DMX REFERENCE

EV Stick IP

CKC Lighting



Manufacturer	CKC Lighting
GDTF file	CKC_Lighting_EV_Stick_IP_88876.gdtf
GDTF revision	V010 · 2025-03-10
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1 About this manual

This document describes the EV Stick IP by CKC Lighting. It was compiled from the GDTF file CKC_Lighting_EV_Stick_IP_88876.gdtf from the GDTF-Share library.

File revision: “V010”.

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 CKC 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
Weight	9.3 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
11 CH	11	46	1, 12, 23, 34, ...
16CH	16	32	1, 17, 33, 49, ...
75CH	75	6	1, 76, 151, 226, ...
14CH	14	36	1, 15, 29, 43, ...
32CH	32	16	1, 33, 65, 97, ...
34CH	34	15	1, 35, 69, 103, ...
39CH	39	13	1, 40, 79, 118, ...
112CH	112	4	1, 113, 225, 337
123CH	123	4	1, 124, 247, 370



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.

4 Installation

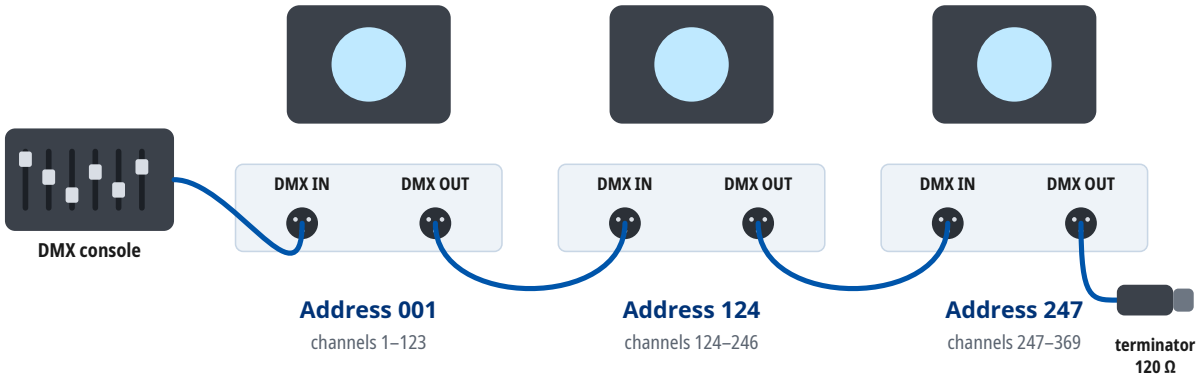
⚠ **WARNING**

- 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: 9.3 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.

5 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 123CH: every unit occupies 123 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.

6 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 “123CH”: 123.
- 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 “123CH”, you can use, for example, the start addresses 1, 124, 247, 370.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

7 Functions at a glance

Functions in each DMX mode

	11 CH 11 channels	16CH 16 channels	75CH 75 channels	14CH 14 channels	32CH 32 channels	34CH 34 channels	39CH 39 channels	112CH 112 channels
Dimmer	4, 6	✓	1	5, 10	✓	25, 32	26, 35	✓
Shutter / strobe	8		4, 9	7, 12		27, 34	28, 37	
Color mixing	1–3	1–16	7, 12–75	1–3	1–32	1–24, 28–34	1–24, 28–34	1–118
Color wheel	5		3	4			25	
Effects / macros	9–11		5, 6, 10, 11	8, 13, 14			29, 30, 38, 39	
Pixel control			16 + 16 cells			8 cells	8 cells	

