DMX REFERENCE

VOLT plus PAR L

VOLT+ PAR L

Elation

Manufacturer	Elation
GDTF file	Elation_VOLT_plus_PAR_L_140125.gdtf
GDTF revision	26-24-04 Release · 2026-04-24
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1 About this manual

This document describes the VOLT+ PAR L by Elation. It was compiled from the GDTF file Elation_VOLT_plus_PAR_L_140125.gdtf from the GDTF-Share library.

File revision: “26-24-04 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 Elation; 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	6.8 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Dimmer 1CH	1	512	1, 2, 3, 4, ...
RGB 3CH	3	170	1, 4, 7, 10, ...
Color 6CH	6	85	1, 7, 13, 19, ...
Color and Dimmer 9CH	9	56	1, 10, 19, 28, ...
CMY 11CH	11	46	1, 12, 23, 34, ...
CMY Extended 14CH	14	36	1, 15, 29, 43, ...
Standard 14CH	14	36	1, 15, 29, 43, ...
Extended 20CH	20	25	1, 21, 41, 61, ...


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.

⚠ WARNING

- This device emits ultraviolet (UV) radiation, which can harm the eyes and skin.
- Do not look directly into the light source and avoid prolonged exposure of the eyes and skin at close range. Install the device so that people are not exposed at close range.
- People with increased sensitivity to light, including those taking medication that increases this sensitivity, should avoid UV exposure.

⚠ 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.

4 Product description

Description in the GDTF file

“Introducing the VOLT+ PAR L, a next-generation replacement fixture in Elation’s popular VOLT Series that delivers the ultimate in battery-powered lighting performance with enhanced efficiency, versatility, and durability in a compact, sleek form factor.”

5 Installation

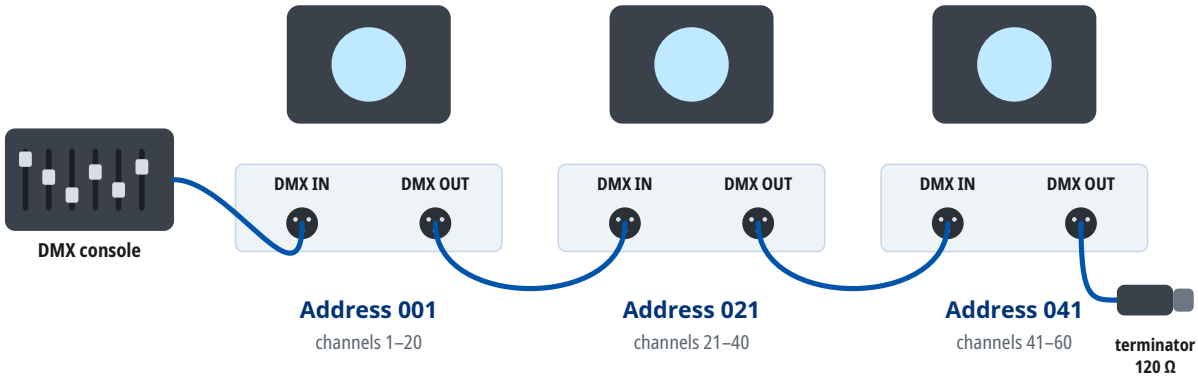
⚠ **WARNING**

- 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: 6.85 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 20CH: every unit occupies 20 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

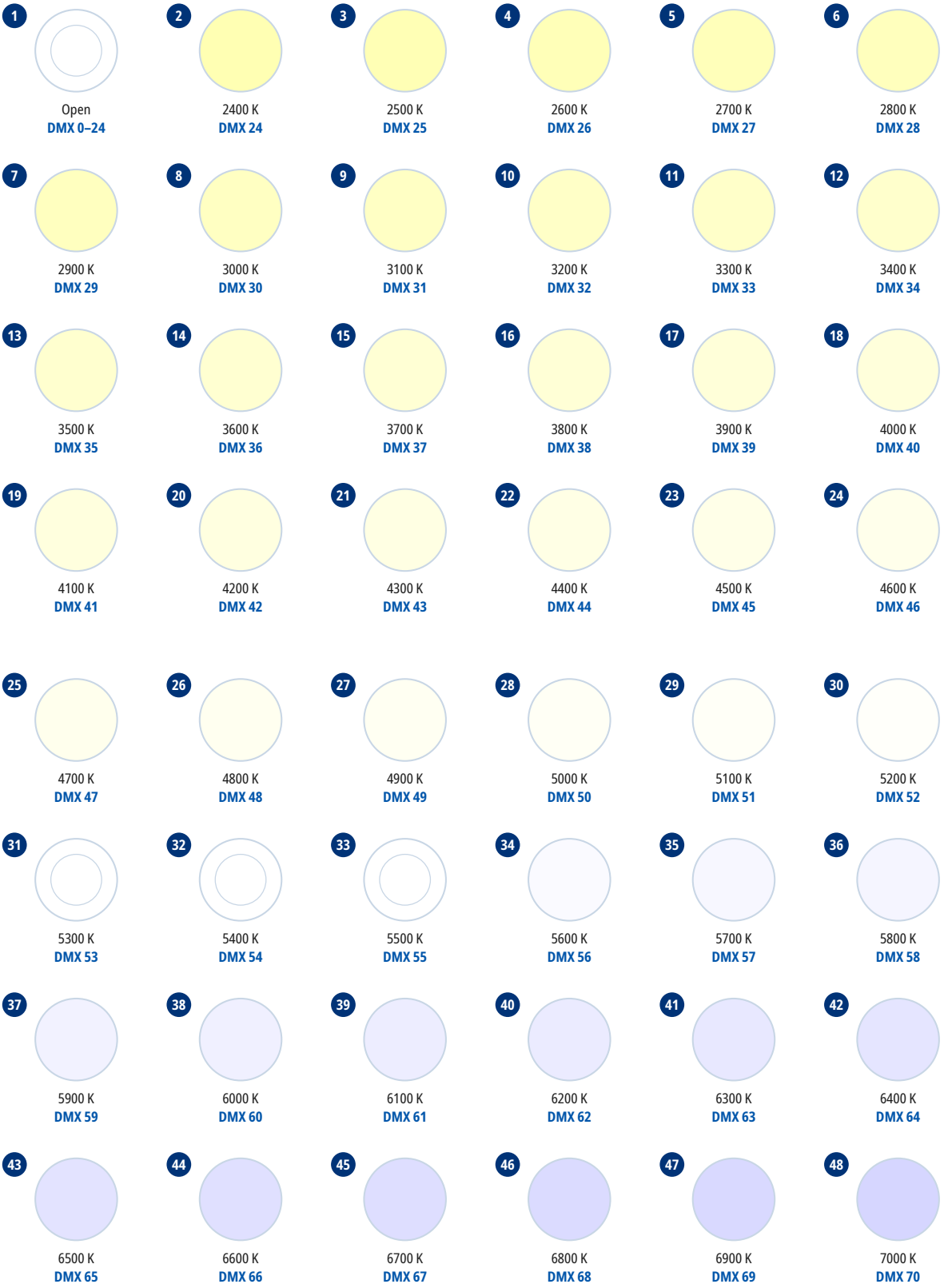
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Extended 20CH”: 20.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 20CH”, you can use, for example, the start addresses 1, 21, 41, 61.
- 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

