DMX REFERENCE

VIZI XTREME

ADJ



Manufacturer	ADJ
GDTF file	ADJ_VIZI_XTREME_151129.gdtf
GDTF revision	First Release 26-15-07 · 2026-07-15
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1 About this manual

This document describes the VIZI XTREME by ADJ. It was compiled from the GDTF file ADJ_VIZI_XTREME_151129.gdtf from the GDTF-Share library.

File revision: “First Release 26-15-07”.

The DMX modes, the channel functions and the technical data are given as the GDTF file states them. Installation, operation from the device's control panel, service and safety instructions are described in the manufacturer's original user manual, which takes precedence over this document.

This document was not issued or endorsed by ADJ; product names and trademarks belong to their owners.

Safety notices are marked with signal words according to the severity of the hazard: DANGER – an imminent hazard that will result in death or serious injury; WARNING – a potential hazard that could result in death or serious injury; CAUTION – a potential hazard that could result in minor injury or property damage; NOTE – additional information for correct and safe use.

> **NOTE** This product is designed for stage and effect lighting. It is not suitable for household room illumination.

2 Quick reference

Parameter	Value
Weight	7 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
73Ch	73	7	1, 74, 147, 220, ...
40Ch	40	12	1, 41, 81, 121, ...
28Ch	28	18	1, 29, 57, 85, ...
63Ch	63	8	1, 64, 127, 190, ...
54Ch	54	9	1, 55, 109, 163, ...

No light? Check these channels

- 73Ch: CH 31 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 62 Shutter 2 at 32–63, 160–191 or 224–255
- 40Ch: CH 18 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 29 Shutter 2 at 32–63, 160–191 or 224–255
- 28Ch: CH 12 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 21 Shutter 2 at 32–63, 160–191 or 224–255
- 63Ch: CH 21 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 52 Shutter 2 at 32–63, 160–191 or 224–255
- 54Ch: CH 18 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 48 Shutter 2 at 32–63, 160–191 or 224–255



Read the manual before use



Do not stare into the light



Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

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

⚠ CAUTION

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

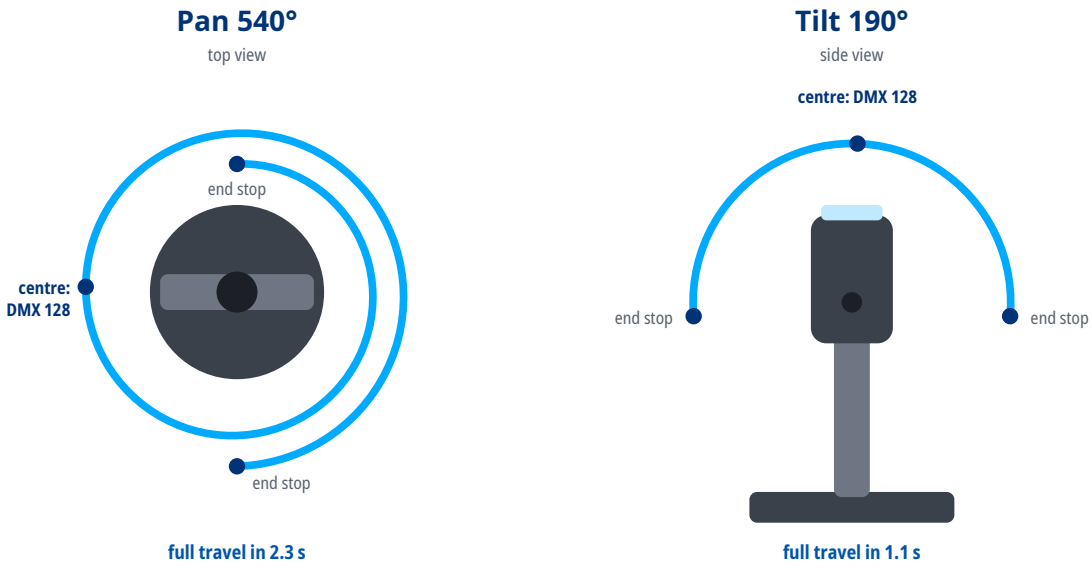
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

4 Product description

Description in the GDTF file

“Ultra-fast and incredibly compact, but also extremely powerful, the Vizi Xtreme is a beam wash moving head offering powerful output, dynamic effects – including optional 360° continuous pan/tilt movement, and precise control. It features four, individually controlled, 60-watt RGBL color mixing LEDs surrounded by an additional ring of RGBW ‘eye candy’ LEDs. Designed for maximum versatility and speed, it delivers brilliant color mixing, motorized zoom from 3°–45°, and advanced control connectivity for professional lighting applications.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

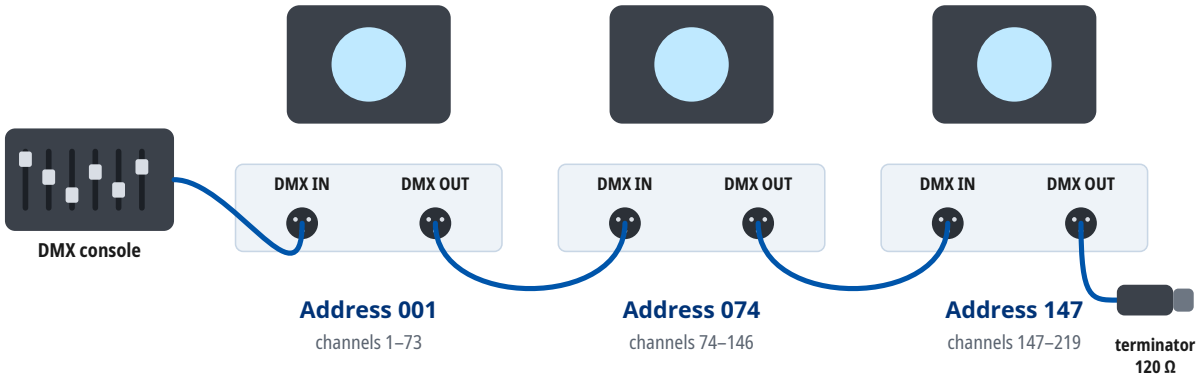
⚠ **WARNING**

- 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: 7 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 73Ch: every unit occupies 73 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

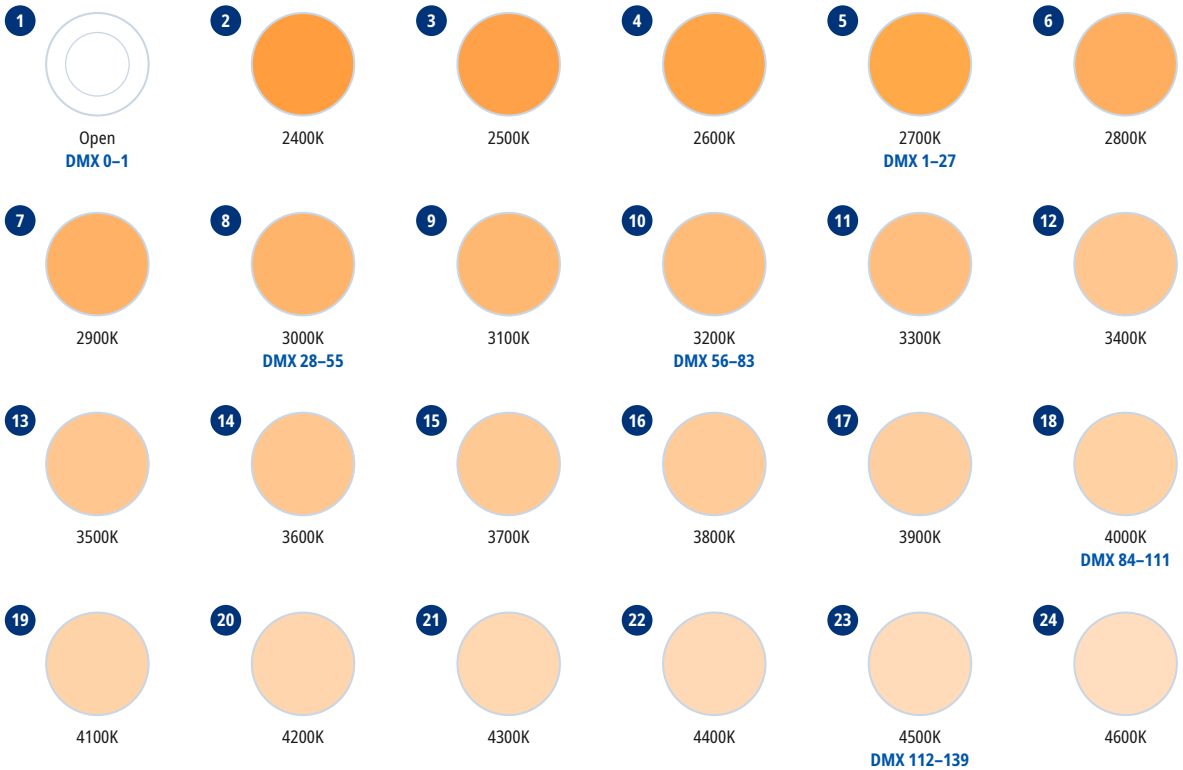
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “73Ch”: 73.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- For several devices in a row in the DMX mode “73Ch”, you can use, for example, the start addresses 1, 74, 147, 220.
- 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.