Color wheel

1 Off
DMX 0–9

2 Color Macro 1
DMX 10–17

3 Color Macro 2
DMX 18–24

4 Color Macro 3
DMX 25–32

5 Color Macro 4
DMX 33–39

6 Color Macro 5
DMX 40–47

7 Color Macro 6
DMX 48–54

8 Color Macro 7
DMX 55–61

9 Color Macro 8
DMX 62–69

10 Color Macro 9
DMX 70–76

11 Color Macro 10
DMX 77–84

12 Color Macro 11
DMX 85–91

13 Color Macro 12
DMX 92–99

14 Color Macro 13
DMX 100–106

15 Color Macro 14
DMX 107–113

16 Color Macro 15
DMX 114–121

17 Color Macro 16
DMX 122–128

18 Color Macro 17
DMX 129–136

19 Color Macro 18
DMX 137–143

20 Color Macro 19
DMX 144–151

21 Color Macro 20
DMX 152–158

22 Color Macro 21
DMX 159–165

23 Color Macro 22
DMX 166–173

24 Color Macro 23
DMX 174–180

25 Color Macro 24
DMX 181–188

26 Color Macro 25
DMX 189–195

27 Color Macro 26
DMX 196–203

28 Color Macro 27
DMX 204–210

29 Color Macro 28
DMX 211–217

30 Color Macro 29
DMX 218–225

31 Color Macro 30
DMX 226–232

32 Color Macro 31
DMX 233–240

33 Color Macro 32
DMX 241–247

34 Color Macro 33
DMX 248–255

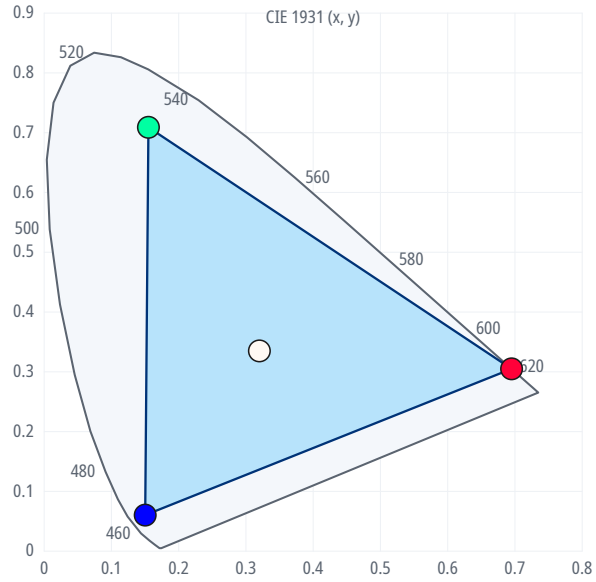
35 3200K

36 4000K

37 5600K

38 6500K

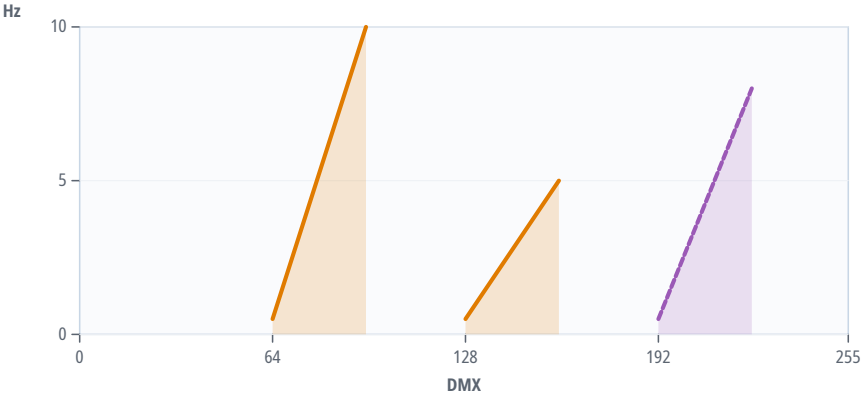
LED colors and the colors they mix



LED	x	y	nm
White	0.320	0.335	
Red	0.695	0.305	620
Green	0.155	0.709	515
Blue	0.150	0.060	460

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

Strobe rate



Cells (pixels)

17 CH 49	1 CH 1	18 CH 52	2 CH 4	19 CH 55	3 CH 7	20 CH 58	4 CH 10	21 CH 61	5 CH 13	22 CH 64	6 CH 16	23 CH 67	7 CH 19	24 CH 70	8 CH 22
25 CH 73	9 CH 25	26 CH 76	10 CH 28	27 CH 79	11 CH 31	28 CH 82	12 CH 34	29 CH 85	13 CH 37	30 CH 88	14 CH 40	31 CH 91	15 CH 43	32 CH 94	16 CH 46

32 cells in one row, left to right as the GDTF file places them (seen from above), wrapped after 16; numbered by their first DMX channel (CH) in the mode “75CH”.