	Dimmer 1CH 1 channel	RGB 3CH 3 channels	Color 6CH 6 channels	Color and Dimmer 9CH 9 channels	CMY 11CH 11 channels	CMY Extended 14CH 14 channels	Standard 14CH 14 channels	Extended 20CH 20 channels
Dimmer	1	✓	✓	1	1	1	1	1
Dimmer resolution	8 bit			16 bit	16 bit	16 bit	16 bit	16 bit
Shutter / strobe				3	3	3	3	3
Color mixing		1–3	1–6	4, 6, 8	4–6	4, 6, 8	4–9	6× (4–14)
Color temperature					8	11	11	17
Color wheel					7, 9	10, 12	10, 12	16, 18

Color wheel 1

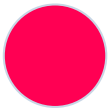


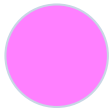
49 7100 K **DMX 71**
50 7200 K **DMX 72**
51 7300 K **DMX 73**
52 7400 K **DMX 74**
53 7500 K **DMX 75**
54 7600 K **DMX 76**
55 7700 K **DMX 77**
56 7800 K **DMX 78**
57 7900 K **DMX 79**
58 8000 K **DMX 80**
59 8100 K **DMX 81**
60 8200 K **DMX 82**
61 8300 K **DMX 83**
62 8400 K **DMX 84**
63 8500 K **DMX 85–86**

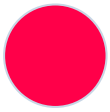
Color wheel 2

1 OFF
2 RED
3 GREEN
4 BLUE
5 WHITE
6 AMBER
7 UV
8 RED + GREEN
9 RED + BLUE
10 RED + WHITE
11 RED + AMBER
12 RED + UV
13 GREEN + BLUE
14 GREEN + WHITE
15 GREEN + AMBER
16 GREEN + UV
17 BLUE + WHITE
18 BLUE + AMBER
19 BLUE + UV
20 WHITE + AMBER
21 WHITE + UV
22 AMBER + UV
23 RED + GREEN + BLUE
24 RED + GREEN + WHITE

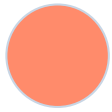
25  RED + GREEN + AMBER

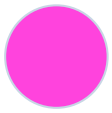
26  RED + GREEN + UV

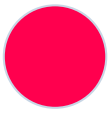
27  RED + BLUE + WHITE

28  RED + BLUE + AMBER

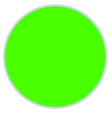
29  RED + BLUE + UV

30  RED + WHITE + AMBER

31  RED + WHITE + UV

32  RED + AMBER + UV

33 GREEN + BLUE + WHITE

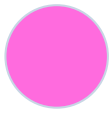
34  GREEN + BLUE + AMBER

35  GREEN + BLUE + UV

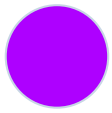
36 GREEN + WHITE + AMBER

37  GREEN + WHITE + UV

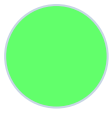
38 GREEN + AMBER + UV

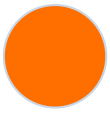
39  BLUE + WHITE + AMBER

40  BLUE + WHITE + UV

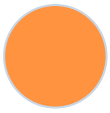
41  BLUE + AMBER + UV

42  WHITE + AMBER + UV

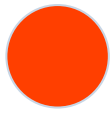
43  RED + GREEN + BLUE + WHITE

44  RED + GREEN + BLUE + AMBER

45  RED + GREEN + BLUE + UV

46  RED + GREEN +WHITE + AMBER

47  RED + GREEN + WHITE + UV

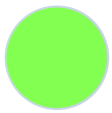
48  RED + GREEN + AMBER + UV

49  RED + BLUE + WHITE + AMBER

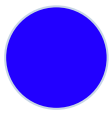
50  RED + BLUE + WHITE + UV

51  RED + BLUE + AMBER + UV

52  RED + WHITE + AMBER + UV

53  GREEN + BLUE + WHITE + AMBER

54  GREEN + BLUE + WHITE + UV

55  GREEN + BLUE + AMBER + UV

56 GREEN + WHITE + AMBER + UV

57  BLUE + WHITE + AMBER + UV

58  RED + GREEN + BLUE + WHITE + AMBER

59  RED + GREEN + BLUE + WHITE + UV

60  RED + GREEN + BLUE + AMBER + UV

61  RED + GREEN + WHITE + AMBER + UV

62  RED + BLUE + WHITE + AMBER + UV

63  GREEN +BLUE + WHITE + AMBER + UV

64  RED + GREEN + BLUE + WHITE + AMBER + UV

Color wheel 3

1 Pale Yellow DMX 1
2 Straw DMX 2
3 Gold Tint DMX 3
4 Spring Yellow DMX 4
5 Medium Yellow DMX 5
6 Yellow DMX 6
7 Deep Amber DMX 7
8 Deep Straw DMX 8
9 Loving Amber DMX 9
10 Gold Amber DMX 10
11 Orange DMX 11
12 Deep Orange DMX 12
13 Dark Amber DMX 13
14 Millennium Gold DMX 14
15 Deep Golden Amber DMX 15
16 Scarlet DMX 16
17 Primary Red DMX 17
18 Bright Red DMX 18
19 Medium Red DMX 19
20 Fire DMX 20
21 Pink DMX 21
22 Medium Pink DMX 22
23 Dark Pink DMX 23
24 Bright Pink DMX 24
25 Bright Rose DMX 25
26 Special Rose Pink DMX 26
27 Vanity Fair DMX 27
28 Magenta DMX 28
29 Dark Magenta DMX 29
30 Rose Purple DMX 30
31 Mauve DMX 31
32 Medium Purple DMX 32
33 Lavender DMX 33
34 Palace blue DMX 34
35 Dark Blue DMX 35
36 Medium Blue DMX 36
37 Deep Blue DMX 37
38 Daylight Blue DMX 38
39 Slate Blue DMX 39
40 Light Blue DMX 40
41 Sky Blue DMX 41
42 Pale Navy Blue DMX 42
43 Marine Blue DMX 43
44 Peacock Blue DMX 44
45 Lagoon Blue DMX 45
46 Medium Blue Green DMX 46
47 Dark Yellow Green DMX 47
48 Primary Green DMX 48

