DMX REFERENCE

Robin iTetra2

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_iTetra2_119740.gdtf
GDTF revision	2025-12-03 Reupload to share, Uploaded to GDTF Share.
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 6
5 Installation 6
6 Connections 7
7 Operation 7
8 Functions at a glance 8
9 DMX channels 11
Mode 6-Pattern full RGBW 12
Mode 5-Pattern full RGB 24
Mode 4-Pixel RGBW 28
Mode 3-Pixel RGB 31
Mode 2-Pattern 34
Mode 1-Wash 37
10 Technical specifications 40
11 Maintenance and cleaning 41
12 Troubleshooting 41
13 Disposal 41

1 About this manual

This document describes the Robin iTetra2™ by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_iTetra2_119740.gdtf from the GDTF-Share library.

File revision: “2025-12-03 Reupload to share, Uploaded to GDTF Share.”.

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	600 W
Weight	29.3 kg
Ingress protection	IP65

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 6-Pattern full RGBW	128	4	1, 129, 257, 385
Mode 5-Pattern full RGB	110	4	1, 111, 221, 331
Mode 4-Pixel RGBW	115	4	1, 116, 231, 346
Mode 3-Pixel RGB	97	5	1, 98, 195, 292, ...
Mode 2-Pattern	56	9	1, 57, 113, 169, ...
Mode 1-Wash	34	15	1, 35, 69, 103, ...

No light? Check these channels

- Mode 6-Pattern full RGBW: CH 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 52 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 53 Dimmer 4 above 0; CH 54 Shutter 5 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 55 Dimmer 5 above 0
- Mode 5-Pattern full RGB: CH 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 52 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 53 Dimmer 4 above 0; CH 54 Shutter 5 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 55 Dimmer 5 above 0
- Mode 4-Pixel RGBW: CH 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 41 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 42 Dimmer 4 above 0
- Mode 3-Pixel RGB: CH 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 41 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 42 Dimmer 4 above 0
- Mode 2-Pattern: CH 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 52 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 53 Dimmer 4 above 0; CH 54 Shutter 5 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 55 Dimmer 5 above 0
- Mode 1-Wash: CH 13 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 14 Dimmer 1 above 0; CH 21 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 22 Dimmer 2 above 0; CH 28 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 29 Dimmer 3 above 0; CH 33 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter

open”; CH 34 Dimmer 4 above 0



Read the manual before use



Risk of electric shock



Do not stare into the light

3 Safety instructions



Read the manual before use



Risk of electric shock



Do not stare into the light

⚠ 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

- Connect the device only to a properly installed mains outlet with a protective earth (ground) contact. The outlet or other means of disconnection must remain easily accessible.
- Power supply: 100–240 V, 50/60 Hz. Before connecting, make sure that the mains voltage matches this value and the value on the rating plate of the device.
- Do not connect the device to a dimmer or to a dimmed circuit.
- Use only the original power cable or a cable with identical ratings. Protect the cable from damage, do not run it over sharp edges, and never unplug it by pulling on the cable.
- When connecting several devices to one circuit, do not exceed its permitted load.
- Do not touch the device with wet hands.

⚠ CAUTION

- The device is rated IP65 and may be used outdoors within the limits of this rating.
- This protection is effective only when all connectors are mated or closed with their protective caps and all seals are intact. Use cables and connectors with the same or a higher protection rating.
- Do not open the housing; opening it breaks the seals and the protection rating can no longer be guaranteed.
- Install the device so that water cannot collect around connectors and cable glands, and inspect seals and cables regularly.

⚠ CAUTION

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

⚠ CAUTION

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

⚠ WARNING

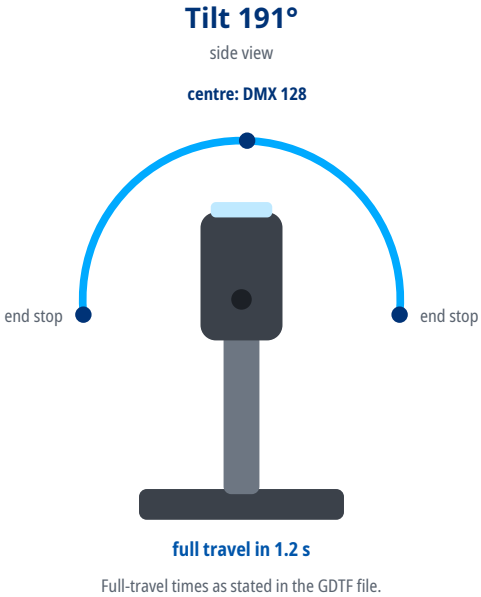
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts,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

4 Product description

Description in the GDTF file

“The impressive IP65-rated iTetra2™ moving linear LED bar joins the Robe iSeries, retaining all the coolness and functionality of the indoor version with the added benefit of Robe’s self-managing, low-maintenance ingress protection technology which very efficiently stops rain, dust, humidity, smoke or haze damage. With an identical DMX map, features and performance to Tetra2™, the outdoor iTetra2™ also has the onboard patented RAINS™ (Robe Automatic Ingress Neutralization System) which manages humidity, temperature and pressure control. As an active monitoring system, RAINS™ automatically removes any moisture detected within the fixture. iTetra2™ automatically runs a self-test whenever it senses a cover is removed and replaced which provides an error message if gaskets or covers are not replaced correctly or locking screws are not tightened, ensuring maximum protection. The lightweight aluminium alloy structure provides a dust-free environment for the optics, eliminating the need for frequent cleaning and routine maintenance, also reducing UV damage to the plastic parts.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

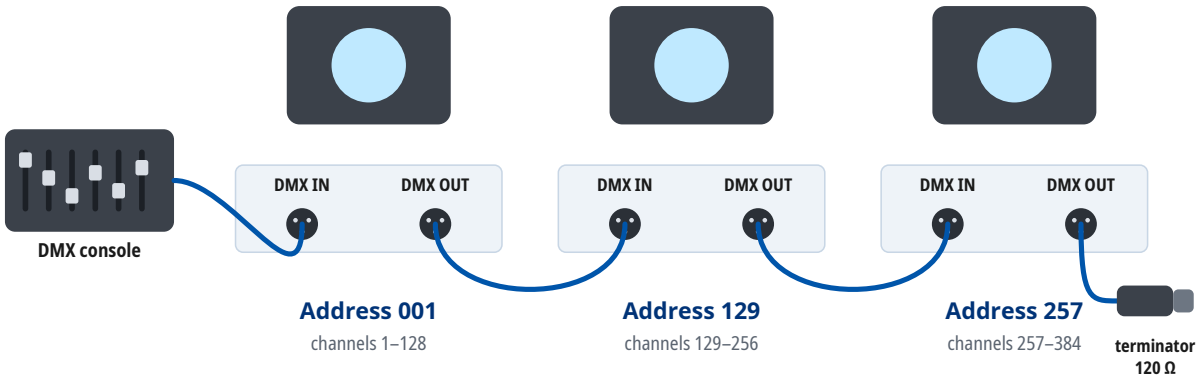
⚠ **WARNING**

- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 29.3 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 128 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

