DMX REFERENCE

Lotus 1850B

Lotus Light



Manufacturer	Lotus Light
GDTF file	Lotus_Light_Lotus_1850B_167152.gdtf
GDTF revision	Lotus-1850B · 2026-10-30
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1 About this manual

This document describes the Lotus 1850B by Lotus Light. It was compiled from the GDTF file Lotus_Light_Lotus_1850B_167152.gdtf from the GDTF-Share library.

File revision: “Lotus-1850B”.

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 Lotus Light; 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	22 kg
Ingress protection	IP65

DMX modes

Mode	Channels	Units in one universe	First start addresses
31CH	31	16	1, 32, 63, 94, ...
43CH	43	11	1, 44, 87, 130, ...
67CH	67	7	1, 68, 135, 202, ...
147CH	147	3	1, 148, 295

No light? Check these channels

- 31CH: CH 6 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”
- 43CH: CH 6 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”
- 67CH: CH 6 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”
- 147CH: CH 6 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”



Read the manual before use



Do not stare into the light

3 Safety instructions



Read the manual before use



Do not stare into the light

⚠ WARNING

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ CAUTION

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

⚠ WARNING

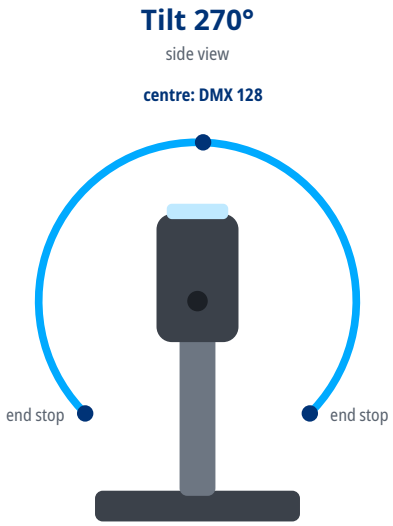
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts,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

4 Product description

Description in the GDTF file

“TECHNICAL SPECIFICATIONS: -Physical & Construction Fixture Dimensions: 495 x 250 x 400 mm Net Weight (NW): 24 kg Gross Weight (GW): 27 kg Max. External Surface Temperature: 60°C Operating Temperature: -20°C to 45°C IP Rating: IP65 Electrical Specifications Input Voltage: 100-240V AC, 50/60Hz Power Consumption: 110V/1050W, 230V/980W Electrical Parameters((Voltage V / Current A / Power Factor PF): * 230V / 4.30A / 0.98 PF * 110V / 8.86A / 0.99 PF Fuse: F20AL250V Power Linking: * 110V / 8.86A: Max. 1 Unit * 230V / 4.30A: Max. 2 Units Optical & Photometric LED Source: *Main Led:18*50W RGBL *Aura Led:135*1W CW+WW(5 pcs per group, 27 groups in total) Optical Angle: *Beam Angle: 5° - 20° *Field Angle: 9° - 27° *Single Lens Angle: 5° Photometric Data: *3M: Min. Angle 70,500 Lux | Max. Angle 11,100 Lux *5M: Min. Angle 45,100 Lux | Max. Angle 4,160 Lux *8M: Min. Angle 23,800 Lux | Max. Angle 1,730 Lux Control & Performance DMX Channel Modes : 31CH/43CH/67CH/147CH Control Mode: RDM, Art-Net, sACN, DMX512, NFC,Auto-run,W-DMX(Optional)Strobe Rate: 1Hz - 25Hz Refresh Rate (PWM): 4kHz - 25kHz”

Range of movement



5 Installation

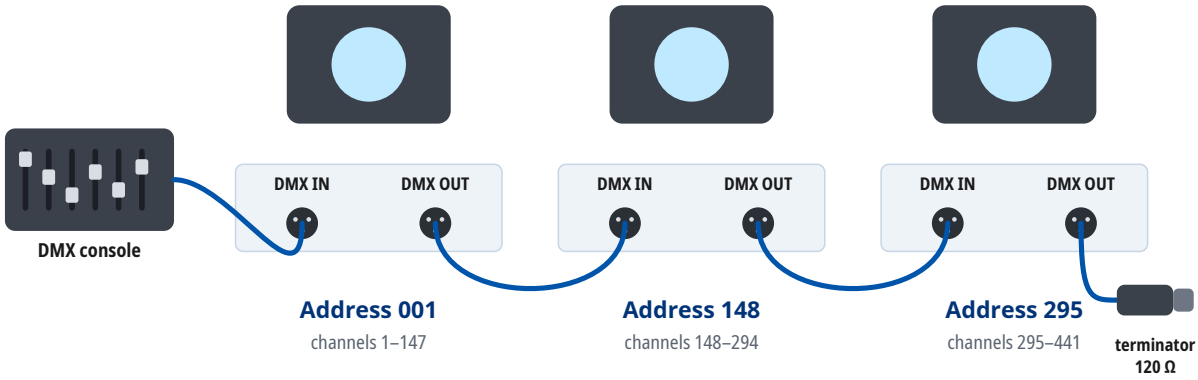
⚠ **WARNING**

- 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: 22 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 147CH: every unit occupies 147 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