49 Fern Green
DMX 49

50 Moss Green
DMX 50

51 Dark Green
DMX 51

52 Lime Green
DMX 52

53 Pale Green
DMX 53

54 Quarter CT Blue
DMX 54

55 Half CT Blue
DMX 55

56 Full CT Blue
DMX 56

57 Double CT Blue
DMX 57

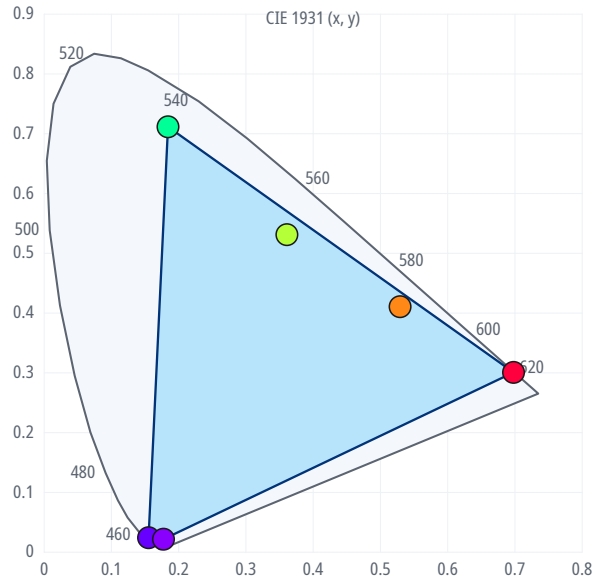
58 Quarter CT Orange
DMX 58

59 Half CT Orange
DMX 59

60 LEE 204 - Full C T Orange
DMX 60–61

61 Open
DMX 0–1

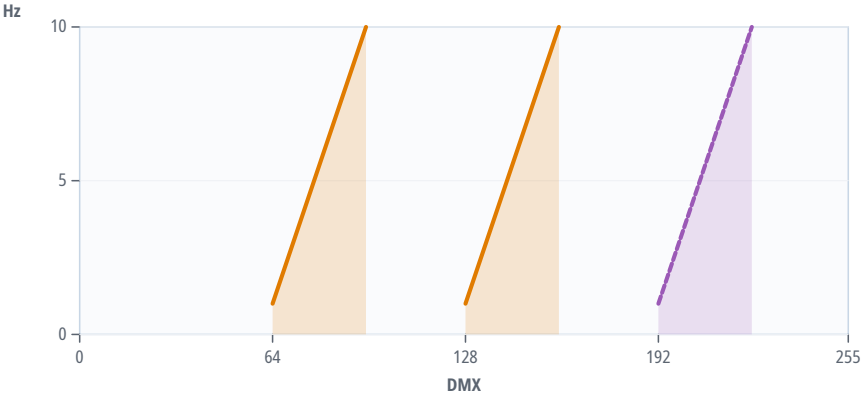
LED colors and the colors they mix



LED	x	y	nm
Red-LED	0.698	0.301	484
Green-LED	0.184	0.712	484
Blue-LED	0.155	0.024	484
Lime-LED	0.361	0.531	484
Amber-LED	0.529	0.411	484
UV-LED	0.177	0.022	484

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

Strobe rate



CH 3 · Standard 14CH

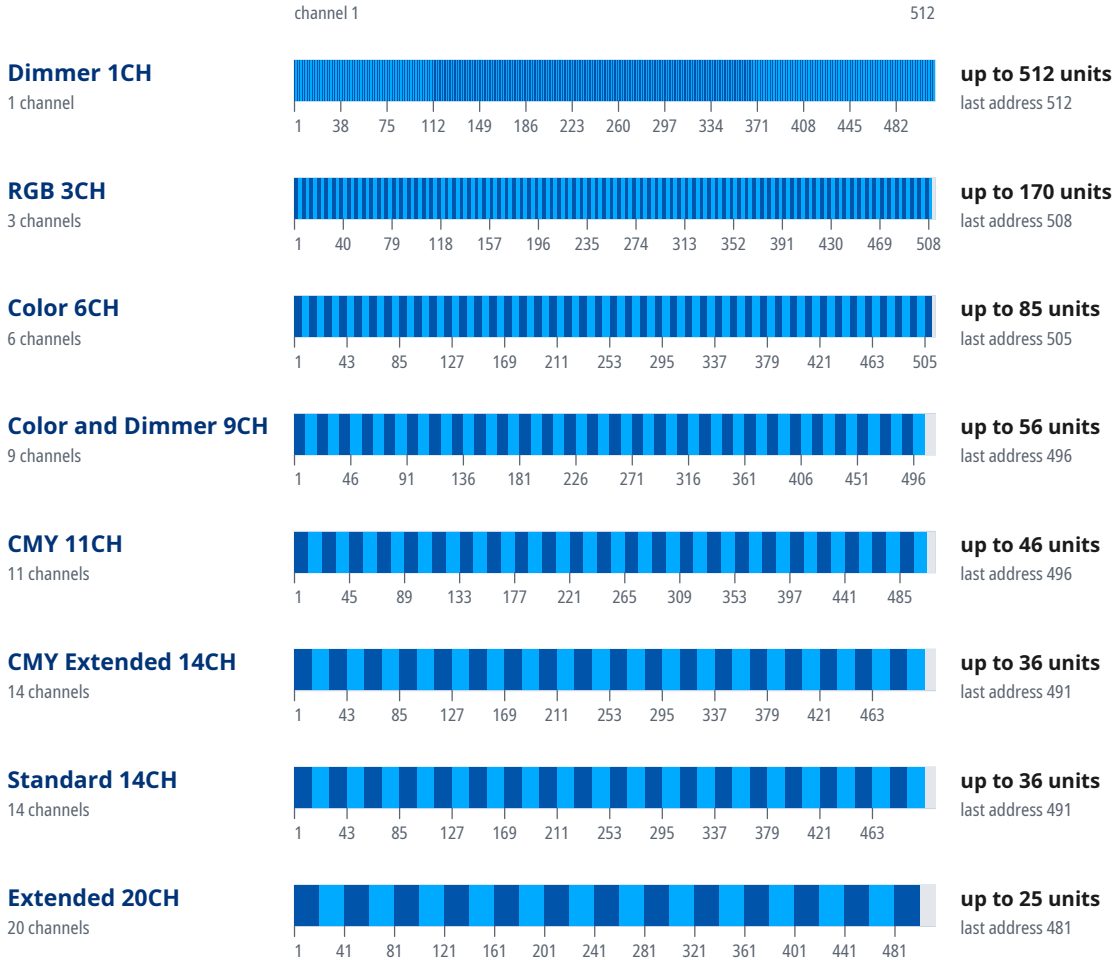
64–95: 1–10 Hz
Strobe Effect Slow to Fast

