DMX REFERENCE

pixelPATT

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_pixelPATT_129557.gdtf
GDTF revision	2026-02-19 3D model update
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 5
6 Connections 5
7 Operation 6
8 Functions at a glance 6
9 DMX channels 11
Mode 1 - Wash 12
Mode 2 - Pattern 17
Mode 3 - Pixel RGB 23
Mode 4 - Pixel RGBW 26
Mode 5 - Pattern full RGB 28
Mode 6 - Pattern full RGBW 30
Mode 7 - Pixel RGBW only 32
10 Technical specifications 33
11 Maintenance and cleaning 34
12 Troubleshooting 34
13 Disposal 35

1 About this manual

This document describes the pixelPATT™ by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_pixelPATT_129557.gdtf from the GDTF-Share library.

File revision: “2026-02-19 3D model update”.

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 Robe Lighting; 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
Power consumption	210 W
Weight	12 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 - Wash	13	39	1, 14, 27, 40, ...
Mode 2 - Pattern	32	16	1, 33, 65, 97, ...
Mode 3 - Pixel RGB	40	12	1, 41, 81, 121, ...
Mode 4 - Pixel RGBW	47	10	1, 48, 95, 142, ...
Mode 5 - Pattern full RGB	53	9	1, 54, 107, 160, ...
Mode 6 - Pattern full RGBW	60	8	1, 61, 121, 181, ...
Mode 7 - Pixel RGBW only	28	18	1, 29, 57, 85, ...

No light? Check these channels

- Mode 1 - Wash: CH 8 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 9 Dimmer 1 above 0; CH 12 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 2 above 0
- Mode 2 - Pattern: CH 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 28 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 29 Dimmer 2 above 0; CH 30 Shutter 3 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 31 Dimmer 3 above 0
- Mode 3 - Pixel RGB: CH 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 17 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 18 Dimmer 2 above 0
- Mode 4 - Pixel RGBW: CH 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 17 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 18 Dimmer 2 above 0
- Mode 5 - Pattern full RGB: CH 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 28 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 29 Dimmer 2 above 0; CH 30 Shutter 3 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 31 Dimmer 3 above 0
- Mode 6 - Pattern full RGBW: CH 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 28 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 29 Dimmer 2 above 0; CH 30 Shutter 3 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 31 Dimmer 3 above 0


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.

⚠ CAUTION

- This device is designed to be powered by safety extra-low voltage (SELV). Use only a power supply that meets SELV requirements and has sufficient capacity for the total current drawn by the device and any connected load.
- Power supply: 48 V.
- Observe the correct polarity and do not exceed the specified voltage; reversed polarity or overvoltage can damage the device.
- Size the supply wires for the total current drawn. Undersized wires heat up and cause a voltage drop.
- Connect and disconnect wires only with the power switched off.

⚠ 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.

4 Product description

Description in the GDTF file

“Joining Robe’s line of retro style lighting products is pixelPATT, the latest addition to the PATT family. In spite of its eye catching retro design, pixelPATT is based on modern LED pixel controlled technology.”

“For full data (consuption, voltage etc.) please add PATT Driver.”

5 Installation

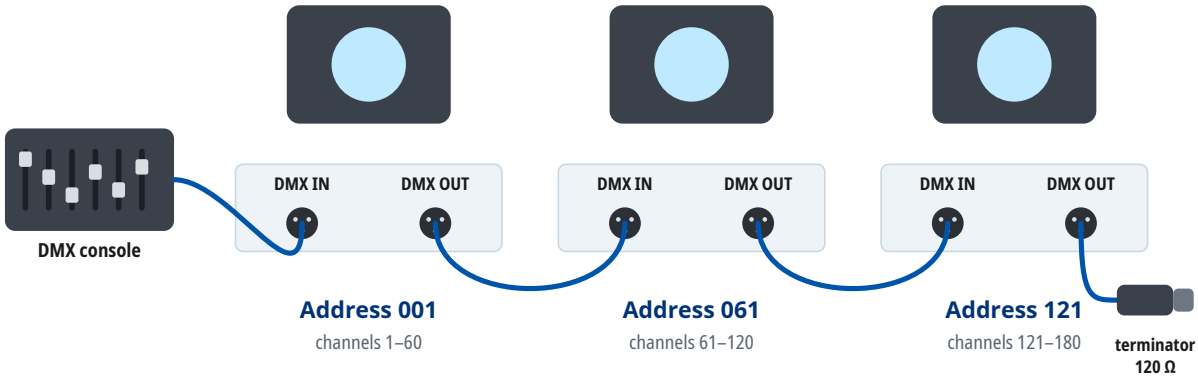
⚠ **WARNING**

- 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: 12 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 6 - Pattern full RGBW: every unit occupies 60 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 “Mode 6 - Pattern full RGBW”: 60.
- 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 “Mode 6 - Pattern full RGBW”, you can use, for example, the start addresses 1, 61, 121, 181.
- 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.

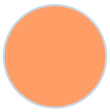
8 Functions at a glance

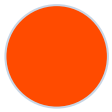
Functions in each DMX mode

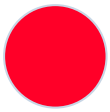
	Mode 1 - Wash 13 channels	Mode 2 - Pattern 32 channels	Mode 3 - Pixel RGB 40 channels	Mode 4 - Pixel RGBW 47 channels	Mode 5 - Pattern full RGB 53 channels	Mode 6 - Pattern full RGBW 60 channels	Mode 7 - Pixel RGBW only 28 channels
Dimmer	**9, 13**	**13, 29, 31**	**13, 18**	**13, 18**	**13, 29, 31**	**13, 29, 31**	✓
Dimmer resolution	8 bit	16 bit	16 bit	16 bit	16 bit	16 bit	
Shutter / strobe	**8, 12**	**12, 28, 30**	**12, 17**	**12, 17**	**12, 28, 30**	**12, 28, 30**	
Color mixing	**3–6**	8 channels (3–26)	25 channels (3–40)	26 channels (3–41)	29 channels (3–53)	30 channels (3–54)	**1–22**
Color temperature	**7**	**11**	**11**	**11**	**11**	**11**	
Effects / macros	**2**	**2, 27**	**2**	**2**	**2, 27**	**2, 27**	
Pixel control			✓	✓	✓	✓	

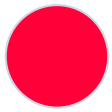
Color wheel

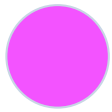
1
No function
DMX 0

2 
Filter 4 (Medium Bastard Amber)
DMX 1–2

3 
Filter 25 (Sunset red)
DMX 3–4

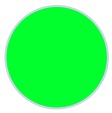
4 
Filter 19 (Fire)
DMX 5–6

5 
Filter 26 (Bright Red)
DMX 7–8

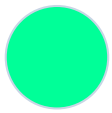
6 
Filter 58 (Lavender)
DMX 9–10

7 
Filter 68 (Sky Blue)
DMX 11–12

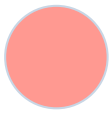
8 
Fliter 36 (Medium Pink)
DMX 13–14

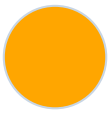
9 
Filter 89 (Moss Green)
DMX 15–16

10
Filter 88 (Lime Green)
DMX 17–18

11 
Filter 90 (Dark Yellow Green)
DMX 19–20

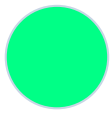
12 
Filter 49 (Medium Purple)
DMX 21–22

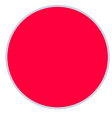
13 
Filter 52 (Light Lavender)
DMX 23–24

14 
Filter 102 (Light Amber)
DMX 25–26

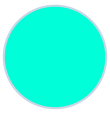
15 
Filter 103 (Straw)
DMX 27–28

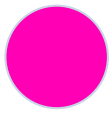
16
Filter 140 (Summer Blue)
DMX 29–30

17 
Fliter 124 (Dark Green)
DMX 31–32

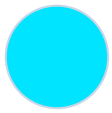
18 
Filter 106 (Primary Red)
DMX 33–34

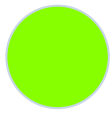
19 
Filter 111 (Dark Pink)
DMX 35–36

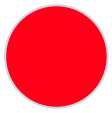
20 
Filter 115 (Peacock Blue)
DMX 37–38

21 
Filter 126 (Mauve)
DMX 39–40

22
Filter 117 (Steel Blue)
DMX 41–42

23 
Filter 118 (Light Blue)
DMX 43–44

24 
Filter 122 (Fern Green)
DMX 45–46

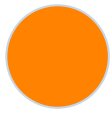
25 
Filter 182 (Light Red)
DMX 47–48

26
Filter 121 (Filter Green)
DMX 49–50

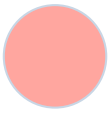
27 
Filter 128 (Bright Pink)
DMX 51–52

28
Filter 131 (Marine Blue)
DMX 53–54

29 
Filter 132 (Medium Blue)
DMX 55–56

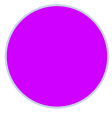
30 
Filter 134 (Golden Amber)
DMX 57–58

31 
Filter 135 (Deep Golden Amber)
DMX 59–60

32 
Filter 136 (Pale Lavender)
DMX 61–62

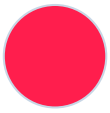
33
Filter 137 (Special Lavender)
DMX 63–64

