DMX REFERENCE

H2 FC

CLH2FC

Cameo



Manufacturer	Cameo
GDTF file	Cameo_H2_FC_16398.gdtf
GDTF revision	Firmware_1.0_GDTF_V01 · 2021-08-16
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1 About this manual

This document describes the CLH2FC by Cameo. It was compiled from the GDTF file Cameo_H2_FC_16398.gdtf from the GDTF-Share library.

File revision: “Firmware_1.0_GDTF_V01”.

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 Cameo; product names and trademarks belong to their owners.

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

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

2 Quick reference

Parameter	Value
Power consumption	250 W
Weight	8.3 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
1 CH DIM (User Color 1)	1	512	1, 2, 3, 4, ...
2CH DIM 16 Bit (User Color 1)	2	256	1, 3, 5, 7, ...
2CH CCT	2	256	1, 3, 5, 7, ...
5 CH RGBAL	5	102	1, 6, 11, 16, ...
3Ch Color	3	170	1, 4, 7, 10, ...
6 CH HSI-CCT Mode (16Bit)	6	85	1, 7, 13, 19, ...
13 CH Direct CCT CP	13	39	1, 14, 27, 40, ...
20 CH Direct CCT CP 16 Bit Device	20	25	1, 21, 41, 61, ...
23 CH Direct HSI CCT CP 16 Bit Device	23	22	1, 24, 47, 70, ...


Read the manual before use


Risk of electric shock


Do not stare into the light


Indoor use only

3 Safety instructions


Read the manual before use


Risk of electric shock


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

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

⚠ WARNING

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

⚠ CAUTION

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

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

4 Product description

Description in the GDTF file

“■LED-Houselight Color-LED RGBAL / 7.400 lm / 180W”

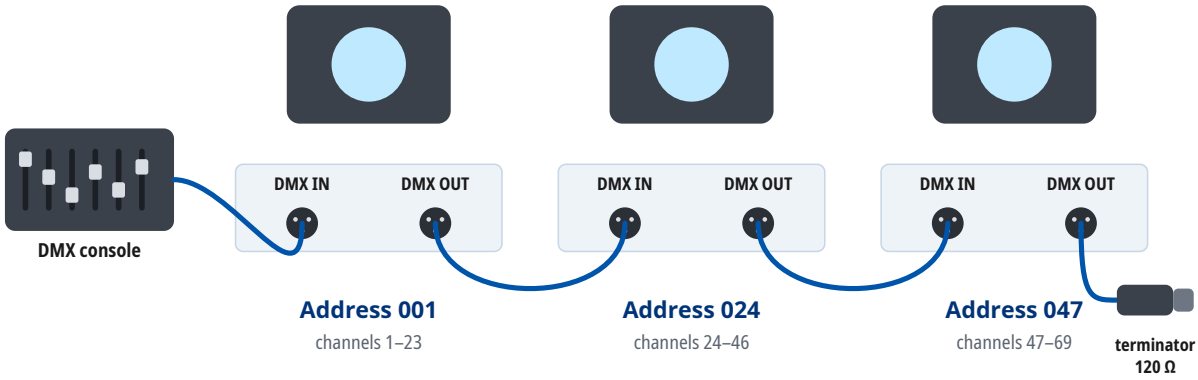
5 Installation

> ⚠ **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: 8.3 kg.
> - Use suitable mounting hardware (for example truss clamps) and tighten all screw connections properly.
> - Always secure the suspended device against falling with a safety cable of adequate load capacity, routed through a fixed point of the device and around the supporting structure.
> - During installation and removal, keep people out of the area below the work position.
> - Regularly inspect the fixings and the safety cable for damage, corrosion and loosening.

6 Connections

- Use shielded cable designed for DMX512 with an impedance of 110 Ω. Ordinary microphone cable is not suitable for DMX, especially over longer distances.
- Connect the devices in a daisy chain: connect the DMX OUT of one device to the DMX IN of the next. Do not split the line with Y-cables or wire it in a star; the line may be split only with a DMX splitter.
- Connect the shield to pin 1 only. Do not connect the shield (ground) to the metal shell of the connector; this can cause short circuits or erratic behavior.
- XLR pin assignment: pin 1 – shield (ground), pin 2 – Data- (Data Complement), pin 3 – Data+ (Data True). On 5-pin connectors, pins 4 and 5 are not connected; a 5-pin connector can be connected to a 3-pin one with a cable adapter.
- Terminate the end of the line (for impedance matching): plug an XLR connector with a 120 Ω, ¼ W resistor between pins 2 and 3 into the DMX OUT of the last device. This reduces the risk of erratic behavior.
- Connect no more than 32 devices to one DMX line. For more devices or longer runs, use a DMX splitter or booster.

