DMX REFERENCE

6 Cannon

Evolights



Manufacturer	Evolights
GDTF file	Evolights_6_CANNON_126259.gdtf
GDTF revision	Final 2026 · 2026-01-26
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1 About this manual

This document describes the 6 Cannon by Evolights. It was compiled from the GDTF file Evolights_6_CANNON_126259.gdtf from the GDTF-Share library.

File revision: “Final 2026”.

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 Evolights; 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	20 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
34_Channel	34	15	1, 35, 69, 103, ...
49 Channel	49	10	1, 50, 99, 148, ...
69 Channal	69	7	1, 70, 139, 208, ...

No light? Check these channels

- 34_Channel: CH 6 Shutter 1 at 0–9 “Shutter Open”; CH 25 Shutter 2 at 0–9 “Shutter Open”
- 49 Channel: CH 21 Shutter 1 at 0–9 “Shutter Open”; CH 40 Shutter 2 at 0–9 “Shutter Open”
- 69 Channal: CH 21 Shutter 1 at 0–9 “Shutter Open”; CH 60 Shutter 2 at 0–9 “Shutter Open”



Read the manual before use



Do not stare into the light



Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

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

⚠ CAUTION

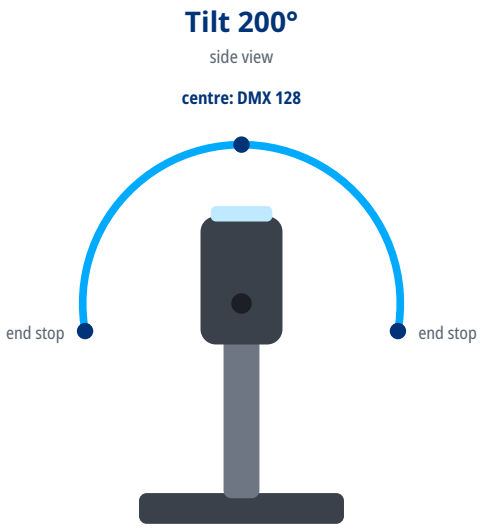
- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them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

⚠ WARNING

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

4 Product description

Range of movement



5 Installation

⚠ WARNING

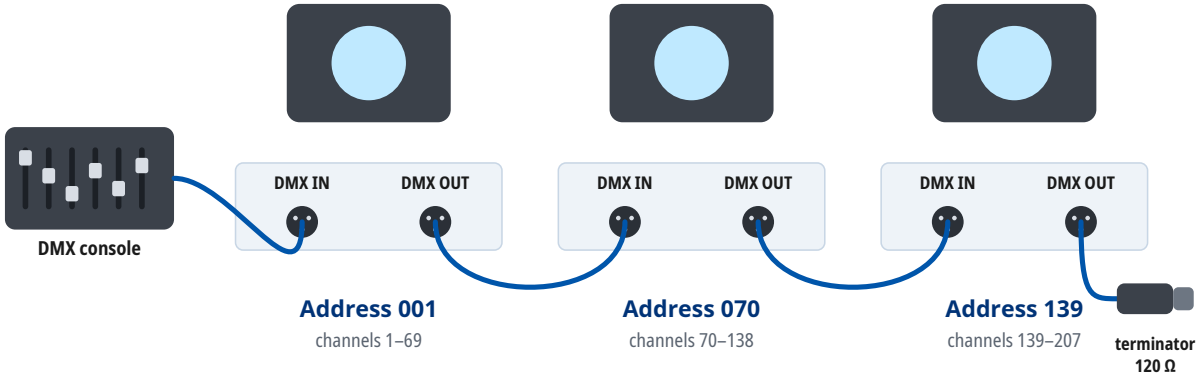
- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 20 kg.
- 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 69 Channal: every unit occupies 69 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 “69 Channal”: 69.
- 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 “69 Channal”, you can use, for example, the start addresses 1, 70, 139, 208.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

Functions in each DMX mode

	34_Channel 34 channels	49 Channel 49 channels	69 Channal 69 channels
Pan / Tilt	1	6× (1–11)	6× (1–11)
Dimmer	5, 24	20, 39	20, 59
Shutter / strobe	6, 25	21, 40	21, 60
Color mixing	14 channels (7–33)	14 channels (22–48)	34 channels (22–68)
Color temperature	11	26	46
Zoom	4	14–19	14–19
Effects / macros	12–14, 21, 22, 29	27–29, 36, 37, 44	47–49, 56, 57, 64
Pixel control	✓	✓	✓