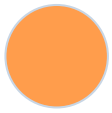
34
Filter 138 (Pale Green)
DMX 65–66

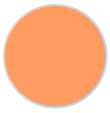
35 
Filter 798 (Chrysalis Pink)
DMX 67–68

36 
Filter 141 (Bright Blue)
DMX 69–70

37 
Filter 147 (Apricot)
DMX 71–72

38 
Filter 148 (Bright Rose)
DMX 73–74

39 
Filter 152 (Pale Gold)
DMX 75–76

40 
Filter 154 (Pale Rose)
DMX 77–78

41
Filter 157 (Pink)
DMX 79–80

42
Filter 143 (Pale Navy Blue)
DMX 81–82

43
Filter 162 (Bastard Amber)
DMX 83–84

44
Filter 164 (Flame Red)
DMX 85–86

45
Filter 165 (Daylight Blue)
DMX 87–88

46
Filter 169 (Lilac Tint)
DMX 89–90

47
Filter 170 (Deep Lavender)
DMX 91–92

48
Filter 172 (Lagoon Blue)
DMX 93–94

49 Filter 194 (Surprise Pink)
DMX 95–96

50 Filter 180 (Dark Lavender)
DMX 97–98

51 Filter 181 (Congo Blue)
DMX 99–100

52 Filter 197 (Alice Blue)
DMX 101–102

53 Filter 201 (Full CT Blue)
DMX 103–104

54 Filter 202 (Half CT Blue)
DMX 105–106

55 Filter 203 (Quarter CT Blue)
DMX 107–108

56 Filter 204 (Full CT Orange)
DMX 109–110

57 Filter 219 (Fluorescent Green)
DMX 111–112

58 Filter 206 (Quarter CT Orange)
DMX 113–114

59 Filter 247 (Filter Minus Green)
DMX 115–116

60 Filter 248 (Half Minus Green)
DMX 117–118

61 Filter 281 (Three Quarter CT Blue)
DMX 119–120

62 Filter 285 (Three Quarter CT Orange)
DMX 121–122

63 Filter 352 (Glacier Blue)
DMX 123–124

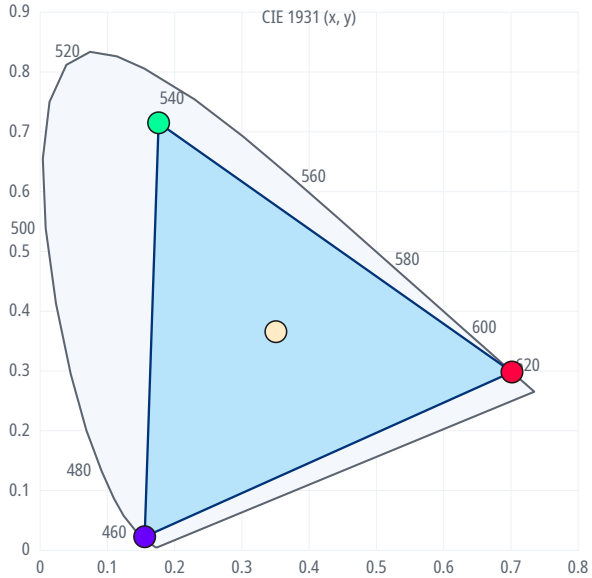
64 Filter 353 (Lighter Blue)
DMX 125–126

65 Filter 507 (Madge)
DMX 127–128

66 Filter 778 (Millennium Gold)
DMX 129–130

67 Filter 793 (Vanity Fair)
DMX 131–132

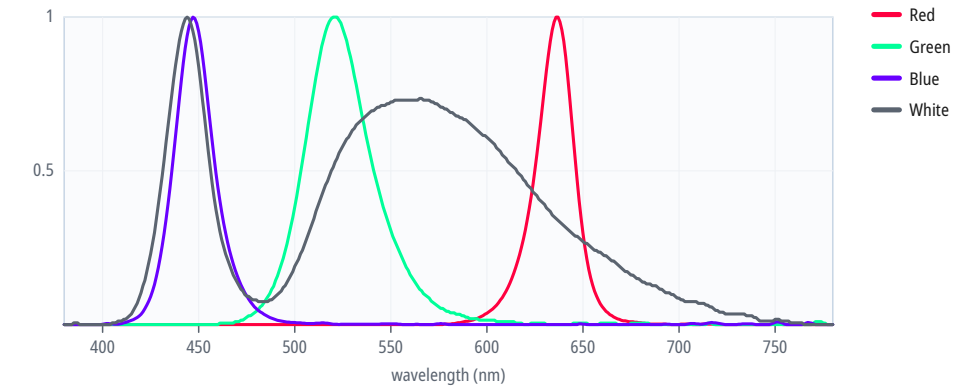
LED colors and the colors they mix



LED	x	y	nm
Red	0.702	0.298	626
Green	0.176	0.715	527
Blue	0.155	0.023	452
White	0.350	0.366	

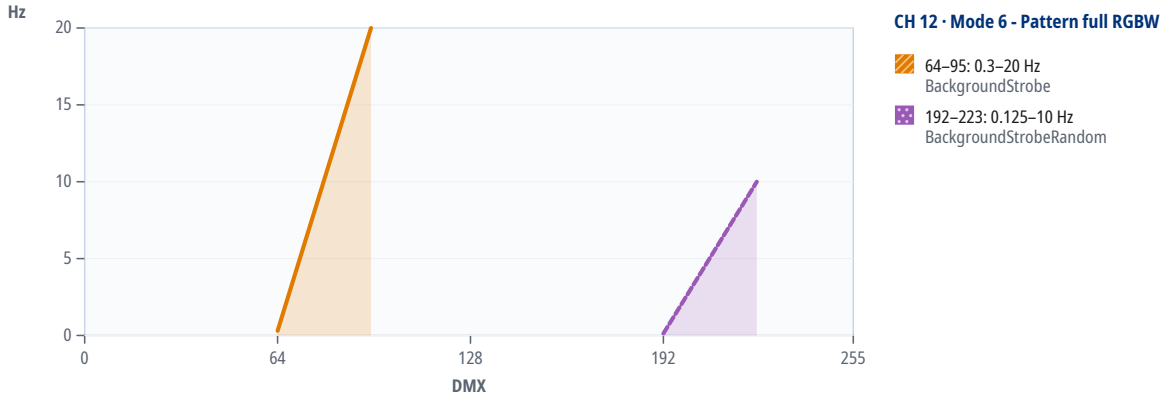
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Spectra of the light sources