DMX line



Mode 23 CH Direct HSI CCT CP 16 Bit Device: every unit occupies 23 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 “23 CH Direct HSI CCT CP 16 Bit Device”: 23.
- 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 “23 CH Direct HSI CCT CP 16 Bit Device”, you can use, for example, the start addresses 1, 24, 47, 70.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

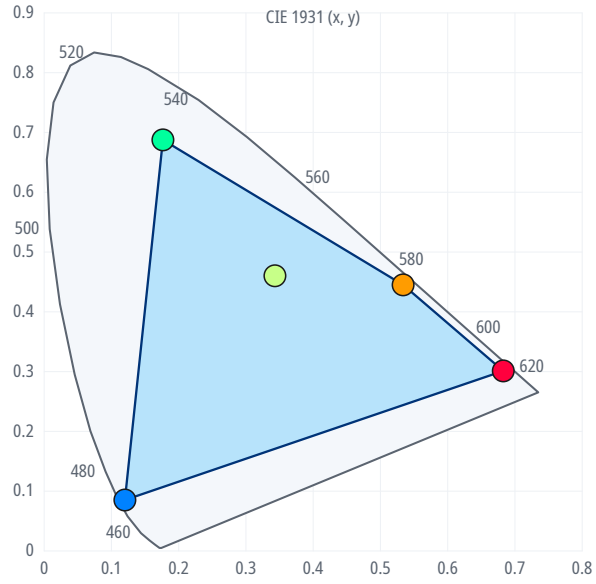
Functions in each DMX mode

	1 CH DIM (User Color 1) 1 channel	2CH DIM 16 Bit (User Color 1) 2 channels	2CH CCT 2 channels	5 CH RGBAL 5 channels	3Ch Color 3 channels	6 CH HSI-CCT Mode (16Bit) 6 channels	13 CH Direct CCT CP 13 channels	20 CH Direct CCT CP 16 Bit Device 20 channels
Dimmer	1	1	1		1	1	1	1
Dimmer resolution	8 bit	16 bit	8 bit		8 bit	8 bit	8 bit	16 bit
Shutter / strobe					2		2	3
Color mixing				1–5			3–7	5× (4–12)
Color temperature			2			4	8	14
Color wheel					3		10	16

Color wheel

1. No Color — DMX 0–5
2. Red — DMX 6–13
3. Amber — DMX 14–21
4. Yellow Warm — DMX 22–29
5. Yellow — DMX 30–37
6. Green — DMX 38–45
7. Turquoise — DMX 46–53
8. Cyan — DMX 54–61
9. Blue — DMX 62–69
10. Lavender — DMX 70–77
11. Mauve — DMX 78–85
12. Magenta — DMX 86–93
13. Pink — DMX 94–101
14. Warm White — DMX 102–109
15. Wite — DMX 110–117
16. cold white — DMX 118–126
17. User Color 1 — DMX 202–207
18. User Color 2 — DMX 208–213
19. User Color 3 — DMX 214–219
20. User Color 4 — DMX 220–225
21. No Color 1 — DMX 226–255

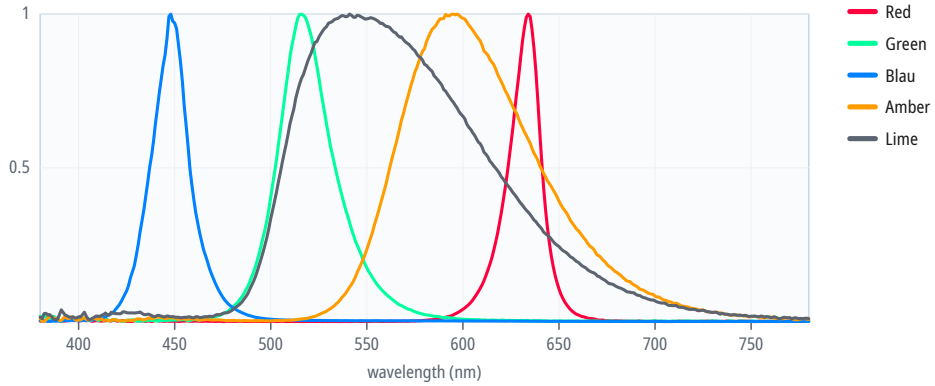
LED colors and the colors they mix



LED	x	y	nm
Red	0.683	0.301	625
Green	0.177	0.688	521
Blau	0.120	0.085	452
Amber	0.534	0.445	589
Lime	0.343	0.460	566

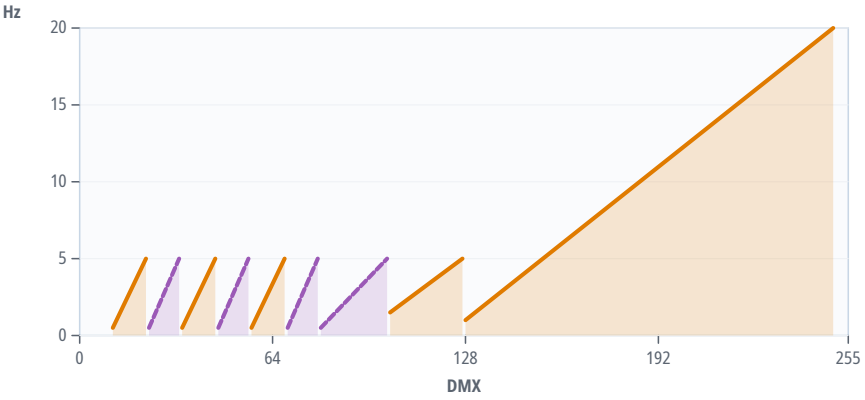
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Spectra of the light sources