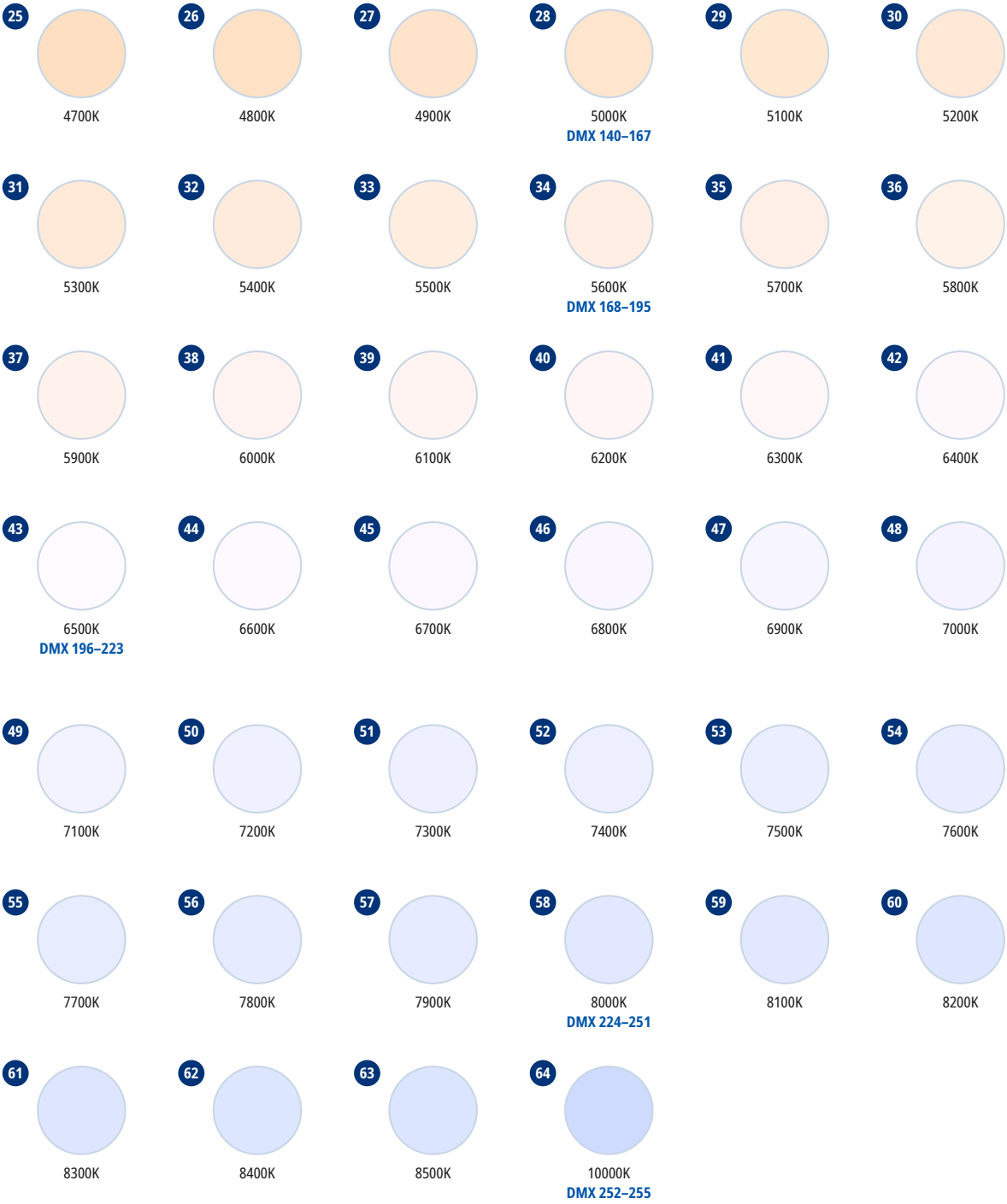
8 Functions at a glance

Functions in each DMX mode

	73Ch 73 channels	40Ch 40 channels	28Ch 28 channels	63Ch 63 channels	54Ch 54 channels
Pan / Tilt	1, 3, 5, 6	1, 3, 5, 6	1, 2	1, 3, 5, 6	1, 3, 5, 6
Pan / Tilt resolution	16 bit	16 bit	8 bit	16 bit	16 bit
Dimmer	32, 63	19, 30	13, 22	22, 53	19, 49
Dimmer resolution	16 bit	16 bit	8 bit	16 bit	8 bit
Shutter / strobe	31, 62	18, 29	12, 21	21, 52	18, 48
Color mixing	7–22, 34–57	7–10, 21–24	3–6, 14–17	27 channels (7–47)	7–9, 20–43
Color temperature	23	11		13	10
Color wheel	24, 26, 27, 58	12–14, 25	7, 8	14, 16, 17, 48	11, 13, 14, 44
Zoom	65	32	23	55	50
Effects / macros	28–30, 59–61, 69–71	15–17, 26–28, 36–38	9–11, 18–20, 24–26	18–20, 49–51, 59–61	15–17, 45–47
Pixel control	✓			✓	✓

Color wheel 1




25
4700K
26
4800K
27
4900K
28
5000K
DMX 140–167
29
5100K
30
5200K
31
5300K
32
5400K
33
5500K
34
5600K
DMX 168–195
35
5700K
36
5800K
37
5900K
38
6000K
39
6100K
40
6200K
41
6300K
42
6400K
43
6500K
DMX 196–223
44
6600K
45
6700K
46
6800K
47
6900K
48
7000K
49
7100K
50
7200K
51
7300K
52
7400K
53
7500K
54
7600K
55
7700K
56
7800K
57
7900K
58
8000K
DMX 224–251
59
8100K
60
8200K
61
8300K
62
8400K
63
8500K
64
10000K
DMX 252–255

Color wheel 2

1 Open
DMX 0

2 Color Macro 1
DMX 1–4

3 Color Macro 2
DMX 5–8

4 Color Macro 3
DMX 9–12

5 Color Macro 4
DMX 13–16

6 Color Macro 5
DMX 17–20

7 Color Macro 6
DMX 21–24

8 Color Macro 7
DMX 25–28

9 Color Macro 8
DMX 29–32

10 Color Macro 9
DMX 33–36

11 Color Macro 10
DMX 37–40

12 Color Macro 11
DMX 41–44

13 Color Macro 12
DMX 45–48

14 Color Macro 13
DMX 49–52

15 Color Macro 14
DMX 53–56

16 Color Macro 15
DMX 57–60

17 Color Macro 16
DMX 61–64

18 Color Macro 17
DMX 65–68

19 Color Macro 18
DMX 69–72

20 Color Macro 19
DMX 73–76

21 Color Macro 20
DMX 77–80

22 Color Macro 21
DMX 81–84

23 Color Macro 22
DMX 85–88

24 Color Macro 23
DMX 89–92

25 Color Macro 24
DMX 93–96

26 Color Macro 25
DMX 97–100

27 Color Macro 26
DMX 101–104

28 Color Macro 27
DMX 105–108

29 Color Macro 28
DMX 109–112

30 Color Macro 29
DMX 113–116

31 Color Macro 30
DMX 117–120

32 Color Macro 31
DMX 121–124

33 Color Macro 32
DMX 125–128

34 Color Macro 33
DMX 129–132

35 Color Macro 34
DMX 133–136

36 Color Macro 35
DMX 137–140

37 Color Macro 36
DMX 141–144

38 Color Macro 37
DMX 145–148

39 Color Macro 38
DMX 149–152

40 Color Macro 39
DMX 153–156

41 Color Macro 40
DMX 157–160

42 Color Macro 41
DMX 161–164

43 Color Macro 42
DMX 165–168

44 Color Macro 43
DMX 169–172

45 Color Macro 44
DMX 173–176

46 Color Macro 45
DMX 177–180

47 Color Macro 46
DMX 181–184

48 Color Macro 47
DMX 185–188

49 Color Macro 48 **DMX 189–192**

50 Color Macro 49 **DMX 193–196**

51 Color Macro 50 **DMX 197–200**

52 Color Macro 51 **DMX 201–204**

53 Color Macro 52 **DMX 205–208**

54 Color Macro 53 **DMX 209–212**

55 Color Macro 54 **DMX 213–216**

56 Color Macro 55 **DMX 217–220**

57 Color Macro 56 **DMX 221–224**

58 Color Macro 57 **DMX 225–228**

59 Color Macro 58 **DMX 229–232**

60 Color Macro 59 **DMX 233–236**

61 Color Macro 60 **DMX 237–240**

62 Color Macro 61 **DMX 241–244**

63 Color Macro 62 **DMX 245–248**

64 Color Macro 63 **DMX 249–252**

65 Color Macro 64 **DMX 253–255**

Color wheel 3

1 Pale Yellow **DMX 1**

2 Straw **DMX 2**

3 Gold Tint **DMX 3**

4 Spring Yellow **DMX 4**

5 Medium Yellow **DMX 5**

6 Yellow **DMX 6**

7 Deep Amber **DMX 7**

8 Deep Straw **DMX 8**

9 Loving Amber **DMX 9**

10 Gold Amber **DMX 10**

11 Orange **DMX 11**

12 Deep Orange **DMX 12**

13 Dark Amber **DMX 13**

14 Millennium Gold **DMX 14**

15 Deep Golden Amber **DMX 15**

16 Scarlet **DMX 16**

17 Primary Red **DMX 17**

18 Bright Red **DMX 18**

19 Medium Red **DMX 19**

20 Fire **DMX 20**

21 Pink **DMX 21**

22 Medium Pink **DMX 22**

23 Dark Pink **DMX 23**

24 Bright Pink **DMX 24**

25 Bright Rose **DMX 25**

26 Special Rose Pink **DMX 26**

27 Vanity Fair **DMX 27**

28 Magenta **DMX 28**

29 Dark Magenta **DMX 29**

30 Rose Purple **DMX 30**

31 Mauve **DMX 31**

32 Medium Purple **DMX 32**

33 Lavender **DMX 33**

34 Palace blue **DMX 34**

35 Dark Blue **DMX 35**

36 Medium Blue **DMX 36**

37 Deep Blue **DMX 37**

38 Daylight Blue **DMX 38**

39 Slate Blue **DMX 39**

40 Light Blue **DMX 40**

41 Sky Blue **DMX 41**

42 Pale Navy Blue **DMX 42**

43 Marine Blue **DMX 43**

44 Peacock Blue **DMX 44**

45 Lagoon Blue **DMX 45**

46 Medium Blue Green **DMX 46**

47 Dark Yellow Green **DMX 47**

48 Primary Green **DMX 48**

49 Fern Green **DMX 49**

50 Moss Green **DMX 50**

51 Dark Green **DMX 51**

52 Lime Green **DMX 52**

53 Pale Green **DMX 53**

54 Quarter CT Blue **DMX 54**

55 Half CT Blue **DMX 55**

56 Full CT Blue **DMX 56**

57 Double CT Blue **DMX 57**

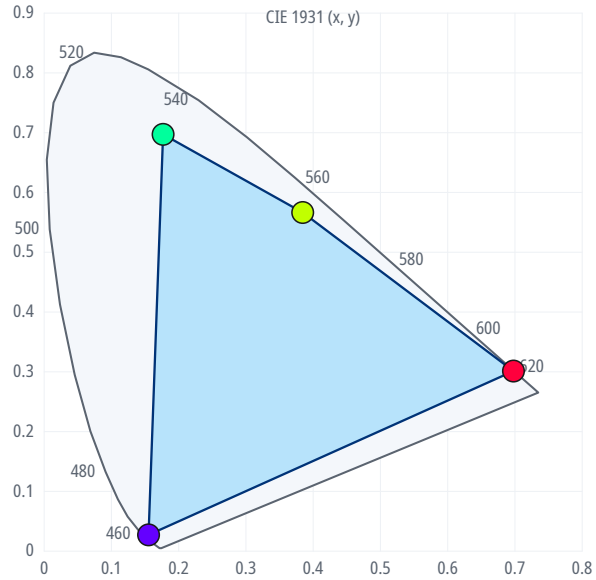
58 Quarter CT Orange **DMX 58**

59 Half CT Orange **DMX 59**

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

61 Open **DMX 0–1**

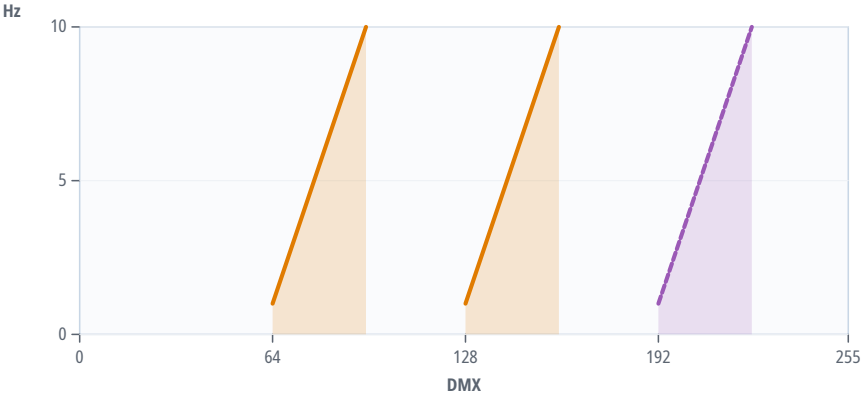
LED colors and the colors they mix



LED	x	y	nm
Red	0.698	0.301	499
Green	0.177	0.697	499
Blue	0.155	0.027	499
Lime	0.384	0.567	499