Color wheel

1 Red
CH 47: DMX 10–19

2 Green
CH 47: DMX 20–29

3 Blue
CH 47: DMX 30–39

4 Yellow
CH 47: DMX 40–49

5 Magenta
CH 47: DMX 50–59

6 Cyan
CH 47: DMX 60–69

7 White
CH 47: DMX 70–79

8 Orang
CH 47: DMX 80–89

9 Mint0
CH 47: DMX 90–99

10 Violet
CH 47: DMX 100–109

11 2500K
CH 47: DMX 110–119

12 Light_Cyan
CH 47: DMX 130–139

13 Light_agenta
CH 47: DMX 140–149

14 Light_Blue
CH 47: DMX 150–159

15 Light_Green
CH 47: DMX 160–169

16 CTC
CH 47: DMX 170–179

17 CTC
CH 64: DMX 80–84

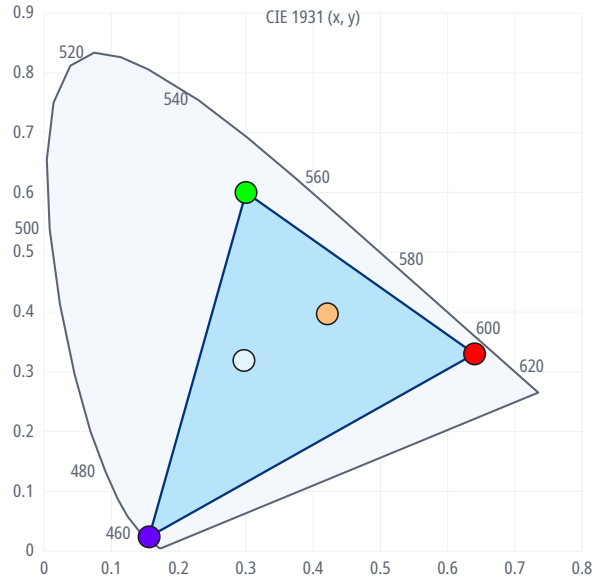
18 Lime
CH 47: DMX 180–189

19 Light_Red
CH 47: DMX 190–199

20 CTO
CH 47: DMX 200–210

21 Open
CH 47: DMX 0–10

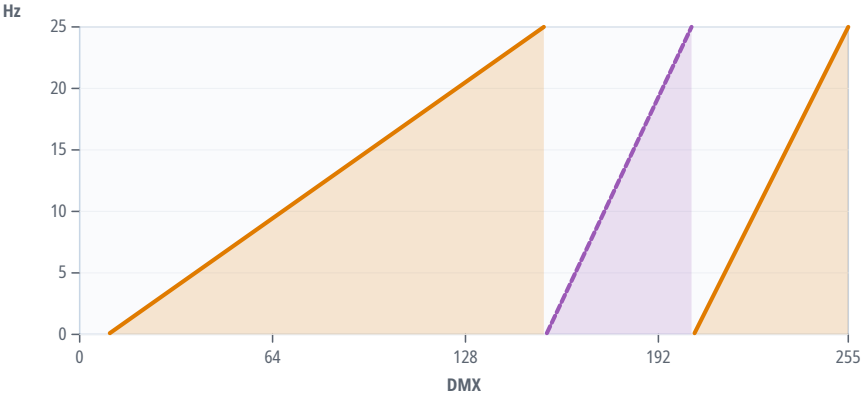
LED colors and the colors they mix



LED	x	y	nm
Red	0.640	0.330	626
Green	0.300	0.600	525
Blue	0.156	0.024	453
2500K	0.421	0.397	
10000K	0.297	0.319	

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

Strobe rate



Cells (pixels)



6 cells where the GDTF file places them (seen from above), numbered in the file's order; the mode “69 Channal” drives them together.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “69 Channal”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	346	11	U2 · 208	16	U3 · 70
2	70	7	415	12	U2 · 277	17	U3 · 139
3	139	8	U2 · 1	13	U2 · 346	18	U3 · 208
4	208	9	U2 · 70	14	U2 · 415	19	U3 · 277
5	277	10	U2 · 139	15	U3 · 1	20	U3 · 346

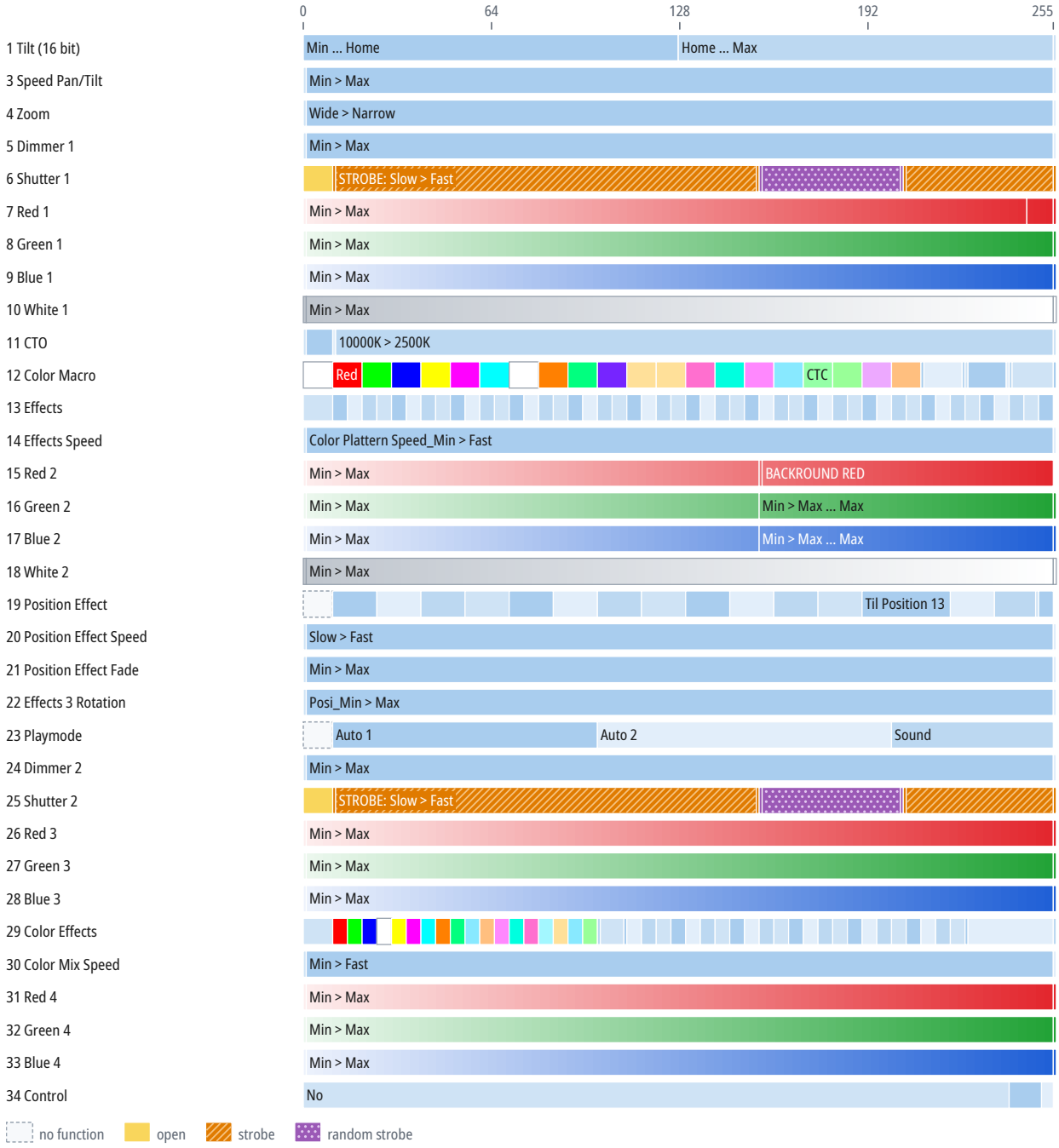
Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode 34_Channel