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

Strobe rate

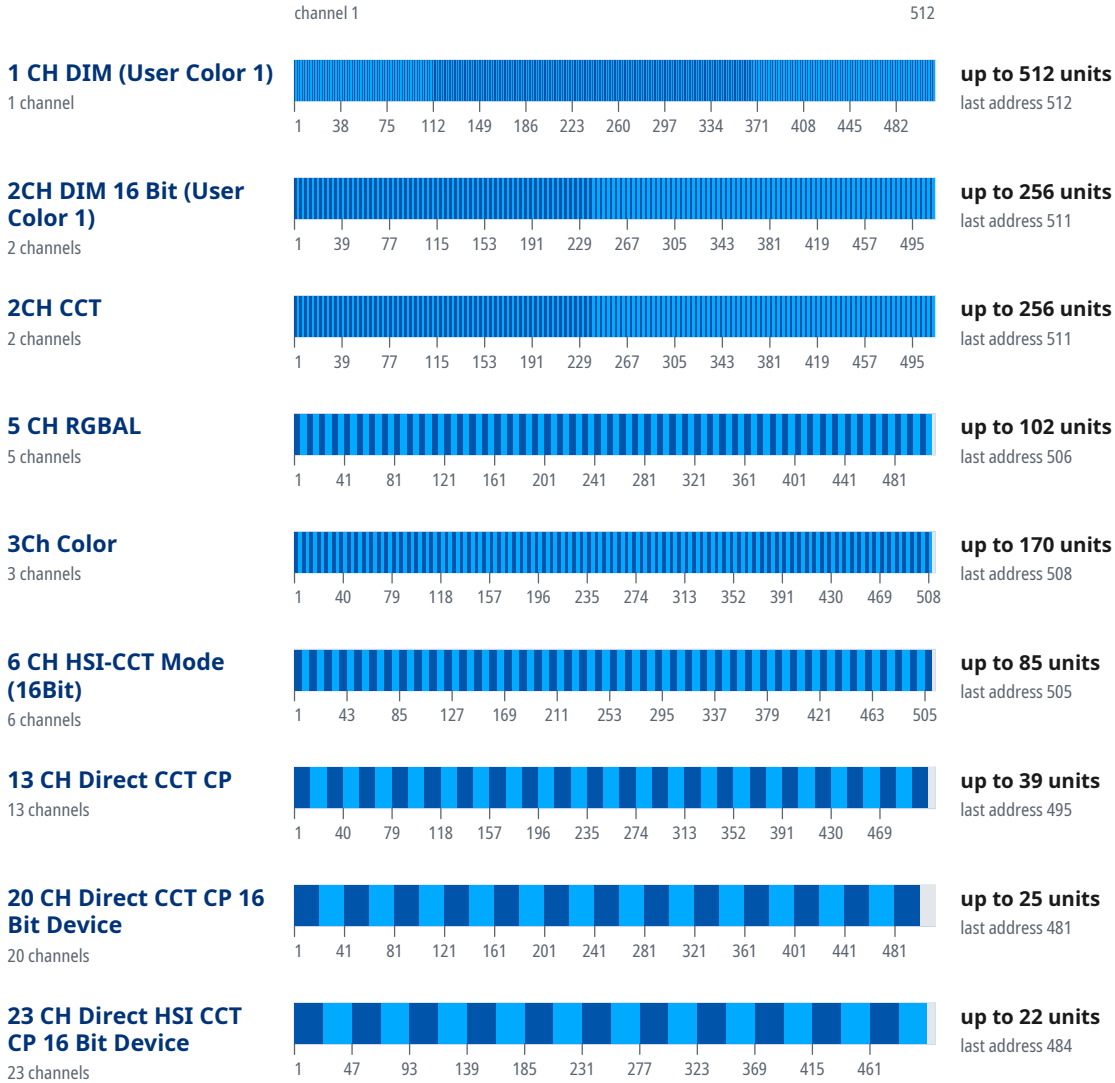


CH 3 · 23 CH Direct HSI CCT CP 16 Bit Device

- 11–22: 0.5–5 Hz
  Ramp up down
- 23–33: 0.5–5 Hz
  Pulse up down Random
- 34–45: 0.5–5 Hz
  Ramp up
- 46–56: 0.5–5 Hz
  Ramp up Random
- 57–68: 0.5–5 Hz
  Ramp down
- 69–79: 0.5–5 Hz
  Ramp down Random
- 80–102: 0.5–5 Hz
  Random Strobe Effect
- 103–127: 1.5–5 Hz
  Strobe Break Effekt

9 DMX channels

Units in one DMX universe



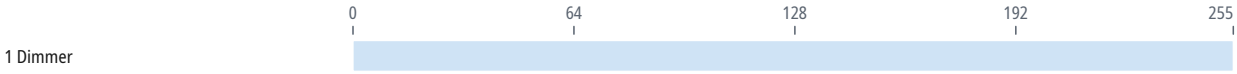
Start addresses of 20 units in the mode “23 CH Direct HSI CCT CP 16 Bit Device”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	116	11	231	16	346
2	24	7	139	12	254	17	369
3	47	8	162	13	277	18	392
4	70	9	185	14	300	19	415
5	93	10	208	15	323	20	438

Mode 1 CH DIM (User Color 1)

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance



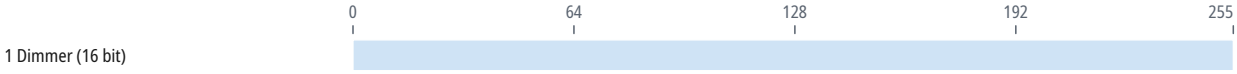
CH	Function	DMX	Description
1	Dimmer	0–255	

Mode 2CH DIM 16 Bit (User Color 1)

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 1 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance

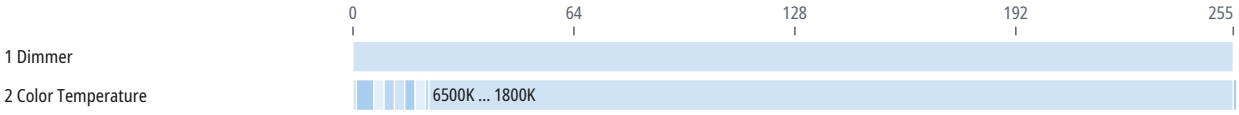


CH	Function	DMX	Description
1	Dimmer	0–255	
2	Dimmer Fine	0–255	Fine adjustment of CH 1

Mode 2CH CCT

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance

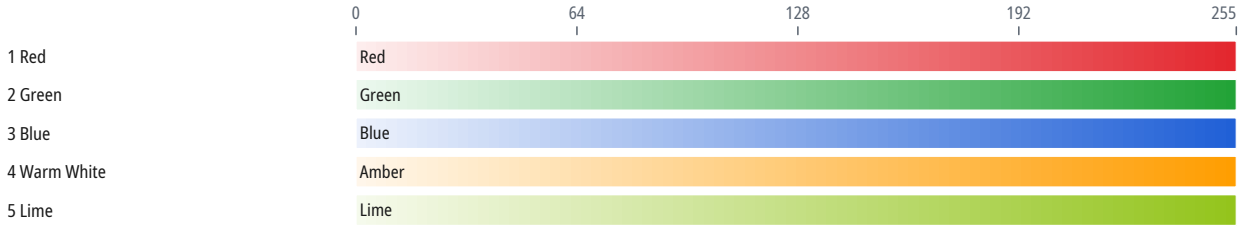


CH	Function	DMX	Description
1	Dimmer	0–255	
2	Color Temperature	0	Full on
		1–5	CTC off
		6–8	Bulb White (2700K)
		9–11	Halogen White (3200K)
		12–14	Neutral White (4000K)
		15–17	Studio-White (5600K)
		18–20	Daylight White (6500K)
		21	6500K
		22–254	6500K ... 1800K
		255	1800K

Mode 5 CH RGBAL

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 Warm White 255.

Channel functions at a glance

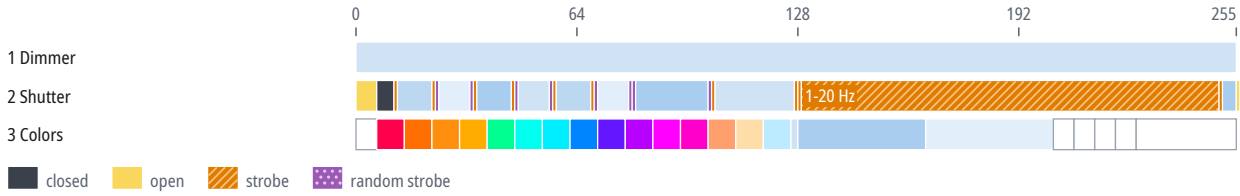


CH	Function	DMX	Description
1	Red	0–255	Red
2	Green	0–255	Green
3	Blue	0–255	Blue
4	Warm White	0–255	Amber
5	Lime	0–255	Lime

Mode 3Ch Color

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 2 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance



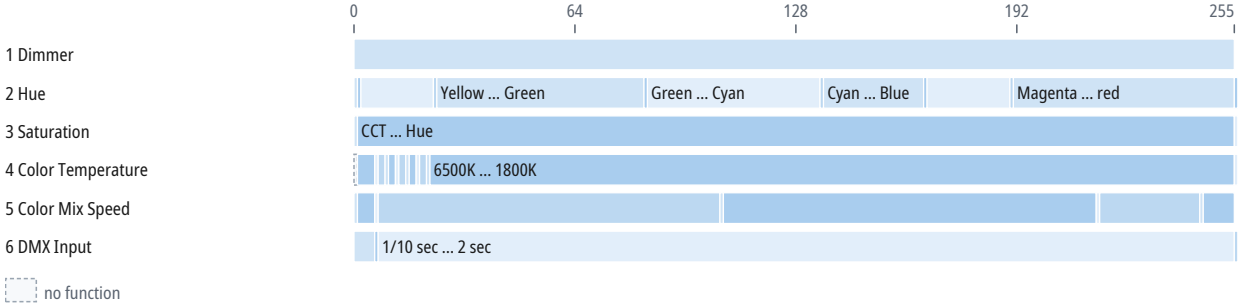
CH	Function	DMX	Description
1	Dimmer	0–255	
2	Shutter	0–5	Strobe open close: Open
		6–10	Strobe open close: Close
		11	Ramp up down: slow
		12–21	Ramp up down: slow ... fast
		22	Ramp up down: fast
		23	Pulse up down Random: Slow
		24–32	Pulse up down Random: Slow ... Fast
		33	Pulse up down Random: Fast
		34	Ramp up: slow
		35–44	Ramp up: slow ... fast
		45	Ramp up: fast
		46	Ramp up Random: Slow
		47–55	Ramp up Random: Slow ... Fast