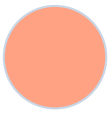
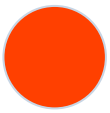
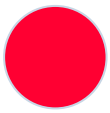
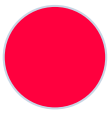
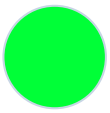
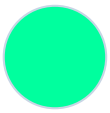
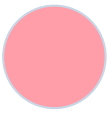
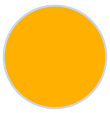
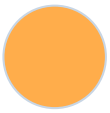
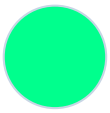
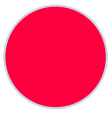
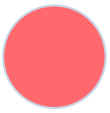
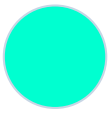
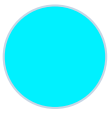
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Mode 6-Pattern full RGBW”: 128.
- Choose start addresses so that the channels of individual devices do not overlap and 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, 129, 257, 385.
- 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 6-Pattern full RGBW 128 channels	Mode 5-Pattern full RGB 110 channels	Mode 4-Pixel RGBW 115 channels	Mode 3-Pixel RGB 97 channels	Mode 2-Pattern 56 channels	Mode 1-Wash 34 channels
Pan / Tilt	1	1	1	1	1	1
Dimmer	5 channels (18–55)	5 channels (18–55)	4 channels (18–42)	4 channels (18–42)	5 channels (18–55)	4 channels (14–34)
Dimmer resolution	16 bit	16 bit	16 bit	16 bit	16 bit	8 bit
Shutter / strobe	5 channels (17–54)	5 channels (17–54)	4 channels (17–41)	4 channels (17–41)	5 channels (17–54)	4 channels (13–33)
Color mixing	71 channels (8–111)	70 channels (8–110)	67 channels (8–98)	66 channels (8–97)	16 channels (8–50)	8–11, 17–20, 24–27
Color temperature	16	16	16	16	16	12
Color wheel	7	7	7	7	7	7
Zoom	35, 37, 39	35, 37, 39	35, 37, 39	35, 37, 39	35, 37, 39	30–32
Effects / macros	51	51			51	
Pixel control	18 cells	18 cells	18 cells	18 cells	✓	✓

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

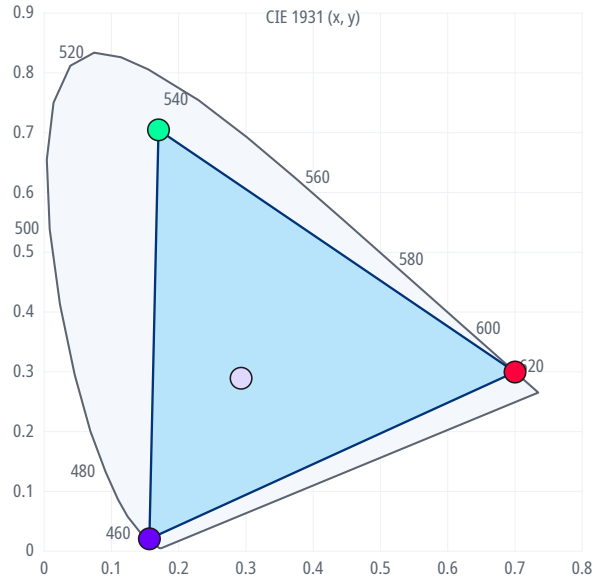
64 Filter 353 (Lighter Blue)
DMX 125–126

65 Filter 507 (Madge)
DMX 127–128

66 Filter 778 (Millennium Gold)
DMX 129–130

67 Filter 793 (Vanity Fair)
DMX 131–132

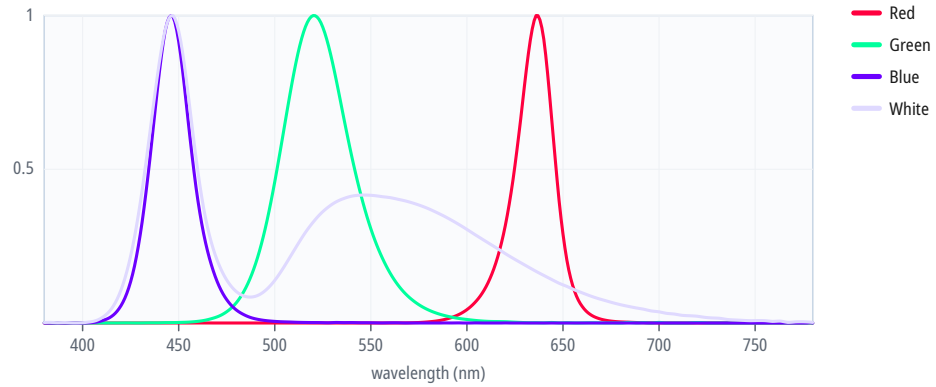
LED colors and the colors they mix



LED	x	y	nm
Red	0.700	0.300	625
Green	0.170	0.705	525
Blue	0.156	0.021	451
White	0.293	0.289	

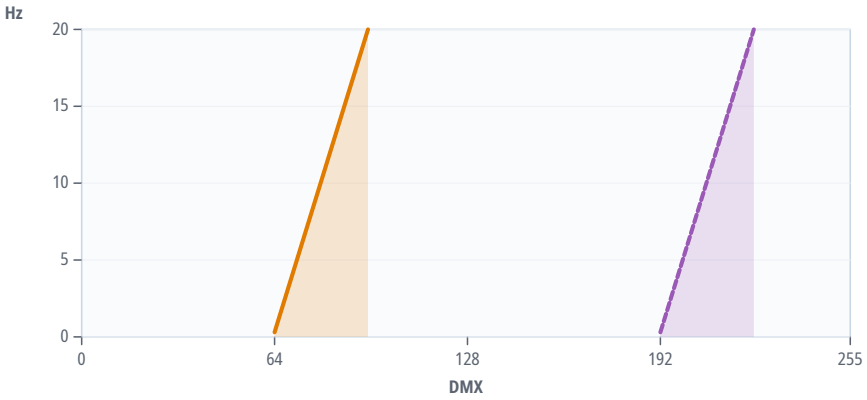
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