128–159: 1–10 Hz
Pulse-Effect in Sequences

192–223: 1–10 Hz
Random Strobe Effect Slow to Fast

9 DMX channels

Units in one DMX universe



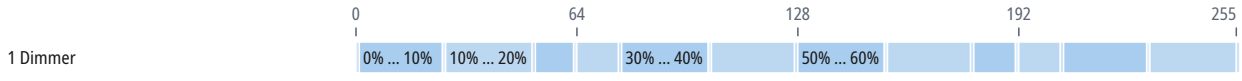
Start addresses of 20 units in the mode “Extended 20CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	101	11	201	16	301
2	21	7	121	12	221	17	321
3	41	8	141	13	241	18	341
4	61	9	161	14	261	19	361
5	81	10	181	15	281	20	381

Mode Dimmer 1CH

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance

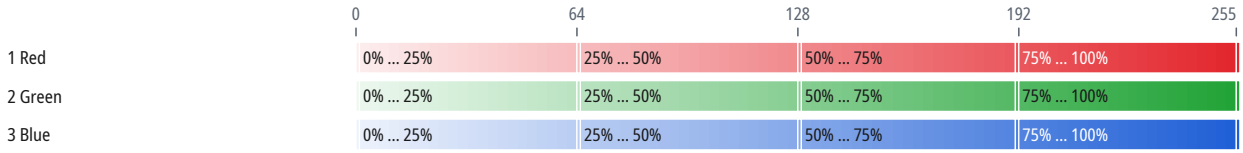


CH	Function	DMX	Description
1	Dimmer	0	0%
		1–24	0% … 10%
		25	10%
		26–50	10% … 20%
		51	20%
		52–62	20% … 25%
		63	25%
		64–75	25% … 30%
		76	30%
		77–101	30% … 40%
		102	40%
		103–126	40% … 50%
		127	50%
		128–152	50% … 60%
		153	60%
		154–177	60% … 70%
		178	70%
		179–190	70% … 75%
		191	75%
		192–203	75% … 80%
		204	80%
		205–228	80% … 90%
		229	90%
		230–254	90% … 100%
		255	100%

Mode RGB 3CH

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 2 Green 255, CH 3 Blue 255.

Channel functions at a glance



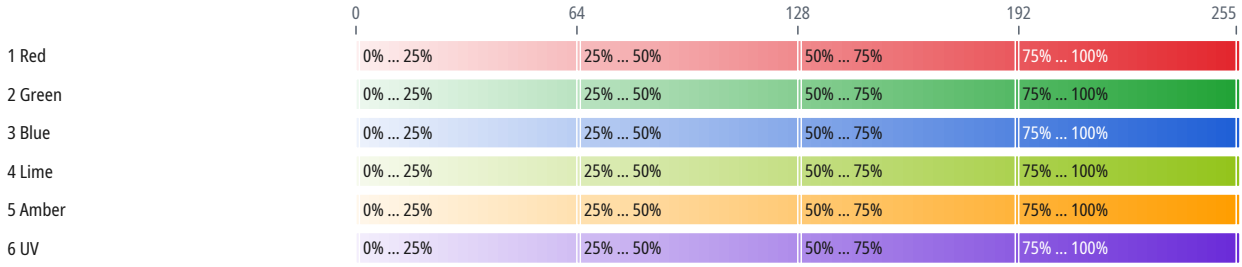
CH	Function	DMX	Description
1	Red	0	0%
		1–63	0% … 25%
		64	25%
		65–127	25% … 50%
		128	50%

CH	Function	DMX	Description
1	Red (continued)	129–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
2	Green	0	0%
		1–63	0% … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
3	Blue	0	0%
		1–63	0% … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%

Mode Color 6CH

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 2 Green 255, CH 3 Blue 255, CH 4 Lime 0, CH 5 Amber 0, CH 6 UV 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Red		Same as CH 1 in the mode “RGB 3CH” (p. 13)
2	Green		Same as CH 2 in the mode “RGB 3CH” (p. 14)
3	Blue		Same as CH 3 in the mode “RGB 3CH” (p. 14)
4	Lime	0	0%
		1–63	0% … 25%
		64	25%

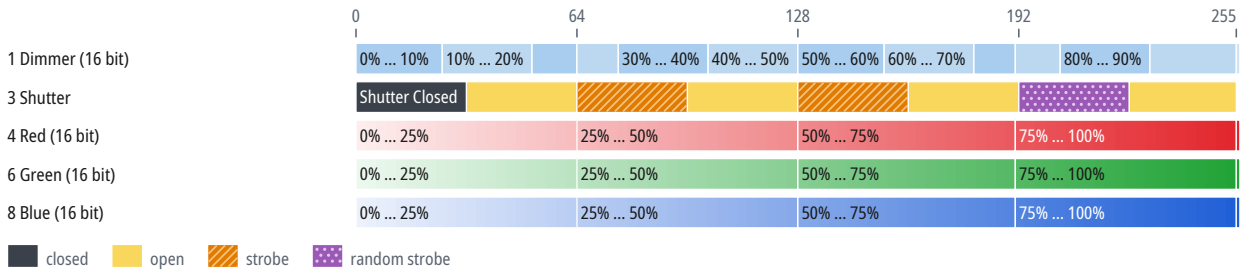
CH	Function	DMX	Description
4	Lime (continued)	65–127	25% … 50%
		128	50%
		129–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
5	Amber	0	0%
		1–63	0% … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
6	UV	0	0%
		1–63	0% … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%