CH	Function	DMX	Description
2	Shutter (continued)	56	Ramp up Random: Fast
		57	Ramp down: slow
		58–67	Ramp down: slow ... fast
		68	Ramp down: fast
		69	Ramp down Random: Slow
		70–78	Ramp down Random: Slow ... Fast
		79	Ramp down Random: Fast
		80	Random Strobe Effect: Slow
		81–101	Random Strobe Effect: Slow ... Fast
		102	Random Strobe Effect: Fast
		103	5s Short burst with break
		104–126	5s Short burst with break ... 1s Short burst with break
		127	1s Short burst with break
		128	Slow 1Hz
		129–249	1-20 Hz (1.1–19.9 Hz)
		250	Fast 20Hz
		251–255	Open
3	Colors	0–5	Color Presets: Open
		6–13	Red
		14–21	Amber
		22–29	Yellow Warm
		30–37	Yellow
		38–45	Green
		46–53	Turquoise
		54–61	Cyan
		62–69	Blue
		70–77	Lavender
		78–85	Mauve
		86–93	Magenta
		94–101	Pink
		102–109	Warm white
		110–117	White
		118–125	Cold white
		126–127	Color Jumping Stop
		128–164	Color Jumping Speed slow->fast
		165–201	Color Fading Speed slow->fast
		202–207	User Color_1
		208–213	User Color_2
		214–219	User Color_3
		220–225	User Color_4
		226–255	User Color: Open

Mode 6 CH HSI-CCT Mode (16Bit)

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance



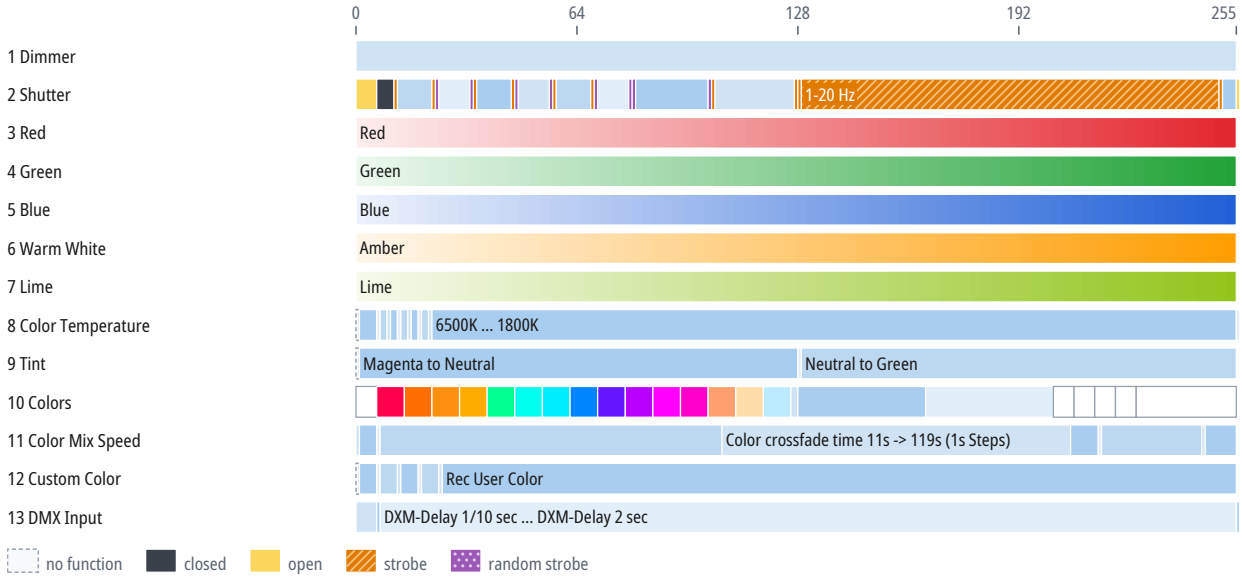
CH	Function	DMX	Description
1	Dimmer	0–255	
2	Hue	0	All on
		1	Red
		2–22	Red ... yellow
		23	Yellow
		24–83	Yellow ... Green
		84	Green
		85–134	Green ... Cyan
		135	Cyan
		136–164	Cyan ... Blue
		165	Blue
		166–189	Blue ... Magenta
		190	Magenta
		191–254	Magenta ... red
		255	Red
3	Saturation	0	CCT
		1–254	CCT ... Hue
		255	Hue
4	Color Temperature	0	No function
		1–5	No function ... Bulb White (2700K)
		6	Bulb White (2700K)
		7–8	Bulb White (2700K) ... Halogen White (3200K)
		9	Halogen White (3200K)
		10–11	Halogen White (3200K) ... Neutral White (4000K)
		12	Neutral White (4000K)
		13–14	Neutral White (4000K) ... Studio-White (5600K)
		15	Studio-White (5600K)
		16–17	Studio-White (5600K) ... Daylight White (6500K)
		18	Daylight White (6500K)

CH	Function	DMX	Description
4	Color Temperature (continued)	19–20	CTC Steps
		21	6500K
		22–254	6500K ... 1800K
		255	1800K
5	Color Mix Speed		Color crossfade time
		0	0s
		1–5	0s ... color crossfade time 01s -> 10s (01s Steps)
		6	Color crossfade time 01s -> 10s (01s Steps)
		7–105	Color crossfade time 01s -> 10s (01s Steps) ... color crossfade time 11s -> 119s (1s Steps)
		106	Color crossfade time 11s -> 119s (1s Steps)
		107–214	Color crossfade time 11s -> 119s (1s Steps) ... color crossfade time 2m -> 4m50s (10s Steps)
		215	Color crossfade time 2m -> 4m50s (10s Steps)
		216–244	Color crossfade time 2m -> 4m50s (10s Steps) ... color crossfade time 5m -> 15m (1m Steps)
		245	Color crossfade time 5m -> 15m (1m Steps)
		246–255	Color crossfade time
6	DMX Input	0–5	No Delay
		6	1/10 sec
		7–254	1/10 sec ... 2 sec
		255	2 sec