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

If the device receives DMX in this mode but gives no light, check these channels: CH 6 Shutter 1 at 0–9 “Shutter Open”; CH 25 Shutter 2 at 0–9 “Shutter Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 1 255, CH 6 Shutter 1 0, CH 7 Red 1 255, CH 8 Green 1 255, CH 9 Blue 1 255, CH 10 White 1 255, CH 12 Color Macro 0, CH 25 Shutter 2 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt	0–127	Min ... Home
		127	Home
		128–255	Home ... Max
		255	Max
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt		P/T SPEED
		0	Min
		1–254	Min > Max
		255	Max
4	Zoom	0	Wide
		1–254	Wide > Narrow
		255	Narrow
5	Dimmer 1		DIMMER HEAD
		0	Min
		1–254	Min > Max
		255	Max
6	Shutter 1	0–9	Shutter Open
		10	STROBE: Slow
		11–153	STROBE: Slow > Fast
		154	STROBE: Fast
		155	RANDOM STROBE: Slow
		156–202	RANDOM STROBE: Slow > Fast
		203	RANDOM STROBE: Fast
		204	EFFEKT STROBE: Slow
		205–254	EFFEKT STROBE: Slow > Fast
		255	EFFEKT STROBE: Fast
7	Red 1	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
8	Green 1	0	Min
		1–254	Min > Max
		255	Max
9	Blue 1	0	Min
		1–254	Min > Max
		255	Max
10	White 1	0	Min
		1–254	Min > Max
		255	Max
11	CTO	0	CTO OPEN: Open

CH	Function	DMX	Description
11	CTO (continued)	1–9	CTO OPEN
		10	10000K
		11–254	10000K > 2500K
		255	2500K
12	Color Macro	0–9	Open
		10–19	Red
		20–29	Green
		30–39	Blue
		40–49	Yellow
		50–59	Magenta
		60–69	Cyan
		70–79	White
		80–89	Orang
		90–99	Mint0
		100–109	Violet
		110–119	2500K
		120–129	Pink
		130–139	Light_Cyan
		140–149	Light_agenta
		150–159	Light_Blue
		160–169	Light_Green
		170–179	CTC
		180–189	Lime
		190–199	Light_Red
		200–209	CTO
		210	COLOR SNAP: Min
		211–223	COLOR SNAP: Min > Max
		224	COLOR SNAP: Max
		225	COLOR GRANDIENT: Min
		226–238	COLOR GRANDIENT: Min > Max
		239	COLOR GRANDIENT: Max
		240	COLOR FADE: Min
		241–254	COLOR FADE: Min > Max
		255	COLOR FADE: Max
13	Effects	0–9	PATTERN OPEN: Open
		10–14	Pattern 1_1
		15–19	Pattern 1_2
		20–24	Pattern 1_3
		25–29	Pattern 1_4
		30–34	Pattern 1_5
		35–39	Pattern 1_6

CH	Function	DMX	Description
13	Effects (continued)	40–44	Pattern 1_7
		45–49	Pattern 1_8
		50–54	Pattern 1_9
		55–59	Pattern 1_10
		60–64	Pattern 1_11
		65–69	Pattern 1_12
		70–74	Pattern 1_13
		75–79	Pattern 1_14
		80–84	Pattern 1_15
		85–89	Pattern 1_16
		90–94	Pattern 1_17
		95–99	Pattern 1_18
		100–104	Pattern 1_19
		105–109	Pattern 1_20
		110–114	Pattern 1_21
		115–119	Pattern 1_22
		120–124	Pattern 1_23
		125–129	Pattern 1_24
		130–134	Pattern 2_1
		135–139	Pattern 2_2
		140–144	Pattern 2_3
		145–149	Pattern 2_4
		150–154	Pattern 2_5
		155–159	Pattern 2_6
		160–164	Pattern 2_7
		165–169	Pattern 2_8
		170–174	Pattern 2_9
		175–179	Pattern 2_10
		180–184	Pattern 2_11
		185–189	Pattern 2_12
		190–194	Pattern 2_13
		195–199	Pattern 2_14
		200–204	Pattern 2_15
		205–209	Pattern 2_16
		210–214	Pattern 2_17
		215–219	Pattern 2_18
		220–224	Pattern 2_19
		225–229	Pattern 2_20
		230–234	Pattern 2_21
		235–239	Pattern 2_22
		240–244	Pattern 2_23

CH	Function	DMX	Description
13	Effects (continued)	245–249	Pattern 2_24
		250–255	Pattern 3_1
14	Effects Speed		COLOR PLATTERN SPEED
		0	Color Plattern Speed_Min
		1–254	Color Plattern Speed_Min > Fast
		255	Color Plattern Speed_Fast
15	Red 2		BACKROUND RED
		0	Min
		1–154	Min > Max
		155	Max
		156–255	BACKROUND RED
16	Green 2		BACKROUND GREEN
		0	Min
		1–154	Min > Max
		155–254	Min > Max ... Max
		255	Max
17	Blue 2		BACKROUND BLUE
		0	Min
		1–154	Min > Max
		155–254	Min > Max ... Max
		255	Max
18	White 2		BACKROUND WHITE
		0	Min
		1–254	Min > Max
		255	Max
19	Position Effect	0–9	TILT MACRO OFF: Off
		10–24	Til Position 1
		25–39	Til Position 2
		40–54	Til Position 3
		55–69	Til Position 4
		70–84	Til Position 5
		85–99	Til Position 6
		100–114	Til Position 7
		115–129	Til Position 8
		130–144	Til Position 9
		145–159	Til Position 10
		160–174	Til Position 11
		175–189	Til Position 12
		190–219	Til Position 13
		220–234	Til Position 14
		235–248	Til Position 14 ... Til Position 15