Mode Color and Dimmer 9CH

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

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 47, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–25	0% … 10%
		25–51	10% … 20%
		51–64	20% … 25%
		64–76	25% … 30%
		76–102	30% … 40%
		102–128	40% … 50%
		128–153	50% … 60%
		153–179	60% … 70%
		179–191	70% … 75%
		191–204	75% … 80%
		204–230	80% … 90%
		230–255	90% … 100%
		255	100%
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter	0–31	Shutter Closed
		32–63	No Function (Shutter Open)
		64–95	Strobe Effect Slow to Fast (1–10 Hz)
		96–127	No Function (Shutter Open)
		128–159	Pulse-Effect in Sequences (1–10 Hz)
		160–191	No Function (Shutter Open)
		192–223	Random Strobe Effect Slow to Fast (1–10 Hz)
		224–255	No Function (Shutter Open)
4	Red	0–64	0% … 25%
		64–128	25% … 50%
		128–191	50% … 75%
		191–255	75% … 100%
		255	100%
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green	0–64	0% … 25%
		64–128	25% … 50%
		128–191	50% … 75%
		191–255	75% … 100%
		255	100%
7	Green Fine	0–255	Fine adjustment of CH 6

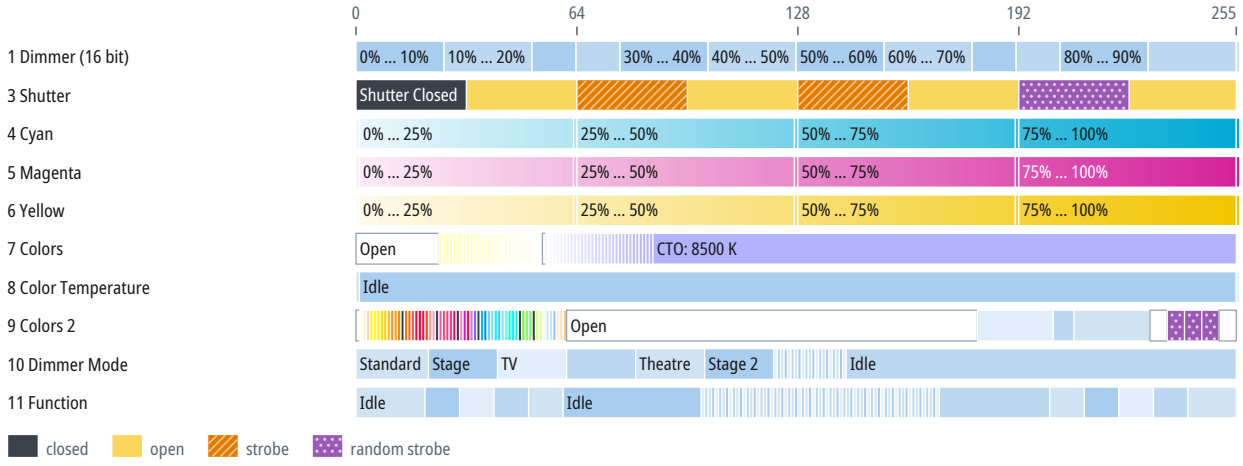
CH	Function	DMX	Description
8	Blue	0–64	0% … 25%
		64–128	25% … 50%
		128–191	50% … 75%
		191–255	75% … 100%
		255	100%
9	Blue Fine	0–255	Fine adjustment of CH 8

Mode CMY 11CH

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

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 47, CH 4 Cyan 0, CH 5 Magenta 0, CH 6 Yellow 0, CH 7 Colors 0, CH 9 Colors 2 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–25	0% … 10%
		25–51	10% … 20%
		51–63	20% … 25%
		64–76	25% … 30%
		76–102	30% … 40%
		102–127	40% … 50%
		128–153	50% … 60%
		153–179	60% … 70%
		179–191	70% … 75%
		191	75%
		192–204	75% … 80%
		204–230	80% … 90%
		230–255	90% … 100%
		255	100%
2	Dimmer Fine	0–255	Fine adjustment of CH 1

CH	Function	DMX	Description
3	Shutter		Same as CH 3 in the mode “Color and Dimmer 9CH” (p. 16)
4	Cyan	0	0%
		1–62	0% … 25%
		63	25%
		64–126	25% … 50%
		127	50%
		128–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
5	Magenta	0	0%
		1–62	0% … 25%
		63	25%
		64–126	25% … 50%
		127	50%
		128–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
6	Yellow	0	0%
		1–62	0% … 25%
		63	25%
		64–126	25% … 50%
		127	50%
		128–190	50% … 75%
		191	75%
		192–254	75% … 100%
		255	100%
7	Colors	0–23	Open
		24	2400 K
		25	2500 K
		26	2600 K
		27	2700 K
		28	2800 K
		29	2900 K
		30	3000 K
		31	3100 K
		32	3200 K
		33	3300 K
		34	3400 K
		35	3500 K

CH	Function	DMX	Description
7	Colors (continued)	36	3600 K
		37	3700 K
		38	3800 K
		39	3900 K
		40	4000 K
		41	4100 K
		42	4200 K
		43	4300 K
		44	4400 K
		45	4500 K
		46	4600 K
		47	4700 K
		48	4800 K
		49	4900 K
		50	5000 K
		51	5100 K
		52	5200 K
		53	5300 K
		54	5400 K
		55	5500 K
		56	5600 K
		57	5700 K
		58	5800 K
		59	5900 K
		60	6000 K
		61	6100 K
		62	6200 K
		63	6300 K
		64	6400 K
		65	6500 K
		66	6600 K
		67	6700 K
		68	6800 K
		69	6900 K
		70	7000 K
		71	7100 K
		72	7200 K
		73	7300 K
		74	7400 K
		75	7500 K
		76	7600 K