Mode 13 CH Direct CCT CP

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 2 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Red 255, CH 4 Green 255, CH 5 Blue 255, CH 6 Warm White 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–255	
2	Shutter		Same as CH 2 in the mode “3Ch Color” (p. 11)
3	Red	0–255	Red
4	Green	0–255	Green
5	Blue	0–255	Blue
6	Warm White	0–255	Amber
7	Lime	0–255	Lime
8	Color Temperature		Same as CH 4 in the mode “6 CH HSI-CCT Mode (16Bit)” (p. 13)
9	Tint	0	No function
		1–127	Magenta to Neutral
		128	Neutral
		129–255	Neutral to Green
10	Colors		Same as CH 3 in the mode “3Ch Color” (p. 12)
11	Color Mix Speed		Color crossfade time
		0	0s
		1–5	0s ... color crossfade time 01s -> 10s (01s Steps)
		6	Color crossfade time 01s -> 10s (01s Steps)
		7–105	Color crossfade time 01s -> 10s (01s Steps) ... color crossfade time 11s -> 119s (1s Steps)
		106–206	Color crossfade time 11s -> 119s (1s Steps)
		207–214	Color crossfade time 11s -> 119s (1s Steps) ... color crossfade time 2m -> 4m50s (10s Steps)
		215	Color crossfade time 2m -> 4m50s (10s Steps)
		216–244	Color crossfade time 2m -> 4m50s (10s Steps) ... color crossfade time 5m -> 15m (1m Steps)
		245	Color crossfade time 5m -> 15m (1m Steps)
		246–255	Color crossfade time
12	Custom Color		Rec User Color
		0	No function
		1–5	No function ... Rec User Color 1 (hold 3s)
		6	Rec User Color 1 (hold 3s)
		7–11	Rec User Color 1 (hold 3s) ... Rec User Color 2 (hold 3s)
		12	Rec User Color 2 (hold 3s)
		13–17	Rec User Color 2 (hold 3s) ... Rec User Color 3 (hold 3s)
		18	Rec User Color 3 (hold 3s)
		19–23	Rec User Color 3 (hold 3s) ... Rec User Color 4 (hold 3s)
		24	Rec User Color 4 (hold 3s)
		25–255	Rec User Color

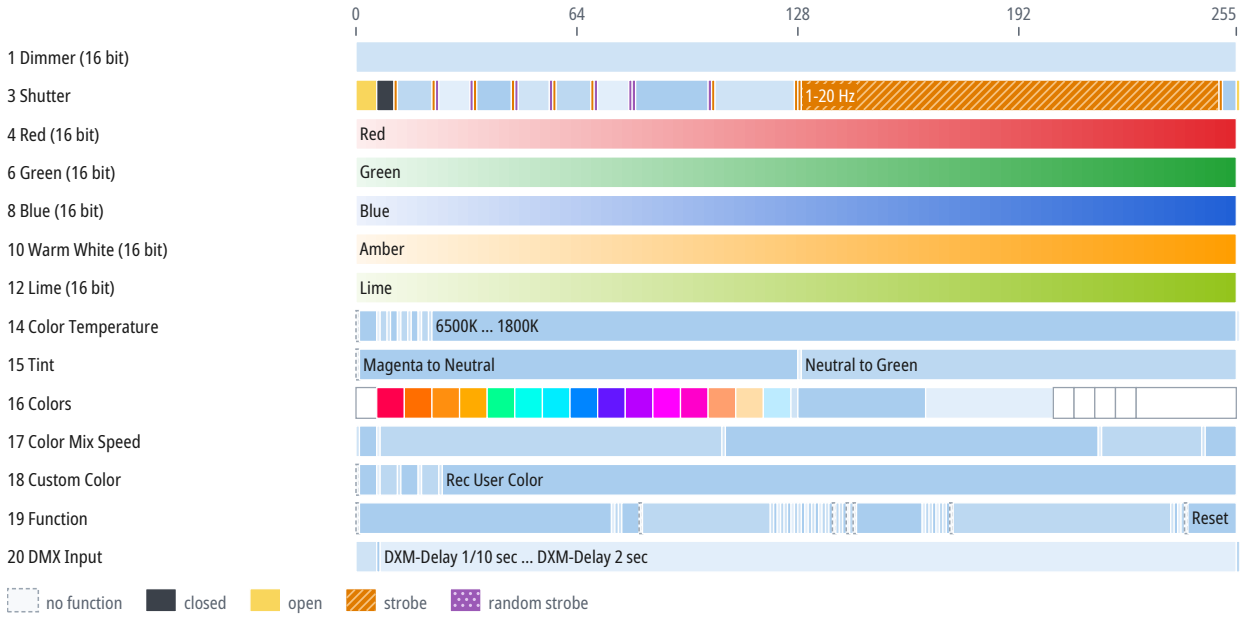
CH	Function	DMX	Description
13	DMX Input	0–5	DXM-Delay No Delay
		6	DXM-Delay 1/10 sec
		7–254	DXM-Delay 1/10 sec ... DXM-Delay 2 sec
		255	DXM-Delay 2 sec