8 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “123CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	U2 · 124	11	U3 · 247	16	U4 · 370
2	124	7	U2 · 247	12	U3 · 370	17	U5 · 1
3	247	8	U2 · 370	13	U4 · 1	18	U5 · 124
4	370	9	U3 · 1	14	U4 · 124	19	U5 · 247
5	U2 · 1	10	U3 · 124	15	U4 · 247	20	U5 · 370

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 11 CH

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 8 Shutter at 32–63, 96–127 or 160–191 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 2 Green 255, CH 3 Blue 255, CH 4 Dimmer 1 255, CH 6 Dimmer 2 255.

CH	Function	DMX	Description
1	Red	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 %
2	Green	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 %
3	Blue	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 %
4	Dimmer 1		Color Add_W 1
		0	0 % White
		1–62	0 % White … 25 % White
		63	25 % White
		64–126	25 % White … 50 % White
		127	50 % White
		128–190	50 % White … 75 % White
		191	75 % White
		192–254	75 % White … 100 % White

CH	Function	DMX	Description
4	Dimmer 1 (continued)	255	100 % White
5	Colors		Color Macros
		0–1	Off
		2–3	3200K
		4–5	4000K
		6–7	5600K
		8–9	6500K
		10–17	Color Macro 1
		18–24	Color Macro 2
		25–32	Color Macro 3
		33–39	Color Macro 4
		40–47	Color Macro 5
		48–54	Color Macro 6
		55–61	Color Macro 7
		62–69	Color Macro 8
		70–76	Color Macro 9
		77–84	Color Macro 10
		85–91	Color Macro 11
		92–99	Color Macro 12
		100–106	Color Macro 13
		107–113	Color Macro 14
		114–121	Color Macro 15
		122–128	Color Macro 16
		129–136	Color Macro 17
		137–143	Color Macro 18
		144–151	Color Macro 19
		152–158	Color Macro 20
		159–165	Color Macro 21
		166–173	Color Macro 22
		174–180	Color Macro 23
		181–188	Color Macro 24
		189–195	Color Macro 25
		196–203	Color Macro 26
		204–210	Color Macro 27
		211–217	Color Macro 28
		218–225	Color Macro 29
		226–232	Color Macro 30
		233–240	Color Macro 31
		241–247	Color Macro 32
		248–255	Color Macro 33
6	Dimmer 2	0–63	0 % Master … 25 % Master
		63	25 % Master

CH	Function	DMX	Description
6	Dimmer 2 (continued)	64–127	25 % Master … 50 % Master
		127	50 % Master
		128–191	50 % Master … 75 % Master
		191	75 % Master
		192–255	75 % Master … 100 % Master
		255	100 % Master
7	Dimmer 2 Fine	0–255	Fine adjustment of CH 6
8	Shutter	0–31	Shutter: Closed
		32–63	Shutter: Open
		64	Strobe Min
		65–94	Strobe Min … Strobe Max
		95	Strobe Max
		96–127	Shutter: Open
		128	Strobe Pulse Min
		129–158	Strobe Pulse Min … Strobe Pulse Max
		159	Strobe Pulse Max
		160–191	Shutter: Open
		192	Random Strobe Min
		193–222	Random Strobe Min … Random Strobe Max
		223	Random Strobe Max
		224–255	Shutter 4
9	Color Macro 1		Outer Program Macro
		0–5	Off
		6–15	Macro 1
		16–25	Macro 2
		26–35	Macro 3
		36–45	Macro 4
		46–55	Macro 5
		56–65	Macro 6
		66–75	Macro 7
		76–85	Macro 8
		86–95	Macro 9
		96–105	Macro 10
		106–115	Macro 11
		116–125	Macro 12
		126–135	Macro 13
		136–145	Macro 14
		146–155	Macro 15
		156–165	Macro 16
		166–175	Macro 17
		176–185	Macro 18
		186–195	Macro 19