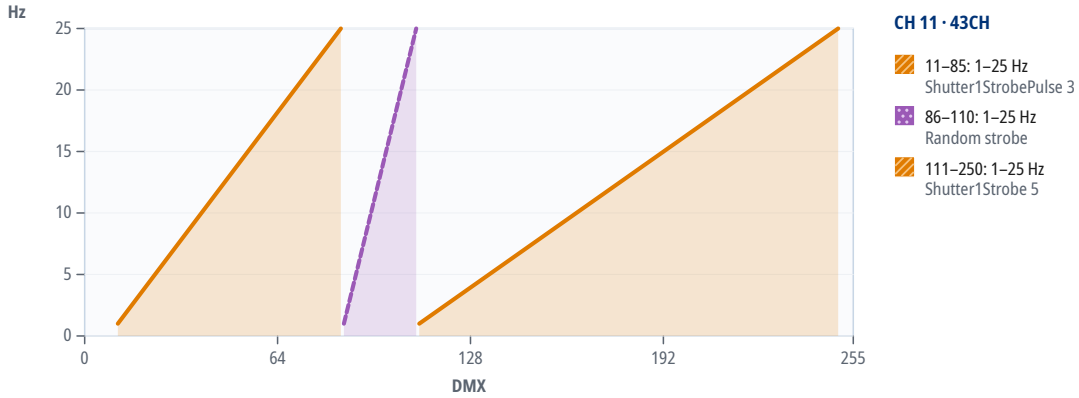
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “147CH”: 147.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 “147CH”, you can use, for example, the start addresses 1, 148, 295.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

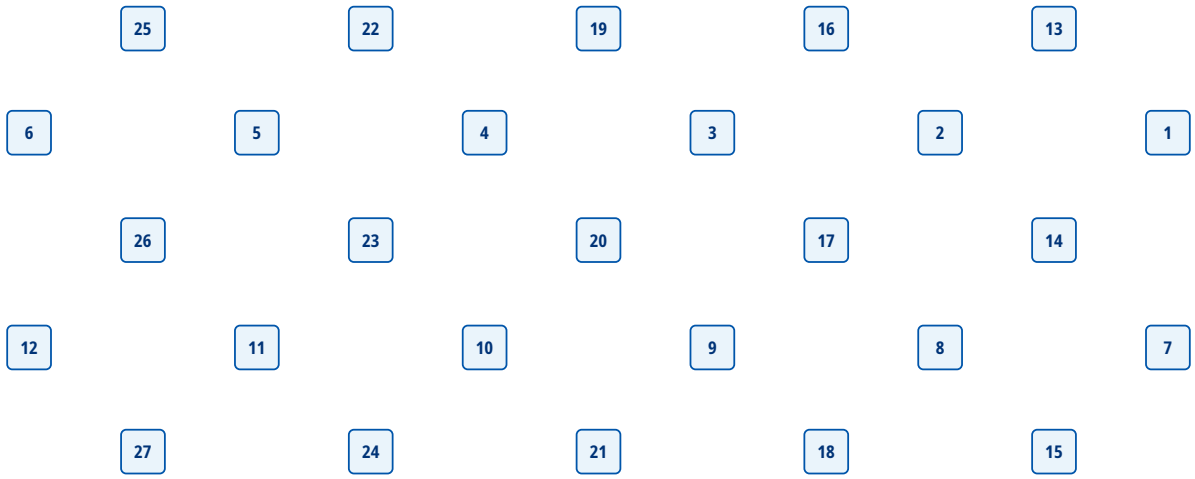
Functions in each DMX mode

	31CH 31 channels	43CH 43 channels	67CH 67 channels	147CH 147 channels
Pan / Tilt	1	1	1	1
Dimmer	6, 8, 10	6, 8, 10	6, 8, 10	6, 8, 10
Shutter / strobe	11, 12	11, 12	11, 12	11, 12
Color mixing	6 channels (13–22)	22–43	22–67	22–147
Color temperature	23, 24	13, 14	13, 14	13, 14
Zoom	5	5	5	5
Effects / macros	25–30	15–20	15–20	15–20
Pixel control		✓	11 cells	18 + 27 cells