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

Strobe rate



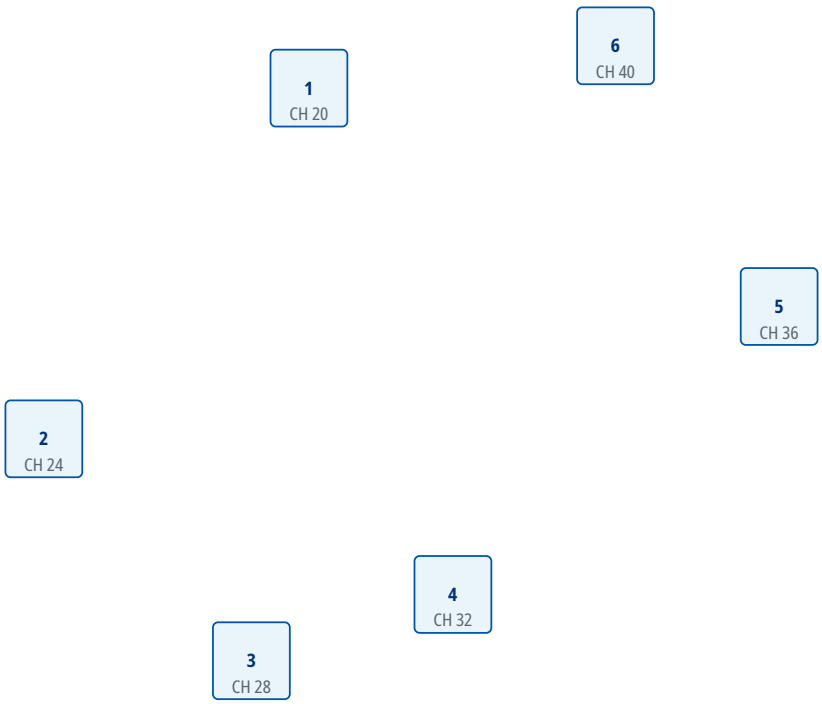
CH 31 · 73Ch

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

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

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

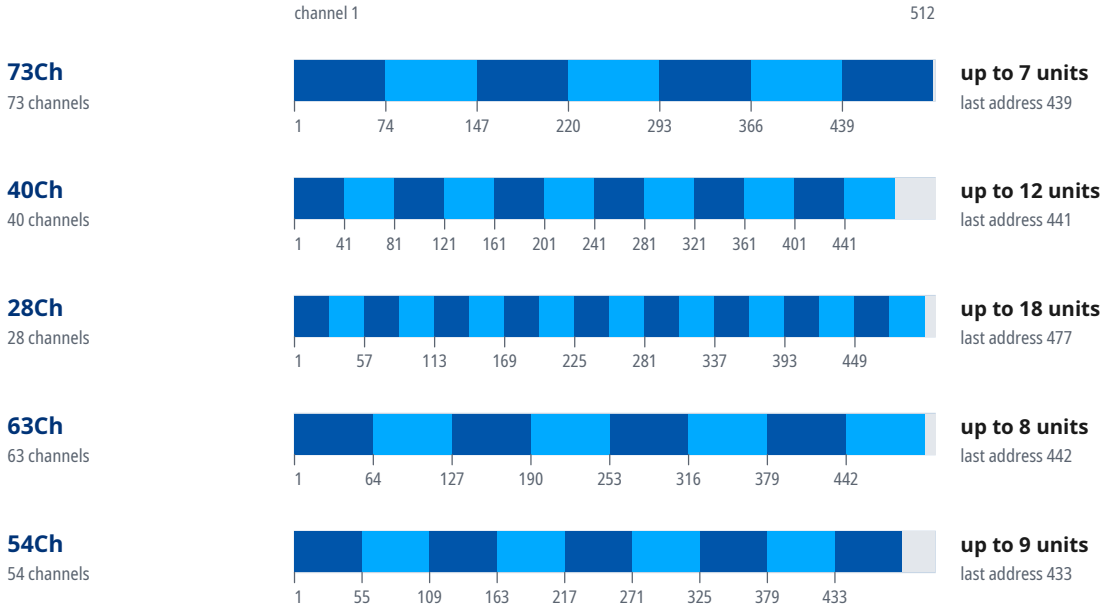
Cells (pixels)



6 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “73Ch”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “73Ch”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	366	11	U2 · 220	16	U3 · 74
2	74	7	439	12	U2 · 293	17	U3 · 147
3	147	8	U2 · 1	13	U2 · 366	18	U3 · 220
4	220	9	U2 · 74	14	U2 · 439	19	U3 · 293
5	293	10	U2 · 147	15	U3 · 1	20	U3 · 366

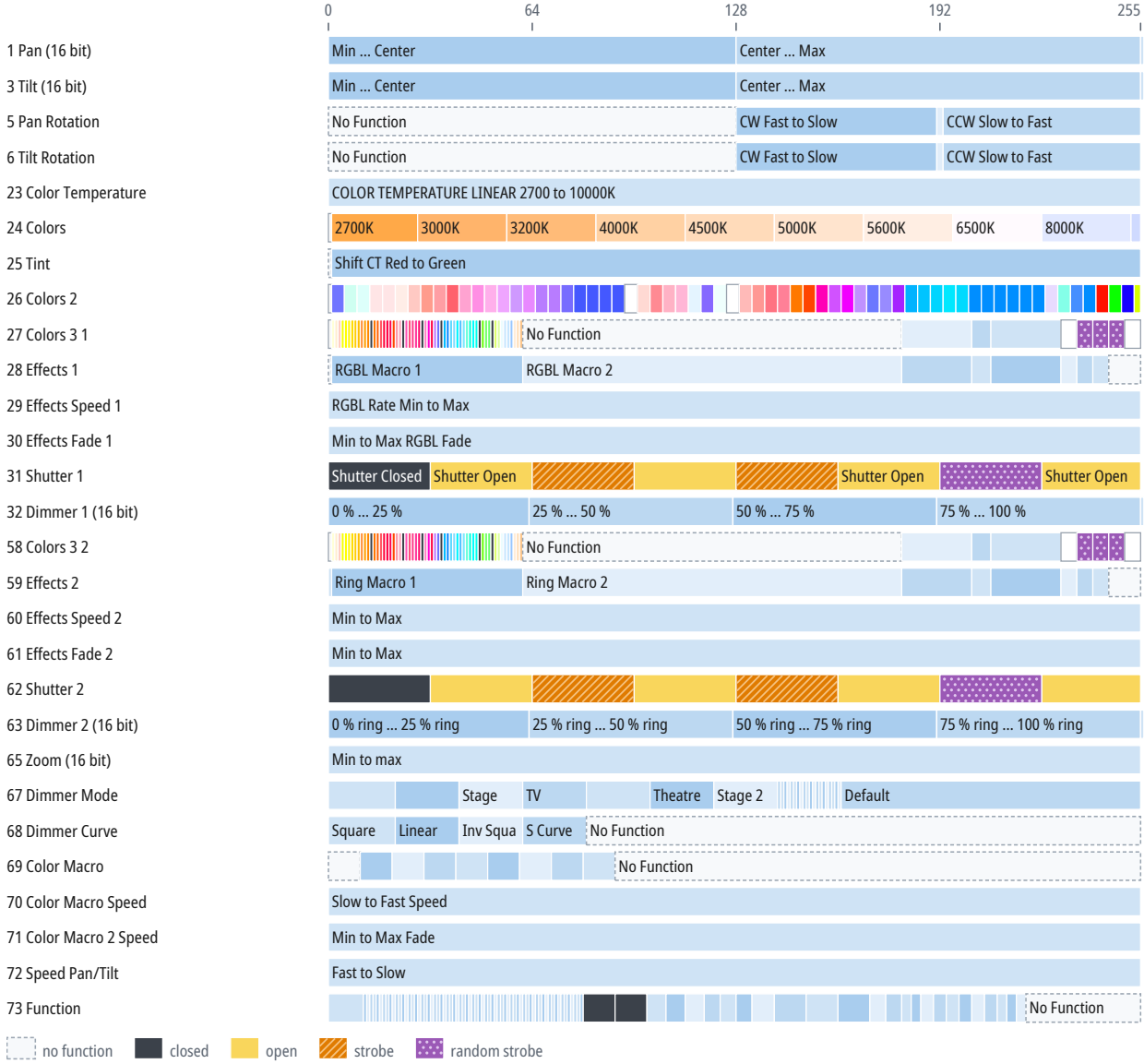
Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode 73Ch