CH	Function	DMX	Description
9	Color Macro 1 (continued)	196–205	Macro 20
		206–215	Macro 21
		216–225	Macro 22
		226–235	Macro 23
		236–245	Macro 24
		246–255	Macro 25
10	Color Macro 2		Inner Program Macro
		0–5	No function
		6–33	Macro1
		34–60	Macro2
		61–88	Macro3
		89–116	Macro4
		117–144	Macro5
		145–172	Macro6
		173–200	Macro7
		201–228	Macro8
		229–255	Macro9
11	Color Macro Speed		In/Out Program Macro Speed
		0	Slow
		1–254	Slow ... fast
		255	Fast

Mode 16CH

The GDTF file gives these values for a console's Highlight function: CH 1 Red 1 255, CH 2 Green 1 255, CH 3 Blue 1 255, CH 4 Red 2 255, CH 5 Green 2 255, CH 6 Blue 2 255, CH 7 Red 3 255, CH 8 Green 3 255, CH 9 Blue 3 255, CH 10 Red 4 255, CH 11 Green 4 255, CH 12 Blue 4 255.

CH	Function	DMX	Description
1	Red 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 %
2	Green 1	0	0 %
		1–62	0 % ... 25 %
		63	25 %
		64–126	25 % ... 50 %
		127	50 %
		128–190	50 % ... 75 %

CH	Function	DMX	Description
2	Green 1 (continued)	191	75 %
		192–254	75 % … 100 %
		255	100 %
3	Blue 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 %
4	Red 2		Red 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 %
5	Green 2	0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
6	Blue 2	0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
7	Red 3		Red 1
		0	0 %

CH	Function	DMX	Description
7	Red 3 (continued)	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 3	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 3	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	Red 4		Red 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 %
11	Green 4	0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %

CH	Function	DMX	Description
11	Green 4 (continued)	191	75 %
		192–254	75 % … 100 %
		255	100 %
12	Blue 4	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	White 1	0–255	
14	White 2	0–255	
15	White 3	0–255	
16	White 4	0–255	

Mode 75CH

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 4 Shutter 1 at 32–63, 96–127 or 160–191 “Open”; CH 9 Shutter 2 at 32–63, 96–127 or 160–191 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 255, CH 7 Dimmer 2 255, CH 12 Red 255 (the same in each of the 16 cells), CH 13 Green 255 (the same in each of the 16 cells), CH 14 Blue 255 (the same in each of the 16 cells).

CH	Function	DMX	Description
1	Dimmer 1		Outer Dimmer
		0–63	0 % RGB Master … 25 % RGB Master
		63–127	25 % RGB Master … 50 % RGB Master
		127–191	50 % RGB Master … 75 % RGB Master
		191–255	75 % RGB Master … 100 % RGB Master
		255	100 % RGB Master
2	Dimmer 1 Fine	0–255	Fine adjustment of CH 1
3	Colors		Color Macros
		0–9	Off
		10–17	Color Macro 1
		18–24	Color Macro 2
		25–32	Color Macro 3
		33–39	Color Macro 4
		40–47	Color Macro 5
		48–54	Color Macro 6
		55–61	Color Macro 7
		62–69	Color Macro 8
		70–76	Color Macro 9