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



CH 17 · Mode 6-Pattern full RGBW

64–95: 0.3–20 Hz
BackgroundStrobe

192–223: 0.3–20 Hz
BackgroundStrobeRandom

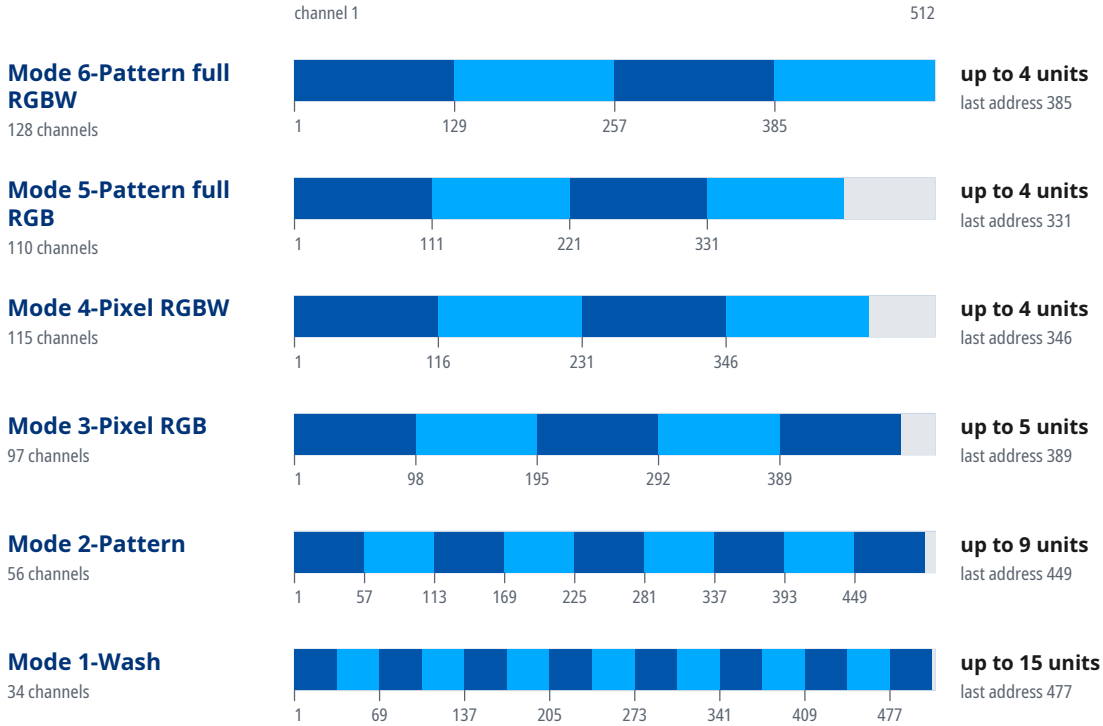
Cells (pixels)



18 cells in one row, left to right as the GDTF file places them (seen from above), wrapped after 9; 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	U2 · 129	11	U3 · 257	16	U4 · 385
2	129	7	U2 · 257	12	U3 · 385	17	U5 · 1
3	257	8	U2 · 385	13	U4 · 1	18	U5 · 129
4	385	9	U3 · 1	14	U4 · 129	19	U5 · 257
5	U2 · 1	10	U3 · 129	15	U4 · 257	20	U5 · 385

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 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 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 52 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 53 Dimmer 4 above 0; CH 54 Shutter 5 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 55 Dimmer 5 above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255, CH 54 Shutter 5 32, CH 55 Dimmer 5 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt	0–127	Tilt
		128	Center
		128–255	Tilt
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt	0	Max
		1–254	Max ... min
		255	Min
4	Control	0–5	No function
		6	Standby ON
		7	Standby OFF
		8	Pressure test ON
		9	Pressure test OFF
		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	Tilt speed mode
		45–49	Tilt time mode
		50–54	Blackout while tilt moving
		55–59	Disabled blackout while tilt moving
		60–64	Dimmer curve Square law
		65–69	Dimmer curve Linear
		70–74	Fans mode Auto
		75–79	Fans mode High
		80–84	White point 8000K On
		85–89	White point 8000K Off
		90–94	Automatic white pixel ON
		95–99	Automatic white pixel OFF
		100–104	Fans ON at blackout
		105–109	Fans OFF at blackout
		110–114	Kling-Net On
		115–119	Kling-Net Off
		120–124	Parking position On
		125–129	Parking position Off
		130–139	Fixture reset (except Tilt)
		140–149	Tilt reset
		150–159	Zoom reset
		160–169	Flower effects reset
		170–171	Tungsten effect simulation 750W

CH	Function	DMX	Description
4	Control (continued)	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
		182–199	Reserved 3
		200–209	Total fixture reset
		210	PixelIndex min
		211–226	PixelIndex min ... PixelIndex max
		227	PixelIndex max
		228–229	Pixel mirror On
		230–231	Pixel mirror Off
		232–236	Pixel Index: No function
		237	Save Pixel index and Mirror to fixture
		238–239	Reserved 4
		240	Disabled Quiet mode
		241–255	Quiet mode min to max
5	LED Frequency	0–4	PWM frequency from Display menu
		5–9	300Hz
		10–14	NoFunction
		15–19	600Hz
		20–255	No function
6	LED Frequency Adjusting	0–121	Selected LED frequency
		122–127	LED Frequency (step -6...-1)
		128	Selected LED Frequency
		129–134	LED Frequency (step +1...6)
		135–255	LEDFrequency Adjusting
7	Colors	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
7	Colors (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)
		111–112	Filter 219 (Fluorescent Green)

CH	Function	DMX	Description
7	Colors (continued)	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	Raw DMX
		236–245	Ranbow effect (with fade time) from slow to fast
		246–255	Ranbow effect (without fade time) from slow to fast
8	Red 1		Background Red
		0–255	Min ... Max
		255	Max
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Background Green
		0–255	Min ... Max
		255	Max
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		Background Blue
		0–255	Min ... Max
		255	Max
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Background White
		0–255	Min ... Max
		255	Max
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	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
17	Shutter 1	0–31	Shutter closed
		32–63	Open/Close: Shutter open
		64	Strobe min

CH	Function	DMX	Description
17	Shutter 1 (continued)	65–94	Strobe min ... Strobe max
		95	Strobe max
		96–127	Shutter open
		128	Open pulse slow
		129–142	Open pulse slow ... Open pulse fast
		143	Open pulse fast
		144	Closing pulse fast
		145–158	Closing pulse fast ... Closing pulse slow
		159	Closing pulse slow
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
18	Dimmer 1	0–255	Closed ... Open
		255	Open
19	Dimmer 1 Fine	0–255	Fine adjustment of CH 18
20	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
21	Flower Effect 1	0	Open position/Flower Effect Off
		1–127	Flower Effect forwards rotation from fast to slow
		128	No rotation
		129–255	Backwards rotation from slow to fast
22	Red 2		Flower Red
		0	Min
		1–254	Min ... Max
		255	Max
23	Green 2		Flower Green
		0	Min
		1–254	Min ... Max
		255	Max
24	Blue 2		Flower Blue

CH	Function	DMX	Description
24	Blue 2 (continued)	0	Min
		1–254	Min … Max
		255	Max
25	White 2		Flower White
		0	Min
		1–254	Min … Max
		255	Max
26	Shutter 2	0–31	Shutter closed
		32–63	Open/Close: Shutter open
		64	Strobe min
		65–94	Strobe min … Strobe max
		95	Strobe max
		96–127	Shutter open
		128	Open pulse slow
		129–142	Open pulse slow … Open pulse fast
		143	Open pulse fast
		144	Closing pulse fast
		145–158	Closing pulse fast … Closing pulse slow
		159	Closing pulse slow
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow … Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
27	Dimmer 2	0	Closed
		1–254	Closed … Open
		255	Open
28	Flower Effect 2	0	Open position/Flower Effect Off
		1–127	Flower Effect forwards rotation from fast to slow
		128	No rotation
		129–255	Backwards rotation from slow to fast
29	Red 3		Flower Red
		0	Min
		1–254	Min … Max
		255	Max
30	Green 3		Flower Green
		0	Min
		1–254	Min … Max
		255	Max
31	Blue 3		Flower Blue
		0	Min
		1–254	Min … Max