Strobe rate



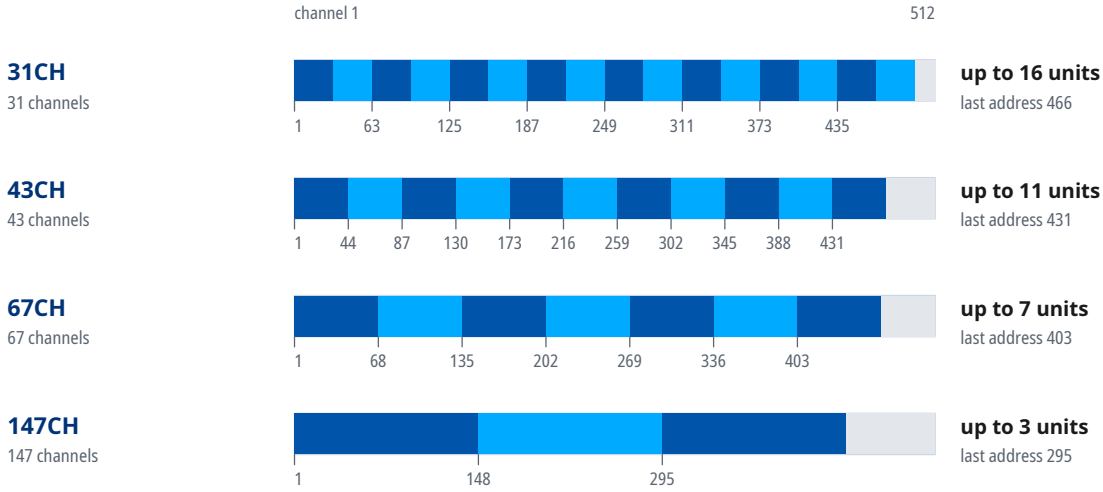
Cells (pixels)



Cells where the GDTF file places them (seen from above), 27 in all; numbered in the order of their first DMX channel in the mode “43CH”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “147CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	U2 · 295	11	U4 · 148	16	U6 · 1
2	148	7	U3 · 1	12	U4 · 295	17	U6 · 148
3	295	8	U3 · 148	13	U5 · 1	18	U6 · 295
4	U2 · 1	9	U3 · 295	14	U5 · 148	19	U7 · 1
5	U2 · 148	10	U4 · 1	15	U5 · 295	20	U7 · 148

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 31CH

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 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”. The GDTF file gives these values for a console's Highlight function: CH 6 Dimmer 1 0, CH 8 Dimmer 2 255, CH 10 Dimmer 3 255, CH 13 Red 255, CH 15 Green 255, CH 17 Blue 255, CH 21 Warm White 255, CH 22 Cool White 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt	0–127	Tilt 1
		127	Home
		128–255	Tilt 1
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt	0–255	
4	Control	0–4	No Function
		5–9	Display Always On
		10–14	Display 10s
		15–19	Display 30s

CH	Function	DMX	Description
4	Control (continued)	20–24	Display 1min
		25–29	Screen Lock Off
		30–34	Screen Lock On
		35–39	Signal Hold
		40–44	Blackout
		45–59	No Function
		60–64	Dimming Standard
		65–69	Dimming Fast
		70–74	Dimming Slow
		75–84	No Function
		85–89	Dimming Linear
		90–94	Dimming Square
		95–99	Dimming S-Curve
		100–109	No Function
		110–114	LED Freq 4K
		115–119	LED Freq 8K
		120–124	LED Freq 16K
		125–129	LED Freq 24K
		130–139	No Function
		140–144	Fan Auto
		145–149	Fan Silent
		150–154	Fan Full
		155–164	No Function
		165–169	Red Shift Off
		170–174	Red Shift On
		175–179	Pixel Invert Off
		180–184	Pixel Invert On
		185–214	No Function
		215–219	Tilt Invert Off
		220–224	Tilt Invert On
		225–229	Error Corr Off
		230–234	Error Corr On
		235–239	Tilt Reset
		240–244	Focus Reset
		245–249	Reset All
		250–255	No Function
5	Zoom	0–255	5–20°
6	Dimmer 1	0–255	
7	Dimmer 1 Fine	0–255	Fine adjustment of CH 6
8	Dimmer 2	0–255	
9	Dimmer 2 Fine	0–255	Fine adjustment of CH 8
10	Dimmer 3	0–255	