Mode 20 CH Direct CCT CP 16 Bit Device

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 1 Dimmer above 0; CH 3 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 Warm White 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–255	
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 2 in the mode “3Ch Color” (p. 11)
4	Red	0–255	Red
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green	0–255	Green
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue	0–255	Blue
9	Blue Fine	0–255	Fine adjustment of CH 8
10	Warm White	0–255	Amber
11	Warm White Fine	0–255	Fine adjustment of CH 10
12	Lime	0–255	Lime
13	Lime Fine	0–255	Fine adjustment of CH 12

CH	Function	DMX	Description
14	Color Temperature		Same as CH 4 in the mode “6 CH HSI-CCT Mode (16Bit)” (p. 13)
15	Tint		Same as CH 9 in the mode “13 CH Direct CCT CP” (p. 15)
16	Colors		Same as CH 3 in the mode “3Ch Color” (p. 12)
17	Color Mix Speed		Same as CH 5 in the mode “6 CH HSI-CCT Mode (16Bit)” (p. 14)
18	Custom Color		Same as CH 12 in the mode “13 CH Direct CCT CP” (p. 15)
19	Function	0	Dimmer Response: No function
		1–73	No function ... Dimmer Response LED (hold 1.5s)
		74	Dimmer Response LED (hold 1.5s)
		75	Dimmer Response LED (hold 1.5s) ... Dimmer Response Halogen (hold 1.5s)
		76	Dimmer Response Halogen (hold 1.5s)
		77–81	Dimmer Response
		82	LED Frequency: No function
		83–119	No function ... LED Frequency 800Hz (hold 3s)
		120	LED Frequency 800Hz (hold 3s)
		121	LED Frequency 800Hz (hold 3s) ... LED Frequency 1200Hz (hold 3s)
		122	LED Frequency 1200Hz (hold 3s)
		123	LED Frequency 1200Hz (hold 3s) ... LED Frequency 2000Hz (hold 3s)
		124	LED Frequency 2000Hz (hold 3s)
		125	LED Frequency 2000Hz (hold 3s) ... LED Frequency 3600Hz (hold 3s)
		126	LED Frequency 3600Hz (hold 3s)
		127	LED Frequency 3600Hz (hold 3s) ... LED Frequency 12kHz (hold 3s)
		128	LED Frequency 12kHz (hold 3s)
		129	LED Frequency 12kHz (hold 3s) ... LED Frequency 25kHz (hold 3s)
		130	LED Frequency 25kHz (hold 3s)
		131	LED Frequency
		132	RAW-Mode (Hold 3s)
		133	RAW-Mode (Hold 3s) ... Factory Calibrated-Mode (Hold 3s)
		134	Factory Calibrated-Mode (Hold 3s)
		135	Factory Calibrated-Mode (Hold 3s) ... User Calibrated-Mode (Hold 3s)
		136	User Calibrated-Mode (Hold 3s)
		137	User Calibrated-Mode (Hold 3s) ... No function
		138	Calibrating Mode: No function
		139	Display on/off
		140	Display on/off: on
		141	Display on/off: on ... off

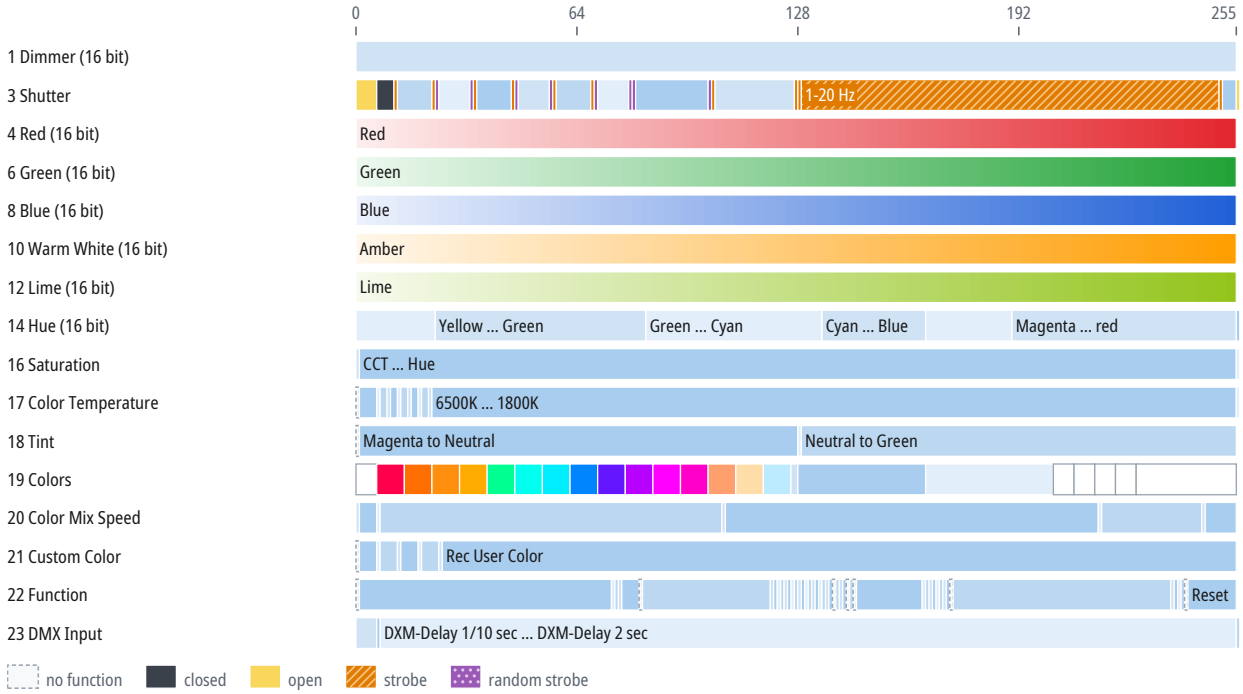
CH	Function	DMX	Description
19	Function (continued)	142	Display on/off: off
		143	Off ... No function
		144	Display on/off: No function
		145–163	Display on/off
		164	Dimmer Curve Linear (hold 3s)
		165	Dimmer Curve Linear (hold 3s) ... Dimmer Curve Exponential (hold 3s)
		166	Dimmer Curve Exponential (hold 3s)
		167	Dimmer Curve Exponential (hold 3s) ... Dimmer Curve Logarithmic (hold 3s)
		168	Dimmer Curve Logarithmic (hold 3s)
		169	Dimmer Curve Logarithmic (hold 3s) ... Dimmer Curve S-Curve (hold 3s)
		170	Dimmer Curve S-Curve (hold 3s)
		171	Dimmer Curve S-Curve (hold 3s) ... No function
		172	Dimmer Curve: No function
		173–235	Dimmer Curve
		236	Default set (except DMX-Address and Mode) (Hold 3s)
		237	Default set (except DMX-Address and Mode) (Hold 3s) ... Default set (except DMX-Address and Mode User color) (Hold 3s)
		238	Default set (except DMX-Address and Mode User color) (Hold 3s)
		239	Default set (except DMX-Address and Mode User color) (Hold 3s) ... No function
		240	Reset: No function
		241–255	Reset
20	DMX Input	0–5	DXM-Delay 0 Delay
		6	DXM-Delay 1/10 sec
		7–254	DXM-Delay 1/10 sec ... DXM-Delay 2 sec
		255	DXM-Delay 2 sec

