 11 Shutter at 0, 252–255 “Open” or 104–107 or 208–212; CH 12 Dimmer above 0; CH 33 Foreground Shutter at 255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 11 Shutter 255, CH 12 Dimmer 255, CH 38 Strip Shutter 255, CH 39 Strip Red 255, CH 40 Strip Green 255, CH 41 Strip Blue 255, CH 77 Red 255 (the same in each of the 18 cells), CH 78 Green 255 (the same in each of the 18 cells), CH 79 Blue 255 (the same in each of the 18 cells).

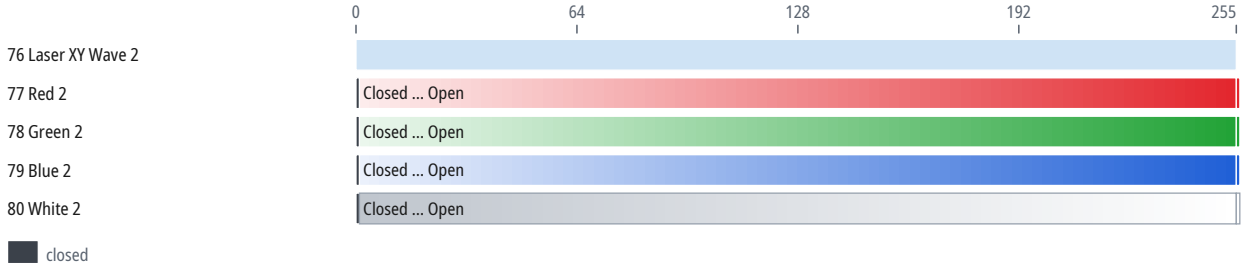
Channel functions at a glance



Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Red 1	0–255	Closed ... Open
		255	Open
2	Red 1 Fine	0–255	Fine adjustment of CH 1
3	Green 1	0–255	Closed ... Open
		255	Open
4	Green 1 Fine	0–255	Fine adjustment of CH 3
5	Blue 1	0–255	Closed ... Open
		255	Open
6	Blue 1 Fine	0–255	Fine adjustment of CH 5
7	White 1	0–255	Closed ... Open
		255	Open
8	White 1 Fine	0–255	Fine adjustment of CH 7
9	CTO	0	Closed
		1–254	Closed ... Open
		255	Open
10	Colors	0–255	
11	Shutter	0	Closed: Open
		1–3	Closed
		4–103	Strobe (0.5–40 Hz)
		104–107	Open 1
		108–207	Strobe 1 (1–2.5 Hz)
		208–212	Open 2
		213–225	Low Random Strobe
		226–238	Medium Random Strobe (1–2.5 Hz)
		239–251	Fast Random Strobe (0.3–5 Hz)
		252–255	Open
12	Dimmer	0–255	Closed ... Open
		255	Open
13	Dimmer Fine	0–255	Fine adjustment of CH 12
14	Pan	0–127	Min ... Center
		127	Center
		128–255	Center ... Max
		255	Max

CH	Function	DMX	Description
15	Pan Fine	0–255	Fine adjustment of CH 14
16	Tilt	0–127	Min … Center
		128–255	Center … Max
		255	Max
17	Tilt Fine	0–255	Fine adjustment of CH 16
18	Macro	0–255	
19	Reset	0	Closed
		1–254	Closed … Reset
		255	Reset
20	Zoom	0	Min
		1–126	Min … Center
		127	Center
		128–254	Center … Max
		255	Max
21	Lens Rotation	0–127	Index
		128–191	>>>
		192–255	<<<
22	Effects	0–255	
23	Effect Speed	0–255	
24	Effect Fades	0–255	
25	Effect Red	0	Closed
		1–254	Closed … Open
		255	Open
26	Effect Green	0	Closed
		1–254	Closed … Open
		255	Open
27	Effect Blue	0	Closed
		1–254	Closed … Open
		255	Open
28	Effect White	0	Closed
		1–254	Closed … Open
		255	Open
29	Effect Dim	0	Closed
		1–254	Closed … Open
		255	Open
30	Back Dim	0	Closed
		1–254	Closed … Open
		255	Open
31	Effect Transition	0–255	
32	Effect Supplement	0–255	
33	Foreground Shutter	0	Closed