CH	Function	DMX	Description
31	Blue 3 (continued)	255	Max
32	White 3		Flower White
		0	Min
		1–254	Min … Max
		255	Max
33	Shutter 3	0–31	Shutter closed
		32–63	Open/Close: Shutter open
		64	Strobe min
		65–94	Strobe min … Strobe max
		95	Strobe max
		96–127	Shutter open
		128	Open pulse slow
		129–142	Open pulse slow … Open pulse fast
		143	Open pulse fast
		144	Closing pulse fast
		145–158	Closing pulse fast … Closing pulse slow
		159	Closing pulse slow
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow … Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
34	Dimmer 3	0	Closed
		1–254	Closed … Open
		255	Open
35	Zoom 1	0–255	Max beam angle … Min beam angle
		255	Min beam angle
36	Zoom 1 Fine	0–255	Fine adjustment of CH 35
37	Zoom 2	0–255	Max beam angle … Min beam angle
		255	Min beam angle
38	Zoom 2 Fine	0–255	Fine adjustment of CH 37
39	Zoom 3	0–255	Max beam angle … Min beam angle
		255	Min beam angle
40	Zoom 3 Fine	0–255	Fine adjustment of CH 39
41	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
		13–14	Pattern 6
		15–16	Pattern 7

CH	Function	DMX	Description
41	Pattern Selection (continued)	17–18	Pattern 8
		19–20	Pattern 9
		21–22	Pattern 10
		23–24	Pattern 11
		25–26	Pattern 12
		27–255	Reserved
42	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
		23–24	Variant 12
		25–26	Variant 13
		27–28	Variant 14
		29–30	Variant 15
		31–32	Variant 16
		33–34	Variant 17
		35–255	Reserved
43	Pattern Rotation	0	No movement
		1–127	CW movement fast to slow
		128	Pause - without movement
		129–255	CCW movement slow to fast
44	Pattern Fade	0	Snap
		1	Fade min
		2–254	Fade min ... Fade max
		255	Fade max
45	Pattern Transition	0	No fade
		1	100 ms
		2–254	100 ms ... 4 s
		255	4 s
46	Pattern Crossfade	0	Background
		1–254	Background ... Pattern
		255	Pattern
47	Red 4		Pattern Red
		0	Min
		1–254	Min ... Max

CH	Function	DMX	Description
47	Red 4 (continued)	255	Max
48	Green 4		Pattern Green
		0	Min
		1–254	Min ... Max
		255	Max
49	Blue 4		Pattern Blue
		0	Min
		1–254	Min ... Max
		255	Max
50	White 4		Pattern White
		0	Min
		1–254	Min ... Max
		255	Max
51	Color Macro	0–2	No macro
		3–8	Macro 1
		9–14	Macro 2
		15–20	Macro 3
		21–26	Macro 4
		27–32	Macro 5
		33–38	Macro 6
		39–44	Macro 7
		45–50	Macro 8
		51–56	Macro 9
		57–62	Macro 10
		63–68	Macro 11
		69–74	Macro 12
		75–80	Macro 13
		81–86	Macro 14
		87–92	Macro 15
		93–98	Macro 16
		99–104	Macro 17
		105–110	Macro 18
		111–116	Macro 19
		117–122	Macro 20
		123–128	Macro 21
		129–134	Macro 22
		135–140	Macro 23
		141–255	Reserved
52	Shutter 4	0–31	Shutter closed
		32–63	Open/Close: Shutter open
		64	Strobe min
		65–94	Strobe min ... Strobe max

CH	Function	DMX	Description
52	Shutter 4 (continued)	95	Strobe max
		96–127	Shutter open
		128	Opening pulse slow
		129–142	Opening pulse slow ... Opening pulse fast
		143	Opening pulse fast
		144	Closing pulse fast
		145–158	Closing pulse fast ... Closing pulse slow
		159	Closing pulse slow
		160–191	Shutter open
		192	Random strobe min
		193–222	Pattern Strobe Random
		223	Random strobe min
		224–255	Shutter open
53	Dimmer 4		Pattern Dimmer
		0	Closed
		1–254	Closed ... Open
		255	Open
54	Shutter 5	0–31	Shutter closed
		32–63	Open/Close: Shutter open
		64	Strobe min
		65–94	Strobe min ... Strobe max
		95	Strobe max
		96–127	Shutter open
		128	Opening pulse slow
		129–142	Opening pulse slow ... Opening pulse fast
		143	Opening pulse fast
		144	Closing pulse fast
		145–158	Closing pulse fast ... Closing pulse slow
		159	Closing pulse slow
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
55	Dimmer 5		Master Dimmer
		0–255	Closed ... Open
		255	Open
56	Dimmer 5 Fine	0–255	Fine adjustment of CH 55
57	Red 5		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max

CH	Function	DMX	Description
58	Green 5		Pixel Green
		0	Min
		1–254	Min … Max
		255	Max
59	Blue 5		Pixel Blue
		0	Min
		1–254	Min … Max
		255	Max
60	White 5		Pixel White
		0	Min
		1–254	Min … Max
		255	Max

CH 57–128: 18 cells of 4 channels each. Every cell works as cell 1 in the table above (CH 57–60); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	White	Cell	Red	Green	Blue	White
1	57	58	59	60	2	61	62	63	64
3	65	66	67	68	4	69	70	71	72
5	73	74	75	76	6	77	78	79	80
7	81	82	83	84	8	85	86	87	88
9	89	90	91	92	10	93	94	95	96
11	97	98	99	100	12	101	102	103	104
13	105	106	107	108	14	109	110	111	112
15	113	114	115	116	16	117	118	119	120
17	121	122	123	124	18	125	126	127	128

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 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 52 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 53 Dimmer 4 above 0; CH 54 Shutter 5 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 55 Dimmer 5 above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “Mode 6-Pattern full RGBW” (p. 13)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt		Same as CH 3 in the mode “Mode 6-Pattern full RGBW” (p. 13)
4	Control		Same as CH 4 in the mode “Mode 6-Pattern full RGBW” (p. 13)
5	LED Frequency		Same as CH 5 in the mode “Mode 6-Pattern full RGBW” (p. 14)
6	LED Frequency Adjusting		Same as CH 6 in the mode “Mode 6-Pattern full RGBW” (p. 14)
7	Colors		Same as CH 7 in the mode “Mode 6-Pattern full RGBW” (p. 14)
8	Red 1		Same as CH 8 in the mode “Mode 6-Pattern full RGBW” (p. 16)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Mode 6-Pattern full RGBW” (p. 16)
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		Same as CH 12 in the mode “Mode 6-Pattern full RGBW” (p. 16)
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Mode 6-Pattern full RGBW” (p. 16)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	CTO		Same as CH 16 in the mode “Mode 6-Pattern full RGBW” (p. 16)
17	Shutter 1		Same as CH 17 in the mode “Mode 6-Pattern full RGBW” (p. 16)
18	Dimmer 1		Same as CH 18 in the mode “Mode 6-Pattern full RGBW” (p. 17)
19	Dimmer 1 Fine	0–255	Fine adjustment of CH 18
20	Color Mix Mode		Same as CH 20 in the mode “Mode 6-Pattern full RGBW” (p. 17)
21	Flower Effect 1		Same as CH 21 in the mode “Mode 6-Pattern full RGBW” (p. 17)
22	Red 2		Same as CH 22 in the mode “Mode 6-Pattern full RGBW” (p. 17)
23	Green 2		Same as CH 23 in the mode “Mode 6-Pattern full RGBW” (p. 17)
24	Blue 2		Same as CH 24 in the mode “Mode 6-Pattern full RGBW” (p. 17)
25	White 2		Same as CH 25 in the mode “Mode 6-Pattern full RGBW” (p. 18)
26	Shutter 2		Same as CH 26 in the mode “Mode 6-Pattern full RGBW” (p. 18)
27	Dimmer 2		Same as CH 27 in the mode “Mode 6-Pattern full RGBW” (p. 18)
28	Flower Effect 2		Same as CH 28 in the mode “Mode 6-Pattern full RGBW” (p. 18)
29	Red 3		Same as CH 29 in the mode “Mode 6-Pattern full RGBW” (p. 18)