CH	Function	DMX	Description
19	Position Effect (continued)	249	Til Position 15
		250–255	Til Position 16
20	Position Effect Speed		MOVE EFFECT SPEED
		0	Slow
		1–254	Slow > Fast
		255	Fast
21	Position Effect Fade		MOVE OPPERATING
		0	Min
		1–254	Min > Max
		255	Max
22	Effects 3 Rotation		MOVE MOTOR START
		0	Posi_Min
		1–254	Posi_Min > Max
		255	Posi_Max
23	Playmode		PLAY MODE
		0–9	No Function
		10–99	Auto 1
		100–199	Auto 2
		200–255	Sound
24	Dimmer 2		DIMMER RING
		0	Min
		1–254	Min > Max
		255	Max
25	Shutter 2	0–9	Shutter Open
		10	STROBE: Slow
		11–153	STROBE: Slow > Fast (0.27–24.8 Hz)
		154	STROBE: Fast
		155	RANDOM STROBE: Slow
		156–202	RANDOM STROBE: Slow > Fast (0.62–24.5 Hz)
		203	RANDOM STROBE: Fast
		204	EFFEKT STROBE: Slow
		205–254	EFFEKT STROBE: Slow > Fast (0.59–24.5 Hz)
		255	EFFEKT STROBE: Fast
26	Red 3		RING RED
		0	Min
		1–254	Min > Max
		255	Max
27	Green 3		RING GREEN
		0	Min
		1–254	Min > Max
		255	Max
28	Blue 3		RING BLUE

CH	Function	DMX	Description
28	Blue 3 (continued)	0	Min
		1–254	Min > Max
		255	Max
29	Color Effects	0–9	Open
		10–14	Red
		15–19	Green
		20–24	Blue 1
		25–29	White
		30–34	Yellow
		35–39	Magenta
		40–44	Cyan 1
		45–49	Orange
		50–54	Mint
		55–59	Light Blue
		60–64	CTO
		65–69	Light Magenta
		70–74	Light Cyan
		75–79	Pink
		80–84	CTC
		85–89	2500K
		90–94	Light Blue
		95–99	Lime
		100	COLOR SNAP: Min
		101–108	COLOR SNAP: Min > Max
		109	COLOR SNAP: Max
		110–114	Ringcoloreffect_1
		115–119	Ringcoloreffect_2
		120–124	Ringcoloreffect_3
		125–129	Ringcoloreffect_4
		130–134	Ringcoloreffect_5
		135–139	Ringcoloreffect_6
		140–144	Ringcoloreffect_7
		145–149	Ringcoloreffect_8
		150–154	Ringcoloreffect_9
		155–159	Ringcoloreffect_10
		160–164	Ringcoloreffect_11
		165–169	Ringcoloreffect_12
		170–174	Ringcoloreffect_13
		175–179	Ringcoloreffect_14
		180–184	Ringcoloreffect_15
		185–189	Ringcoloreffect_16
		190–194	Ringcoloreffect_17

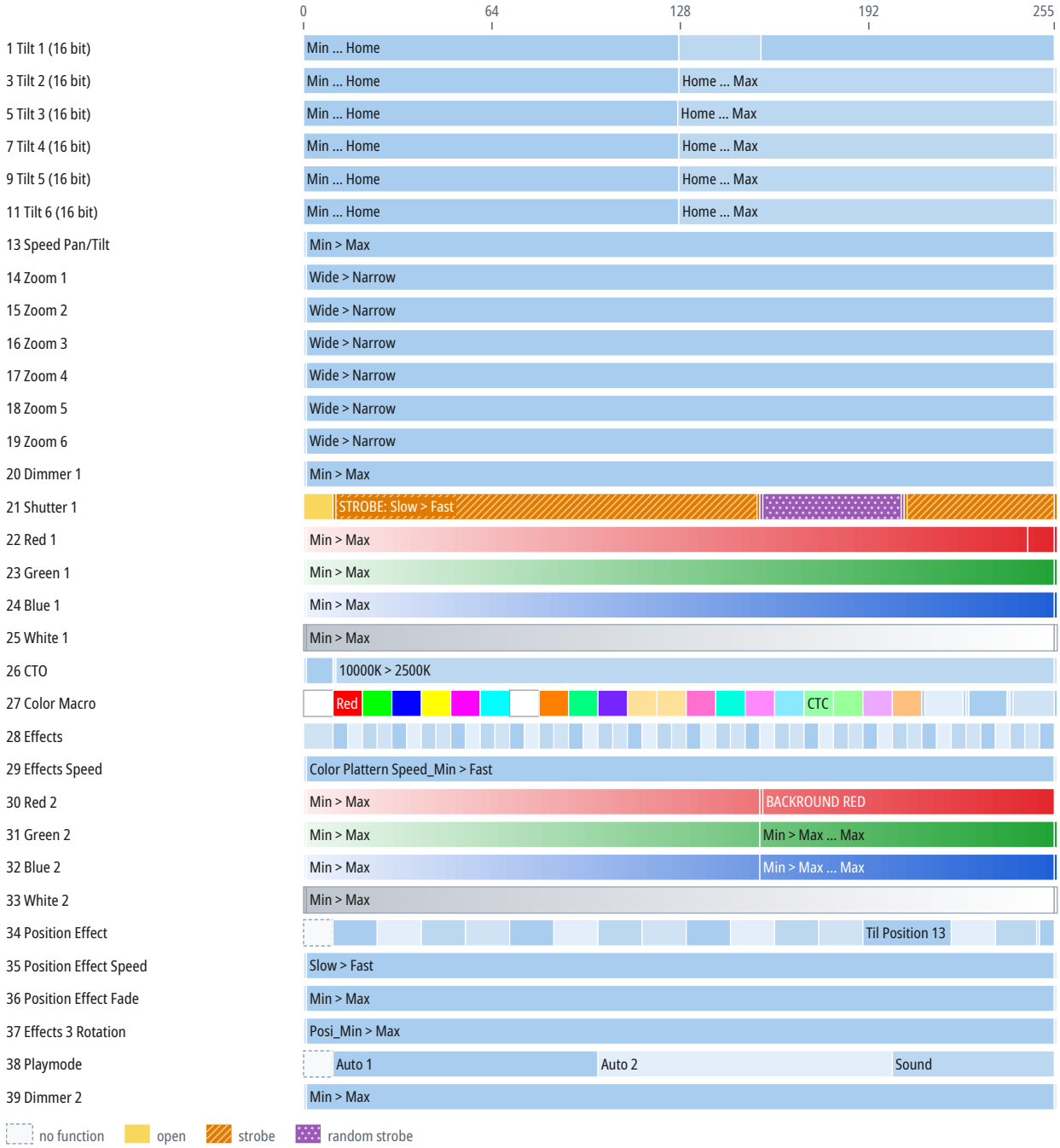
CH	Function	DMX	Description
29	Color Effects (continued)	195–199	Ringcoloreffect_18
		200–204	Ringcoloreffect_19
		205–209	Ringcoloreffect_20
		210–214	Ringcoloreffect_21
		215–219	Ringcoloreffect_22
		220–224	Ringcoloreffect_23
		225	CONTROL: Min
		226–254	CONTROL: Min > Max
		255	CONTROL: Max
30	Color Mix Speed		RINGEFFECT SPEED
		0	Min
		1–254	Min > Fast
		255	Fast
31	Red 4		BACKROUND RED
		0	Min
		1–254	Min > Max
		255	Max
32	Green 4		BACKRAUND GREEN
		0	Min
		1–254	Min > Max
		255	Max
33	Blue 4		BACKROUND BLUE
		0	Min
		1–254	Min > Max
		255	Max
34	Control	0–239	No
		240–250	Reset
		251–255	No