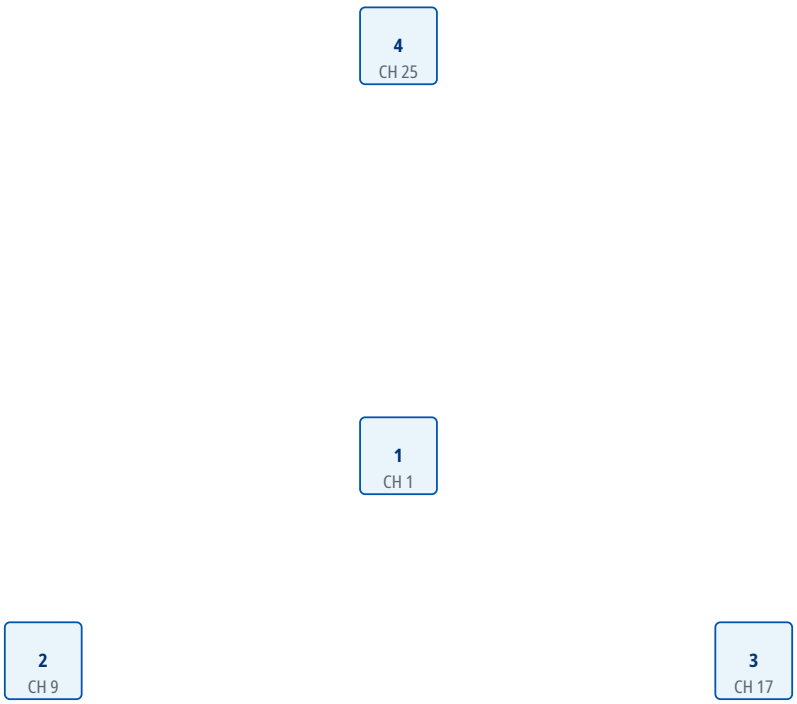


Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



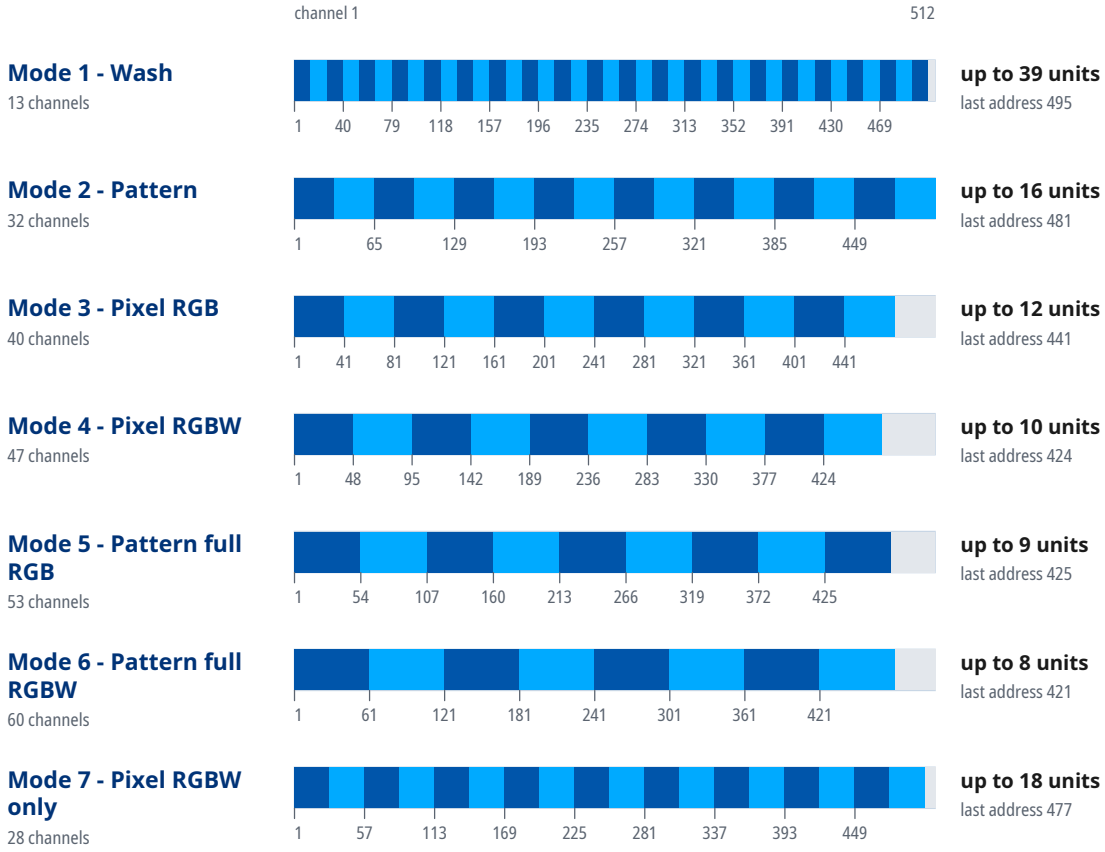
Cells (pixels)



4 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “Mode 6 - Pattern full RGBW”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 6 - Pattern full RGBW”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	301	11	U2 · 121	16	U2 · 421
2	61	7	361	12	U2 · 181	17	U3 · 1
3	121	8	421	13	U2 · 241	18	U3 · 61
4	181	9	U2 · 1	14	U2 · 301	19	U3 · 121
5	241	10	U2 · 61	15	U2 · 361	20	U3 · 181

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 1 - Wash

If the device receives DMX in this mode but gives no light, check these channels: CH 8 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 9 Dimmer 1 above 0; CH 12 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 2 above 0. The GDTF file gives these values for a console's Highlight function: CH 3 Red 255, CH 4 Green 255, CH 5 Blue 255, CH 6 White 255, CH 9 Dimmer 1 255, CH 13 Dimmer 2 255.

CH	Function	DMX	Description
1	Control	0–9	No function
		10–14	Wired DMX
		15–19	Wireless DMX
		20–24	Display ON
		25–29	Display OFF
		30–34	RGBW colour mixing mode
		35–39	CMY colour mixing mode
		40–44	Dimmer curve Square law
		45–49	Dimmer curve Linear
		50–54	White point 8000K On
		55–59	White point 8000K Off
		60–169	No function
		170–171	Tungsten effect simulation 750W
		172–173	Tungsten effect simulation 1000W
		174–175	Tungsten effect simulation 1200W
		176–177	Tungsten effect simulation 2000W
		178–179	Tungsten effect simulation 2500W
		180–181	Tungsten effect simulation Off
		182–255	No function
2	Color Macro		Background Virtual Color Wheel
		0	No function
		1–2	Filter 4 (Medium Bastard Amber)
		3–4	Filter 25 (Sunset red)
		5–6	Filter 19 (Fire)
		7–8	Filter 26 (Bright Red)
		9–10	Filter 58 (Lavender)
		11–12	Filter 68 (Sky Blue)
		13–14	Fliter 36 (Medium Pink)
		15–16	Filter 89 (Moss Green)
		17–18	Filter 88 (Lime Green)
		19–20	Filter 90 (Dark Yellow Green)
		21–22	Filter 49 (Medium Purple)
		23–24	Filter 52 (Light Lavender)
		25–26	Filter 102 (Light Amber)
		27–28	Filter 103 (Straw)

CH	Function	DMX	Description
2	Color Macro (continued)	29–30	Filter 140 (Summer Blue)
		31–32	Fliter 124 (Dark Green)
		33–34	Filter 106 (Primary Red)
		35–36	Filter 111 (Dark Pink)
		37–38	Filter 115 (Peacock Blue)
		39–40	Filter 126 (Mauve)
		41–42	Filter 117 (Steel Blue)
		43–44	Filter 118 (Light Blue)
		45–46	Filter 122 (Fern Green)
		47–48	Filter 182 (Light Red)
		49–50	Filter 121 (Filter Green)
		51–52	Filter 128 (Bright Pink)
		53–54	Filter 131 (Marine Blue)
		55–56	Filter 132 (Medium Blue)
		57–58	Filter 134 (Golden Amber)
		59–60	Filter 135 (Deep Golden Amber)
		61–62	Filter 136 (Pale Lavender)
		63–64	Filter 137 (Special Lavender)
		65–66	Filter 138 (Pale Green)
		67–68	Filter 798 (Chrysalis Pink)
		69–70	Filter 141 (Bright Blue)
		71–72	Filter 147 (Apricot)
		73–74	Filter 148 (Bright Rose)
		75–76	Filter 152 (Pale Gold)
		77–78	Filter 154 (Pale Rose)
		79–80	Filter 157 (Pink)
		81–82	Filter 143 (Pale Navy Blue)
		83–84	Filter 162 (Bastard Amber)
		85–86	Filter 164 (Flame Red)
		87–88	Filter 165 (Daylight Blue)
		89–90	Filter 169 (Lilac Tint)
		91–92	Filter 170 (Deep Lavender)
		93–94	Filter 172 (Lagoon Blue)
		95–96	Filter 194 (Surprise Pink)
		97–98	Filter 180 (Dark Lavender)
		99–100	Filter 181 (Congo Blue)
		101–102	Filter 197 (Alice Blue)
		103–104	Filter 201 (Full CT Blue)
		105–106	Filter 202 (Half CT Blue)
		107–108	Filter 203 (Quarter CT Blue)
		109–110	Filter 204 (Full CT Orange)