CH	Function	DMX	Description
33	Foreground Shutter (continued)	1–254	Closed ... Open
		255	Open
34	Background Shutter	0–255	
35	Back Select	0–255	
36	Frequency	0–255	
37	Strip Dim	0	Closed
		1–254	Closed ... Open
		255	Open
38	Strip Shutter	0–255	
39	Strip Red	0	Closed
		1–254	Closed ... Open
		255	Open
40	Strip Green	0	Closed
		1–254	Closed ... Open
		255	Open
41	Strip Blue	0	Closed
		1–254	Closed ... Open
		255	Open
42	Strip Effect	0–255	
43	Strip Effect Speed	0–255	
44	Laser Dim	0	Closed
		1–254	Closed ... Open
		255	Open
45	Laser Shutter	0–255	
46	Laser Gobo Size	0–255	
47	Laser Pan	0–255	
48	Laser Tilt	0–255	
49	Laser Gobo File	0–255	
50	Laser Color	0–255	
51	Laser Scanning	0–255	
52	Laser Gobo Effect	0–255	
53	Laser Rot Z	0–255	
54	Laser Rot X	0–255	
55	Laser Rot Y	0–255	
56	Laser Pan Move	0–255	
57	Laser Tilt Move	0–255	
58	Laser Zoom	0–255	
59	Laser Painting	0–255	
60	Laser XY Wave	0–255	
61	Laser Shutter 2	0–255	
62	Laser Gobo Size 2	0–255	

CH	Function	DMX	Description
63	Laser Pan 2	0–255	
64	Laser Tilt 2	0–255	
65	Laser Gobo File 2	0–255	
66	Laser Color 2	0–255	
67	Laser Scanning 2	0–255	
68	Laser Gobo Effect 2	0–255	
69	Laser Rot Z 2	0–255	
70	Laser Rot X 2	0–255	
71	Laser Rot Y 2	0–255	
72	Laser Pan Move 2	0–255	
73	Laser Tilt Move 2	0–255	
74	Laser Zoom 2	0–255	
75	Laser Painting 2	0–255	
76	Laser XY Wave 2	0–255	
77	Red 2	0	Closed
		1–254	Closed … Open
		255	Open
78	Green 2	0	Closed
		1–254	Closed … Open
		255	Open
79	Blue 2	0	Closed
		1–254	Closed … Open
		255	Open
80	White 2	0	Closed
		1–254	Closed … Open
		255	Open

CH 77–148: 18 cells of 4 channels each. Every cell works as cell 1 in the table above (CH 77–80); the table below gives each cell's channel numbers.