CH	Function	DMX	Description
11	Shutter 1	0–5	Opne
		6–10	Close
		11–35	Puls Random
		36–60	Ramp up Random
		61–85	Ramp down Randon
		86–110	Random strobe (1–25 Hz)
		111–135	Strobe Break
		136–250	Strobe
		251–255	Open
12	Shutter 2	0–5	Opne
		6–10	Close
		11–35	Puls Random
		36–60	Ramp up Random
		61–85	Ramp down Randon
		86–110	Random strobe (1–25 Hz)
		111–135	Strobe Break
		136–250	Strobe
		251–255	Open
13	Red	0–255	
14	Red Fine	0–255	Fine adjustment of CH 13
15	Green	0–255	
16	Green Fine	0–255	Fine adjustment of CH 15
17	Blue	0–255	
18	Blue Fine	0–255	Fine adjustment of CH 17
19	Lime	0–255	
20	Lime Fine	0–255	Fine adjustment of CH 19
21	Warm White	0–255	
22	Cool White	0–255	
23	CTO	0–5	No Function
		6–21	1800K
		22–37	2000K
		38–53	2500K
		54–69	2700K
		70–85	3000K
		86–101	3200K
		102–117	3500K
		118–133	4000K
		134–149	4500K
		150–165	5000K
		166–181	5600K
		182–197	6000K
		198–213	6500K

CH	Function	DMX	Description
23	CTO (continued)	214–229	7200K
		230–255	8000K
24	CTB	0	Color Temp Comp Off
		1–127	Magenta to Off
		128	Color Temp Comp Off
		129–255	Off to Green
25	Color Macro	0–5	No Function
		6–10	Cyan
		11–15	Magenta
		16–20	Yellow
		21–25	CTO 3200K
		26–30	Flame Red
		31–35	Rose Red
		36–40	Sunset Red
		41–45	Dark Pink
		46–50	Bright Pink
		51–55	Golden Amber
		56–60	Bastard Amber
		61–65	Full CT Orange
		66–70	Sky Blue
		71–75	Steel Blue
		76–80	Light Blue
		81–85	Medium Blue
		86–90	Summer Blue
		91–95	Pale Navy Blue
		96–100	Lagoon Blue
		101–105	Lighter Blue
		106–110	Lime Green
		111–115	Moss Green
		116–120	Forest Green
		121–125	Pale Green
		126–130	Sea Green
		131–135	Spring Green
		136–140	Aquamarine
		141–145	Emerald Green
		146–185	Rainbow Effect
		186–220	Color Macro Jump
		221–255	Color Macro Fade
26	Effects 1	0–9	No Function
		10–34	Effect 1
		35–59	Effect 2
		60–84	Effect 3

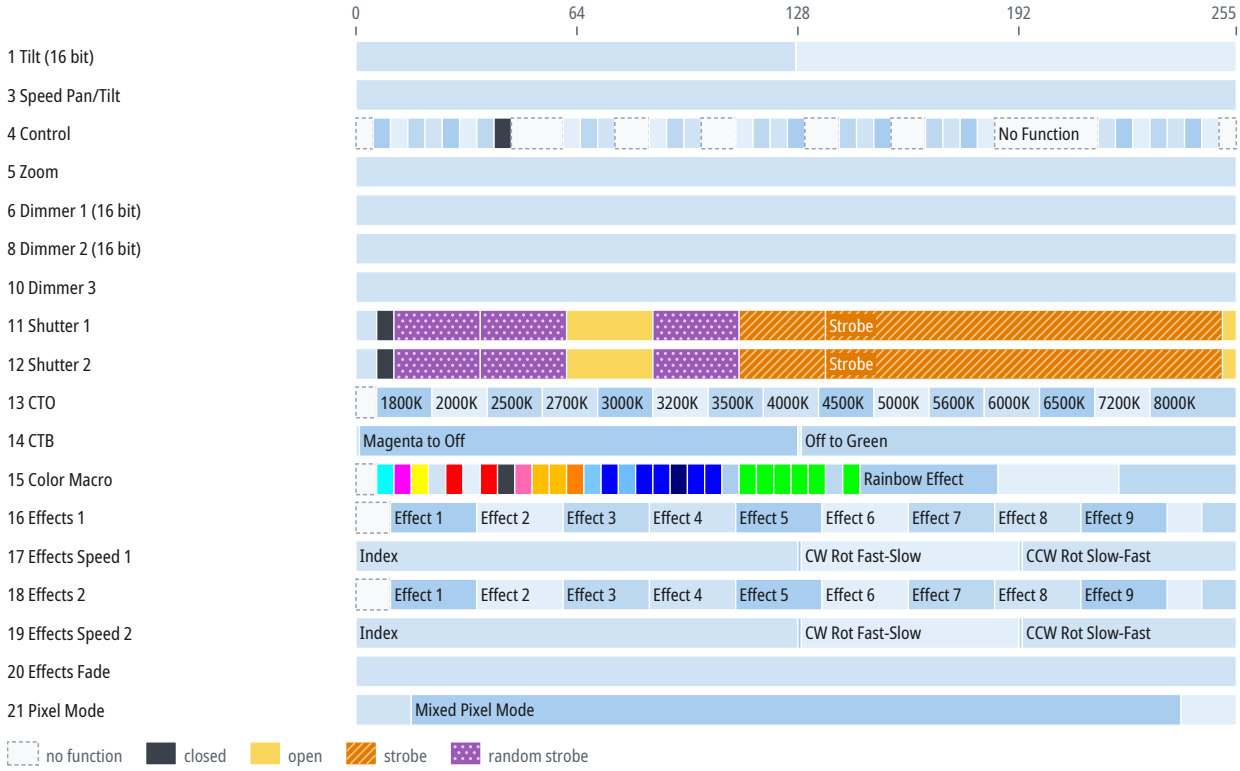
CH	Function	DMX	Description
26	Effects 1 (continued)	85–109	Effect 4
		110–134	Effect 5
		135–159	Effect 6
		160–184	Effect 7
		185–209	Effect 8
		210–234	Effect 9
		235–244	Effect 10
		245–255	Effect Loop 1-10
27	Effects Speed 1	0–127	Index
		128	Stop
		129–191	CW Rot Fast-Slow
		192	Stop
		193–255	CCW Rot Slow-Fast
28	Effects 2	0–9	No Function
		10–34	Effect 1
		35–59	Effect 2
		60–84	Effect 3
		85–109	Effect 4
		110–134	Effect 5
		135–159	Effect 6
		160–184	Effect 7
		185–209	Effect 8
		210–234	Effect 9
		235–244	Effect 10
		245–255	Effect Loop 1-10
29	Effects Speed 2	0–127	Index
		128	Stop
		129–191	CW Rot Fast-Slow
		192	Stop
		193–255	CCW Rot Slow-Fast
30	Effects Fade	0–255	
31	Pixel Mode	0–15	DMX Mode
		16–238	Mixed Pixel Mode
		239–255	ArtNet Mode