CH	Function	DMX	Description
2	Color Macro (continued)	111–112	Filter 219 (Fluorescent Green)
		113–114	Filter 206 (Quarter CT Orange)
		115–116	Filter 247 (Filter Minus Green)
		117–118	Filter 248 (Half Minus Green)
		119–120	Filter 281 (Three Quarter CT Blue)
		121–122	Filter 285 (Three Quarter CT Orange)
		123–124	Filter 352 (Glacier Blue)
		125–126	Filter 353 (Lighter Blue)
		127–128	Filter 507 (Madge)
		129–130	Filter 778 (Millennium Gold)
		131–132	Filter 793 (Vanity Fair)
		133–235	Filter 793 (Vanity Fair) ... Ranbow effect (with fade time) from slow to fast
		236–245	Ranbow effect (with fade time) from slow to fast
		246–255	Ranbow effect (without fade time) from slow to fast
3	Red		Background Red
		0	Min
		1–254	Min ... Max
		255	Max
4	Green		Background Green
		0	Min
		1–254	Min ... Max
		255	Max
5	Blue		Background Blue
		0	Min
		1–254	Min ... Max
		255	Max
6	White		Background White
		0	Min
		1–254	Min ... Max
		255	Max
7	CTO		Background CTO
		0	8000K
		1–63	8000K ... 5600K
		64	5600K
		65–127	5600K ... 4200K
		128	4200K
		129–191	4200K ... 3200K
		192	3200K
		193–254	3200K ... 2700K
		255	2700K

CH	Function	DMX	Description
8	Shutter 1	0–31	Background Shutter: Closed
		32–63	Background Shutter: Open
		64–67	Background Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		68–70	Background Strobe: Slow to fast 2/12 (0.375–0.426 Hz)
		71–73	Background Strobe: Slow to fast 3/12 (0.464–0.541 Hz)
		74–76	Background Strobe: Slow to fast 4/12 (0.58–1.18 Hz)
		77–79	Background Strobe: Slow to fast 5/12 (1.67–2.86 Hz)
		80–82	Background Strobe: Slow to fast 6/12 (3.49–4.48 Hz)
		83–85	Background Strobe: Slow to fast 7/12 (5–6 Hz)
		86–88	Background Strobe: Slow to fast 8/12 (6.52–8.11 Hz)
		89–90	Background Strobe: Slow to fast 9/12 (9.09–10 Hz)
		91–92	Background Strobe: Slow to fast 10/12 (11.1–13 Hz)
		93–94	Background Strobe: Slow to fast 11/12 (15–17.6 Hz)
		95	Background Strobe: Slow to fast 12/12
		96–127	Background Shutter: Shutter open
		128–130	Background Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–132	Background Strobe Pulse Open: Slow to fast 2/7 (0.147–0.156 Hz)
		133–134	Background Strobe Pulse Open: Slow to fast 3/7 (0.167–0.178 Hz)
		135–136	Background Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–138	Background Strobe Pulse Open: Slow to fast 5/7 (0.227–0.25 Hz)
		139–140	Background Strobe Pulse Open: Slow to fast 6/7 (0.278–0.312 Hz)
		141–143	Background Strobe Pulse Open: Slow to fast 7/7 (0.357–0.499 Hz)
		144–145	Background Strobe Pulse Close: Fast to slow 1/7 (0.5–0.416 Hz)
		146–147	Background Strobe Pulse Close: Fast to slow 2/7 (0.357–0.312 Hz)
		148–149	Background Strobe Pulse Close: Fast to slow 3/7 (0.278–0.25 Hz)
		150–151	Background Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–153	Background Strobe Pulse Close: Fast to slow 5/7 (0.192–0.178 Hz)
		154–155	Background Strobe Pulse Close: Fast to slow 6/7 (0.167–0.156 Hz)
		156–159	Background Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Background Shutter: Shutter open
		192	Random strobe slow

CH	Function	DMX	Description
8	Shutter 1 (continued)	193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Background Shutter: Shutter open
9	Dimmer 1	0	Closed
		1–254	Closed ... Open
		255	Open
10	LED Zone Mode	0–2	All pixels
		3–4	Rings
		5–6	Halves
		7–8	Quarters
		9–255	No function
11	Color Mix Mode	0–9	Global colors
		10–19	Maximum mode
		20–29	Minimum mode
		30–39	Multiply mode
		40–49	Addition mode
		50–59	Subtraction mode
		60–69	Inverted subtraction mode
		70–79	Colored background
		80–127	No function
		128	Global colors
		129–254	Crossfade
		255	Pixel colors
12	Shutter 2	0–31	Open/Close: Closed
		32–63	Open/Close: Open
		64–67	Master Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		68–79	Master Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.375–2.86 Hz)
		80–82	Master Strobe: Slow to fast 6/12 (3.49–4.48 Hz)
		83–94	Master Strobe: Slow to fast 6/12 ... Slow to fast 12/12 (5–17.6 Hz)
		95	Master Strobe: Slow to fast 12/12
		96–127	Shutter open
		128–130	Master Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–134	Master Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.147–0.178 Hz)
		135–136	Master Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–140	Master Strobe Pulse Open: Slow to fast 4/7 ... Slow to fast 7/7 (0.227–0.312 Hz)
		141–143	Master Strobe Pulse Open: Slow to fast 7/7 (0.357–0.499 Hz)
		144–145	Master Strobe Pulse Close: Fast to slow 1/7 (0.5–0.416 Hz)
		146–149	Master Strobe Pulse Close: Fast to slow 1/7 ... Fast to slow 4/7 (0.357–0.25 Hz)

CH	Function	DMX	Description
12	Shutter 2 (continued)	150–151	Master Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–155	Master Strobe Pulse Close: Fast to slow 4/7 ... Fast to slow 7/7 (0.192–0.156 Hz)
		156–159	Master Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
13	Dimmer 2	0	Closed
		1–254	Closed ... Open
		255	Open

Mode 2 - Pattern

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 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 28 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 29 Dimmer 2 above 0; CH 30 Shutter 3 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 31 Dimmer 3 above 0. The GDTF file gives these values for a console's Highlight function: CH 3 Red 1 255, CH 5 Green 1 255, CH 7 Blue 1 255, CH 9 White 1 255, CH 13 Dimmer 1 255, CH 23 Red 2 255, CH 24 Green 2 255, CH 25 Blue 2 255, CH 26 White 2 255, CH 29 Dimmer 2 255, CH 31 Dimmer 3 255.

CH	Function	DMX	Description
1	Control		Same as CH 1 in the mode “Mode 1 - Wash” (p. 12)
2	Color Macro 1		Background Virtual Color Wheel
		0	No function
		1–2	Filter 4 (Medium Bastard Amber)
		3–4	Filter 25 (Sunset red)
		5–6	Filter 19 (Fire)
		7–8	Filter 26 (Bright Red)
		9–10	Filter 58 (Lavender)
		11–12	Filter 68 (Sky Blue)
		13–14	Fliter 36 (Medium Pink)
		15–16	Filter 89 (Moss Green)
		17–18	Filter 88 (Lime Green)
		19–20	Filter 90 (Dark Yellow Green)
		21–22	Filter 49 (Medium Purple)
		23–24	Filter 52 (Light Lavender)
		25–26	Filter 102 (Light Amber)
		27–28	Filter 103 (Straw)
		29–30	Filter 140 (Summer Blue)
		31–32	Fliter 124 (Dark Green)
		33–34	Filter 106 (Primary Red)

CH	Function	DMX	Description
2	Color Macro 1 (continued)	35–36	Filter 111 (Dark Pink)
		37–38	Filter 115 (Peacock Blue)
		39–40	Filter 126 (Mauve)
		41–42	Filter 117 (Steel Blue)
		43–44	Filter 118 (Light Blue)
		45–46	Filter 122 (Fern Green)
		47–48	Filter 182 (Light Red)
		49–50	Filter 121 (Filter Green)
		51–52	Filter 128 (Bright Pink)
		53–54	Filter 131 (Marine Blue)
		55–56	Filter 132 (Medium Blue)
		57–58	Filter 134 (Golden Amber)
		59–60	Filter 135 (Deep Golden Amber)
		61–62	Filter 136 (Pale Lavender)
		63–64	Filter 137 (Special Lavender)
		65–66	Filter 138 (Pale Green)
		67–68	Filter 798 (Chrysalis Pink)
		69–70	Filter 141 (Bright Blue)
		71–72	Filter 147 (Apricot)
		73–74	Filter 148 (Bright Rose)
		75–76	Filter 152 (Pale Gold)
		77–78	Filter 154 (Pale Rose)
		79–80	Filter 157 (Pink)
		81–82	Filter 143 (Pale Navy Blue)
		83–84	Filter 162 (Bastard Amber)
		85–86	Filter 164 (Flame Red)
		87–88	Filter 165 (Daylight Blue)
		89–90	Filter 169 (Lilac Tint)
		91–92	Filter 170 (Deep Lavender)
		93–94	Filter 172 (Lagoon Blue)
		95–96	Filter 194 (Surprise Pink)
		97–98	Filter 180 (Dark Lavender)
		99–100	Filter 181 (Congo Blue)
		101–102	Filter 197 (Alice Blue)
		103–104	Filter 201 (Full CT Blue)
		105–106	Filter 202 (Half CT Blue)
		107–108	Filter 203 (Quarter CT Blue)
		109–110	Filter 204 (Full CT Orange)
		111–112	Filter 219 (Fluorescent Green)
		113–114	Filter 206 (Quarter CT Orange)
		115–116	Filter 247 (Filter Minus Green)