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 31 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 62 Shutter 2 at 32–63, 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 7 Red 1 255, CH 8 Green 1 255, CH 9 Blue 1 255, CH 10 Lime 1 255, CH 11 Red 2 255, CH 12 Green 2 255, CH 13 Blue 2 255, CH 14 Lime 2 255, CH 15 Red 3 255, CH 16 Green 3 255, CH 17 Blue 3 255, CH 18 Lime 3 255, CH 19 Red 4 255, CH 20 Green 4 255, CH 21 Blue 4 255, CH 22 Lime 4 255, CH 26 Colors 2 0, CH 27 Colors 3 1 0, CH 31 Shutter 1 47, CH 32 Dimmer 1 255, CH 34 Red 5 255, CH 35 Green 5 255, CH 36 Blue 5 255, CH 37 White 1 255, CH 38 Red 6 255, CH 39 Green 6 255, CH 40 Blue 6 255, CH 41 White 2 255, CH 42 Red 7 255, CH 43 Green 7 255, CH 44 Blue 7 255, CH 45 White 3 255, CH 46 Red 8 255, CH 47 Green 8 255, CH 48 Blue 8 255, CH 49 White 4 255, CH 50 Red 9 255, CH 51 Green 9 255, CH 52 Blue 9 255, CH 53 White 5 255, CH 54 Red 10 255, CH 55 Green 10 255, CH 56 Blue 10 255, CH 57 White 6 255, CH 58 Colors 3 2 0, CH 62 Shutter 2 255, CH 63 Dimmer 2 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–128	Min … Center
		128–255	Center … Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–128	Min … Center
		128–255	Center … Max
		255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Pan Rotation		Infinite Pan
		0–127	No Function
		128–190	CW Fast to Slow (360–10 °/s)
		191–192	Stop
		193–255	CCW Slow to Fast (10–360 °/s)
6	Tilt Rotation		Infinite Tilt
		0–127	No Function
		128–190	CW Fast to Slow (360–10 °/s)
		191–192	Stop
		193–255	CCW Slow to Fast (10–360 °/s)
7	Red 1		Red Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
8	Green 1		Green Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
9	Blue 1		Blue Main LED
		0	0 %
		1–62	0 % … 25 %

CH	Function	DMX	Description
9	Blue 1 (continued)	63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
10	Lime 1		Lime Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
11	Red 2		Red Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
12	Green 2		Green Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
13	Blue 2		Blue Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %

CH	Function	DMX	Description
13	Blue 2 (continued)	64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
14	Lime 2		Lime Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
15	Red 3		Red Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
16	Green 3		Green Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
17	Blue 3		Blue Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %

CH	Function	DMX	Description
17	Blue 3 (continued)	127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
18	Lime 3		Lime Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
19	Red 4		Red Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
20	Green 4		Green Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
21	Blue 4		Blue Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %

CH	Function	DMX	Description
21	Blue 4 (continued)	191	75 %
		192–254	75 % … 100 %
		255	100 %
22	Lime 4		Lime Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
23	Color Temperature	0–255	COLOR TEMPERATURE LINEAR 2700 to 10000K (2700–10000 K)
24	Colors	0	No Function (Open)
		1–27	2700K
		28–55	3000K
		56–83	3200K
		84–111	4000K
		112–139	4500K
		140–167	5000K
		168–195	5600K
		196–223	6500K
		224–251	8000K
		252–255	10000K
25	Tint	0	No Function
		1–255	Shift CT Red to Green
26	Colors 2		Color Macros
		0	Open
		1–4	Color Macro 1
		5–8	Color Macro 2
		9–12	Color Macro 3
		13–16	Color Macro 4
		17–20	Color Macro 5
		21–24	Color Macro 6
		25–28	Color Macro 7
		29–32	Color Macro 8
		33–36	Color Macro 9
		37–40	Color Macro 10
		41–44	Color Macro 11
		45–48	Color Macro 12
		49–52	Color Macro 13

CH	Function	DMX	Description
26	Colors 2 (continued)	53–56	Color Macro 14
		57–60	Color Macro 15
		61–64	Color Macro 16
		65–68	Color Macro 17
		69–72	Color Macro 18
		73–76	Color Macro 19
		77–80	Color Macro 20
		81–84	Color Macro 21
		85–88	Color Macro 22
		89–92	Color Macro 23
		93–96	Color Macro 24
		97–100	Color Macro 25
		101–104	Color Macro 26
		105–108	Color Macro 27
		109–112	Color Macro 28
		113–116	Color Macro 29
		117–120	Color Macro 30
		121–124	Color Macro 31
		125–128	Color Macro 32
		129–132	Color Macro 33
		133–136	Color Macro 34
		137–140	Color Macro 35
		141–144	Color Macro 36
		145–148	Color Macro 37
		149–152	Color Macro 38
		153–156	Color Macro 39
		157–160	Color Macro 40
		161–164	Color Macro 41
		165–168	Color Macro 42
		169–172	Color Macro 43
		173–176	Color Macro 44
		177–180	Color Macro 45
		181–184	Color Macro 46
		185–188	Color Macro 47
		189–192	Color Macro 48
		193–196	Color Macro 49
		197–200	Color Macro 50
		201–204	Color Macro 51
		205–208	Color Macro 52
		209–212	Color Macro 53
		213–216	Color Macro 54
		217–220	Color Macro 55

CH	Function	DMX	Description
26	Colors 2 (continued)	221–224	Color Macro 56
		225–228	Color Macro 57
		229–232	Color Macro 58
		233–236	Color Macro 59
		237–240	Color Macro 60
		241–244	Color Macro 61
		245–248	Color Macro 62
		249–252	Color Macro 63
		253–255	Color Macro 64
27	Colors 3 1	0	Virtual Foreground Color Wheel Open: Open
		1	Pale Yellow
		2	Straw
		3	Gold Tint
		4	Spring Yellow
		5	Medium Yellow
		6	Yellow
		7	Deep Amber
		8	Deep Straw
		9	Loving Amber
		10	Gold Amber
		11	Orange
		12	Deep Orange
		13	Dark Amber
		14	Millennium Gold
		15	Deep Golden Amber
		16	Scarlet
		17	Primary Red
		18	Bright Red
		19	Medium Red
		20	Fire
		21	Pink
		22	Medium Pink
		23	Dark Pink
		24	Bright Pink
		25	Bright Rose
		26	Special Rose Pink
		27	Vanity Fair
		28	Magenta
		29	Dark Magenta
		30	Rose Purple
		31	Mauve
		32	Medium Purple

CH	Function	DMX	Description
27	Colors 3 1 (continued)	33	Lavender
		34	Palace blue
		35	Dark Blue
		36	Medium Blue
		37	Deep Blue
		38	Daylight Blue
		39	Slate Blue
		40	Light Blue
		41	Sky Blue
		42	Pale Navy Blue
		43	Marine Blue
		44	Peacock Blue
		45	Lagoon Blue
		46	Medium Blue Green
		47	Dark Yellow Green
		48	Primary Green
		49	Fern Green
		50	Moss Green
		51	Dark Green
		52	Lime Green
		53	Pale Green
		54	Quarter CT Blue
		55	Half CT Blue
		56	Full CT Blue
		57	Double CT Blue
		58	Quarter CT Orange
		59	Half CT Orange
		60	Full CT Orange
		61–179	No Function
		180–201	Clockwise fast to slow (7200–14 °/s)
		202–207	Color 3 Wheel Spin: Stop
		208–229	Counter-clockwise slow to fast (14–7200 °/s)
		230–234	Open
		235–239	Color 3 Wheel Random: Fast
		240–244	Medium
		245–249	Color 3 Wheel Random: Slow
		250–255	Open
28	Effects 1		RGBL Color Chase
		0	No Function
		1–60	RGBL Macro 1
		61–179	RGBL Macro 2
		180–201	RGBL Macro 3

CH	Function	DMX	Description
28	Effects 1 (continued)	202–207	RGBL Macro 4
		208–229	RGBL Macro 5
		230–234	RGBL Macro 6
		235–239	RGBL Macro 7
		240–244	RGBL Macro 8
		245–255	No Function
29	Effects Speed 1		Ring Speed
		0–255	RGBL Rate Min to Max (1–10 Hz)
30	Effects Fade 1		RGBL Fade
		0–255	Min to Max RGBL Fade
31	Shutter 1	0–31	Shutter Closed
		32–63	Shutter Open
		64–95	Strobe Effect Slow to Fast (1–10 Hz)
		96–127	No Function (Shutter Open)
		128–159	Pulse-Effect in Sequences (1–10 Hz)
		160–191	Shutter Open
		192–223	Random Strobe Effect Slow to Fast (1–10 Hz)
		224–255	Shutter Open
32	Dimmer 1	0–63	0 % … 25 %
		63–127	25 % … 50 %
		127–191	50 % … 75 %
		191–255	75 % … 100 %
		255	100 %
33	Dimmer 1 Fine	0–255	Fine adjustment of CH 32
34	Red 5		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
35	Green 5		Green ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring

CH	Function	DMX	Description
35	Green 5 (continued)	192–254	75 % ring ... 100 % ring
		255	100 % ring
36	Blue 5		Blue Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
37	White 1		White Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
38	Red 6		Red Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
39	Green 6		Green ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring

CH	Function	DMX	Description
40	Blue 6		Blue Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
41	White 2		White Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
42	Red 7		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
43	Green 7		Green ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
44	Blue 7		Blue Ring
		0	0 % ring

CH	Function	DMX	Description
44	Blue 7 (continued)	1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
45	White 3		White Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
46	Red 8		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
47	Green 8		Green ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
48	Blue 8		Blue Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring

CH	Function	DMX	Description
48	Blue 8 (continued)	64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
49	White 4		White Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
50	Red 9		Red Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
51	Green 9		Green ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
52	Blue 9		Blue Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring

CH	Function	DMX	Description
52	Blue 9 (continued)	128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
53	White 5		White Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
54	Red 10		Red Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
55	Green 10		Green ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
56	Blue 10		Blue Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring

CH	Function	DMX	Description
56	Blue 10 (continued)	192–254	75 % ring … 100 % ring
		255	100 % ring
57	White 6		White Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
58	Colors 3 2	0	Virtual Foreground Color Wheel Open: Open
		1	Pale Yellow
		2	Straw
		3	Gold Tint
		4	Spring Yellow
		5	Medium Yellow
		6	Yellow
		7	Deep Amber
		8	Deep Straw
		9	Loving Amber
		10	Gold Amber
		11	Orange
		12	Deep Orange
		13	Dark Amber
		14	Millennium Gold
		15	Deep Golden Amber
		16	Scarlet
		17	Primary Red
		18	Bright Red
		19	Medium Red
		20	Fire
		21	Pink
		22	Medium Pink
		23	Dark Pink
		24	Bright Pink
		25	Bright Rose
		26	Special Rose Pink
		27	Vanity Fair
		28	Magenta
		29	Dark Magenta