Mode 43CH

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 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”. The GDTF file gives these values for a console's Highlight function: CH 6 Dimmer 1 0, CH 8 Dimmer 2 255, CH 10 Dimmer 3 255, CH 22 Red 1 255, CH 23 Green 1 255, CH 24 Blue 1 255, CH 26 Red 2 255, CH 27 Green 2 255, CH 28 Blue 2 255, CH 30 Red 3 255, CH 31 Green 3 255, CH 32 Blue 3 255, CH 34 Warm White 1 255, CH 35 Cool White 1 255, CH 36 Warm White 2 255, CH 37 Cool White 2 255, CH 38 Warm White 3 255, CH 39 Cool White 3 255, CH 40 Warm White 4 255, CH 41 Cool White 4 255, CH 42 Warm White 5 255, CH 43 Cool White 5 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “31CH” (p. 10)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt	0–255	
4	Control		Same as CH 4 in the mode “31CH” (p. 10)
5	Zoom	0–255	5–20°
6	Dimmer 1	0–255	
7	Dimmer 1 Fine	0–255	Fine adjustment of CH 6
8	Dimmer 2	0–255	
9	Dimmer 2 Fine	0–255	Fine adjustment of CH 8
10	Dimmer 3	0–255	
11	Shutter 1		Same as CH 11 in the mode “31CH” (p. 12)
12	Shutter 2		Same as CH 12 in the mode “31CH” (p. 12)