CH	Function	DMX	Description
7	Colors (continued)	77	7700 K
		78	7800 K
		79	7900 K
		80	8000 K
		81	8100 K
		82	8200 K
		83	8300 K
		84	8400 K
		85	2400 K to: 8500 K
		86–255	CTO: 8500 K
8	Color Temperature		CTC Crossfade
		0	CTC
		1–254	Idle
		255	Color Mix
9	Colors 2	0	Open
		1	Pale Yellow
		2	Straw
		3	Gold Tint
		4	Spring Yellow
		5	Medium Yellow
		6	Yellow
		7	Deep Amber
		8	Deep Straw
		9	Loving Amber
		10	Gold Amber
		11	Orange
		12	Deep Orange
		13	Dark Amber
		14	Millennium Gold
		15	Deep Golden Amber
		16	Scarlet
		17	Primary Red
		18	Bright Red
		19	Medium Red
		20	Fire
		21	Pink
		22	Medium Pink
		23	Dark Pink
		24	Bright Pink
		25	Bright Rose
		26	Special Rose Pink

CH	Function	DMX	Description
9	Colors 2 (continued)	27	Vanity Fair
		28	Magenta
		29	Dark Magenta
		30	Rose Purple
		31	Mauve
		32	Medium Purple
		33	Lavender
		34	Palace blue
		35	Dark Blue
		36	Medium Blue
		37	Deep Blue
		38	Daylight Blue
		39	Slate Blue
		40	Light Blue
		41	Sky Blue
		42	Pale Navy Blue
		43	Marine Blue
		44	Peacock Blue
		45	Lagoon Blue
		46	Medium Blue Green
		47	Dark Yellow Green
		48	Primary Green
		49	Fern Green
		50	Moss Green
		51	Dark Green
		52	Lime Green
		53	Pale Green
		54	Quarter CT Blue
		55	Half CT Blue
		56	Full CT Blue
		57	Double CT Blue
		58	Quarter CT Orange
		59	Half CT Orange
		60	Full CT Orange
		61–179	Open
		180–201	Clockwise fast to slow (7200–14 °/s)
		202–207	Color 1 Wheel Spin: Stop
		208–229	Counter-clockwise slow to fast (14–7200 °/s)
		230–234	Open
		235–239	Color 2 Wheel Random: Fast
		240–244	Medium
		245–249	Color 2 Wheel Random: Slow

CH	Function	DMX	Description
9	Colors 2 (continued)	250–255	Open
10	Dimmer Mode	0–20	Standard
		21–40	Stage
		41–60	TV
		61–80	Architectural
		81–100	Theatre
		101–120	Stage 2
		121	0s Delay
		122	0/1s Delay
		123	0/2s Delay
		124	0/3s Delay
		125	0/4s Delay
		126	0/5s Delay
		127	0/6s Delay
		128	0/7s Delay
		129	0/8s Delay
		130	0/9s Delay
		131	1s Delay
		132	1/5s Delay
		133–141	2...10s Delay
		142–255	Idle
11	Function	0–19	Idle
		20–29	2hr Run Time
		30–39	4hr Run Time
		40–49	8hr Run Time
		50–59	12hr Run Time
		60–99	Idle
		100	900 Hz
		101	910 Hz
		102	920 Hz
		103	930 Hz
		104	940 Hz
		105	950 Hz
		106	960 Hz
		107	970 Hz
		108	980 Hz
		109	990 Hz
		110	1000 Hz
		111	1010 Hz
		112–113	1020 Hz (1020–1030 Hz)
		114	1040 Hz
		115	1050 Hz

CH	Function	DMX	Description
11	Function (continued)	116	1060 Hz
		117	1070 Hz
		118	1080 Hz
		119	1090 Hz
		120	1100 Hz
		121	1110 Hz
		122	1120 Hz
		123	1130 Hz
		124	1140 Hz
		125	1150 Hz
		126	1160 Hz
		127	1170 Hz
		128	1180 Hz
		129	1190 Hz
		130	1200 Hz
		131	1210 Hz
		132	1220 Hz
		133	1230 Hz
		134	1240 Hz
		135	1250 Hz
		136	1260 Hz
		137	1270 Hz
		138	1280 Hz
		139	1290 Hz
		140	1300 Hz
		141	1310 Hz
		142	1320 Hz
		143	1330 Hz
		144	1340 Hz
		145	1350 Hz
		146	1360 Hz
		147	1370 Hz
		148	1380 Hz
		149	1390 Hz
		150	1400 Hz
		151	1410 Hz
		152	1420 Hz
		153	1430 Hz
		154	1440 Hz
		155	1450 Hz
		156	1460 Hz
		157	1470 Hz

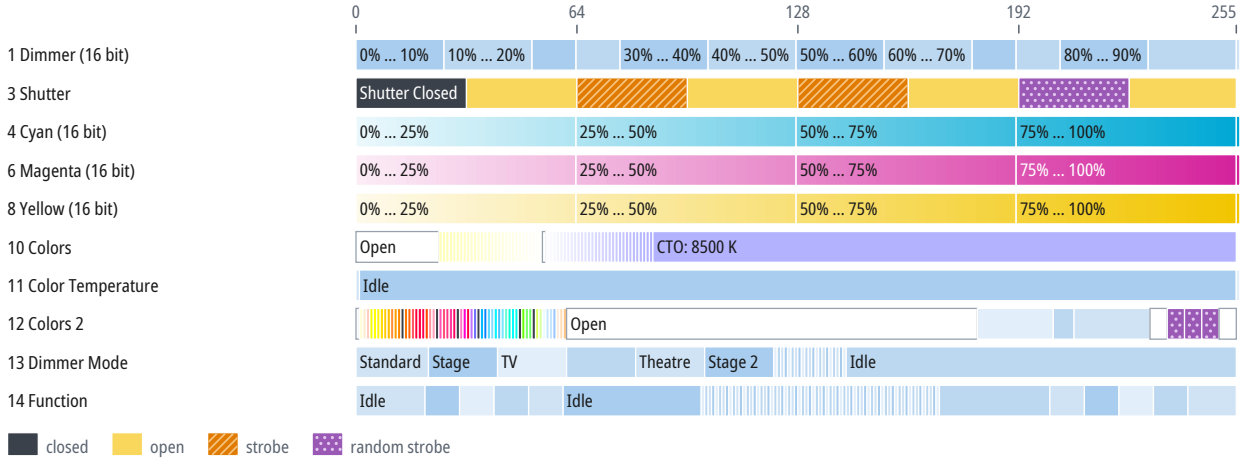
CH	Function	DMX	Description
11	Function (continued)	158	1480 Hz
		159	1490 Hz
		160	1500 Hz
		161	2500 Hz
		162	4000 Hz
		163	5000 Hz
		164	6000 Hz
		165	10000 Hz
		166	15000 Hz
		167	20000 Hz
		168	25000 Hz
		169–200	Dimmer Curve: Idle
		201–210	Curve Linear (default)
		211–220	Curve Square
		221–230	Curve Inverse Square
		231–240	Curve S-Curve
		241–255	Idle (4)

Mode CMY Extended 14CH

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

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 47, CH 4 Cyan 0, CH 6 Magenta 0, CH 8 Yellow 0, CH 10 Colors 0, CH 12 Colors 2 0.