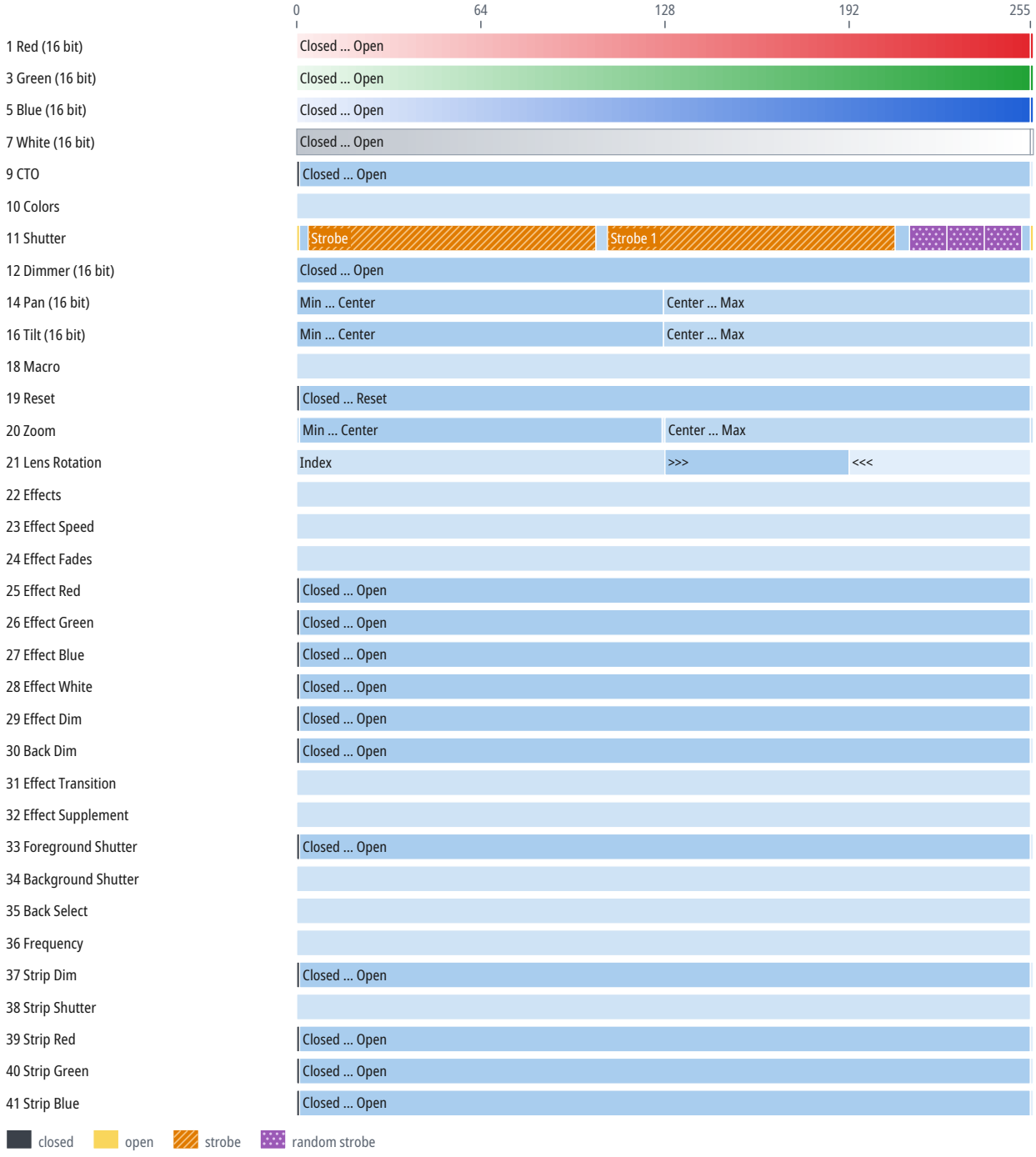
Cell	Red	Green	Blue	White	Cell	Red	Green	Blue	White
1	77	78	79	80	2	81	82	83	84
3	85	86	87	88	4	89	90	91	92
5	93	94	95	96	6	97	98	99	100
7	101	102	103	104	8	105	106	107	108
9	109	110	111	112	10	113	114	115	116
11	117	118	119	120	12	121	122	123	124
13	125	126	127	128	14	129	130	131	132
15	133	134	135	136	16	137	138	139	140
17	141	142	143	144	18	145	146	147	148

Mode 76 Channel

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 11 Shutter at 0, 252–255 “Open” or 104–107 or 208–212; CH 12 Dimmer above 0; CH 33 Foreground Shutter at 255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 3 Green 255, CH 5 Blue 255, CH 11 Shutter 255, CH 12 Dimmer 255, CH 38 Strip Shutter 255, CH 39 Strip Red 255, CH 40 Strip Green 255, CH 41 Strip Blue 255.

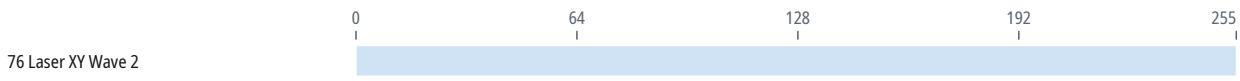
Channel functions at a glance



Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Red	0–255	Closed ... Open
		255	Open
2	Red Fine	0–255	Fine adjustment of CH 1