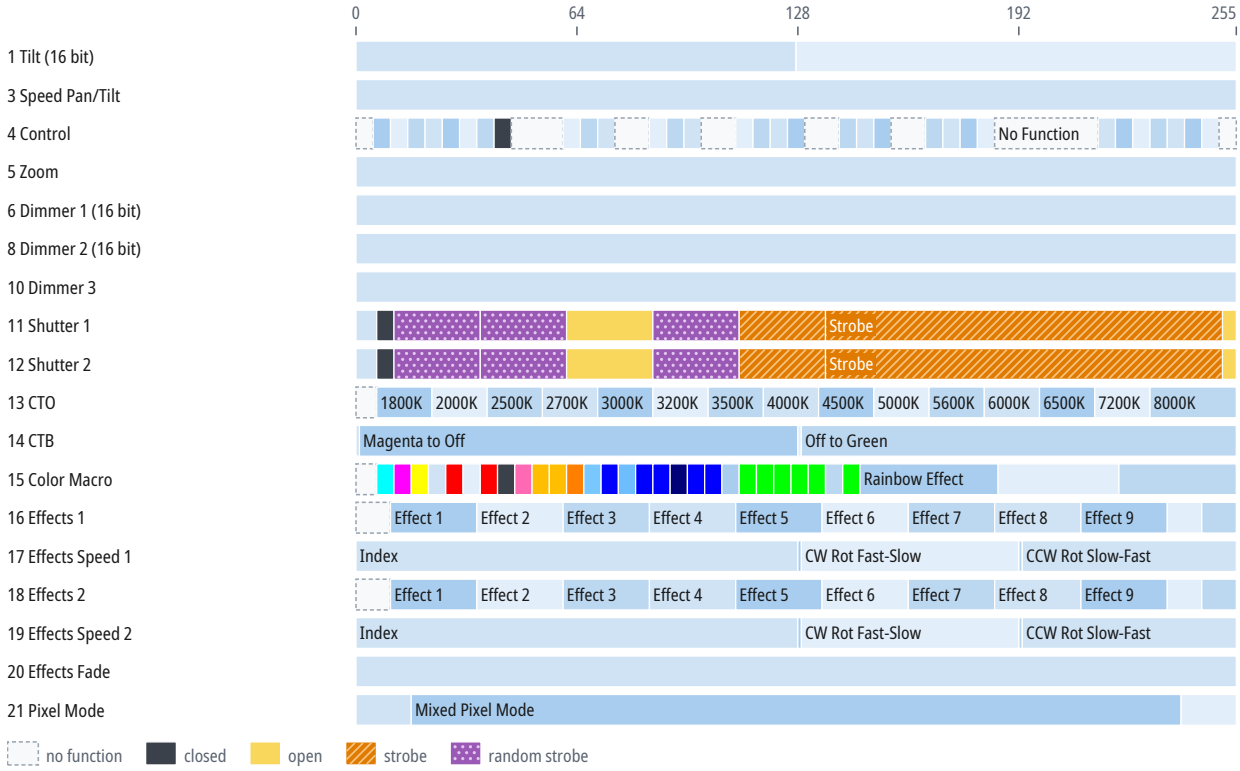
CH	Function	DMX	Description
13	CTO		Same as CH 23 in the mode “31CH” (p. 12)
14	CTB		Same as CH 24 in the mode “31CH” (p. 13)
15	Color Macro		Same as CH 25 in the mode “31CH” (p. 13)
16	Effects 1		Same as CH 26 in the mode “31CH” (p. 13)
17	Effects Speed 1		Same as CH 27 in the mode “31CH” (p. 14)
18	Effects 2		Same as CH 28 in the mode “31CH” (p. 14)
19	Effects Speed 2		Same as CH 29 in the mode “31CH” (p. 14)
20	Effects Fade	0–255	
21	Pixel Mode		Same as CH 31 in the mode “31CH” (p. 14)
22	Red 1	0–255	
23	Green 1	0–255	
24	Blue 1	0–255	
25	Lime 1	0–255	
26	Red 2	0–255	
27	Green 2	0–255	
28	Blue 2	0–255	
29	Lime 2	0–255	
30	Red 3	0–255	
31	Green 3	0–255	
32	Blue 3	0–255	
33	Lime 3	0–255	
34	Warm White 1	0–255	
35	Cool White 1	0–255	
36	Warm White 2	0–255	
37	Cool White 2	0–255	
38	Warm White 3	0–255	
39	Cool White 3	0–255	
40	Warm White 4	0–255	
41	Cool White 4	0–255	
42	Warm White 5	0–255	
43	Cool White 5	0–255	

Mode 67CH

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 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”. The GDTF file gives these values for a console's Highlight function: CH 6 Dimmer 1 0, CH 8 Dimmer 2 255, CH 10 Dimmer 3 255, CH 22 Red 1 255, CH 23 Green 1 255, CH 24 Blue 1 255, CH 26 Red 2 255, CH 27 Green 2 255, CH 28 Blue 2 255, CH 30 Red 3 255, CH 31 Green 3 255, CH 32 Blue 3 255, CH 34 Red 4 255, CH 35 Green 4 255, CH 36 Blue 4 255, CH 38 Red 5 255, CH 39 Green 5 255, CH 40 Blue 5 255, CH 42 Red 6 255, CH 43 Green 6 255, CH 44 Blue 6 255, CH 46 Warm White 255 (the same in each of the 11 cells), CH 47 Cool White 255 (the same in each of the 11 cells).

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “31CH” (p. 10)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt	0–255	
4	Control		Same as CH 4 in the mode “31CH” (p. 10)
5	Zoom	0–255	5–20°
6	Dimmer 1	0–255	
7	Dimmer 1 Fine	0–255	Fine adjustment of CH 6
8	Dimmer 2	0–255	
9	Dimmer 2 Fine	0–255	Fine adjustment of CH 8
10	Dimmer 3	0–255	
11	Shutter 1		Same as CH 11 in the mode “31CH” (p. 12)
12	Shutter 2		Same as CH 12 in the mode “31CH” (p. 12)