Mode 49 Channel

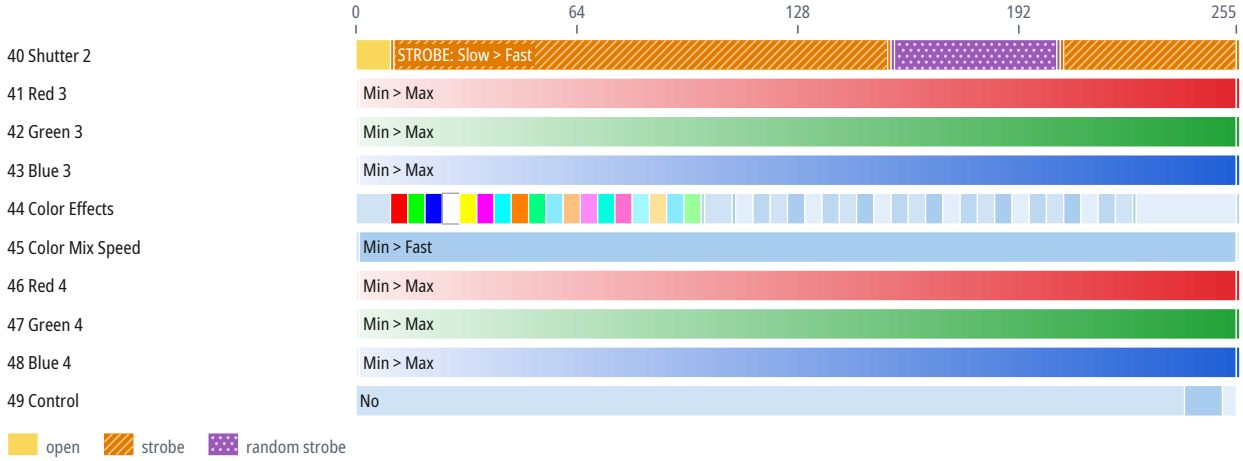
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 21 Shutter 1 at 0–9 “Shutter Open”; CH 40 Shutter 2 at 0–9 “Shutter Open”. The GDTF file gives these values for a console's Highlight function: CH 20 Dimmer 1 255, CH 21 Shutter 1 0, CH 22 Red 1 255, CH 23 Green 1 255, CH 24 Blue 1 255, CH 25 White 1 255, CH 27 Color Macro 0, CH 40 Shutter 2 0.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Tilt 1	0–127	Min ... Home
		127	Home
		128–155	Home ... Max
		155	Max
		156–255	TILT
2	Tilt 1 Fine	0–255	Fine adjustment of CH 1
3	Tilt 2	0–127	Min ... Home
		127	Home
		128–255	Home ... Max
		255	Max
4	Tilt 2 Fine	0–255	Fine adjustment of CH 3
5	Tilt 3	0–127	Min ... Home
		127–255	Home ... Max
		255	Max
6	Tilt 3 Fine	0–255	Fine adjustment of CH 5
7	Tilt 4	0–127	Min ... Home
		127	Home
		128–255	Home ... Max
		255	Max
8	Tilt 4 Fine	0–255	Fine adjustment of CH 7
9	Tilt 5	0–127	Min ... Home
		127	Home
		128–255	Home ... Max
		255	Max
10	Tilt 5 Fine	0–255	Fine adjustment of CH 9
11	Tilt 6	0–127	Min ... Home
		127	Home
		128–255	Home ... Max

CH	Function	DMX	Description
11	Tilt 6 (continued)	255	Max
12	Tilt 6 Fine	0–255	Fine adjustment of CH 11
13	Speed Pan/Tilt		Same as CH 3 in the mode “34_Channel” (p. 11)
14	Zoom 1	0	Wide
		1–254	Wide > Narrow
		255	Narrow
15	Zoom 2	0	Wide
		1–254	Wide > Narrow
		255	Narrow
16	Zoom 3	0	Wide
		1–254	Wide > Narrow
		255	Narrow
17	Zoom 4	0	Wide
		1–254	Wide > Narrow
		255	Narrow
18	Zoom 5	0	Wide
		1–254	Wide > Narrow
		255	Narrow
19	Zoom 6	0	Wide
		1–254	Wide > Narrow
		255	Narrow
20	Dimmer 1		Same as CH 5 in the mode “34_Channel” (p. 11)
21	Shutter 1		Same as CH 6 in the mode “34_Channel” (p. 11)
22	Red 1		Same as CH 7 in the mode “34_Channel” (p. 11)
23	Green 1		Same as CH 8 in the mode “34_Channel” (p. 11)
24	Blue 1		Same as CH 9 in the mode “34_Channel” (p. 11)
25	White 1		Same as CH 10 in the mode “34_Channel” (p. 11)
26	CTO		Same as CH 11 in the mode “34_Channel” (p. 11)
27	Color Macro		Same as CH 12 in the mode “34_Channel” (p. 12)
28	Effects		Same as CH 13 in the mode “34_Channel” (p. 12)
29	Effects Speed		Same as CH 14 in the mode “34_Channel” (p. 14)
30	Red 2		Same as CH 15 in the mode “34_Channel” (p. 14)
31	Green 2		Same as CH 16 in the mode “34_Channel” (p. 14)
32	Blue 2		Same as CH 17 in the mode “34_Channel” (p. 14)
33	White 2		Same as CH 18 in the mode “34_Channel” (p. 14)
34	Position Effect		Same as CH 19 in the mode “34_Channel” (p. 14)
35	Position Effect Speed		Same as CH 20 in the mode “34_Channel” (p. 15)
36	Position Effect Fade		Same as CH 21 in the mode “34_Channel” (p. 15)
37	Effects 3 Rotation		Same as CH 22 in the mode “34_Channel” (p. 15)
38	Playmode		Same as CH 23 in the mode “34_Channel” (p. 15)
39	Dimmer 2		Same as CH 24 in the mode “34_Channel” (p. 15)
40	Shutter 2		Same as CH 25 in the mode “34_Channel” (p. 15)