CH	Function	DMX	Description
2	Color Macro 1 (continued)	117–118	Filter 248 (Half Minus Green)
		119–120	Filter 281 (Three Quarter CT Blue)
		121–122	Filter 285 (Three Quarter CT Orange)
		123–124	Filter 352 (Glacier Blue)
		125–126	Filter 353 (Lighter Blue)
		127–128	Filter 507 (Madge)
		129–130	Filter 778 (Millennium Gold)
		131–132	Filter 793 (Vanity Fair)
		133–235	Filter 793 (Vanity Fair) ... Ranbow effect (with fade time) from slow to fast
		236–245	Ranbow effect (with fade time) from slow to fast
		246–255	Ranbow effect (without fade time) from slow to fast
3	Red 1		Background Red
		0–255	Min ... Max
		255	Max
4	Red 1 Fine	0–255	Fine adjustment of CH 3
5	Green 1		Background Green
		0–255	Min ... Max
		255	Max
6	Green 1 Fine	0–255	Fine adjustment of CH 5
7	Blue 1		Background Blue
		0–255	Min ... Max
		255	Max
8	Blue 1 Fine	0–255	Fine adjustment of CH 7
9	White 1		Background White
		0–255	Min ... Max
		255	Max
10	White 1 Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 7 in the mode “Mode 1 - Wash” (p. 14)
12	Shutter 1		Same as CH 8 in the mode “Mode 1 - Wash” (p. 15)
13	Dimmer 1	0–255	Closed ... Open
		255	Open
14	Dimmer 1 Fine	0–255	Fine adjustment of CH 13
15	LED Zone Mode		Same as CH 10 in the mode “Mode 1 - Wash” (p. 16)
16	Color Mix Mode		Same as CH 11 in the mode “Mode 1 - Wash” (p. 16)
17	Pattern Selection	0–2	No pattern
		3–4	Pattern 1
		5–6	Pattern 2
		7–8	Pattern 3
		9–10	Pattern 4
		11–12	Pattern 5

CH	Function	DMX	Description
17	Pattern Selection (continued)	13–14	Pattern 6
		15–16	Pattern 7
		17–18	Pattern 8
		19–20	Pattern 9
		21–22	Pattern 10
		23–24	Pattern 11
		25–255	Reserved
18	Pattern Size	0–2	Variant 1
		3–4	Variant 2
		5–6	Variant 3
		7–8	Variant 4
		9–10	Variant 5
		11–12	Variant 6
		13–14	Variant 7
		15–16	Variant 8
		17–18	Variant 9
		19–20	Variant 10
		21–22	Variant 11
		23–255	Reserved
19	Pattern Rotation	0	No movement
		1–127	Pattern indexing
		128–190	Forwards rotation from fast to slow
		191–192	Pause - without rotation
		193–255	Backwards rotation from slow to fast
20	Pattern Fade	0	Snap
		1	Fade min
		2–254	Fade min ... Fade max
		255	Fade max
21	Pattern Transition	0	No fade
		1	100 ms
		2–254	100 ms ... 4 s
		255	4 s
22	Pattern Crossfade	0	Background
		1–254	Background ... Pattern
		255	Pattern
23	Red 2		Pattern Red
		0	Min
		1–254	Min ... Max
		255	Max
24	Green 2		Pattern Green
		0	Min

CH	Function	DMX	Description
24	Green 2 (continued)	1–254	Min ... Max
		255	Max
25	Blue 2		Pattern Blue
		0	Min
		1–254	Min ... Max
		255	Max
26	White 2		Pattern White
		0	Min
		1–254	Min ... Max
		255	Max
27	Color Macro 2	0–2	No macro
		3–8	Macro 1
		9–14	Macro 2
		15–20	Macro 3
		21–26	Macro 4
		27–32	Macro 5
		33–255	Reserved
28	Shutter 2	0–31	Open/Close: Closed
		32–63	Open/Close: Open
		64–67	Pattern Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		68–79	Pattern Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.375–2.86 Hz)
		80–82	Pattern Strobe: Slow to fast 6/12 (3.49–4.48 Hz)
		83–94	Pattern Strobe: Slow to fast 6/12 ... Slow to fast 12/12 (5–17.6 Hz)
		95	Pattern Strobe: Slow to fast 12/12
		96–127	Shutter open
		128–130	Pattern Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–134	Pattern Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.147–0.178 Hz)
		135–136	Pattern Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–140	Pattern Strobe Pulse Open: Slow to fast 4/7 ... Slow to fast 7/7 (0.227–0.312 Hz)
		141–143	Pattern Strobe Pulse Open: Slow to fast 7/7 (0.357–0.499 Hz)
		144–145	Pattern Strobe Pulse Close: Fast to slow 1/7 (0.5–0.416 Hz)
		146–149	Pattern Strobe Pulse Close: Fast to slow 1/7 ... Fast to slow 4/7 (0.357–0.25 Hz)
		150–151	Pattern Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–155	Pattern Strobe Pulse Close: Fast to slow 4/7 ... Fast to slow 7/7 (0.192–0.156 Hz)
		156–159	Pattern Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast

CH	Function	DMX	Description
28	Shutter 2 (continued)	223	Random strobe fast
		224–255	Shutter open
29	Dimmer 2		Pattern Dimmer
		0	Closed
		1–254	Closed … Open
		255	Open
30	Shutter 3	0–31	Open/Close: Closed
		32–63	Open/Close: Open
		64–67	Master Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		68–79	Master Strobe: Slow to fast 1/12 … Slow to fast 6/12 (0.375–2.86 Hz)
		80–82	Master Strobe: Slow to fast 6/12 (3.49–4.48 Hz)
		83–94	Master Strobe: Slow to fast 6/12 … Slow to fast 12/12 (5–17.6 Hz)
		95	Master Strobe: Slow to fast 12/12
		96–127	Shutter open
		128–130	Master Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–134	Master Strobe Pulse Open: Slow to fast 1/7 … Slow to fast 4/7 (0.147–0.178 Hz)
		135–136	Master Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–140	Master Strobe Pulse Open: Slow to fast 4/7 … Slow to fast 7/7 (0.227–0.312 Hz)
		141–143	Master Strobe Pulse Open: Slow to fast 7/7 (0.357–0.499 Hz)
		144–145	Master Strobe Pulse Close: Fast to slow 1/7 (0.5–0.416 Hz)
		146–149	Master Strobe Pulse Close: Fast to slow 1/7 … Fast to slow 4/7 (0.357–0.25 Hz)
		150–151	Master Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–155	Master Strobe Pulse Close: Fast to slow 4/7 … Fast to slow 7/7 (0.192–0.156 Hz)
		156–159	Master Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow … Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
31	Dimmer 3	0–255	Closed … Open
		255	Open
32	Dimmer 3 Fine	0–255	Fine adjustment of CH 31

Mode 3 - Pixel RGB

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 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 17 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 18 Dimmer 2 above 0. The GDTF file gives these values for a console's Highlight function: CH 3 Red 1 255, CH 5 Green 1 255, CH 7 Blue 1 255, CH 9 White 255, CH 13 Dimmer 1 255, CH 18 Dimmer 2 255.