CH	Function	DMX	Description
13	CTO		Same as CH 23 in the mode “31CH” (p. 12)
14	CTB		Same as CH 24 in the mode “31CH” (p. 13)
15	Color Macro		Same as CH 25 in the mode “31CH” (p. 13)
16	Effects 1		Same as CH 26 in the mode “31CH” (p. 13)
17	Effects Speed 1		Same as CH 27 in the mode “31CH” (p. 14)
18	Effects 2		Same as CH 28 in the mode “31CH” (p. 14)
19	Effects Speed 2		Same as CH 29 in the mode “31CH” (p. 14)
20	Effects Fade	0–255	
21	Pixel Mode		Same as CH 31 in the mode “31CH” (p. 14)
22	Red 1	0–255	
23	Green 1	0–255	
24	Blue 1	0–255	
25	Lime 1	0–255	
26	Red 2	0–255	
27	Green 2	0–255	
28	Blue 2	0–255	
29	Lime 2	0–255	
30	Red 3	0–255	
31	Green 3	0–255	
32	Blue 3	0–255	
33	Lime 3	0–255	
34	Red 4	0–255	
35	Green 4	0–255	
36	Blue 4	0–255	
37	Lime 4	0–255	
38	Red 5	0–255	
39	Green 5	0–255	
40	Blue 5	0–255	
41	Lime 5	0–255	
42	Red 6	0–255	
43	Green 6	0–255	
44	Blue 6	0–255	
45	Lime 6	0–255	
46	Warm White 1	0–255	
47	Cool White 1	0–255	

CH 46–67: 11 cells of 2 channels each. Every cell works as cell 1 in the table above (CH 46–47); the table below gives each cell's channel numbers.

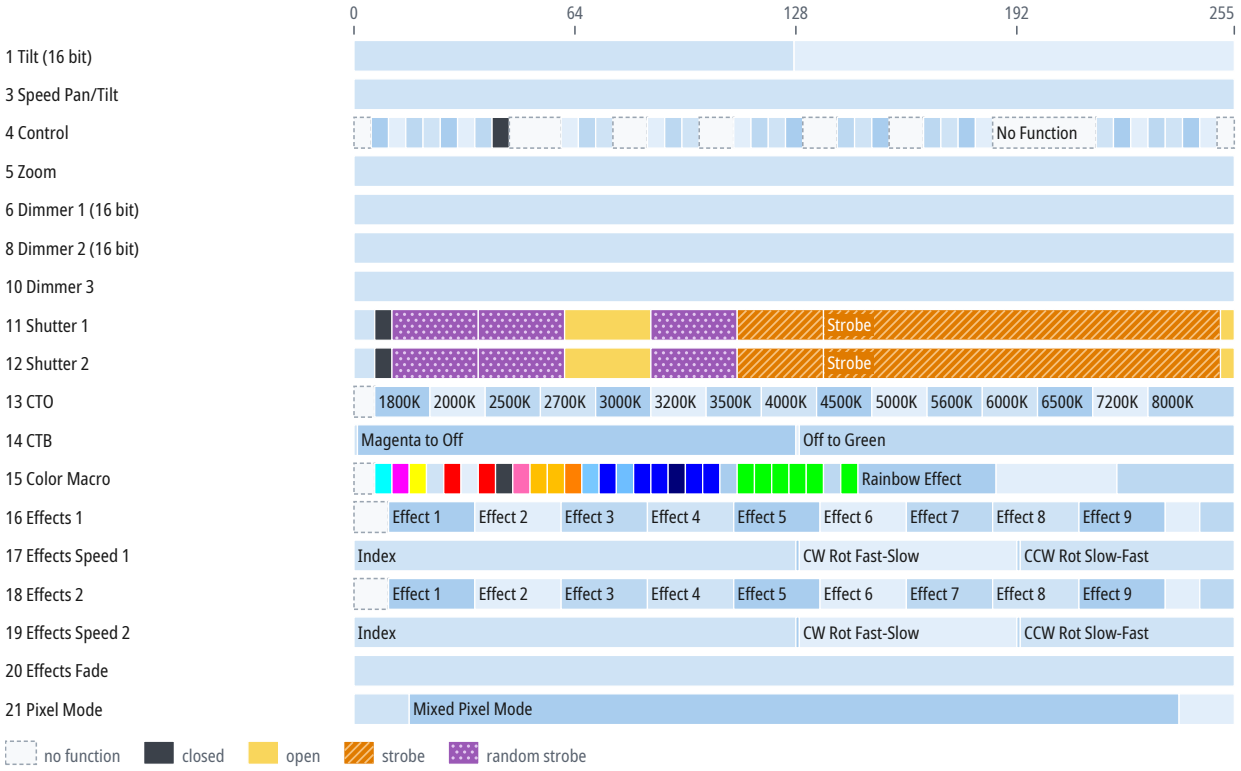
Cell	Warm White	Cool White	Cell	Warm White	Cool White	Cell	Warm White	Cool White	Cell	Warm White	Cool White
1	46	47	2	48	49	3	50	51	4	52	53
5	54	55	6	56	57	7	58	59	8	60	61
9	62	63	10	64	65	11	66	67			