CH	Function	DMX	Description
58	Colors 3 2 (continued)	30	Rose Purple
		31	Mauve
		32	Medium Purple
		33	Lavender
		34	Palace blue
		35	Dark Blue
		36	Medium Blue
		37	Deep Blue
		38	Daylight Blue
		39	Slate Blue
		40	Light Blue
		41	Sky Blue
		42	Pale Navy Blue
		43	Marine Blue
		44	Peacock Blue
		45	Lagoon Blue
		46	Medium Blue Green
		47	Dark Yellow Green
		48	Primary Green
		49	Fern Green
		50	Moss Green
		51	Dark Green
		52	Lime Green
		53	Pale Green
		54	Quarter CT Blue
		55	Half CT Blue
		56	Full CT Blue
		57	Double CT Blue
		58	Quarter CT Orange
		59	Half CT Orange
		60	Full CT Orange
		61–179	No Function
		180–201	Clockwise fast to slow (7200–14 °/s)
		202–207	Color 3 Wheel Spin: Stop
		208–229	Counter-clockwise slow to fast (14–7200 °/s)
		230–234	Open
		235–239	Color 3 Wheel Random: Fast
		240–244	Medium
		245–249	Color 3 Wheel Random: Slow
		250–255	Open
59	Effects 2		Ring Effects
		0	Open

CH	Function	DMX	Description
59	Effects 2 (continued)	1–60	Ring Macro 1
		61–179	Ring Macro 2
		180–201	Ring Macro 3
		202–207	Ring Macro 4
		208–229	Ring Macro 5
		230–234	Ring Macro 6
		235–239	Ring Macro 7
		240–244	Ring Macro 8
		245–255	No Function
60	Effects Speed 2		Ring Speed
		0–255	Min to Max (1–10 Hz)
61	Effects Fade 2		Ring Fade
		0–255	Min to Max
62	Shutter 2	0–31	Shutter Closed Ring
		32–63	Shutter Open Ring
		64–95	Strobe Effect Slow to Fast Ring (1–10 Hz)
		96–127	No Function (Shutter Open) Ring
		128–159	Pulse-Effect in Sequences Ring (1–10 Hz)
		160–191	Shutter Open Ring
		192–223	Rnd Strob Slow to Fast Ring (1–10 Hz)
		224–255	Shutter Open Ring
63	Dimmer 2		Ring Dimmer
		0–63	0 % ring ... 25 % ring
		63–127	25 % ring ... 50 % ring
		127–191	50 % ring ... 75 % ring
		191–255	75 % ring ... 100 % ring
		255	100 % ring
64	Dimmer 2 Fine	0–255	Fine adjustment of CH 63
65	Zoom	0–255	Min to max (8–38°)
66	Zoom Fine	0–255	Fine adjustment of CH 65
67	Dimmer Mode	0–20	Default to unit setting
		21–40	Standard
		41–60	Stage
		61–80	TV
		81–100	Architectural
		101–120	Theatre
		121–140	Stage 2
		141	0/1s Delay
		142	0/2s Delay
		143	0/3s Delay
		144	0/4s Delay
		145	0/5s Delay

CH	Function	DMX	Description
67	Dimmer Mode (continued)	146	0/6s Delay
		147	0/7s Delay
		148	0/8s Delay
		149	0/9s Delay
		150	1s Delay
		151	1/5s Delay
		152–160	2...10s Delay
		161–255	Default
68	Dimmer Curve	0–20	Square
		21–40	Linear
		41–60	Inv Squa
		61–80	S Curve
		81–255	No Function
69	Color Macro		Internal Programs
		0–9	No Function
		10–19	Program 1
		20–29	Program 2
		30–39	Program 3
		40–49	Program 4
		50–59	Program 5
		60–69	Program 6
		70–79	Program 7
		80–89	Program 8
		90–255	No Function
70	Color Macro Speed		Internal Programs Speed
		0–255	Slow to Fast Speed
71	Color Macro 2 Speed		Internal Programs Fade
		0–255	Min to Max Fade
72	Speed Pan/Tilt	0–255	Fast to Slow
73	Function	0–10	Default refresh rates (1200)
		11	900 Hz
		12	910 Hz
		13	920 Hz
		14	930 Hz
		15	940 Hz
		16	950 Hz
		17	960 Hz
		18	970 Hz
		19	980 Hz
		20	990 Hz
		21	1000 Hz
		22	1010 Hz

CH	Function	DMX	Description
73	Function (continued)	23	1020 Hz
		24	1030 Hz
		25	1040 Hz
		26	1050 Hz
		27	1060 Hz
		28	1070 Hz
		29	1080 Hz
		30	1090 Hz
		31	1100 Hz
		32	1110 Hz
		33	1120 Hz
		34	1130 Hz
		35	1140 Hz
		36	1150 Hz
		37	1160 Hz
		38	1170 Hz
		39	1180 Hz
		40	1190 Hz
		41	1200 Hz
		42	1210 Hz
		43	1220 Hz
		44	1230 Hz
		45	1240 Hz
		46	1250 Hz
		47	1260 Hz
		48	1270 Hz
		49	1280 Hz
		50	1290 Hz
		51	1300 Hz
		52	1310 Hz
		53	1320 Hz
		54	1330 Hz
		55	1340 Hz
		56	1350 Hz
		57	1360 Hz
		58	1370 Hz
		59	1380 Hz
		60	1390 Hz
		61	1400 Hz
		62	1410 Hz
		63	1420 Hz
		64	1430 Hz

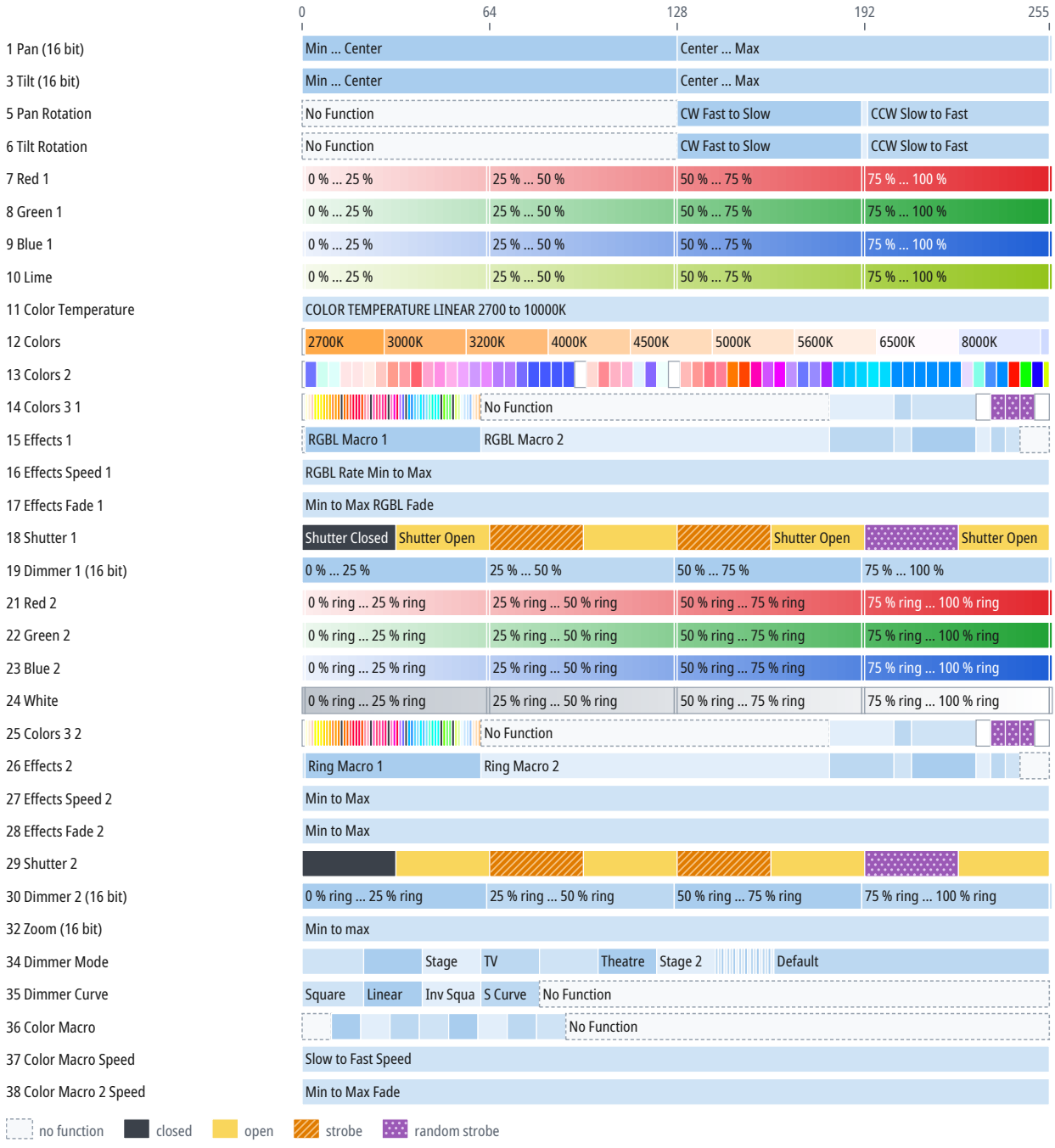
CH	Function	DMX	Description
73	Function (continued)	65	1440 Hz
		66	1450 Hz
		67	1460 Hz
		68	1470 Hz
		69	1480 Hz
		70	1490 Hz
		71	1500 Hz
		72	2500 Hz
		73	4000 Hz
		74	5000 Hz
		75	6000 Hz
		76	10000 Hz
		77	15000 Hz
		78	20000 Hz
		79	25000 Hz
		80–89	Enable Blackout while Pan/Tilt moving
		90–99	Disable Blackout while Pan/Tilt moving
		100–105	Fan Mode Auto (Hold 3s)
		106–111	Fan Mode High (Hold 3s)
		112–117	Fan Mode Low (Hold 3s)
		118–122	Fan Mode Mute (Hold 3s)
		123–127	Enable Pan Invert (Hold 3s)
		128–132	Disable Pan Invert (Hold 3s)
		133–139	Enable Tilt Invert (Hold 3s)
		140–149	Disable Tilt Invert (Hold 3s)
		150–159	Reset All
		160–169	Reset Pan/Tilt
		170–174	Reset Effect
		175–179	Enable Zoom Speed Fast
		180–182	Disable Zoom Speed Fast
		183–185	Enable White Calibration (Hold 3s)
		186–189	Enable White Fixed Values (Hold 3s)
		190–193	Enable Limited Zoom Mode (Hold 3s
		194–197	Disable Limited Zoom Mode (Hold 3s)
		198–201	Enable Hibernation 15minutes (Hold 3s)
		202–205	Disable Hibernation (Hold 3s)
		206–209	Aria Enable (Hold 3s)
		210–212	Aria Disable (Hold 3s)
		213–215	Display Backlight ON (Hold 3s)
		216–218	Display Backlight OFF (Hold 3s)
		219–255	No Function