CH	Function	DMX	Description
1	Control		Same as CH 1 in the mode “Mode 1 - Wash” (p. 12)
2	Color Macro		Same as CH 2 in the mode “Mode 1 - Wash” (p. 12)
3	Red 1		Same as CH 3 in the mode “Mode 2 - Pattern” (p. 19)
4	Red 1 Fine	0–255	Fine adjustment of CH 3
5	Green 1		Same as CH 5 in the mode “Mode 2 - Pattern” (p. 19)
6	Green 1 Fine	0–255	Fine adjustment of CH 5
7	Blue 1		Same as CH 7 in the mode “Mode 2 - Pattern” (p. 19)
8	Blue 1 Fine	0–255	Fine adjustment of CH 7
9	White		Background White
		0–255	Min ... Max
		255	Max
10	White Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 7 in the mode “Mode 1 - Wash” (p. 14)
12	Shutter 1	0–31	Open/Close: Closed
		32–63	Open/Close: Open
		64–67	Background Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		68–79	Background Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.375–2.86 Hz)
		80–82	Background Strobe: Slow to fast 6/12 (3.49–4.48 Hz)
		83–94	Background Strobe: Slow to fast 6/12 ... Slow to fast 12/12 (5–17.6 Hz)
		95	Background Strobe: Slow to fast 12/12
		96–127	Shutter open
		128–130	Background Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–134	Background Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.147–0.178 Hz)
		135–136	Background Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–140	Background Strobe Pulse Open: Slow to fast 4/7 ... Slow to fast 7/7 (0.227–0.312 Hz)
		141–143	Background Strobe Pulse Open: Slow to fast 7/7 (0.357–0.499 Hz)
		144–145	Background Strobe Pulse Close: Fast to slow 1/7 (0.5–0.416 Hz)
		146–149	Background Strobe Pulse Close: Fast to slow 1/7 ... Fast to slow 4/7 (0.357–0.25 Hz)

CH	Function	DMX	Description
12	Shutter 1 (continued)	150–151	Background Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–155	Background Strobe Pulse Close: Fast to slow 4/7 ... Fast to slow 7/7 (0.192–0.156 Hz)
		156–159	Background Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
13	Dimmer 1		Same as CH 13 in the mode “Mode 2 - Pattern” (p. 19)
14	Dimmer 1 Fine	0–255	Fine adjustment of CH 13
15	LED Zone Mode		Same as CH 10 in the mode “Mode 1 - Wash” (p. 16)
16	Color Mix Mode		Same as CH 11 in the mode “Mode 1 - Wash” (p. 16)
17	Shutter 2		Same as CH 12 in the mode “Mode 1 - Wash” (p. 16)
18	Dimmer 2	0–255	Closed ... Open
		255	Open
19	Dimmer 2 Fine	0–255	Fine adjustment of CH 18
20	Red 2		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
21	Green 2		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
22	Blue 2		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
23	Red 3		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
24	Green 3		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
25	Blue 3		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max

CH	Function	DMX	Description
26	Red 4		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
27	Green 4		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
28	Blue 4		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
29	Red 5		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
30	Green 5		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
31	Blue 5		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
32	Red 6		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
33	Green 6		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
34	Blue 6		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
35	Red 7		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
36	Green 7		Pixel Green
		0	Min

CH	Function	DMX	Description
36	Green 7 (continued)	1–254	Min ... Max
		255	Max
37	Blue 7		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
38	Red 8		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
39	Green 8		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
40	Blue 8		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max

Mode 4 - Pixel RGBW

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 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 17 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 18 Dimmer 2 above 0. The GDTF file gives these values for a console's Highlight function: CH 3 Red 1 255, CH 5 Green 1 255, CH 7 Blue 1 255, CH 9 White 1 255, CH 13 Dimmer 1 255, CH 18 Dimmer 2 255.

CH	Function	DMX	Description
1	Control		Same as CH 1 in the mode “Mode 1 - Wash” (p. 12)
2	Color Macro		Same as CH 2 in the mode “Mode 1 - Wash” (p. 12)
3	Red 1		Same as CH 3 in the mode “Mode 2 - Pattern” (p. 19)
4	Red 1 Fine	0–255	Fine adjustment of CH 3
5	Green 1		Same as CH 5 in the mode “Mode 2 - Pattern” (p. 19)
6	Green 1 Fine	0–255	Fine adjustment of CH 5
7	Blue 1		Same as CH 7 in the mode “Mode 2 - Pattern” (p. 19)
8	Blue 1 Fine	0–255	Fine adjustment of CH 7
9	White 1		Same as CH 9 in the mode “Mode 2 - Pattern” (p. 19)
10	White 1 Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 7 in the mode “Mode 1 - Wash” (p. 14)
12	Shutter 1		Same as CH 12 in the mode “Mode 3 - Pixel RGB” (p. 23)
13	Dimmer 1		Same as CH 13 in the mode “Mode 2 - Pattern” (p. 19)
14	Dimmer 1 Fine	0–255	Fine adjustment of CH 13
15	LED Zone Mode		Same as CH 10 in the mode “Mode 1 - Wash” (p. 16)
16	Color Mix Mode		Same as CH 11 in the mode “Mode 1 - Wash” (p. 16)

CH	Function	DMX	Description
17	Shutter 2		Same as CH 12 in the mode “Mode 1 - Wash” (p. 16)
18	Dimmer 2		Same as CH 18 in the mode “Mode 3 - Pixel RGB” (p. 24)
19	Dimmer 2 Fine	0–255	Fine adjustment of CH 18
20	Red 2		Same as CH 20 in the mode “Mode 3 - Pixel RGB” (p. 24)
21	Green 2		Same as CH 21 in the mode “Mode 3 - Pixel RGB” (p. 24)
22	Blue 2		Same as CH 22 in the mode “Mode 3 - Pixel RGB” (p. 24)
23	White 2		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max
24	Red 3		Same as CH 23 in the mode “Mode 3 - Pixel RGB” (p. 24)
25	Green 3		Same as CH 24 in the mode “Mode 3 - Pixel RGB” (p. 24)
26	Blue 3		Same as CH 25 in the mode “Mode 3 - Pixel RGB” (p. 24)
27	White 3		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max
28	Red 4		Same as CH 26 in the mode “Mode 3 - Pixel RGB” (p. 25)
29	Green 4		Same as CH 27 in the mode “Mode 3 - Pixel RGB” (p. 25)
30	Blue 4		Same as CH 28 in the mode “Mode 3 - Pixel RGB” (p. 25)
31	White 4		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max
32	Red 5		Same as CH 29 in the mode “Mode 3 - Pixel RGB” (p. 25)
33	Green 5		Same as CH 30 in the mode “Mode 3 - Pixel RGB” (p. 25)
34	Blue 5		Same as CH 31 in the mode “Mode 3 - Pixel RGB” (p. 25)
35	White 5		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max
36	Red 6		Same as CH 32 in the mode “Mode 3 - Pixel RGB” (p. 25)
37	Green 6		Same as CH 33 in the mode “Mode 3 - Pixel RGB” (p. 25)
38	Blue 6		Same as CH 34 in the mode “Mode 3 - Pixel RGB” (p. 25)
39	White 6		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max
40	Red 7		Same as CH 35 in the mode “Mode 3 - Pixel RGB” (p. 25)
41	Green 7		Same as CH 36 in the mode “Mode 3 - Pixel RGB” (p. 25)
42	Blue 7		Same as CH 37 in the mode “Mode 3 - Pixel RGB” (p. 26)
43	White 7		Pixel White

CH	Function	DMX	Description
43	White 7 (continued)	0	Min
		1–254	Min ... Max
		255	Max
44	Red 8		Same as CH 38 in the mode “Mode 3 - Pixel RGB” (p. 26)
45	Green 8		Same as CH 39 in the mode “Mode 3 - Pixel RGB” (p. 26)
46	Blue 8		Same as CH 40 in the mode “Mode 3 - Pixel RGB” (p. 26)
47	White 8		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max

Mode 5 - Pattern full RGB

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 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 28 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 29 Dimmer 2 above 0; CH 30 Shutter 3 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 31 Dimmer 3 above 0. The GDTF file gives these values for a console's Highlight function: CH 3 Red 1 255, CH 5 Green 1 255, CH 7 Blue 1 255, CH 9 White 1 255, CH 13 Dimmer 1 255, CH 29 Dimmer 2 255, CH 31 Dimmer 3 255.