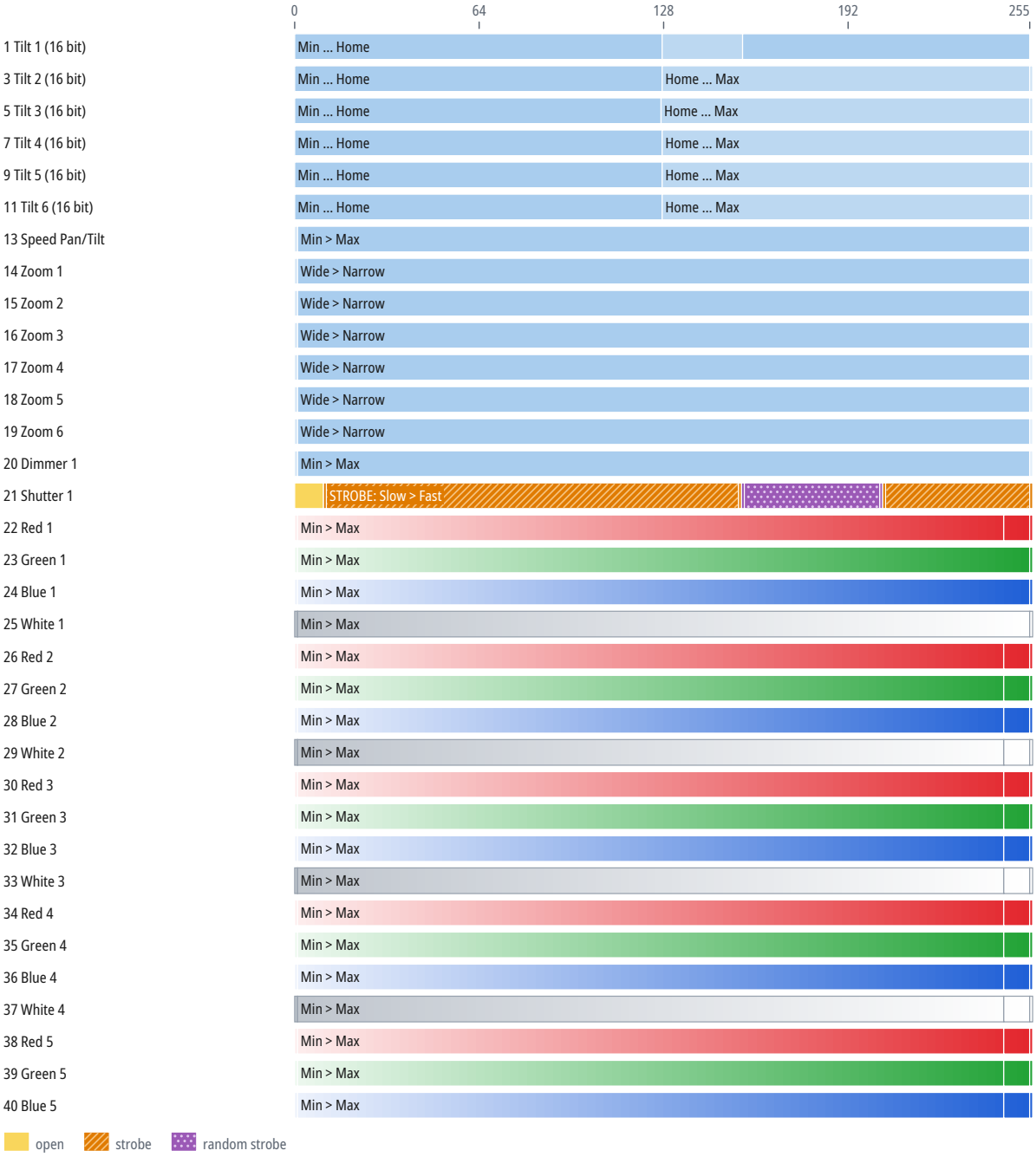
CH	Function	DMX	Description
41	Red 3		Same as CH 26 in the mode “34_Channel” (p. 15)
42	Green 3		Same as CH 27 in the mode “34_Channel” (p. 15)
43	Blue 3		Same as CH 28 in the mode “34_Channel” (p. 15)
44	Color Effects		Same as CH 29 in the mode “34_Channel” (p. 16)
45	Color Mix Speed		Same as CH 30 in the mode “34_Channel” (p. 17)
46	Red 4		Same as CH 31 in the mode “34_Channel” (p. 17)
47	Green 4		Same as CH 32 in the mode “34_Channel” (p. 17)
48	Blue 4		Same as CH 33 in the mode “34_Channel” (p. 17)
49	Control		Same as CH 34 in the mode “34_Channel” (p. 17)