Mode 40Ch

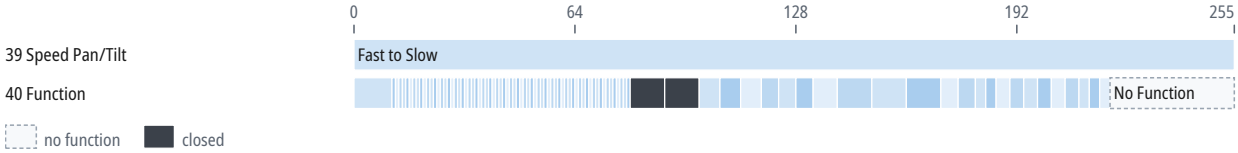
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 18 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 29 Shutter 2 at 32–63, 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 7 Red 1 255, CH 8 Green 1 255, CH 9 Blue 1 255, CH 10 Lime 255, CH 13 Colors 2 0, CH 14 Colors 3 1 0, CH 18 Shutter 1 47, CH 19 Dimmer 1 255, CH 21 Red 2 255, CH 22 Green 2 255, CH 23 Blue 2 255, CH 24 White 255, CH 25 Colors 3 2 0, CH 29 Shutter 2 255, CH 30 Dimmer 2 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “73Ch” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “73Ch” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Pan Rotation		Same as CH 5 in the mode “73Ch” (p. 17)
6	Tilt Rotation		Same as CH 6 in the mode “73Ch” (p. 17)
7	Red 1		Same as CH 7 in the mode “73Ch” (p. 17)
8	Green 1		Same as CH 8 in the mode “73Ch” (p. 17)
9	Blue 1		Same as CH 9 in the mode “73Ch” (p. 17)
10	Lime		Lime Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
11	Color Temperature	0–255	COLOR TEMPERATURE LINEAR 2700 to 10000K (2700–10000 K)
12	Colors		Same as CH 24 in the mode “73Ch” (p. 21)
13	Colors 2		Same as CH 26 in the mode “73Ch” (p. 21)
14	Colors 3 1		Same as CH 27 in the mode “73Ch” (p. 23)
15	Effects 1		Same as CH 28 in the mode “73Ch” (p. 24)
16	Effects Speed 1		Same as CH 29 in the mode “73Ch” (p. 25)
17	Effects Fade 1		Same as CH 30 in the mode “73Ch” (p. 25)
18	Shutter 1		Same as CH 31 in the mode “73Ch” (p. 25)
19	Dimmer 1		Same as CH 32 in the mode “73Ch” (p. 25)
20	Dimmer 1 Fine	0–255	Fine adjustment of CH 19
21	Red 2		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring

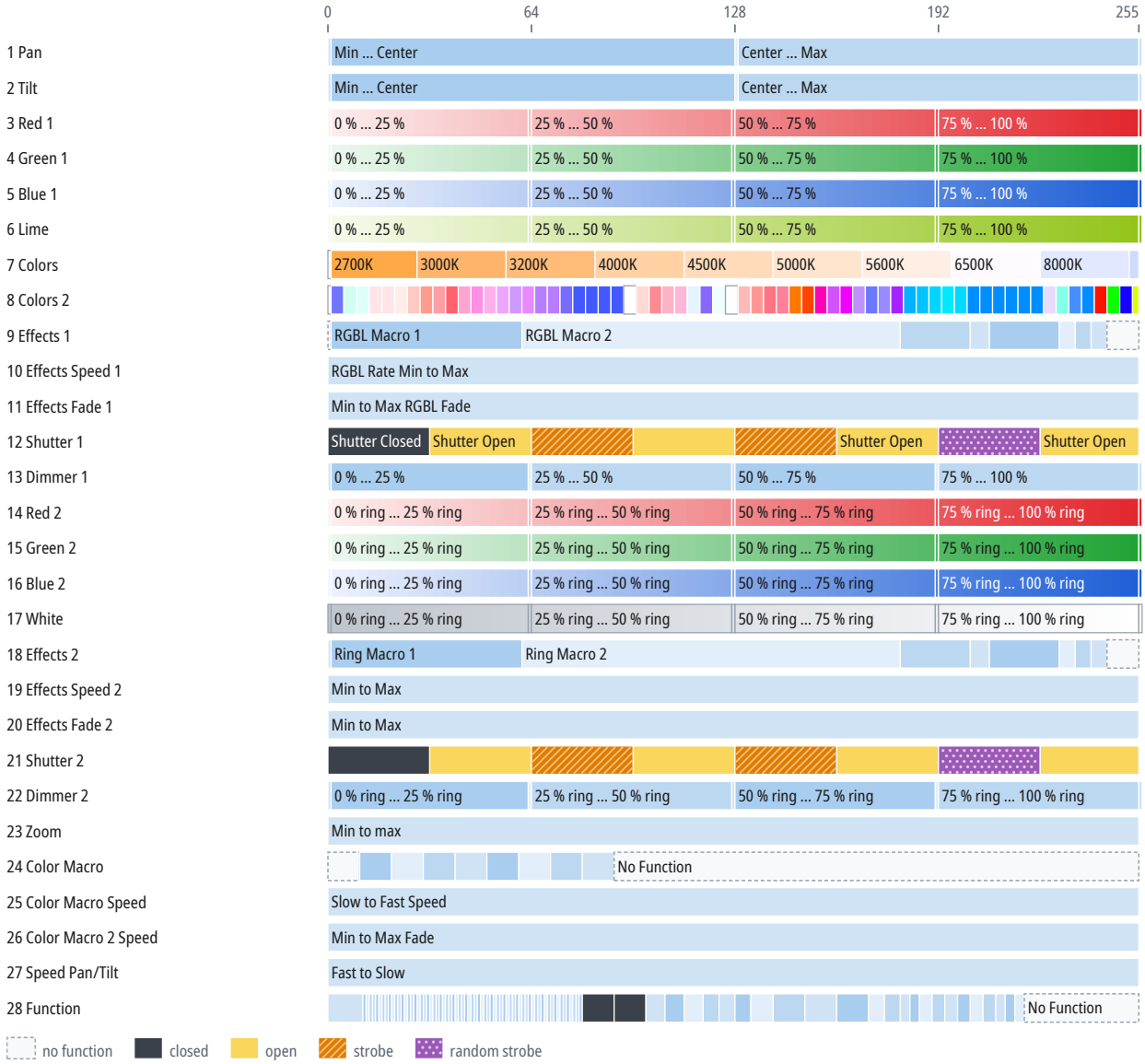
CH	Function	DMX	Description
21	Red 2 (continued)	128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
22	Green 2		Green ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
23	Blue 2		Blue Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
24	White		White Ring
		0	0 % ring
		1–62	0 % ring ... 25 % ring
		63	25 % ring
		64–126	25 % ring ... 50 % ring
		127	50 % ring
		128–190	50 % ring ... 75 % ring
		191	75 % ring
		192–254	75 % ring ... 100 % ring
		255	100 % ring
25	Colors 3 2		Same as CH 58 in the mode “73Ch” (p. 31)
26	Effects 2		Same as CH 59 in the mode “73Ch” (p. 32)
27	Effects Speed 2		Same as CH 60 in the mode “73Ch” (p. 33)
28	Effects Fade 2		Same as CH 61 in the mode “73Ch” (p. 33)
29	Shutter 2		Same as CH 62 in the mode “73Ch” (p. 33)
30	Dimmer 2		Same as CH 63 in the mode “73Ch” (p. 33)
31	Dimmer 2 Fine	0–255	Fine adjustment of CH 30

CH	Function	DMX	Description
32	Zoom	0–255	Min to max (8–38°)
33	Zoom Fine	0–255	Fine adjustment of CH 32
34	Dimmer Mode		Same as CH 67 in the mode “73Ch” (p. 33)
35	Dimmer Curve		Same as CH 68 in the mode “73Ch” (p. 34)
36	Color Macro		Same as CH 69 in the mode “73Ch” (p. 34)
37	Color Macro Speed		Same as CH 70 in the mode “73Ch” (p. 34)
38	Color Macro 2 Speed		Same as CH 71 in the mode “73Ch” (p. 34)
39	Speed Pan/Tilt	0–255	Fast to Slow
40	Function		Same as CH 73 in the mode “73Ch” (p. 34)

Mode 28Ch

If the device receives DMX in this mode but gives no light, check these channels: CH 12 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 21 Shutter 2 at 32–63, 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 3 Red 1 255, CH 4 Green 1 255, CH 5 Blue 1 255, CH 6 Lime 255, CH 8 Colors 2 0, CH 12 Shutter 1 47, CH 13 Dimmer 1 255, CH 14 Red 2 255, CH 15 Green 2 255, CH 16 Blue 2 255, CH 17 White 255, CH 21 Shutter 2 255, CH 22 Dimmer 2 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0	Min
		1–127	Min ... Center
		128	Center
		129–254	Center ... Max
		255	Max
2	Tilt	0	Min

CH	Function	DMX	Description
2	Tilt (continued)	1–127	Min … Center
		128	Center
		129–254	Center … Max
		255	Max
3	Red 1		Same as CH 7 in the mode “73Ch” (p. 17)
4	Green 1		Same as CH 8 in the mode “73Ch” (p. 17)
5	Blue 1		Same as CH 9 in the mode “73Ch” (p. 17)
6	Lime		Same as CH 10 in the mode “40Ch” (p. 38)
7	Colors		Same as CH 24 in the mode “73Ch” (p. 21)
8	Colors 2		Same as CH 26 in the mode “73Ch” (p. 21)
9	Effects 1		Same as CH 28 in the mode “73Ch” (p. 24)
10	Effects Speed 1		Same as CH 29 in the mode “73Ch” (p. 25)
11	Effects Fade 1		Same as CH 30 in the mode “73Ch” (p. 25)
12	Shutter 1		Same as CH 31 in the mode “73Ch” (p. 25)
13	Dimmer 1	0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
14	Red 2		Same as CH 21 in the mode “40Ch” (p. 38)
15	Green 2		Same as CH 22 in the mode “40Ch” (p. 39)
16	Blue 2		Same as CH 23 in the mode “40Ch” (p. 39)
17	White		Same as CH 24 in the mode “40Ch” (p. 39)
18	Effects 2		Same as CH 59 in the mode “73Ch” (p. 32)
19	Effects Speed 2		Same as CH 60 in the mode “73Ch” (p. 33)
20	Effects Fade 2		Same as CH 61 in the mode “73Ch” (p. 33)
21	Shutter 2		Same as CH 62 in the mode “73Ch” (p. 33)
22	Dimmer 2		Ring Dimmer
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring

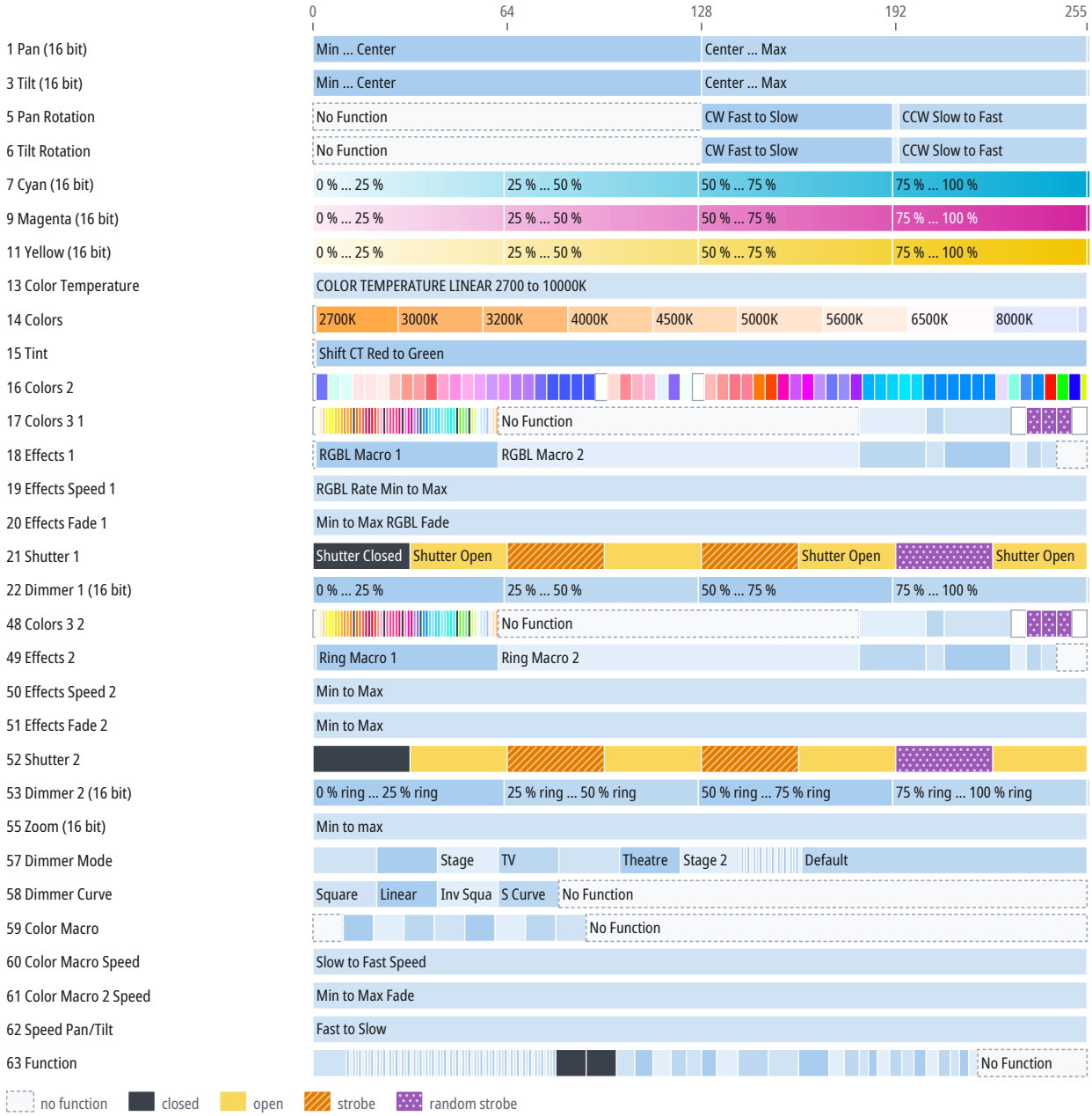
CH	Function	DMX	Description
23	Zoom	0–255	Min to max (8–38°)
24	Color Macro		Same as CH 69 in the mode “73Ch” (p. 34)
25	Color Macro Speed		Same as CH 70 in the mode “73Ch” (p. 34)
26	Color Macro 2 Speed		Same as CH 71 in the mode “73Ch” (p. 34)
27	Speed Pan/Tilt	0–255	Fast to Slow
28	Function		Same as CH 73 in the mode “73Ch” (p. 34)

Mode 63Ch

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 21 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 52 Shutter 2 at 32–63, 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 7 Cyan 0, CH 9 Magenta 0, CH 11 Yellow 0, CH 16 Colors 2 0, CH 17 Colors 3 1 0, CH 21 Shutter 1 47, CH 22 Dimmer 1 255, CH 24 Red 1 255, CH 25 Green 1 255, CH 26 Blue 1 255, CH 27 White 1 255, CH 28 Red 2 255, CH 29 Green 2 255, CH 30 Blue 2 255, CH 31 White 2 255, CH 32 Red 3 255, CH 33 Green 3 255, CH 34 Blue 3 255, CH 35 White 3 255, CH 36 Red 4 255, CH 37 Green 4 255, CH 38 Blue 4 255, CH 39 White 4 255, CH 40 Red 5 255, CH 41 Green 5 255, CH 42 Blue 5 255, CH 43 White 5 255, CH 44 Red 6 255, CH 45 Green 6 255, CH 46 Blue 6 255, CH 47 White 6 255, CH 48 Colors 3 2 0, CH 52 Shutter 2 255, CH 53 Dimmer 2 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “73Ch” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “73Ch” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Pan Rotation		Same as CH 5 in the mode “73Ch” (p. 17)
6	Tilt Rotation		Same as CH 6 in the mode “73Ch” (p. 17)
7	Cyan		Cyan Main LED
		0–63	0 % … 25 %
		63–127	25 % … 50 %
		127–191	50 % … 75 %
		191–255	75 % … 100 %
		255	100 %
8	Cyan Fine	0–255	Fine adjustment of CH 7
9	Magenta		Magenta Main LED
		0–63	0 % … 25 %
		63–127	25 % … 50 %
		127–191	50 % … 75 %
		191–255	75 % … 100 %
		255	100 %
10	Magenta Fine	0–255	Fine adjustment of CH 9
11	Yellow		Yellow Main LED
		0–63	0 % … 25 %
		63–127	25 % … 50 %
		127–191	50 % … 75 %
		191–255	75 % … 100 %
		255	100 %
12	Yellow Fine	0–255	Fine adjustment of CH 11
13	Color Temperature	0–255	COLOR TEMPERATURE LINEAR 2700 to 10000K (2700–10000 K)
14	Colors		Same as CH 24 in the mode “73Ch” (p. 21)
15	Tint		Same as CH 25 in the mode “73Ch” (p. 21)
16	Colors 2		Same as CH 26 in the mode “73Ch” (p. 21)
17	Colors 3 1		Same as CH 27 in the mode “73Ch” (p. 23)
18	Effects 1		Same as CH 28 in the mode “73Ch” (p. 24)
19	Effects Speed 1		Same as CH 29 in the mode “73Ch” (p. 25)
20	Effects Fade 1		Same as CH 30 in the mode “73Ch” (p. 25)
21	Shutter 1		Same as CH 31 in the mode “73Ch” (p. 25)
22	Dimmer 1		Same as CH 32 in the mode “73Ch” (p. 25)
23	Dimmer 1 Fine	0–255	Fine adjustment of CH 22
24	Red 1		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring

CH	Function	DMX	Description
24	Red 1 (continued)	63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
25	Green 1		Green ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
26	Blue 1		Blue Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
27	White 1		Same as CH 37 in the mode “73Ch” (p. 26)
28	Red 2		Same as CH 21 in the mode “40Ch” (p. 38)
29	Green 2		Same as CH 22 in the mode “40Ch” (p. 39)
30	Blue 2		Same as CH 23 in the mode “40Ch” (p. 39)
31	White 2		Same as CH 41 in the mode “73Ch” (p. 27)
32	Red 3		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring

CH	Function	DMX	Description
32	Red 3 (continued)	255	100 % ring
33	Green 3		Green ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
34	Blue 3		Blue Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
35	White 3		Same as CH 45 in the mode “73Ch” (p. 28)
36	Red 4		Red Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
37	Green 4		Green ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring

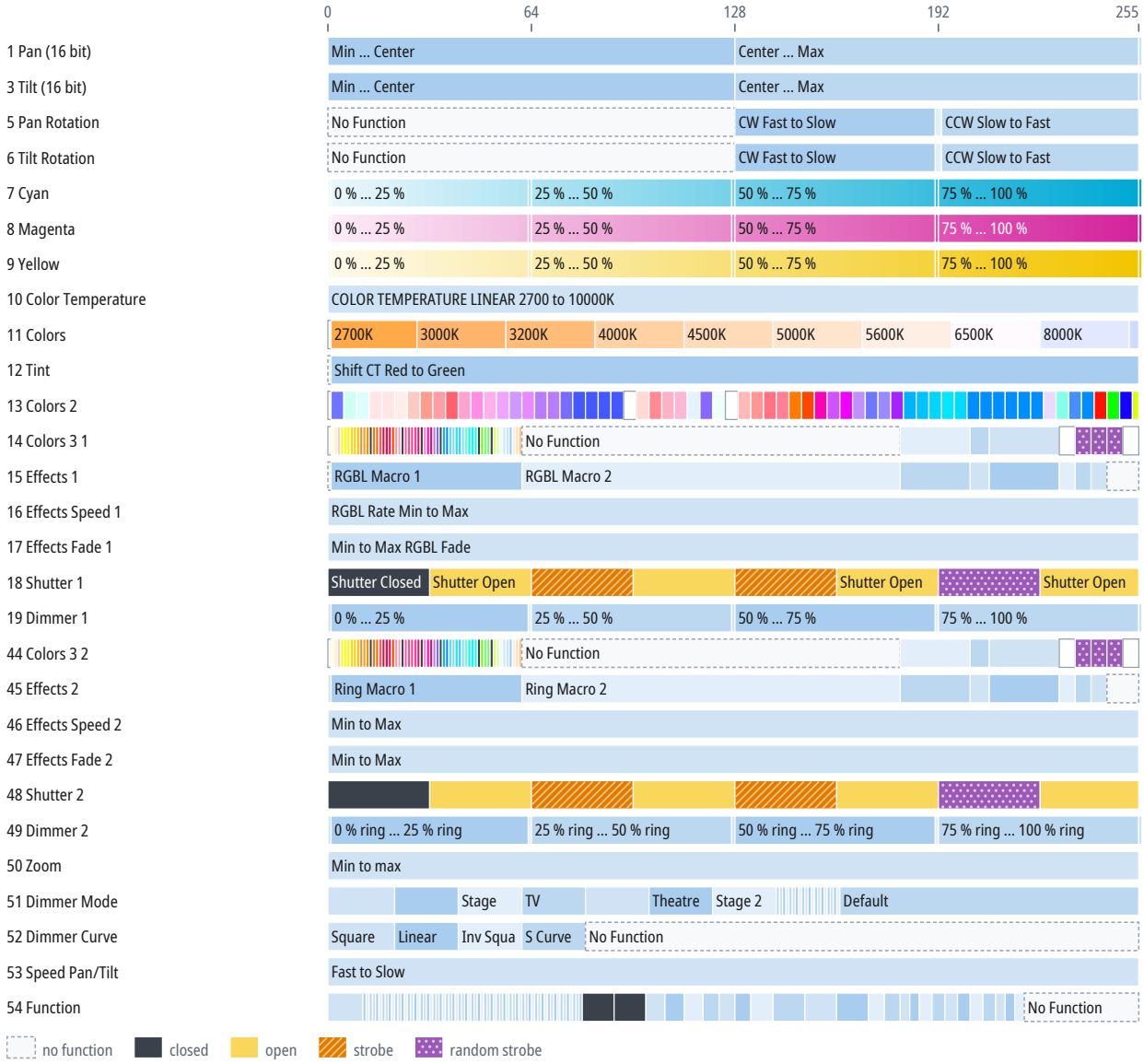
CH	Function	DMX	Description
37	Green 4 (continued)	255	100 % ring
38	Blue 4		Blue Ring
		0	0 % ring
		1–62	0 % ring … 25 % ring
		63	25 % ring
		64–126	25 % ring … 50 % ring
		127	50 % ring
		128–190	50 % ring … 75 % ring
		191	75 % ring
		192–254	75 % ring … 100 % ring
		255	100 % ring
39	White 4		Same as CH 49 in the mode “73Ch” (p. 29)
40	Red 5		Same as CH 34 in the mode “73Ch” (p. 25)
41	Green 5		Same as CH 35 in the mode “73Ch” (p. 25)
42	Blue 5		Same as CH 36 in the mode “73Ch” (p. 26)
43	White 5		Same as CH 53 in the mode “73Ch” (p. 30)
44	Red 6		Same as CH 38 in the mode “73Ch” (p. 26)
45	Green 6		Same as CH 39 in the mode “73Ch” (p. 26)
46	Blue 6		Same as CH 40 in the mode “73Ch” (p. 27)
47	White 6		Same as CH 57 in the mode “73Ch” (p. 31)
48	Colors 3 2		Same as CH 58 in the mode “73Ch” (p. 31)
49	Effects 2		Same as CH 59 in the mode “73Ch” (p. 32)
50	Effects Speed 2		Same as CH 60 in the mode “73Ch” (p. 33)
51	Effects Fade 2		Same as CH 61 in the mode “73Ch” (p. 33)
52	Shutter 2		Same as CH 62 in the mode “73Ch” (p. 33)
53	Dimmer 2		Same as CH 63 in the mode “73Ch” (p. 33)
54	Dimmer 2 Fine	0–255	Fine adjustment of CH 53
55	Zoom	0–255	Min to max (8–38°)
56	Zoom Fine	0–255	Fine adjustment of CH 55
57	Dimmer Mode		Same as CH 67 in the mode “73Ch” (p. 33)
58	Dimmer Curve		Same as CH 68 in the mode “73Ch” (p. 34)
59	Color Macro		Same as CH 69 in the mode “73Ch” (p. 34)
60	Color Macro Speed		Same as CH 70 in the mode “73Ch” (p. 34)
61	Color Macro 2 Speed		Same as CH 71 in the mode “73Ch” (p. 34)
62	Speed Pan/Tilt	0–255	Fast to Slow
63	Function		Same as CH 73 in the mode “73Ch” (p. 34)

Mode 54Ch

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 18 Shutter 1 at 32–63, 160–191 or 224–255 “Shutter Open”; CH 48 Shutter 2 at 32–63, 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 7 Cyan 0, CH 8 Magenta 0, CH 9 Yellow 0, CH 13 Colors 2 0, CH 14 Colors 3 1 0, CH 18 Shutter 1 47, CH 19 Dimmer 1 255, CH 20 Red 1 255, CH 21 Green 1 255, CH 22 Blue 1 255, CH 23 White 1 255, CH 24 Red 2 255, CH 25 Green 2 255, CH 26 Blue 2 255, CH 27 White 2 255, CH 28 Red 3 255, CH 29 Green 3 255, CH 30 Blue 3 255, CH 31 White 3 255, CH 32 Red 4 255, CH 33 Green 4 255, CH 34 Blue 4 255, CH 35 White 4 255, CH 36 Red 5 255, CH 37 Green 5 255, CH 38 Blue 5 255, CH 39 White 5 255, CH 40 Red 6 255, CH 41 Green 6 255, CH 42 Blue 6 255, CH 43 White 6 255, CH 44 Colors 3 2 0, CH 48 Shutter 2 255, CH 49 Dimmer 2 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “73Ch” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “73Ch” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Pan Rotation		Same as CH 5 in the mode “73Ch” (p. 17)
6	Tilt Rotation		Same as CH 6 in the mode “73Ch” (p. 17)
7	Cyan		Cyan Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
8	Magenta		Magenta Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
9	Yellow		Yellow Main LED
		0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
10	Color Temperature	0–255	COLOR TEMPERATURE LINEAR 2700 to 10000K (2700–10000 K)
11	Colors		Same as CH 24 in the mode “73Ch” (p. 21)
12	Tint		Same as CH 25 in the mode “73Ch” (p. 21)
13	Colors 2		Same as CH 26 in the mode “73Ch” (p. 21)

CH	Function	DMX	Description
14	Colors 3 1		Same as CH 27 in the mode “73Ch” (p. 23)
15	Effects 1		Same as CH 28 in the mode “73Ch” (p. 24)
16	Effects Speed 1		Same as CH 29 in the mode “73Ch” (p. 25)
17	Effects Fade 1		Same as CH 30 in the mode “73Ch” (p. 25)
18	Shutter 1		Same as CH 31 in the mode “73Ch” (p. 25)
19	Dimmer 1		Same as CH 13 in the mode “28Ch” (p. 42)
20	Red 1		Same as CH 24 in the mode “63Ch” (p. 45)
21	Green 1		Same as CH 25 in the mode “63Ch” (p. 46)
22	Blue 1		Same as CH 26 in the mode “63Ch” (p. 46)
23	White 1		Same as CH 37 in the mode “73Ch” (p. 26)
24	Red 2		Same as CH 21 in the mode “40Ch” (p. 38)
25	Green 2		Same as CH 22 in the mode “40Ch” (p. 39)
26	Blue 2		Same as CH 23 in the mode “40Ch” (p. 39)
27	White 2		Same as CH 41 in the mode “73Ch” (p. 27)
28	Red 3		Same as CH 32 in the mode “63Ch” (p. 46)
29	Green 3		Same as CH 33 in the mode “63Ch” (p. 47)
30	Blue 3		Same as CH 34 in the mode “63Ch” (p. 47)
31	White 3		Same as CH 45 in the mode “73Ch” (p. 28)
32	Red 4		Same as CH 36 in the mode “63Ch” (p. 47)
33	Green 4		Same as CH 37 in the mode “63Ch” (p. 47)
34	Blue 4		Same as CH 38 in the mode “63Ch” (p. 48)
35	White 4		Same as CH 49 in the mode “73Ch” (p. 29)
36	Red 5		Same as CH 34 in the mode “73Ch” (p. 25)
37	Green 5		Same as CH 35 in the mode “73Ch” (p. 25)
38	Blue 5		Same as CH 36 in the mode “73Ch” (p. 26)
39	White 5		Same as CH 53 in the mode “73Ch” (p. 30)
40	Red 6		Same as CH 38 in the mode “73Ch” (p. 26)
41	Green 6		Same as CH 39 in the mode “73Ch” (p. 26)
42	Blue 6		Same as CH 40 in the mode “73Ch” (p. 27)
43	White 6		Same as CH 57 in the mode “73Ch” (p. 31)
44	Colors 3 2		Same as CH 58 in the mode “73Ch” (p. 31)
45	Effects 2		Same as CH 59 in the mode “73Ch” (p. 32)
46	Effects Speed 2		Same as CH 60 in the mode “73Ch” (p. 33)
47	Effects Fade 2		Same as CH 61 in the mode “73Ch” (p. 33)
48	Shutter 2		Same as CH 62 in the mode “73Ch” (p. 33)
49	Dimmer 2		Same as CH 22 in the mode “28Ch” (p. 42)
50	Zoom	0–255	Min to max (8–38°)
51	Dimmer Mode		Same as CH 67 in the mode “73Ch” (p. 33)
52	Dimmer Curve		Same as CH 68 in the mode “73Ch” (p. 34)
53	Speed Pan/Tilt	0–255	Fast to Slow
54	Function		Same as CH 73 in the mode “73Ch” (p. 34)

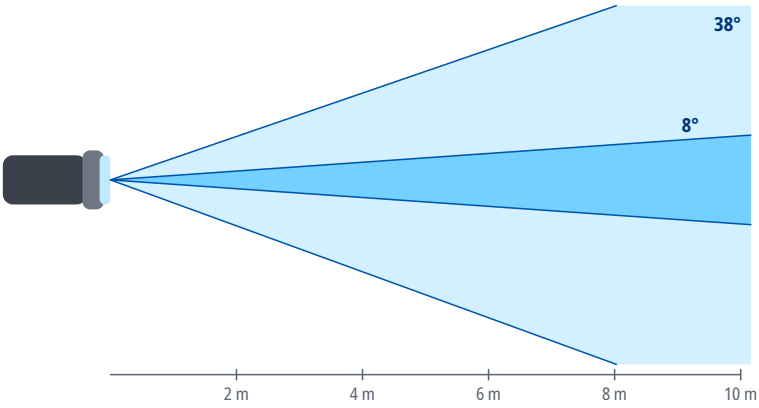
10 Technical specifications

Parameter	Value
Light source	LED
Zoom	8–38°
Pan	540°
Tilt	190°
RDM	yes (manufacturer ID 0x1900, device model ID 0x001C)
Weight	7 kg
Operating temperature	-10 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–10000 K
Strobe frequency	1–10 Hz
Color wheel 3 rotation	up to 7200 °/s (1200 rpm)

Spot diameter



Distance	Ø 8°	Ø 38°
2 m	0.28 m	1.4 m
4 m	0.56 m	2.8 m
6 m	0.84 m	4.1 m
8 m	1.1 m	5.5 m
10 m	1.4 m	6.9 m
15 m	2.1 m	10.3 m

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

11 Maintenance and cleaning

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

12 Troubleshooting

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

13 Disposal

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

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

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

Recycle the packaging materials according to their type.