Channel functions at a glance



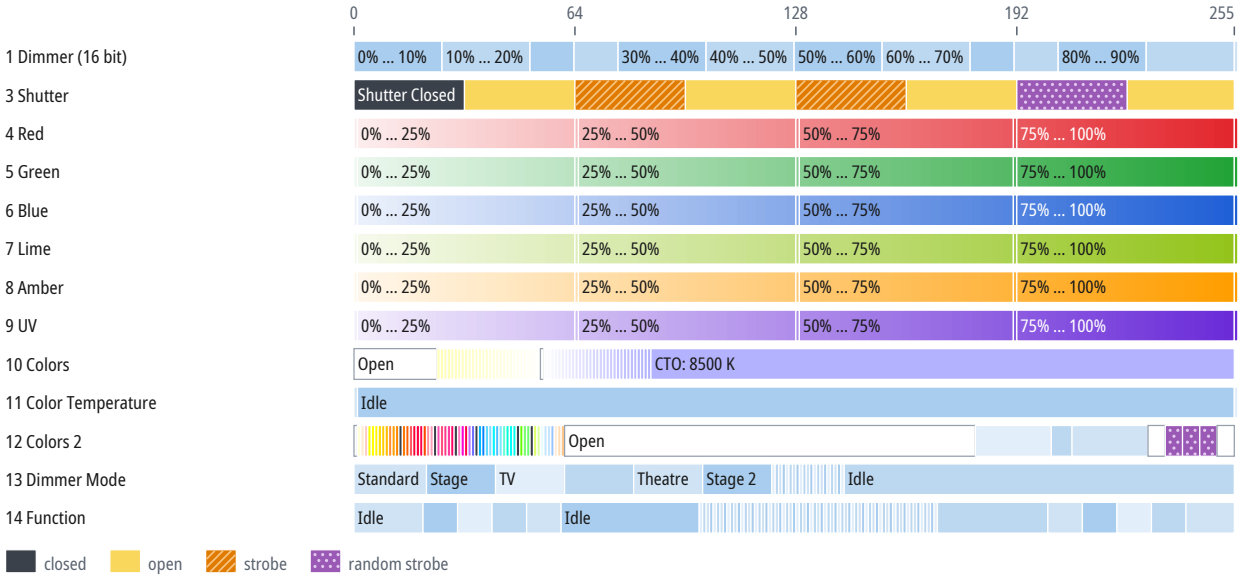
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “CMY 11CH” (p. 17)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 3 in the mode “Color and Dimmer 9CH” (p. 16)
4	Cyan	0–63	0% … 25%
		63	25%
		64–127	25% … 50%
		127	50%
		128–191	50% … 75%
		191	75%
		192–255	75% … 100%
		255	100%
5	Cyan Fine	0–255	Fine adjustment of CH 4
6	Magenta	0–63	0% … 25%
		63	25%
		64–127	25% … 50%
		127	50%
		128–191	50% … 75%
		191	75%
		192–255	75% … 100%
		255	100%
7	Magenta Fine	0–255	Fine adjustment of CH 6
8	Yellow	0–63	0% … 25%
		63	25%
		64–127	25% … 50%
		127	50%
		128–191	50% … 75%
		191	75%
		192–255	75% … 100%
		255	100%
9	Yellow Fine	0–255	Fine adjustment of CH 8
10	Colors		Same as CH 7 in the mode “CMY 11CH” (p. 18)
11	Color Temperature		Same as CH 8 in the mode “CMY 11CH” (p. 20)
12	Colors 2		Same as CH 9 in the mode “CMY 11CH” (p. 20)
13	Dimmer Mode		Same as CH 10 in the mode “CMY 11CH” (p. 22)
14	Function		Same as CH 11 in the mode “CMY 11CH” (p. 22)

Mode Standard 14CH

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

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 47, CH 4 Red 255, CH 5 Green 255, CH 6 Blue 255, CH 7 Lime 255, CH 8 Amber 255, CH 9 UV 255, CH 10 Colors 0, CH 12 Colors 2 0.