Mode 69 Channal

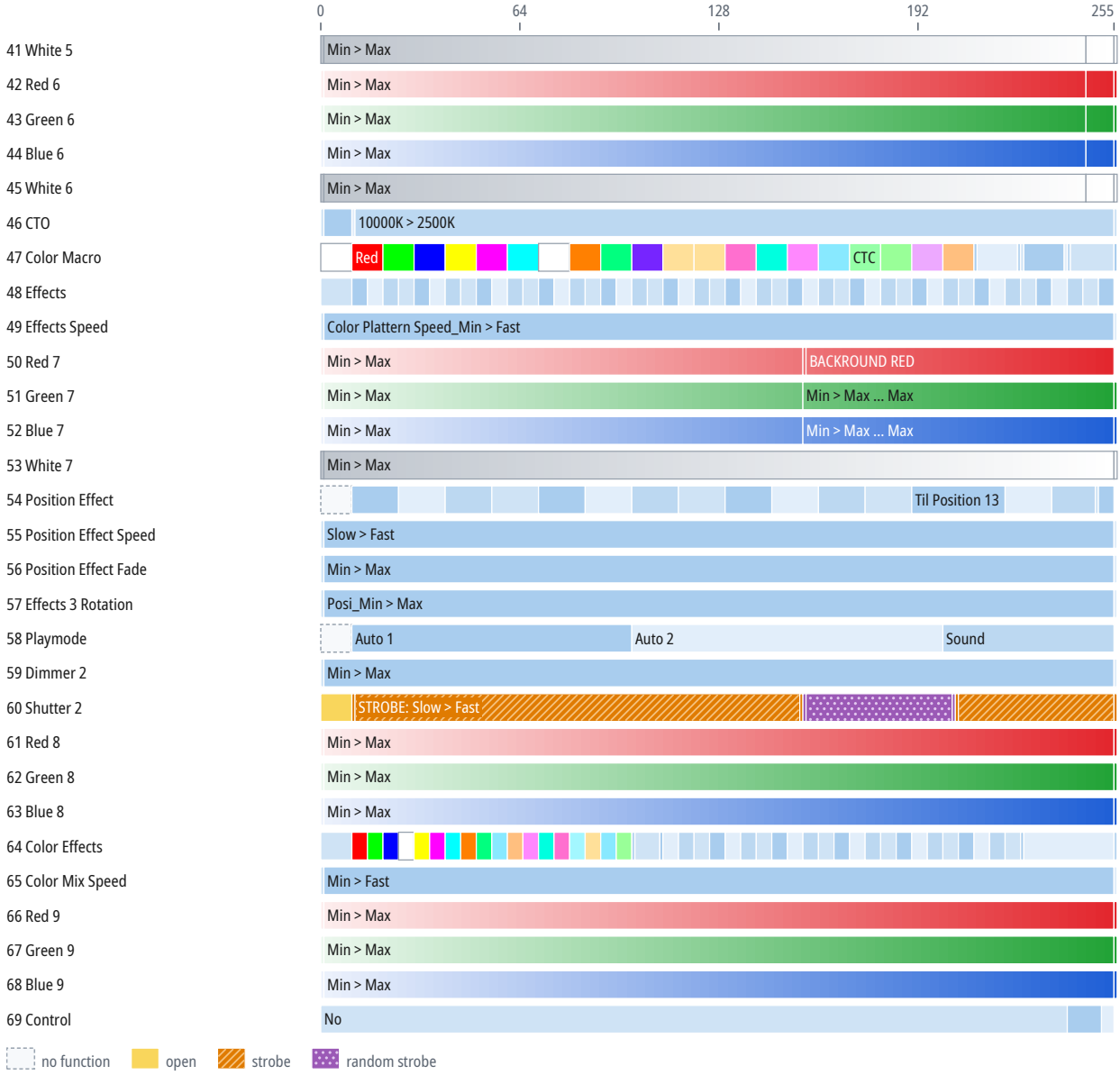
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 21 Shutter 1 at 0–9 “Shutter Open”; CH 60 Shutter 2 at 0–9 “Shutter Open”. The GDTF file gives these values for a console's Highlight function: CH 20 Dimmer 1 255, CH 21 Shutter 1 0, CH 22 Red 1 255, CH 23 Green 1 255, CH 24 Blue 1 255, CH 25 White 1 255, CH 26 Red 2 255, CH 27 Green 2 255, CH 28 Blue 2 255, CH 29 White 2 255, CH 30 Red 3 255, CH 31 Green 3 255, CH 32 Blue 3 255, CH 33 White 3 255, CH 34 Red 4 255, CH 35 Green 4 255, CH 36 Blue 4 255, CH 37 White 4 255, CH 38 Red 5 255, CH 39 Green 5 255, CH 40 Blue 5 255, CH 41 White 5 255, CH 42 Red 6 255, CH 43 Green 6 255, CH 44 Blue 6 255, CH 45 White 6 255, CH 47 Color Macro 0, CH 60 Shutter 2 0.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Tilt 1		Same as CH 1 in the mode “49 Channel” (p. 19)
2	Tilt 1 Fine	0–255	Fine adjustment of CH 1
3	Tilt 2		Same as CH 3 in the mode “49 Channel” (p. 19)
4	Tilt 2 Fine	0–255	Fine adjustment of CH 3
5	Tilt 3		Same as CH 5 in the mode “49 Channel” (p. 19)
6	Tilt 3 Fine	0–255	Fine adjustment of CH 5
7	Tilt 4		Same as CH 7 in the mode “49 Channel” (p. 19)
8	Tilt 4 Fine	0–255	Fine adjustment of CH 7
9	Tilt 5		Same as CH 9 in the mode “49 Channel” (p. 19)
10	Tilt 5 Fine	0–255	Fine adjustment of CH 9
11	Tilt 6		Same as CH 11 in the mode “49 Channel” (p. 19)
12	Tilt 6 Fine	0–255	Fine adjustment of CH 11