CH	Function	DMX	Description
30	Green 3		Same as CH 30 in the mode “Mode 6-Pattern full RGBW” (p. 18)
31	Blue 3		Same as CH 31 in the mode “Mode 6-Pattern full RGBW” (p. 18)
32	White 3		Same as CH 32 in the mode “Mode 6-Pattern full RGBW” (p. 19)
33	Shutter 3		Same as CH 33 in the mode “Mode 6-Pattern full RGBW” (p. 19)
34	Dimmer 3		Same as CH 34 in the mode “Mode 6-Pattern full RGBW” (p. 19)
35	Zoom 1		Same as CH 35 in the mode “Mode 6-Pattern full RGBW” (p. 19)
36	Zoom 1 Fine	0–255	Fine adjustment of CH 35
37	Zoom 2		Same as CH 37 in the mode “Mode 6-Pattern full RGBW” (p. 19)
38	Zoom 2 Fine	0–255	Fine adjustment of CH 37
39	Zoom 3		Same as CH 39 in the mode “Mode 6-Pattern full RGBW” (p. 19)
40	Zoom 3 Fine	0–255	Fine adjustment of CH 39
41	Pattern Selection		Same as CH 41 in the mode “Mode 6-Pattern full RGBW” (p. 19)
42	Pattern Size		Same as CH 42 in the mode “Mode 6-Pattern full RGBW” (p. 20)
43	Pattern Rotation		Same as CH 43 in the mode “Mode 6-Pattern full RGBW” (p. 20)
44	Pattern Fade		Same as CH 44 in the mode “Mode 6-Pattern full RGBW” (p. 20)
45	Pattern Transition		Same as CH 45 in the mode “Mode 6-Pattern full RGBW” (p. 20)
46	Pattern Crossfade		Same as CH 46 in the mode “Mode 6-Pattern full RGBW” (p. 20)
47	Red 4		Same as CH 47 in the mode “Mode 6-Pattern full RGBW” (p. 20)
48	Green 4		Same as CH 48 in the mode “Mode 6-Pattern full RGBW” (p. 21)
49	Blue 4		Same as CH 49 in the mode “Mode 6-Pattern full RGBW” (p. 21)
50	White 4		Same as CH 50 in the mode “Mode 6-Pattern full RGBW” (p. 21)
51	Color Macro		Same as CH 51 in the mode “Mode 6-Pattern full RGBW” (p. 21)
52	Shutter 4		Same as CH 52 in the mode “Mode 6-Pattern full RGBW” (p. 21)
53	Dimmer 4		Same as CH 53 in the mode “Mode 6-Pattern full RGBW” (p. 22)
54	Shutter 5		Same as CH 54 in the mode “Mode 6-Pattern full RGBW” (p. 22)

CH	Function	DMX	Description
55	Dimmer 5		Same as CH 55 in the mode “Mode 6-Pattern full RGBW” (p. 22)
56	Dimmer 5 Fine	0–255	Fine adjustment of CH 55
57	Red 5		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
58	Green 5		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
59	Blue 5		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max

CH 57–110: 18 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 57–59); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	57	58	59	2	60	61	62	3	63	64	65
4	66	67	68	5	69	70	71	6	72	73	74
7	75	76	77	8	78	79	80	9	81	82	83
10	84	85	86	11	87	88	89	12	90	91	92
13	93	94	95	14	96	97	98	15	99	100	101
16	102	103	104	17	105	106	107	18	108	109	110

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 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 41 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 42 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “Mode 6-Pattern full RGBW” (p. 13)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt		Same as CH 3 in the mode “Mode 6-Pattern full RGBW” (p. 13)
4	Control		Same as CH 4 in the mode “Mode 6-Pattern full RGBW” (p. 13)
5	LED Frequency		Same as CH 5 in the mode “Mode 6-Pattern full RGBW” (p. 14)
6	LED Frequency Adjusting		Same as CH 6 in the mode “Mode 6-Pattern full RGBW” (p. 14)
7	Colors		Same as CH 7 in the mode “Mode 6-Pattern full RGBW” (p. 14)
8	Red 1		Same as CH 8 in the mode “Mode 6-Pattern full RGBW” (p. 16)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Mode 6-Pattern full RGBW” (p. 16)
11	Green 1 Fine	0–255	Fine adjustment of CH 10

CH	Function	DMX	Description
12	Blue 1		Same as CH 12 in the mode “Mode 6-Pattern full RGBW” (p. 16)
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Mode 6-Pattern full RGBW” (p. 16)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	CTO		Same as CH 16 in the mode “Mode 6-Pattern full RGBW” (p. 16)
17	Shutter 1		Same as CH 17 in the mode “Mode 6-Pattern full RGBW” (p. 16)
18	Dimmer 1		Same as CH 18 in the mode “Mode 6-Pattern full RGBW” (p. 17)
19	Dimmer 1 Fine	0–255	Fine adjustment of CH 18
20	Color Mix Mode		Same as CH 20 in the mode “Mode 6-Pattern full RGBW” (p. 17)
21	Flower Effect 1		Same as CH 21 in the mode “Mode 6-Pattern full RGBW” (p. 17)
22	Red 2		Same as CH 22 in the mode “Mode 6-Pattern full RGBW” (p. 17)
23	Green 2		Same as CH 23 in the mode “Mode 6-Pattern full RGBW” (p. 17)
24	Blue 2		Same as CH 24 in the mode “Mode 6-Pattern full RGBW” (p. 17)
25	White 2		Same as CH 25 in the mode “Mode 6-Pattern full RGBW” (p. 18)
26	Shutter 2		Same as CH 26 in the mode “Mode 6-Pattern full RGBW” (p. 18)
27	Dimmer 2		Same as CH 27 in the mode “Mode 6-Pattern full RGBW” (p. 18)
28	Flower Effect 2		Same as CH 28 in the mode “Mode 6-Pattern full RGBW” (p. 18)
29	Red 3		Same as CH 29 in the mode “Mode 6-Pattern full RGBW” (p. 18)
30	Green 3		Same as CH 30 in the mode “Mode 6-Pattern full RGBW” (p. 18)
31	Blue 3		Same as CH 31 in the mode “Mode 6-Pattern full RGBW” (p. 18)
32	White 3		Same as CH 32 in the mode “Mode 6-Pattern full RGBW” (p. 19)
33	Shutter 3		Same as CH 33 in the mode “Mode 6-Pattern full RGBW” (p. 19)
34	Dimmer 3		Same as CH 34 in the mode “Mode 6-Pattern full RGBW” (p. 19)
35	Zoom 1		Same as CH 35 in the mode “Mode 6-Pattern full RGBW” (p. 19)
36	Zoom 1 Fine	0–255	Fine adjustment of CH 35
37	Zoom 2		Same as CH 37 in the mode “Mode 6-Pattern full RGBW” (p. 19)