Channel functions at a glance



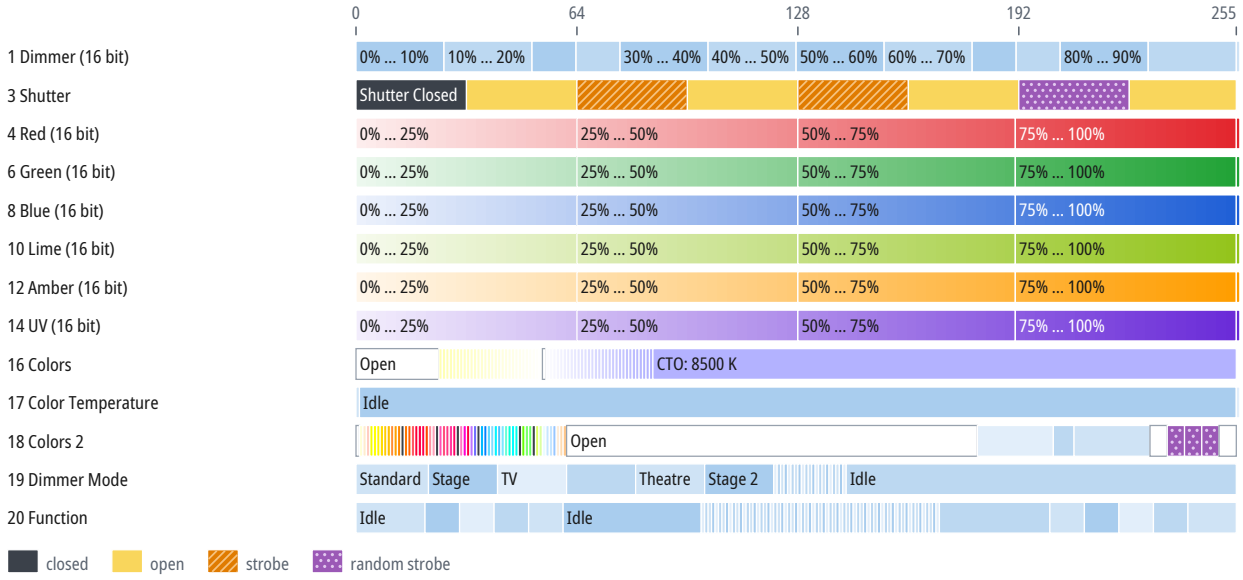
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “CMY 11CH” (p. 17)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 3 in the mode “Color and Dimmer 9CH” (p. 16)
4	Red		Same as CH 1 in the mode “RGB 3CH” (p. 13)
5	Green		Same as CH 2 in the mode “RGB 3CH” (p. 14)
6	Blue		Same as CH 3 in the mode “RGB 3CH” (p. 14)
7	Lime		Same as CH 4 in the mode “Color 6CH” (p. 14)
8	Amber		Same as CH 5 in the mode “Color 6CH” (p. 15)
9	UV		Same as CH 6 in the mode “Color 6CH” (p. 15)
10	Colors		Same as CH 7 in the mode “CMY 11CH” (p. 18)
11	Color Temperature		Same as CH 8 in the mode “CMY 11CH” (p. 20)
12	Colors 2		Same as CH 9 in the mode “CMY 11CH” (p. 20)
13	Dimmer Mode		Same as CH 10 in the mode “CMY 11CH” (p. 22)
14	Function		Same as CH 11 in the mode “CMY 11CH” (p. 22)

Mode Extended 20CH

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

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Shutter 47, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 Lime 255, CH 12 Amber 255, CH 14 UV 255, CH 16 Colors 0, CH 18 Colors 2 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “CMY 11CH” (p. 17)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 3 in the mode “Color and Dimmer 9CH” (p. 16)
4	Red		Same as CH 4 in the mode “Color and Dimmer 9CH” (p. 16)
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green		Same as CH 6 in the mode “Color and Dimmer 9CH” (p. 16)
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue		Same as CH 8 in the mode “Color and Dimmer 9CH” (p. 17)
9	Blue Fine	0–255	Fine adjustment of CH 8
10	Lime		Color Add_GC 1
		0–64	0% ... 25%
		64–128	25% ... 50%
		128–191	50% ... 75%
		191–255	75% ... 100%
		255	100%
11	Lime Fine	0–255	Fine adjustment of CH 10
12	Amber	0–64	0% ... 25%
		64–128	25% ... 50%
		128–191	50% ... 75%
		191–255	75% ... 100%
		255	100%

CH	Function	DMX	Description
13	Amber Fine	0–255	Fine adjustment of CH 12
14	UV	0–64	0% ... 25%
		64–128	25% ... 50%
		128–191	50% ... 75%
		191–255	75% ... 100%
		255	100%
15	UV Fine	0–255	Fine adjustment of CH 14
16	Colors		Same as CH 7 in the mode “CMY 11CH” (p. 18)
17	Color Temperature		Same as CH 8 in the mode “CMY 11CH” (p. 20)
18	Colors 2		Same as CH 9 in the mode “CMY 11CH” (p. 20)
19	Dimmer Mode		Same as CH 10 in the mode “CMY 11CH” (p. 22)
20	Function		Same as CH 11 in the mode “CMY 11CH” (p. 22)

10 Technical specifications

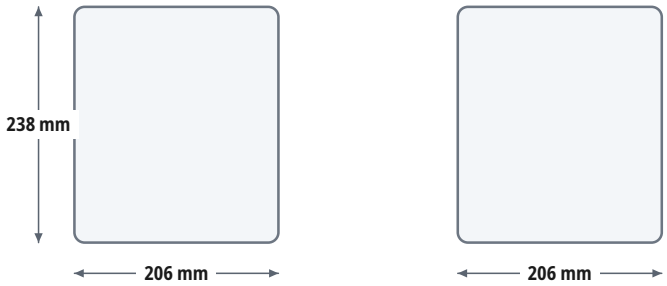
Parameter	Value
Light	
Light source	LED
LED power	60 W
Luminous flux	4,060 lm
Color temperature	6,500 K
Color rendering index (CRI)	81
Optics	
Beam angle	15°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RDM	yes (manufacturer ID 0x22A6, device model ID 0x0060)
Electrical	
Power connectors	powerCON TRUE1 IN, powerCONTRUE1TOP OUT
Dimensions and construction	
Weight	6.8 kg
Operating environment	
Operating temperature	-15 to 45 °C

Speeds and ranges

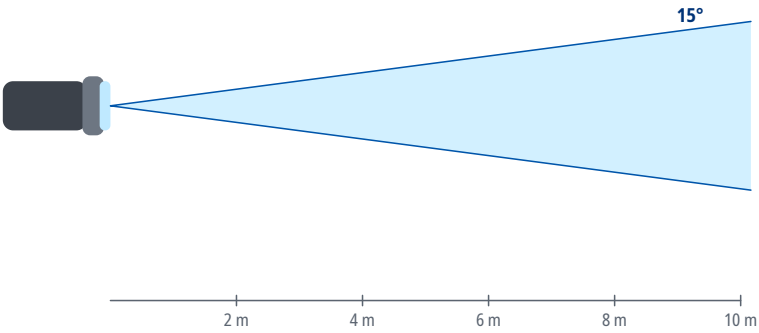
Parameter	Value
Strobe frequency	1–10 Hz
LED frequency	900–25000 Hz
Color wheel 3 rotation	up to 7200 °/s (1200 rpm)

Dimensions

weight 6.8 kg



Spot diameter



Distance	Ø 15°
2 m	0.53 m
4 m	1.1 m
6 m	1.6 m
8 m	2.1 m
10 m	2.6 m
15 m	3.9 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.

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.