CH	Function	DMX	Description
1	Control		Same as CH 1 in the mode “Mode 1 - Wash” (p. 12)
2	Color Macro 1		Same as CH 2 in the mode “Mode 2 - Pattern” (p. 17)
3	Red 1		Same as CH 3 in the mode “Mode 2 - Pattern” (p. 19)
4	Red 1 Fine	0–255	Fine adjustment of CH 3
5	Green 1		Same as CH 5 in the mode “Mode 2 - Pattern” (p. 19)
6	Green 1 Fine	0–255	Fine adjustment of CH 5
7	Blue 1		Same as CH 7 in the mode “Mode 2 - Pattern” (p. 19)
8	Blue 1 Fine	0–255	Fine adjustment of CH 7
9	White 1		Same as CH 9 in the mode “Mode 2 - Pattern” (p. 19)
10	White 1 Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 7 in the mode “Mode 1 - Wash” (p. 14)
12	Shutter 1		Same as CH 12 in the mode “Mode 3 - Pixel RGB” (p. 23)
13	Dimmer 1		Same as CH 13 in the mode “Mode 2 - Pattern” (p. 19)
14	Dimmer 1 Fine	0–255	Fine adjustment of CH 13
15	LED Zone Mode		Same as CH 10 in the mode “Mode 1 - Wash” (p. 16)
16	Color Mix Mode		Same as CH 11 in the mode “Mode 1 - Wash” (p. 16)
17	Pattern Selection		Same as CH 17 in the mode “Mode 2 - Pattern” (p. 19)
18	Pattern Size		Same as CH 18 in the mode “Mode 2 - Pattern” (p. 20)
19	Pattern Rotation		Same as CH 19 in the mode “Mode 2 - Pattern” (p. 20)
20	Pattern Fade		Same as CH 20 in the mode “Mode 2 - Pattern” (p. 20)
21	Pattern Transition		Same as CH 21 in the mode “Mode 2 - Pattern” (p. 20)
22	Pattern Crossfade		Same as CH 22 in the mode “Mode 2 - Pattern” (p. 20)
23	Red 2		Same as CH 23 in the mode “Mode 2 - Pattern” (p. 20)

CH	Function	DMX	Description
24	Green 2		Same as CH 24 in the mode “Mode 2 - Pattern” (p. 20)
25	Blue 2		Same as CH 25 in the mode “Mode 2 - Pattern” (p. 21)
26	White 2		Same as CH 26 in the mode “Mode 2 - Pattern” (p. 21)
27	Color Macro 2		Same as CH 27 in the mode “Mode 2 - Pattern” (p. 21)
28	Shutter 2	0–31	Open'/Close: Closed
		32–63	Open'/Close: Open
		64–67	Pattern Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		68–79	Pattern Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.375–2.86 Hz)
		80–82	Pattern Strobe: Slow to fast 6/12 (3.49–4.48 Hz)
		83–94	Pattern Strobe: Slow to fast 6/12 ... Slow to fast 12/12 (5–17.6 Hz)
		95	Pattern Strobe: Slow to fast 12/12
		96–127	Shutter open
		128–130	Pattern Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–134	Pattern Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.147–0.178 Hz)
		135–136	Pattern Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–140	Pattern Strobe Pulse Open: Slow to fast 4/7 ... Slow to fast 7/7 (0.227–0.312 Hz)
		141–143	Pattern Strobe Pulse Open: Slow to fast 7/7 (0.357–0.499 Hz)
		144–145	Pattern Strobe Pulse Close: Fast to slow 1/7 (0.5–0.416 Hz)
		146–149	Pattern Strobe Pulse Close: Fast to slow 1/7 ... Fast to slow 4/7 (0.357–0.25 Hz)
		150–151	Pattern Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–155	Pattern Strobe Pulse Close: Fast to slow 4/7 ... Fast to slow 7/7 (0.192–0.156 Hz)
		156–159	Pattern Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
29	Dimmer 2		Same as CH 29 in the mode “Mode 2 - Pattern” (p. 22)
30	Shutter 3		Same as CH 30 in the mode “Mode 2 - Pattern” (p. 22)
31	Dimmer 3		Same as CH 31 in the mode “Mode 2 - Pattern” (p. 22)
32	Dimmer 3 Fine	0–255	Fine adjustment of CH 31
33	Red 3		Same as CH 23 in the mode “Mode 3 - Pixel RGB” (p. 24)
34	Green 3		Same as CH 24 in the mode “Mode 3 - Pixel RGB” (p. 24)
35	Blue 3		Same as CH 25 in the mode “Mode 3 - Pixel RGB” (p. 24)
36	Red 4		Same as CH 26 in the mode “Mode 3 - Pixel RGB” (p. 25)
37	Green 4		Same as CH 27 in the mode “Mode 3 - Pixel RGB” (p. 25)
38	Blue 4		Same as CH 28 in the mode “Mode 3 - Pixel RGB” (p. 25)

CH	Function	DMX	Description
39	Red 5		Same as CH 29 in the mode “Mode 3 - Pixel RGB” (p. 25)
40	Green 5		Same as CH 30 in the mode “Mode 3 - Pixel RGB” (p. 25)
41	Blue 5		Same as CH 31 in the mode “Mode 3 - Pixel RGB” (p. 25)
42	Red 6		Same as CH 32 in the mode “Mode 3 - Pixel RGB” (p. 25)
43	Green 6		Same as CH 33 in the mode “Mode 3 - Pixel RGB” (p. 25)
44	Blue 6		Same as CH 34 in the mode “Mode 3 - Pixel RGB” (p. 25)
45	Red 7		Same as CH 35 in the mode “Mode 3 - Pixel RGB” (p. 25)
46	Green 7		Same as CH 36 in the mode “Mode 3 - Pixel RGB” (p. 25)
47	Blue 7		Same as CH 37 in the mode “Mode 3 - Pixel RGB” (p. 26)
48	Red 8		Same as CH 38 in the mode “Mode 3 - Pixel RGB” (p. 26)
49	Green 8		Same as CH 39 in the mode “Mode 3 - Pixel RGB” (p. 26)
50	Blue 8		Same as CH 40 in the mode “Mode 3 - Pixel RGB” (p. 26)
51	Red 9		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
52	Green 9		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
53	Blue 9		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max

Mode 6 - Pattern full RGBW

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 12 Shutter 1 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 13 Dimmer 1 above 0; CH 28 Shutter 2 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 29 Dimmer 2 above 0; CH 30 Shutter 3 at 32–63 “Open” or 96–127, 160–191, 224–255 “Shutter open”; CH 31 Dimmer 3 above 0. The GDTF file gives these values for a console's Highlight function: CH 3 Red 1 255, CH 5 Green 1 255, CH 7 Blue 1 255, CH 9 White 1 255, CH 13 Dimmer 1 255, CH 29 Dimmer 2 255, CH 31 Dimmer 3 255.

CH	Function	DMX	Description
1	Control		Same as CH 1 in the mode “Mode 1 - Wash” (p. 12)
2	Color Macro 1		Same as CH 2 in the mode “Mode 2 - Pattern” (p. 17)
3	Red 1		Same as CH 3 in the mode “Mode 2 - Pattern” (p. 19)
4	Red 1 Fine	0–255	Fine adjustment of CH 3
5	Green 1		Same as CH 5 in the mode “Mode 2 - Pattern” (p. 19)
6	Green 1 Fine	0–255	Fine adjustment of CH 5
7	Blue 1		Same as CH 7 in the mode “Mode 2 - Pattern” (p. 19)
8	Blue 1 Fine	0–255	Fine adjustment of CH 7