CH	Function	DMX	Description
38	Zoom 2 Fine	0–255	Fine adjustment of CH 37
39	Zoom 3		Same as CH 39 in the mode “Mode 6-Pattern full RGBW” (p. 19)
40	Zoom 3 Fine	0–255	Fine adjustment of CH 39
41	Shutter 4	0–31	Shutter closed
		32–63	Open/Close: Shutter open
		64	Strobe min
		65–94	Strobe min ... Strobe max
		95	Strobe max
		96–127	Shutter open
		128	Opening pulse slow
		129–142	Opening pulse slow ... Opening pulse fast
		143	Opening pulse fast
		144	Closing pulse fast
		145–158	Closing pulse fast ... Closing pulse slow
		159	Closing pulse slow
		160–191	Shutter open
		192	Random strobe slow
		193–222	Random strobe slow ... Random strobe fast
		223	Random strobe fast
		224–255	Shutter open
42	Dimmer 4		Master Dimmer
		0–255	Closed ... Open
		255	Open
43	Dimmer 4 Fine	0–255	Fine adjustment of CH 42
44	Red 4		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
45	Green 4		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
46	Blue 4		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max
47	White 4		Pixel White
		0	Min
		1–254	Min ... Max
		255	Max

CH 44–115: 18 cells of 4 channels each. Every cell works as cell 1 in the table above (CH 44–47); the table

below gives each cell's channel numbers.

Cell	Red	Green	Blue	White	Cell	Red	Green	Blue	White
1	44	45	46	47	2	48	49	50	51
3	52	53	54	55	4	56	57	58	59
5	60	61	62	63	6	64	65	66	67
7	68	69	70	71	8	72	73	74	75
9	76	77	78	79	10	80	81	82	83
11	84	85	86	87	12	88	89	90	91
13	92	93	94	95	14	96	97	98	99
15	100	101	102	103	16	104	105	106	107
17	108	109	110	111	18	112	113	114	115

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 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 41 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 42 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “Mode 6-Pattern full RGBW” (p. 13)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt		Same as CH 3 in the mode “Mode 6-Pattern full RGBW” (p. 13)
4	Control		Same as CH 4 in the mode “Mode 6-Pattern full RGBW” (p. 13)
5	LED Frequency		Same as CH 5 in the mode “Mode 6-Pattern full RGBW” (p. 14)
6	LED Frequency Adjusting		Same as CH 6 in the mode “Mode 6-Pattern full RGBW” (p. 14)
7	Colors		Same as CH 7 in the mode “Mode 6-Pattern full RGBW” (p. 14)
8	Red 1		Same as CH 8 in the mode “Mode 6-Pattern full RGBW” (p. 16)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Mode 6-Pattern full RGBW” (p. 16)
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		Same as CH 12 in the mode “Mode 6-Pattern full RGBW” (p. 16)
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Mode 6-Pattern full RGBW” (p. 16)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	CTO		Same as CH 16 in the mode “Mode 6-Pattern full RGBW” (p. 16)
17	Shutter 1		Same as CH 17 in the mode “Mode 6-Pattern full RGBW” (p. 16)
18	Dimmer 1		Same as CH 18 in the mode “Mode 6-Pattern full RGBW” (p. 17)
19	Dimmer 1 Fine	0–255	Fine adjustment of CH 18
20	Color Mix Mode		Same as CH 20 in the mode “Mode 6-Pattern full RGBW” (p. 17)
21	Flower Effect 1		Same as CH 21 in the mode “Mode 6-Pattern full RGBW” (p. 17)
22	Red 2		Same as CH 22 in the mode “Mode 6-Pattern full RGBW” (p. 17)
23	Green 2		Same as CH 23 in the mode “Mode 6-Pattern full RGBW” (p. 17)
24	Blue 2		Same as CH 24 in the mode “Mode 6-Pattern full RGBW” (p. 17)
25	White 2		Same as CH 25 in the mode “Mode 6-Pattern full RGBW” (p. 18)
26	Shutter 2		Same as CH 26 in the mode “Mode 6-Pattern full RGBW” (p. 18)
27	Dimmer 2		Same as CH 27 in the mode “Mode 6-Pattern full RGBW” (p. 18)
28	Flower Effect 2		Same as CH 28 in the mode “Mode 6-Pattern full RGBW” (p. 18)
29	Red 3		Same as CH 29 in the mode “Mode 6-Pattern full RGBW” (p. 18)

CH	Function	DMX	Description
30	Green 3		Same as CH 30 in the mode “Mode 6-Pattern full RGBW” (p. 18)
31	Blue 3		Same as CH 31 in the mode “Mode 6-Pattern full RGBW” (p. 18)
32	White 3		Same as CH 32 in the mode “Mode 6-Pattern full RGBW” (p. 19)
33	Shutter 3		Same as CH 33 in the mode “Mode 6-Pattern full RGBW” (p. 19)
34	Dimmer 3		Same as CH 34 in the mode “Mode 6-Pattern full RGBW” (p. 19)
35	Zoom 1		Same as CH 35 in the mode “Mode 6-Pattern full RGBW” (p. 19)
36	Zoom 1 Fine	0–255	Fine adjustment of CH 35
37	Zoom 2		Same as CH 37 in the mode “Mode 6-Pattern full RGBW” (p. 19)
38	Zoom 2 Fine	0–255	Fine adjustment of CH 37
39	Zoom 3		Same as CH 39 in the mode “Mode 6-Pattern full RGBW” (p. 19)
40	Zoom 3 Fine	0–255	Fine adjustment of CH 39
41	Shutter 4		Same as CH 41 in the mode “Mode 4-Pixel RGBW” (p. 30)
42	Dimmer 4		Same as CH 42 in the mode “Mode 4-Pixel RGBW” (p. 30)
43	Dimmer 4 Fine	0–255	Fine adjustment of CH 42
44	Red 4		Pixel Red
		0	Min
		1–254	Min ... Max
		255	Max
45	Green 4		Pixel Green
		0	Min
		1–254	Min ... Max
		255	Max
46	Blue 4		Pixel Blue
		0	Min
		1–254	Min ... Max
		255	Max

CH 44–97: 18 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 44–46); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	44	45	46	2	47	48	49	3	50	51	52
4	53	54	55	5	56	57	58	6	59	60	61
7	62	63	64	8	65	66	67	9	68	69	70
10	71	72	73	11	74	75	76	12	77	78	79
13	80	81	82	14	83	84	85	15	86	87	88
16	89	90	91	17	92	93	94	18	95	96	97