CH	Function	DMX	Description
3	Colors (continued)	77–84	Color Macro 10
		85–91	Color Macro 11
		92–99	Color Macro 12
		100–106	Color Macro 13
		107–113	Color Macro 14
		114–121	Color Macro 15
		122–128	Color Macro 16
		129–136	Color Macro 17
		137–143	Color Macro 18
		144–151	Color Macro 19
		152–158	Color Macro 20
		159–165	Color Macro 21
		166–173	Color Macro 22
		174–180	Color Macro 23
		181–188	Color Macro 24
		189–195	Color Macro 25
		196–203	Color Macro 26
		204–210	Color Macro 27
		211–217	Color Macro 28
		218–225	Color Macro 29
		226–232	Color Macro 30
		233–240	Color Macro 31
		241–247	Color Macro 32
		248–255	Color Macro 33
4	Shutter 1	0–31	Shutter: Closed
		32–63	Shutter: Open
		64	Strobe Min
		65–94	Strobe Min ... Strobe Max
		95	Strobe Max
		96–127	Shutter: Open
		128	Strobe Pulse Min
		129–158	Strobe Pulse Min ... Strobe Pulse Max
		159	Strobe Pulse Max
		160–191	Shutter: Open
		192	Random Strobe Min
		193–222	Random Strobe Min ... Random Strobe Max
		223	Random Strobe Max
		224–255	Shutter 4
5	Color Macro 1		Same as CH 9 in the mode “11 CH” (p. 12)
6	Color Macro Speed 1		In/Out Program Macro Speed
		0–255	Slow to fast
7	Dimmer 2	0–63	0 % White ... 25 % White

CH	Function	DMX	Description
7	Dimmer 2 (continued)	63–127	25 % White ... 50 % White
		127–191	50 % White ... 75 % White
		191–255	75 % White ... 100 % White
		255	100 % White
8	Dimmer 2 Fine	0–255	Fine adjustment of CH 7
9	Shutter 2	0–31	Shutter: Closed
		32–63	Shutter: Open
		64	Strobe Min
		65–94	Strobe Min ... Strobe Max
		95	Strobe Max
		96–127	Shutter: Open
		128	Strobe Pulse Min
		129–158	Strobe Pulse Min ... Strobe Pulse Max
		159	Strobe Pulse Max
		160–191	Shutter: Open
		192	Random Strobe Min
		193–222	Random Strobe Min ... Random Strobe Max
		223	Random Strobe Max
		224–255	Shutter 4
10	Color Macro 2		Same as CH 10 in the mode “11 CH” (p. 13)
11	Color Macro Speed 2		In/Out Program Macro Speed
		0–255	Slow to fast
12	Red 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 %
13	Green 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	Blue 1	0	0 %
		1–62	0 % ... 25 %

CH	Function	DMX	Description
14	Blue 1 (continued)	63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
60	White 1	0–255	

CH 12–59: 16 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 12–14); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	12	13	14	2	15	16	17	3	18	19	20
4	21	22	23	5	24	25	26	6	27	28	29
7	30	31	32	8	33	34	35	9	36	37	38
10	39	40	41	11	42	43	44	12	45	46	47
13	48	49	50	14	51	52	53	15	54	55	56
16	57	58	59								

CH 60–75: 16 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 60); the table below gives each cell's channel numbers.

Cell	White	Cell	White	Cell	White	Cell	White	Cell	White	Cell	White
1	60	2	61	3	62	4	63	5	64	6	65
7	66	8	67	9	68	10	69	11	70	12	71
13	72	14	73	15	74	16	75				

Mode 14CH

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 5 Dimmer 1 above 0; CH 7 Shutter 1 at 32–63, 96–127 or 160–191 “Open”; CH 10 Dimmer 2 above 0; CH 12 Shutter 2 at 32–63, 96–127 or 160–191 “Open”.