CH	Function	DMX	Description
3	Green	0–255	Closed ... Open
		255	Open
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue	0–255	Closed ... Open
		255	Open
6	Blue Fine	0–255	Fine adjustment of CH 5
7	White	0–255	Closed ... Open
		255	Open
8	White Fine	0–255	Fine adjustment of CH 7
9	CTO		Same as CH 9 in the mode “148 Channel” (p. 12)
10	Colors	0–255	
11	Shutter		Same as CH 11 in the mode “148 Channel” (p. 12)
12	Dimmer		Same as CH 12 in the mode “148 Channel” (p. 12)
13	Dimmer Fine	0–255	Fine adjustment of CH 12
14	Pan		Same as CH 14 in the mode “148 Channel” (p. 12)
15	Pan Fine	0–255	Fine adjustment of CH 14
16	Tilt		Same as CH 16 in the mode “148 Channel” (p. 13)
17	Tilt Fine	0–255	Fine adjustment of CH 16
18	Macro	0–255	
19	Reset		Same as CH 19 in the mode “148 Channel” (p. 13)
20	Zoom		Same as CH 20 in the mode “148 Channel” (p. 13)
21	Lens Rotation		Same as CH 21 in the mode “148 Channel” (p. 13)
22	Effects	0–255	
23	Effect Speed	0–255	
24	Effect Fades	0–255	
25	Effect Red		Same as CH 25 in the mode “148 Channel” (p. 13)
26	Effect Green		Same as CH 26 in the mode “148 Channel” (p. 13)
27	Effect Blue		Same as CH 27 in the mode “148 Channel” (p. 13)
28	Effect White		Same as CH 28 in the mode “148 Channel” (p. 13)
29	Effect Dim		Same as CH 29 in the mode “148 Channel” (p. 13)
30	Back Dim		Same as CH 30 in the mode “148 Channel” (p. 13)
31	Effect Transition	0–255	
32	Effect Supplement	0–255	
33	Foreground Shutter		Same as CH 33 in the mode “148 Channel” (p. 13)
34	Background Shutter	0–255	
35	Back Select	0–255	
36	Frequency	0–255	
37	Strip Dim		Same as CH 37 in the mode “148 Channel” (p. 14)
38	Strip Shutter	0–255	
39	Strip Red		Same as CH 39 in the mode “148 Channel” (p. 14)
40	Strip Green		Same as CH 40 in the mode “148 Channel” (p. 14)