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 17 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 18 Dimmer 1 above 0; CH 26 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 27 Dimmer 2 above 0; CH 33 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 34 Dimmer 3 above 0; CH 52 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 53 Dimmer 4 above 0; CH 54 Shutter 5 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 55 Dimmer 5 above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “Mode 6-Pattern full RGBW” (p. 13)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt		Same as CH 3 in the mode “Mode 6-Pattern full RGBW” (p. 13)
4	Control		Same as CH 4 in the mode “Mode 6-Pattern full RGBW” (p. 13)
5	LED Frequency		Same as CH 5 in the mode “Mode 6-Pattern full RGBW” (p. 14)
6	LED Frequency Adjusting		Same as CH 6 in the mode “Mode 6-Pattern full RGBW” (p. 14)
7	Colors		Same as CH 7 in the mode “Mode 6-Pattern full RGBW” (p. 14)
8	Red 1		Same as CH 8 in the mode “Mode 6-Pattern full RGBW” (p. 16)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Mode 6-Pattern full RGBW” (p. 16)
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		Same as CH 12 in the mode “Mode 6-Pattern full RGBW” (p. 16)
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Mode 6-Pattern full RGBW” (p. 16)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	CTO		Same as CH 16 in the mode “Mode 6-Pattern full RGBW” (p. 16)
17	Shutter 1		Same as CH 17 in the mode “Mode 6-Pattern full RGBW” (p. 16)
18	Dimmer 1		Same as CH 18 in the mode “Mode 6-Pattern full RGBW” (p. 17)
19	Dimmer 1 Fine	0–255	Fine adjustment of CH 18
20	Color Mix Mode		Same as CH 20 in the mode “Mode 6-Pattern full RGBW” (p. 17)
21	Flower Effect 1		Same as CH 21 in the mode “Mode 6-Pattern full RGBW” (p. 17)
22	Red 2		Same as CH 22 in the mode “Mode 6-Pattern full RGBW” (p. 17)
23	Green 2		Same as CH 23 in the mode “Mode 6-Pattern full RGBW” (p. 17)
24	Blue 2		Same as CH 24 in the mode “Mode 6-Pattern full RGBW” (p. 17)
25	White 2		Same as CH 25 in the mode “Mode 6-Pattern full RGBW” (p. 18)
26	Shutter 2		Same as CH 26 in the mode “Mode 6-Pattern full RGBW” (p. 18)
27	Dimmer 2		Same as CH 27 in the mode “Mode 6-Pattern full RGBW” (p. 18)
28	Flower Effect 2		Same as CH 28 in the mode “Mode 6-Pattern full RGBW” (p. 18)
29	Red 3		Same as CH 29 in the mode “Mode 6-Pattern full RGBW” (p. 18)

CH	Function	DMX	Description
30	Green 3		Same as CH 30 in the mode “Mode 6-Pattern full RGBW” (p. 18)
31	Blue 3		Same as CH 31 in the mode “Mode 6-Pattern full RGBW” (p. 18)
32	White 3		Same as CH 32 in the mode “Mode 6-Pattern full RGBW” (p. 19)
33	Shutter 3		Same as CH 33 in the mode “Mode 6-Pattern full RGBW” (p. 19)
34	Dimmer 3		Same as CH 34 in the mode “Mode 6-Pattern full RGBW” (p. 19)
35	Zoom 1		Same as CH 35 in the mode “Mode 6-Pattern full RGBW” (p. 19)
36	Zoom 1 Fine	0–255	Fine adjustment of CH 35
37	Zoom 2		Same as CH 37 in the mode “Mode 6-Pattern full RGBW” (p. 19)
38	Zoom 2 Fine	0–255	Fine adjustment of CH 37
39	Zoom 3		Same as CH 39 in the mode “Mode 6-Pattern full RGBW” (p. 19)
40	Zoom 3 Fine	0–255	Fine adjustment of CH 39
41	Pattern Selection		Same as CH 41 in the mode “Mode 6-Pattern full RGBW” (p. 19)
42	Pattern Size		Same as CH 42 in the mode “Mode 6-Pattern full RGBW” (p. 20)
43	Pattern Rotation		Same as CH 43 in the mode “Mode 6-Pattern full RGBW” (p. 20)
44	Pattern Fade		Same as CH 44 in the mode “Mode 6-Pattern full RGBW” (p. 20)
45	Pattern Transition		Same as CH 45 in the mode “Mode 6-Pattern full RGBW” (p. 20)
46	Pattern Crossfade		Same as CH 46 in the mode “Mode 6-Pattern full RGBW” (p. 20)
47	Red 4		Same as CH 47 in the mode “Mode 6-Pattern full RGBW” (p. 20)
48	Green 4		Same as CH 48 in the mode “Mode 6-Pattern full RGBW” (p. 21)
49	Blue 4		Same as CH 49 in the mode “Mode 6-Pattern full RGBW” (p. 21)
50	White 4		Same as CH 50 in the mode “Mode 6-Pattern full RGBW” (p. 21)
51	Color Macro		Same as CH 51 in the mode “Mode 6-Pattern full RGBW” (p. 21)
52	Shutter 4		Same as CH 52 in the mode “Mode 6-Pattern full RGBW” (p. 21)
53	Dimmer 4		Same as CH 53 in the mode “Mode 6-Pattern full RGBW” (p. 22)

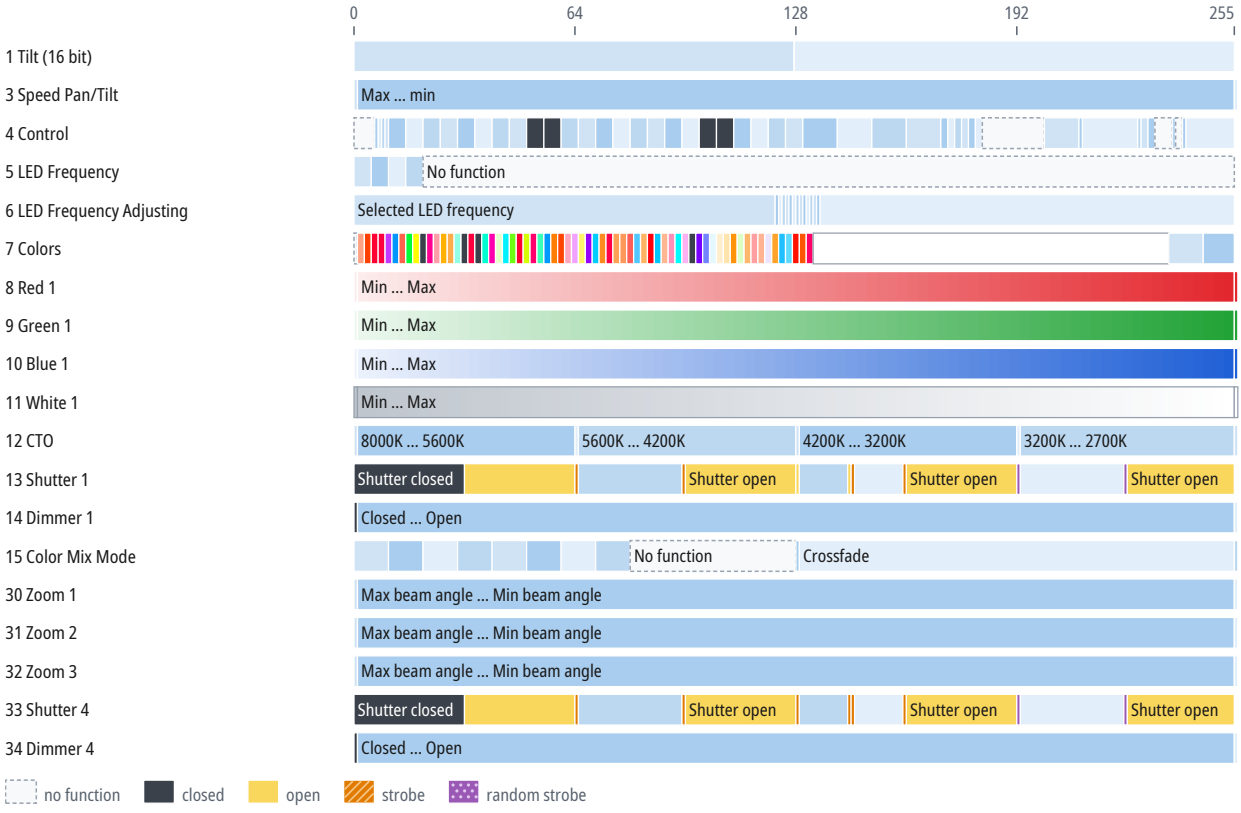
CH	Function	DMX	Description
54	Shutter 5		Same as CH 54 in the mode “Mode 6-Pattern full RGBW” (p. 22)
55	Dimmer 5		Same as CH 55 in the mode “Mode 6-Pattern full RGBW” (p. 22)
56	Dimmer 5 Fine	0–255	Fine adjustment of CH 55