CH	Function	DMX	Description
1	Red	0–255	
2	Green	0–255	
3	Blue	0–255	
4	Colors		Same as CH 5 in the mode “11 CH” (p. 11)
5	Dimmer 1	0–255	Closed … open
		255	Open
6	Dimmer 1 Fine	0–255	Fine adjustment of CH 5
7	Shutter 1		Same as CH 4 in the mode “75CH” (p. 17)
8	Color Macro 1		Same as CH 9 in the mode “11 CH” (p. 12)
9	RGB Marcospeed		RGB Marco Speed
		0–255	RGB Marco Speed

CH	Function	DMX	Description
10	Dimmer 2	0–255	Closed … open
		255	Open
11	Dimmer 2 Fine	0–255	Fine adjustment of CH 10
12	Shutter 2		Same as CH 9 in the mode “75CH” (p. 18)
13	Color Macro 2		Same as CH 10 in the mode “11 CH” (p. 13)
14	W Macrospeed	0–255	

Mode 32CH

CH	Function	DMX	Description
1	Red 1	0–255	
2	Green 1	0–255	
3	Blue 1	0–255	
25	White 1	0–255	

CH 1–24: 8 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 1–3); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	1	2	3	2	4	5	6	3	7	8	9
4	10	11	12	5	13	14	15	6	16	17	18
7	19	20	21	8	22	23	24				

CH 25–32: 8 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 25); the table below gives each cell's channel numbers.

Cell	White	Cell	White	Cell	White	Cell	White	Cell	White	Cell	White
1	25	2	26	3	27	4	28	5	29	6	30
7	31	8	32								

Mode 34CH

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 25 Dimmer 1 above 0; CH 27 Shutter 1 at 32–63, 96–127 or 160–191 “Open”; CH 32 Dimmer 2 above 0; CH 34 Shutter 2 at 32–63, 96–127 or 160–191 “Open”.

CH	Function	DMX	Description
1	Red 1	0–255	
2	Green 1	0–255	
3	Blue 1	0–255	
25	Dimmer 1		Same as CH 5 in the mode “14CH” (p. 19)
26	Dimmer 1 Fine	0–255	Fine adjustment of CH 25
27	Shutter 1		Same as CH 4 in the mode “75CH” (p. 17)
28	White 1	0–255	
29	White 2	0–255	
30	White 3	0–255	
31	White 4	0–255	

CH	Function	DMX	Description
32	Dimmer 2		Same as CH 10 in the mode “14CH” (p. 20)
33	Dimmer 2 Fine	0–255	Fine adjustment of CH 32
34	Shutter 2		Same as CH 9 in the mode “75CH” (p. 18)

CH 1–24: 8 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 1–3); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	1	2	3	2	4	5	6	3	7	8	9
4	10	11	12	5	13	14	15	6	16	17	18
7	19	20	21	8	22	23	24				

Mode 39CH

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 26 Dimmer 1 above 0; CH 28 Shutter 1 at 32–63, 96–127 or 160–191 “Open”; CH 35 Dimmer 2 above 0; CH 37 Shutter 2 at 32–63, 96–127 or 160–191 “Open”.

CH	Function	DMX	Description
1	Red 1	0–255	
2	Green 1	0–255	
3	Blue 1	0–255	
25	Colors		Same as CH 3 in the mode “75CH” (p. 16)
26	Dimmer 1		Same as CH 5 in the mode “14CH” (p. 19)
27	Dimmer 1 Fine	0–255	Fine adjustment of CH 26
28	Shutter 1		Same as CH 4 in the mode “75CH” (p. 17)
29	Color Macro 1		Same as CH 9 in the mode “11 CH” (p. 12)
30	Color Macro Speed 1		Same as CH 6 in the mode “75CH” (p. 17)
31	White 1	0–255	
32	White 2	0–255	
33	White 3	0–255	
34	White 4	0–255	
35	Dimmer 2		Same as CH 10 in the mode “14CH” (p. 20)
36	Dimmer 2 Fine	0–255	Fine adjustment of CH 35
37	Shutter 2		Same as CH 9 in the mode “75CH” (p. 18)
38	Color Macro 2		Same as CH 10 in the mode “11 CH” (p. 13)
39	Color Macro Speed 2		Same as CH 11 in the mode “75CH” (p. 18)