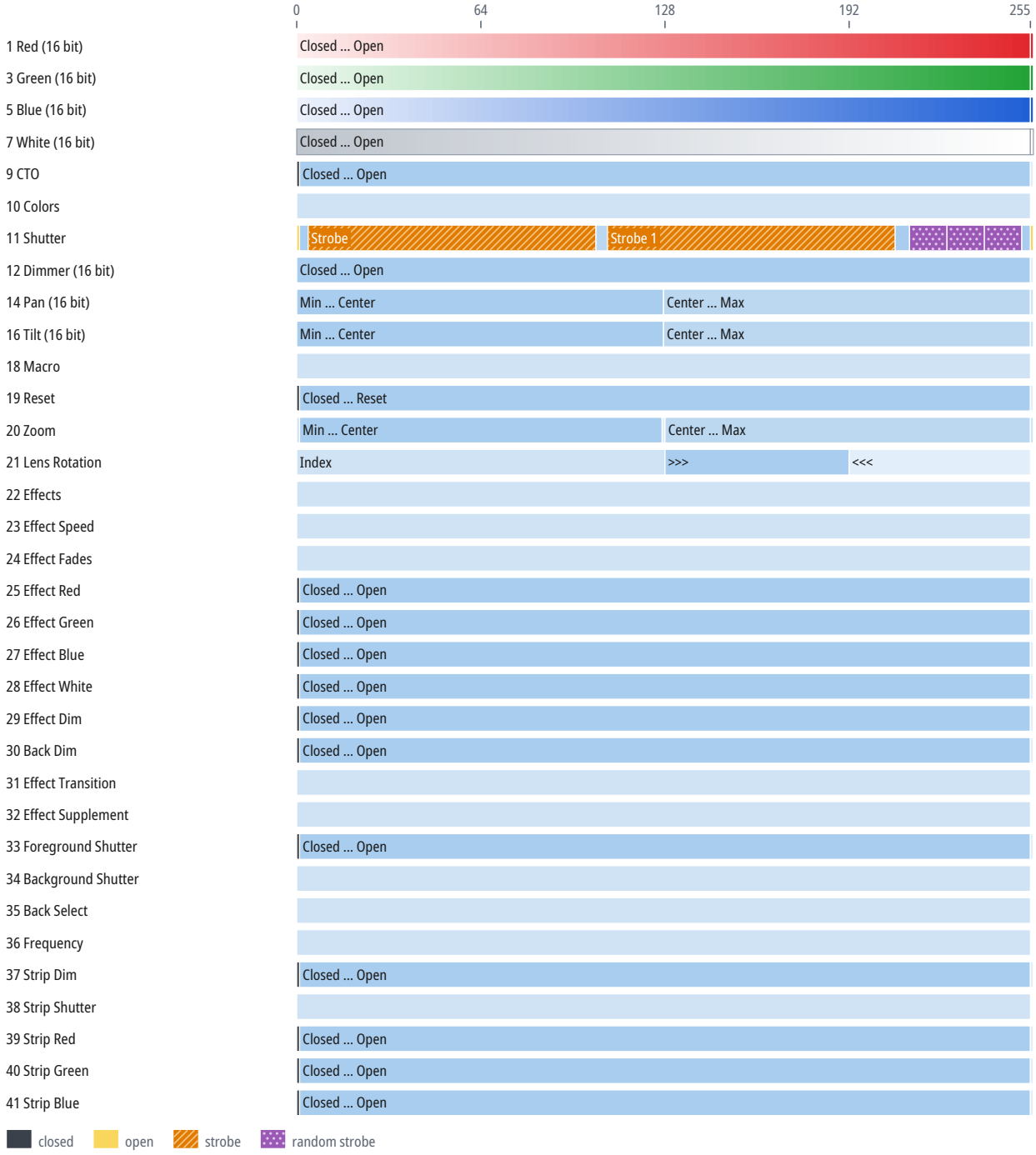
CH	Function	DMX	Description
41	Strip Blue		Same as CH 41 in the mode “148 Channel” (p. 14)
42	Strip Effect	0–255	
43	Strip Effect Speed	0–255	
44	Laser Dim		Same as CH 44 in the mode “148 Channel” (p. 14)
45	Laser Shutter	0–255	
46	Laser Gobo Size	0–255	
47	Laser Pan	0–255	
48	Laser Tilt	0–255	
49	Laser Gobo File	0–255	
50	Laser Color	0–255	
51	Laser Scanning	0–255	
52	Laser Gobo Effect	0–255	
53	Laser Rot Z	0–255	
54	Laser Rot X	0–255	
55	Laser Rot Y	0–255	
56	Laser Pan Move	0–255	
57	Laser Tilt Move	0–255	
58	Laser Zoom	0–255	
59	Laser Painting	0–255	
60	Laser XY Wave	0–255	
61	Laser Shutter 2	0–255	
62	Laser Gobo Size 2	0–255	
63	Laser Pan 2	0–255	
64	Laser Tilt 2	0–255	
65	Laser Gobo File 2	0–255	
66	Laser Color 2	0–255	
67	Laser Scanning 2	0–255	
68	Laser Gobo Effect 2	0–255	
69	Laser Rot Z 2	0–255	
70	Laser Rot X 2	0–255	
71	Laser Rot Y 2	0–255	
72	Laser Pan Move 2	0–255	
73	Laser Tilt Move 2	0–255	
74	Laser Zoom 2	0–255	
75	Laser Painting 2	0–255	
76	Laser XY Wave 2	0–255	