Mode 1-Wash

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 13 Shutter 1 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 14 Dimmer 1 above 0; CH 21 Shutter 2 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 22 Dimmer 2 above 0; CH 28 Shutter 3 at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 29 Dimmer 3 above 0; CH 33 Shutter 4 at 32–63, 96–127, 160–191 or 224–255 “Shutter open”; CH 34 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Red 1 255, CH 9 Green 1 255, CH 10 Blue 1 255, CH 11 White 1 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “Mode 6-Pattern full RGBW” (p. 13)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt		Same as CH 3 in the mode “Mode 6-Pattern full RGBW” (p. 13)
4	Control		Same as CH 4 in the mode “Mode 6-Pattern full RGBW” (p. 13)
5	LED Frequency		Same as CH 5 in the mode “Mode 6-Pattern full RGBW” (p. 14)

CH	Function	DMX	Description
6	LED Frequency Adjusting		Same as CH 6 in the mode “Mode 6-Pattern full RGBW” (p. 14)
7	Colors		Same as CH 7 in the mode “Mode 6-Pattern full RGBW” (p. 14)
8	Red 1		Background Red
		0	Min
		1–254	Min ... Max
		255	Max
9	Green 1		Background Green
		0	Min
		1–254	Min ... Max
		255	Max
10	Blue 1		Background Blue
		0	Min
		1–254	Min ... Max
		255	Max
11	White 1		Background White
		0	Min
		1–254	Min ... Max
		255	Max
12	CTO		Same as CH 16 in the mode “Mode 6-Pattern full RGBW” (p. 16)
13	Shutter 1		Same as CH 17 in the mode “Mode 6-Pattern full RGBW” (p. 16)
14	Dimmer 1	0	Closed
		1–254	Closed ... Open
		255	Open
15	Color Mix Mode		Same as CH 20 in the mode “Mode 6-Pattern full RGBW” (p. 17)
16	Flower Effect 1		Same as CH 21 in the mode “Mode 6-Pattern full RGBW” (p. 17)
17	Red 2		Same as CH 22 in the mode “Mode 6-Pattern full RGBW” (p. 17)
18	Green 2		Same as CH 23 in the mode “Mode 6-Pattern full RGBW” (p. 17)
19	Blue 2		Same as CH 24 in the mode “Mode 6-Pattern full RGBW” (p. 17)
20	White 2		Same as CH 25 in the mode “Mode 6-Pattern full RGBW” (p. 18)
21	Shutter 2		Same as CH 26 in the mode “Mode 6-Pattern full RGBW” (p. 18)
22	Dimmer 2		Same as CH 27 in the mode “Mode 6-Pattern full RGBW” (p. 18)
23	Flower Effect 2		Same as CH 28 in the mode “Mode 6-Pattern full RGBW” (p. 18)
24	Red 3		Same as CH 29 in the mode “Mode 6-Pattern full RGBW” (p. 18)

CH	Function	DMX	Description
25	Green 3		Same as CH 30 in the mode “Mode 6-Pattern full RGBW” (p. 18)
26	Blue 3		Same as CH 31 in the mode “Mode 6-Pattern full RGBW” (p. 18)
27	White 3		Same as CH 32 in the mode “Mode 6-Pattern full RGBW” (p. 19)
28	Shutter 3		Same as CH 33 in the mode “Mode 6-Pattern full RGBW” (p. 19)
29	Dimmer 3		Same as CH 34 in the mode “Mode 6-Pattern full RGBW” (p. 19)
30	Zoom 1	0	Max beam angle
		1–254	Max beam angle ... Min beam angle
		255	Min beam angle
31	Zoom 2	0	Max beam angle
		1–254	Max beam angle ... Min beam angle
		255	Min beam angle
32	Zoom 3	0	Max beam angle
		1–254	Max beam angle ... Min beam angle
		255	Min beam angle
33	Shutter 4		Same as CH 41 in the mode “Mode 4-Pixel RGBW” (p. 30)
34	Dimmer 4		Master Dimmer
		0	Closed
		1–254	Closed ... Open
		255	Open

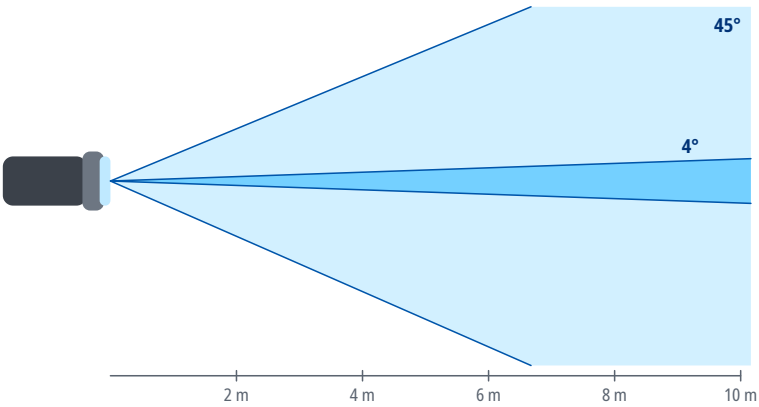
10 Technical specifications

Parameter	Value
Light	
Light source	LED
Optics	
Zoom	4–45°
Movement	
Tilt	191°
Control	
DMX connection	5-pin XLR IN/OUT
RDM	yes (manufacturer ID 0x5253, device model ID 0x0134)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	600 W
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	29.3 kg
Operating environment	
Ingress protection	IP65
Meaning of the IP code (IEC 60529)	Dust-tight; protected against water jets
Operating temperature	-5 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–8000 K
Strobe frequency	0.3–20 Hz
LED frequency	0–600 Hz

Spot diameter



Distance	Ø 4°	Ø 45°
2 m	0.14 m	1.7 m
4 m	0.28 m	3.3 m
6 m	0.42 m	5 m
8 m	0.56 m	6.6 m
10 m	0.7 m	8.3 m
15 m	1 m	12.4 m

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

11 Maintenance and cleaning

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

12 Troubleshooting

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

13 Disposal

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

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

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

Recycle the packaging materials according to their type.