Mode 23 CH Direct HSI CCT CP 16 Bit Device

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 1 Dimmer above 0; CH 3 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 Warm White 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–255	
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 2 in the mode “3Ch Color” (p. 11)
4	Red	0–255	Red
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green	0–255	Green
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue	0–255	Blue
9	Blue Fine	0–255	Fine adjustment of CH 8
10	Warm White	0–255	Amber
11	Warm White Fine	0–255	Fine adjustment of CH 10
12	Lime	0–255	Lime
13	Lime Fine	0–255	Fine adjustment of CH 12
14	Hue	0	All on
		0–23	Red ... yellow
		23–84	Yellow ... Green
		84–135	Green ... Cyan
		135–165	Cyan ... Blue

CH	Function	DMX	Description
14	Hue (continued)	165–190	Blue ... Magenta
		190–255	Magenta ... red
		255	Red
15	Hue Fine	0–255	Fine adjustment of CH 14
16	Saturation		Same as CH 3 in the mode “6 CH HSI-CCT Mode (16Bit)” (p. 13)
17	Color Temperature		Same as CH 4 in the mode “6 CH HSI-CCT Mode (16Bit)” (p. 13)
18	Tint		Same as CH 9 in the mode “13 CH Direct CCT CP” (p. 15)
19	Colors		Same as CH 3 in the mode “3Ch Color” (p. 12)
20	Color Mix Speed		Same as CH 5 in the mode “6 CH HSI-CCT Mode (16Bit)” (p. 14)
21	Custom Color		Same as CH 12 in the mode “13 CH Direct CCT CP” (p. 15)
22	Function		Same as CH 19 in the mode “20 CH Direct CCT CP 16 Bit Device” (p. 17)
23	DMX Input		Same as CH 20 in the mode “20 CH Direct CCT CP 16 Bit Device” (p. 18)

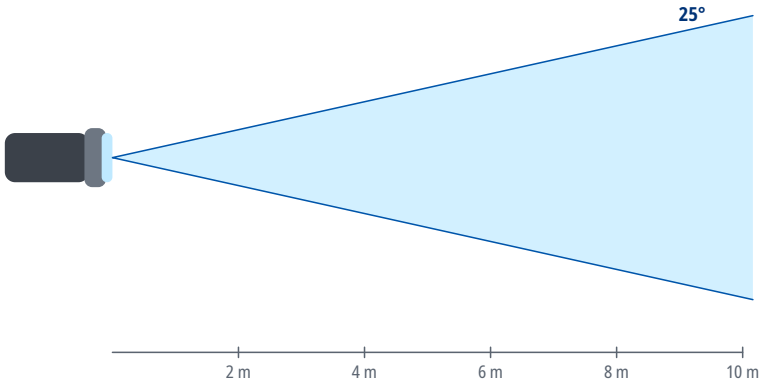
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	165 W
Luminous flux	7,400 lm
Color temperature	5,600 K
Color rendering index (CRI)	95
Optics	
Beam angle	25°
Control	
DMX connection	5-pin XLR IN/OUT
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	250 W
Dimensions and construction	
Weight	8.3 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	1800–6500 K
Strobe frequency	1–20 Hz
LED frequency	800–25000 Hz

Spot diameter



Distance	Ø 25°
2 m	0.89 m
4 m	1.8 m
6 m	2.7 m
8 m	3.5 m
10 m	4.4 m
15 m	6.7 m

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

11 Maintenance and cleaning

- Before cleaning and maintenance, switch the device off, disconnect it from the power supply and let it cool down.

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

12 Troubleshooting

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

13 Disposal

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

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

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

Recycle the packaging materials according to their type.