Mode 52 Channel

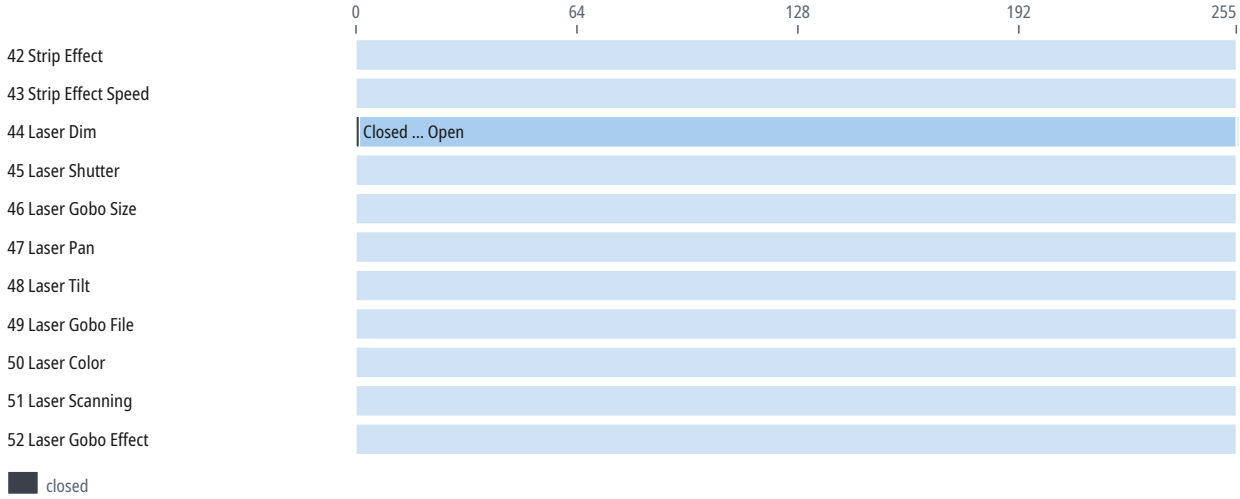
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 11 Shutter at 0, 252–255 “Open” or 104–107 or 208–212; CH 12 Dimmer above 0; CH 33 Foreground Shutter at 255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 3 Green 255, CH 5 Blue 255, CH 11 Shutter 255, CH 12 Dimmer 255, CH 38 Strip Shutter 255, CH 39 Strip Red 255, CH 40 Strip Green 255, CH 41 Strip Blue 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Red		Same as CH 1 in the mode “76 Channel” (p. 17)
2	Red Fine	0–255	Fine adjustment of CH 1
3	Green		Same as CH 3 in the mode “76 Channel” (p. 18)
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue		Same as CH 5 in the mode “76 Channel” (p. 18)
6	Blue Fine	0–255	Fine adjustment of CH 5
7	White		Same as CH 7 in the mode “76 Channel” (p. 18)
8	White Fine	0–255	Fine adjustment of CH 7
9	CTO		Same as CH 9 in the mode “148 Channel” (p. 12)
10	Colors	0–255	
11	Shutter		Same as CH 11 in the mode “148 Channel” (p. 12)
12	Dimmer		Same as CH 12 in the mode “148 Channel” (p. 12)
13	Dimmer Fine	0–255	Fine adjustment of CH 12
14	Pan		Same as CH 14 in the mode “148 Channel” (p. 12)
15	Pan Fine	0–255	Fine adjustment of CH 14
16	Tilt		Same as CH 16 in the mode “148 Channel” (p. 13)
17	Tilt Fine	0–255	Fine adjustment of CH 16
18	Macro	0–255	
19	Reset		Same as CH 19 in the mode “148 Channel” (p. 13)
20	Zoom		Same as CH 20 in the mode “148 Channel” (p. 13)
21	Lens Rotation		Same as CH 21 in the mode “148 Channel” (p. 13)
22	Effects	0–255	
23	Effect Speed	0–255	
24	Effect Fades	0–255	
25	Effect Red		Same as CH 25 in the mode “148 Channel” (p. 13)
26	Effect Green		Same as CH 26 in the mode “148 Channel” (p. 13)
27	Effect Blue		Same as CH 27 in the mode “148 Channel” (p. 13)

CH	Function	DMX	Description
28	Effect White		Same as CH 28 in the mode “148 Channel” (p. 13)
29	Effect Dim		Same as CH 29 in the mode “148 Channel” (p. 13)
30	Back Dim		Same as CH 30 in the mode “148 Channel” (p. 13)
31	Effect Transition	0–255	
32	Effect Supplement	0–255	
33	Foreground Shutter		Same as CH 33 in the mode “148 Channel” (p. 13)
34	Background Shutter	0–255	
35	Back Select	0–255	
36	Frequency	0–255	
37	Strip Dim		Same as CH 37 in the mode “148 Channel” (p. 14)
38	Strip Shutter	0–255	
39	Strip Red		Same as CH 39 in the mode “148 Channel” (p. 14)
40	Strip Green		Same as CH 40 in the mode “148 Channel” (p. 14)
41	Strip Blue		Same as CH 41 in the mode “148 Channel” (p. 14)
42	Strip Effect	0–255	
43	Strip Effect Speed	0–255	
44	Laser Dim		Same as CH 44 in the mode “148 Channel” (p. 14)
45	Laser Shutter	0–255	
46	Laser Gobo Size	0–255	
47	Laser Pan	0–255	
48	Laser Tilt	0–255	
49	Laser Gobo File	0–255	
50	Laser Color	0–255	
51	Laser Scanning	0–255	
52	Laser Gobo Effect	0–255	