CH	Function	DMX	Description
9	White 1		Same as CH 9 in the mode “Mode 2 - Pattern” (p. 19)
10	White 1 Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 7 in the mode “Mode 1 - Wash” (p. 14)
12	Shutter 1		Same as CH 12 in the mode “Mode 3 - Pixel RGB” (p. 23)
13	Dimmer 1		Same as CH 13 in the mode “Mode 2 - Pattern” (p. 19)
14	Dimmer 1 Fine	0–255	Fine adjustment of CH 13
15	LED Zone Mode		Same as CH 10 in the mode “Mode 1 - Wash” (p. 16)
16	Color Mix Mode		Same as CH 11 in the mode “Mode 1 - Wash” (p. 16)
17	Pattern Selection		Same as CH 17 in the mode “Mode 2 - Pattern” (p. 19)
18	Pattern Size		Same as CH 18 in the mode “Mode 2 - Pattern” (p. 20)
19	Pattern Rotation		Same as CH 19 in the mode “Mode 2 - Pattern” (p. 20)
20	Pattern Fade		Same as CH 20 in the mode “Mode 2 - Pattern” (p. 20)
21	Pattern Transition		Same as CH 21 in the mode “Mode 2 - Pattern” (p. 20)
22	Pattern Crossfade		Same as CH 22 in the mode “Mode 2 - Pattern” (p. 20)
23	Red 2		Same as CH 23 in the mode “Mode 2 - Pattern” (p. 20)
24	Green 2		Same as CH 24 in the mode “Mode 2 - Pattern” (p. 20)
25	Blue 2		Same as CH 25 in the mode “Mode 2 - Pattern” (p. 21)
26	White 2		Same as CH 26 in the mode “Mode 2 - Pattern” (p. 21)
27	Color Macro 2		Same as CH 27 in the mode “Mode 2 - Pattern” (p. 21)
28	Shutter 2		Same as CH 28 in the mode “Mode 2 - Pattern” (p. 21)
29	Dimmer 2		Same as CH 29 in the mode “Mode 2 - Pattern” (p. 22)
30	Shutter 3		Same as CH 30 in the mode “Mode 2 - Pattern” (p. 22)
31	Dimmer 3		Same as CH 31 in the mode “Mode 2 - Pattern” (p. 22)
32	Dimmer 3 Fine	0–255	Fine adjustment of CH 31
33	Red 3		Same as CH 23 in the mode “Mode 3 - Pixel RGB” (p. 24)
34	Green 3		Same as CH 24 in the mode “Mode 3 - Pixel RGB” (p. 24)
35	Blue 3		Same as CH 25 in the mode “Mode 3 - Pixel RGB” (p. 24)
36	White 3		Same as CH 27 in the mode “Mode 4 - Pixel RGBW” (p. 27)
37	Red 4		Same as CH 26 in the mode “Mode 3 - Pixel RGB” (p. 25)
38	Green 4		Same as CH 27 in the mode “Mode 3 - Pixel RGB” (p. 25)
39	Blue 4		Same as CH 28 in the mode “Mode 3 - Pixel RGB” (p. 25)
40	White 4		Same as CH 31 in the mode “Mode 4 - Pixel RGBW” (p. 27)
41	Red 5		Same as CH 29 in the mode “Mode 3 - Pixel RGB” (p. 25)
42	Green 5		Same as CH 30 in the mode “Mode 3 - Pixel RGB” (p. 25)
43	Blue 5		Same as CH 31 in the mode “Mode 3 - Pixel RGB” (p. 25)
44	White 5		Same as CH 35 in the mode “Mode 4 - Pixel RGBW” (p. 27)
45	Red 6		Same as CH 32 in the mode “Mode 3 - Pixel RGB” (p. 25)
46	Green 6		Same as CH 33 in the mode “Mode 3 - Pixel RGB” (p. 25)
47	Blue 6		Same as CH 34 in the mode “Mode 3 - Pixel RGB” (p. 25)
48	White 6		Same as CH 39 in the mode “Mode 4 - Pixel RGBW” (p. 27)
49	Red 7		Same as CH 35 in the mode “Mode 3 - Pixel RGB” (p. 25)

CH	Function	DMX	Description
50	Green 7		Same as CH 36 in the mode “Mode 3 - Pixel RGB” (p. 25)
51	Blue 7		Same as CH 37 in the mode “Mode 3 - Pixel RGB” (p. 26)
52	White 7		Same as CH 43 in the mode “Mode 4 - Pixel RGBW” (p. 27)
53	Red 8		Same as CH 38 in the mode “Mode 3 - Pixel RGB” (p. 26)
54	Green 8		Same as CH 39 in the mode “Mode 3 - Pixel RGB” (p. 26)
55	Blue 8		Same as CH 40 in the mode “Mode 3 - Pixel RGB” (p. 26)
56	White 8		Same as CH 47 in the mode “Mode 4 - Pixel RGBW” (p. 28)
57	Red 9		Same as CH 51 in the mode “Mode 5 - Pattern full RGB” (p. 30)
58	Green 9		Same as CH 52 in the mode “Mode 5 - Pattern full RGB” (p. 30)
59	Blue 9		Same as CH 53 in the mode “Mode 5 - Pattern full RGB” (p. 30)
60	White 9		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max

Mode 7 - Pixel RGBW only

CH	Function	DMX	Description
1	Red 1		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
2	Green 1		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
3	Blue 1		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
4	White 1		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max
5	Red 2		Same as CH 20 in the mode “Mode 3 - Pixel RGB” (p. 24)
6	Green 2		Same as CH 21 in the mode “Mode 3 - Pixel RGB” (p. 24)
7	Blue 2		Same as CH 22 in the mode “Mode 3 - Pixel RGB” (p. 24)
8	White 2		Same as CH 23 in the mode “Mode 4 - Pixel RGBW” (p. 27)
9	Red 3		Same as CH 23 in the mode “Mode 3 - Pixel RGB” (p. 24)
10	Green 3		Same as CH 24 in the mode “Mode 3 - Pixel RGB” (p. 24)

CH	Function	DMX	Description
11	Blue 3		Same as CH 25 in the mode “Mode 3 - Pixel RGB” (p. 24)
12	White 3		Same as CH 27 in the mode “Mode 4 - Pixel RGBW” (p. 27)
13	Red 4		Same as CH 26 in the mode “Mode 3 - Pixel RGB” (p. 25)
14	Green 4		Same as CH 27 in the mode “Mode 3 - Pixel RGB” (p. 25)
15	Blue 4		Same as CH 28 in the mode “Mode 3 - Pixel RGB” (p. 25)
16	White 4		Same as CH 31 in the mode “Mode 4 - Pixel RGBW” (p. 27)
17	Red 5		Same as CH 29 in the mode “Mode 3 - Pixel RGB” (p. 25)
18	Green 5		Same as CH 30 in the mode “Mode 3 - Pixel RGB” (p. 25)
19	Blue 5		Same as CH 31 in the mode “Mode 3 - Pixel RGB” (p. 25)
20	White 5		Same as CH 35 in the mode “Mode 4 - Pixel RGBW” (p. 27)
21	Red 6		Same as CH 32 in the mode “Mode 3 - Pixel RGB” (p. 25)
22	Green 6		Same as CH 33 in the mode “Mode 3 - Pixel RGB” (p. 25)
23	Blue 6		Same as CH 34 in the mode “Mode 3 - Pixel RGB” (p. 25)
24	White 6		Same as CH 39 in the mode “Mode 4 - Pixel RGBW” (p. 27)
25	Red 7		Same as CH 35 in the mode “Mode 3 - Pixel RGB” (p. 25)
26	Green 7		Same as CH 36 in the mode “Mode 3 - Pixel RGB” (p. 25)
27	Blue 7		Same as CH 37 in the mode “Mode 3 - Pixel RGB” (p. 26)
28	White 7		Same as CH 43 in the mode “Mode 4 - Pixel RGBW” (p. 27)

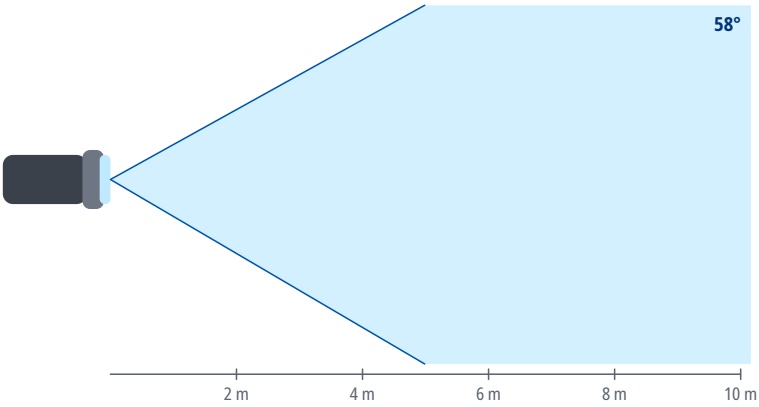
10 Technical specifications

Parameter	Value
Light	
Light source	LED
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45
RDM	yes (manufacturer ID 0x5253, device model ID 0x00DD)
Electrical	
Power supply	48 V
Power consumption	210 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	12 kg
Operating environment	
Operating temperature	0 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–8000 K
Strobe frequency	0.3–20 Hz

Spot diameter



Distance	Ø 58°
2 m	2.2 m
4 m	4.4 m
6 m	6.7 m
8 m	8.9 m
10 m	11.1 m
15 m	16.6 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.