CH 1–24: 8 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 1–3); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	1	2	3	2	4	5	6	3	7	8	9
4	10	11	12	5	13	14	15	6	16	17	18
7	19	20	21	8	22	23	24				

Mode 112CH

CH	Function	DMX	Description
1	Red 1	0–255	
2	Green 1	0–255	
3	Blue 1	0–255	
97	White 1	0–255	

CH 1–96: 32 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 1–3); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	1	2	3	2	4	5	6	3	7	8	9
4	10	11	12	5	13	14	15	6	16	17	18
7	19	20	21	8	22	23	24	9	25	26	27
10	28	29	30	11	31	32	33	12	34	35	36
13	37	38	39	14	40	41	42	15	43	44	45
16	46	47	48	17	49	50	51	18	52	53	54
19	55	56	57	20	58	59	60	21	61	62	63
22	64	65	66	23	67	68	69	24	70	71	72
25	73	74	75	26	76	77	78	27	79	80	81
28	82	83	84	29	85	86	87	30	88	89	90
31	91	92	93	32	94	95	96				

CH 97–112: 16 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 97); the table below gives each cell's channel numbers.

Cell	White	Cell	White	Cell	White	Cell	White	Cell	White	Cell	White
1	97	2	98	3	99	4	100	5	101	6	102
7	103	8	104	9	105	10	106	11	107	12	108
13	109	14	110	15	111	16	112				

Mode 123CH

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 98 Dimmer 1 above 0; CH 100 Shutter 1 at 32–63, 96–127 or 160–191 “Open”; CH 119 Dimmer 2 above 0; CH 121 Shutter 2 at 32–63, 96–127 or 160–191 “Open”.

CH	Function	DMX	Description
1	Red 1	0–255	
2	Green 1	0–255	
3	Blue 1	0–255	
97	Colors		Same as CH 3 in the mode “75CH” (p. 16)
98	Dimmer 1		Same as CH 5 in the mode “14CH” (p. 19)
99	Dimmer 1 Fine	0–255	Fine adjustment of CH 98
100	Shutter 1		Same as CH 4 in the mode “75CH” (p. 17)
101	Color Macro 1		Same as CH 9 in the mode “11 CH” (p. 12)

CH	Function	DMX	Description
102	Color Macro Speed 1		Same as CH 6 in the mode “75CH” (p. 17)
103	White 1	0–255	
119	Dimmer 2		Same as CH 10 in the mode “14CH” (p. 20)
120	Dimmer 2 Fine	0–255	Fine adjustment of CH 119
121	Shutter 2		Same as CH 9 in the mode “75CH” (p. 18)
122	Color Macro 2		Same as CH 10 in the mode “11 CH” (p. 13)
123	Color Macro Speed 2		Same as CH 11 in the mode “75CH” (p. 18)

CH 1–96: 32 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 1–3); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	1	2	3	2	4	5	6	3	7	8	9
4	10	11	12	5	13	14	15	6	16	17	18
7	19	20	21	8	22	23	24	9	25	26	27
10	28	29	30	11	31	32	33	12	34	35	36
13	37	38	39	14	40	41	42	15	43	44	45
16	46	47	48	17	49	50	51	18	52	53	54
19	55	56	57	20	58	59	60	21	61	62	63
22	64	65	66	23	67	68	69	24	70	71	72
25	73	74	75	26	76	77	78	27	79	80	81
28	82	83	84	29	85	86	87	30	88	89	90
31	91	92	93	32	94	95	96				

CH 103–118: 16 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 103); the table below gives each cell's channel numbers.

Cell	White	Cell	White	Cell	White	Cell	White	Cell	White	Cell	White
1	103	2	104	3	105	4	106	5	107	6	108
7	109	8	110	9	111	10	112	11	113	12	114
13	115	14	116	15	117	16	118				

9 Technical specifications

Parameter	Value
Light source	LED
Weight	9.3 kg
Operating temperature	-20 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0.5–10 Hz

10 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.

11 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.

12 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.