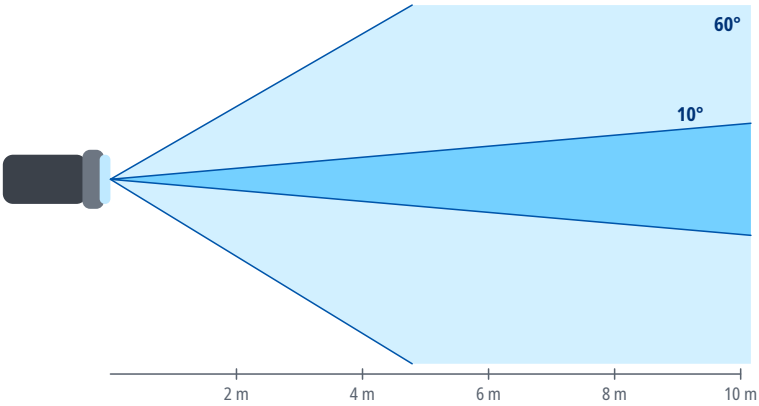
10 Technical specifications

Parameter	Value
Light source	LED
Zoom	10–60°
Pan	540°
Tilt	220°
Weight	22.4 kg
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2500–8000 K
Strobe frequency	0.5–40 Hz

Spot diameter



Distance	Ø 10°	Ø 60°
2 m	0.35 m	2.3 m
4 m	0.7 m	4.6 m
6 m	1 m	6.9 m
8 m	1.4 m	9.2 m
10 m	1.7 m	11.5 m
15 m	2.6 m	17.3 m

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

11 Maintenance and cleaning

- Before cleaning and maintenance, switch the device off, disconnect it from the power supply and let it cool down.
- Clean the housing with a soft, dry or slightly damp cloth. Do not use solvents, abrasive cleaners or pressure washers, and make sure no liquid gets into the device.
- Clean optical parts (lenses, front glass), if the device has any, with a soft lint-free cloth and a cleaner intended for optics or glass.
- Regularly inspect the housing, cables, connectors and fixings. Have damaged parts replaced by a service center.
- How often to clean depends on the environment; dust, smoke and fog make the device dirty much faster.

12 Troubleshooting

Problem	Remedy
The device does not switch on	Check the supply voltage, the cables and the fuse, if the device has one.
The device does not respond to DMX	Check the start address, the selected DMX mode and whether it matches the profile in the controller, the cable connection to DMX IN, and the controller output (universe).
The device behaves erratically or flickers	Check the terminator at the end of the line, the condition and wiring of the cables (shield on pin 1 only), the number of devices on the line (32 at most), and that the line is not split without a splitter.
Only some devices on the line respond	Check the cable and connectors between the last working and the first non-working device, and make sure all devices on the line are switched on.
Devices respond to the wrong channels or affect each other	Check that the addresses do not overlap and that the DMX mode on the devices matches the patch in the controller.
The device or the connected load does not light up although it receives DMX	Check the values of the dimmer, shutter and strobe channels against the DMX channel table. For the DMX modes for which the sources state it, the chapter DMX channels gives under the mode's heading which channels must be open.
Movement is reversed	Check whether Pan/Tilt inversion is enabled in the device menu or in the controller.
Moving parts do not reach the correct position after power-on or transport	Switch the device off and on again to reset the position, and make sure the transport lock, if any, is released. If this does not help, contact a service center.
Movement is jerky	Check the value of the Pan/Tilt speed channel, if the device has one, and the stability of the DMX signal.

13 Disposal

The crossed-out wheeled bin symbol on the product, in the manual or on the packaging means that the product must not be disposed of with unsorted household waste at the end of its life.

Take the end-of-life equipment to a collection point, for example a municipal collection site or a retailer. Proper disposal enables materials to be recycled and helps prevent possible negative effects on the environment and human health.

Follow the regulations applicable in your country; in the Czech Republic, take-back is governed by Act No. 542/2020 Coll., on End-of-Life Products.

Recycle the packaging materials according to their type.