CH	Function	DMX	Description
13	Speed Pan/Tilt		Same as CH 3 in the mode “34_Channel” (p. 11)
14	Zoom 1		Same as CH 14 in the mode “49 Channel” (p. 20)
15	Zoom 2		Same as CH 15 in the mode “49 Channel” (p. 20)
16	Zoom 3		Same as CH 16 in the mode “49 Channel” (p. 20)
17	Zoom 4		Same as CH 17 in the mode “49 Channel” (p. 20)
18	Zoom 5		Same as CH 18 in the mode “49 Channel” (p. 20)
19	Zoom 6		Same as CH 19 in the mode “49 Channel” (p. 20)
20	Dimmer 1		Same as CH 5 in the mode “34_Channel” (p. 11)
21	Shutter 1		Same as CH 6 in the mode “34_Channel” (p. 11)
22	Red 1		Same as CH 7 in the mode “34_Channel” (p. 11)
23	Green 1		Same as CH 8 in the mode “34_Channel” (p. 11)
24	Blue 1		Same as CH 9 in the mode “34_Channel” (p. 11)
25	White 1		Same as CH 10 in the mode “34_Channel” (p. 11)
26	Red 2	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
27	Green 2	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
28	Blue 2	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
29	White 2	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
30	Red 3	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
31	Green 3	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
32	Blue 3	0	Min
		1–245	Min > Max
		246–254	Min > Max … Max
		255	Max
33	White 3	0	Min

CH	Function	DMX	Description
33	White 3 (continued)	1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
34	Red 4	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
35	Green 4	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
36	Blue 4	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
37	White 4	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
38	Red 5	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
39	Green 5	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
40	Blue 5	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
41	White 5	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
42	Red 6	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
43	Green 6	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max

CH	Function	DMX	Description
43	Green 6 (continued)	255	Max
44	Blue 6	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
45	White 6	0	Min
		1–245	Min > Max
		246–254	Min > Max ... Max
		255	Max
46	CTO		Same as CH 11 in the mode “34_Channel” (p. 11)
47	Color Macro		Same as CH 12 in the mode “34_Channel” (p. 12)
48	Effects		Same as CH 13 in the mode “34_Channel” (p. 12)
49	Effects Speed		Same as CH 14 in the mode “34_Channel” (p. 14)
50	Red 7		BACKROUND RED
		0	Min
		1–154	Min > Max
		155	Max
		156–255	BACKROUND RED
51	Green 7		BACKROUND GREEN
		0	Min
		1–154	Min > Max
		155–254	Min > Max ... Max
		255	Max
52	Blue 7		BACKROUND BLUE
		0	Min
		1–154	Min > Max
		155–254	Min > Max ... Max
		255	Max
53	White 7		BACKROUND WHITE
		0	Min
		1–254	Min > Max
		255	Max
54	Position Effect		Same as CH 19 in the mode “34_Channel” (p. 14)
55	Position Effect Speed		Same as CH 20 in the mode “34_Channel” (p. 15)
56	Position Effect Fade		Same as CH 21 in the mode “34_Channel” (p. 15)
57	Effects 3 Rotation		Same as CH 22 in the mode “34_Channel” (p. 15)
58	Playmode		Same as CH 23 in the mode “34_Channel” (p. 15)
59	Dimmer 2		Same as CH 24 in the mode “34_Channel” (p. 15)
60	Shutter 2		Same as CH 25 in the mode “34_Channel” (p. 15)
61	Red 8		RING RED
		0	Min
		1–254	Min > Max

CH	Function	DMX	Description
61	Red 8 (continued)	255	Max
62	Green 8		RING GREEN
		0	Min
		1–254	Min > Max
		255	Max
63	Blue 8		RING BLUE
		0	Min
		1–254	Min > Max
		255	Max
64	Color Effects		Same as CH 29 in the mode “34_Channel” (p. 16)
65	Color Mix Speed		Same as CH 30 in the mode “34_Channel” (p. 17)
66	Red 9		BACKROUND RED
		0	Min
		1–254	Min > Max
		255	Max
67	Green 9		BACKRAUND GREEN
		0	Min
		1–254	Min > Max
		255	Max
68	Blue 9		BACKROUND BLUE
		0	Min
		1–254	Min > Max
		255	Max
69	Control		Same as CH 34 in the mode “34_Channel” (p. 17)

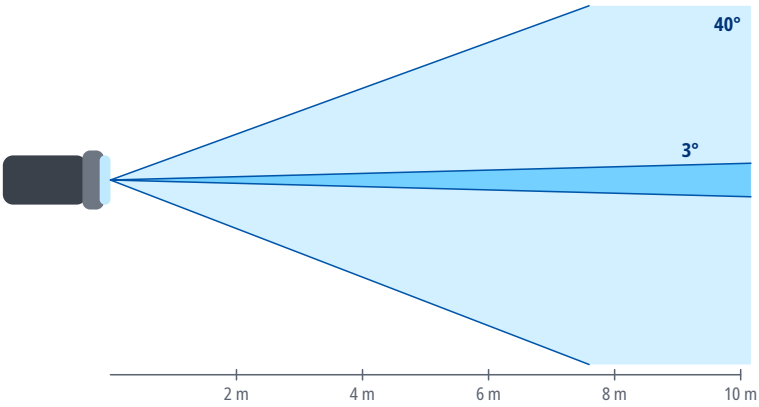
10 Technical specifications

Parameter	Value
Light source	LED
Zoom	3–40°
Tilt	200°
Weight	20 kg
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2500–10000 K
Strobe frequency	0.1–25 Hz

Spot diameter



Distance	Ø 3°	Ø 40°
2 m	0.1 m	1.5 m
4 m	0.21 m	2.9 m
6 m	0.31 m	4.4 m
8 m	0.42 m	5.8 m
10 m	0.52 m	7.3 m
15 m	0.79 m	10.9 m

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

11 Maintenance and cleaning

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

12 Troubleshooting

Problem	Remedy
The device does not switch on	Check the supply voltage, the cables and the fuse, if the device has one.
The device does not respond to DMX	Check the start address, the selected DMX mode and whether it matches the profile in the controller, the cable connection to DMX IN, and the controller output (universe).
The device behaves erratically or flickers	Check the terminator at the end of the line, the condition and wiring of the cables (shield on pin 1 only), the number of devices on the line (32 at most), and that the line is not split without a splitter.
Only some devices on the line respond	Check the cable and connectors between the last working and the first non-working device, and make sure all devices on the line are switched on.
Devices respond to the wrong channels or affect each other	Check that the addresses do not overlap and that the DMX mode on the devices matches the patch in the controller.
The device or the connected load does not light up although it receives DMX	Check the values of the dimmer, shutter and strobe channels against the DMX channel table. For the DMX modes for which the sources state it, the chapter DMX channels gives under the mode's heading which channels must be open.
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.