Mode 147CH

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 Dimmer 1 above 0; CH 8 Dimmer 2 above 0; CH 10 Dimmer 3 above 0; CH 11 Shutter 1 at 251–255 “open”; CH 12 Shutter 2 at 251–255 “open”. The GDTF file gives these values for a console's Highlight function: CH 6 Dimmer 1 0, CH 8 Dimmer 2 255, CH 10 Dimmer 3 255, CH 22 Red 255 (the same in each of the 18 cells), CH 23 Green 255 (the same in each of the 18 cells), CH 24 Blue 255 (the same in each of the 18 cells), CH 94 Warm White 255 (the same in each of the 27 cells), CH 95 Cool White 255 (the same in each of the 27 cells).

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “31CH” (p. 10)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Speed Pan/Tilt	0–255	
4	Control		Same as CH 4 in the mode “31CH” (p. 10)
5	Zoom	0–255	5–20°
6	Dimmer 1	0–255	
7	Dimmer 1 Fine	0–255	Fine adjustment of CH 6
8	Dimmer 2	0–255	
9	Dimmer 2 Fine	0–255	Fine adjustment of CH 8
10	Dimmer 3	0–255	
11	Shutter 1		Same as CH 11 in the mode “31CH” (p. 12)
12	Shutter 2		Same as CH 12 in the mode “31CH” (p. 12)
13	CTO		Same as CH 23 in the mode “31CH” (p. 12)

CH	Function	DMX	Description
14	CTB		Same as CH 24 in the mode “31CH” (p. 13)
15	Color Macro		Same as CH 25 in the mode “31CH” (p. 13)
16	Effects 1		Same as CH 26 in the mode “31CH” (p. 13)
17	Effects Speed 1		Same as CH 27 in the mode “31CH” (p. 14)
18	Effects 2		Same as CH 28 in the mode “31CH” (p. 14)
19	Effects Speed 2		Same as CH 29 in the mode “31CH” (p. 14)
20	Effects Fade	0–255	
21	Pixel Mode		Same as CH 31 in the mode “31CH” (p. 14)
22	Red 1	0–255	
23	Green 1	0–255	
24	Blue 1	0–255	
25	Lime 1	0–255	
94	Warm White 1	0–255	
95	Cool White 1	0–255	

CH 22–93: 18 cells of 4 channels each. Every cell works as cell 1 in the table above (CH 22–25); the table below gives each cell's channel numbers.

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

CH 94–147: 27 cells of 2 channels each. Every cell works as cell 1 in the table above (CH 94–95); the table below gives each cell's channel numbers.

Cell	Warm White	Cool White	Cell	Warm White	Cool White	Cell	Warm White	Cool White	Cell	Warm White	Cool White
1	94	95	2	96	97	3	98	99	4	100	101
5	102	103	6	104	105	7	106	107	8	108	109
9	110	111	10	112	113	11	114	115	12	116	117
13	118	119	14	120	121	15	122	123	16	124	125
17	126	127	18	128	129	19	130	131	20	132	133
21	134	135	22	136	137	23	138	139	24	140	141
25	142	143	26	144	145	27	146	147			

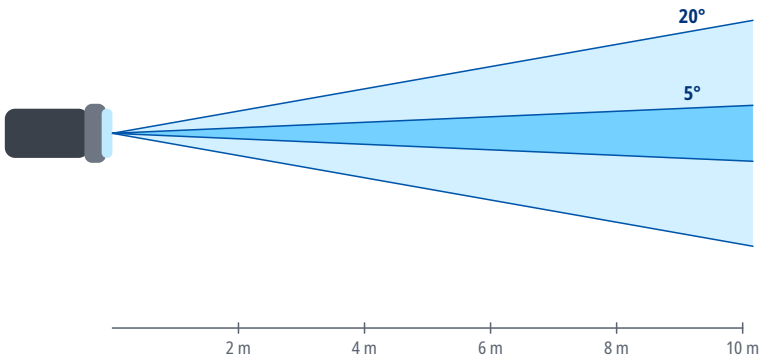
10 Technical specifications

Parameter	Value
Zoom	5–20°
Tilt	270°
Weight	22 kg
Ingress protection	IP65
Meaning of the IP code (IEC 60529)	Dust-tight; protected against water jets
Operating temperature	-20 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	1800–8000 K
Strobe frequency	1–25 Hz

Spot diameter



Distance	Ø 5°	Ø 20°
2 m	0.17 m	0.71 m
4 m	0.35 m	1.4 m
6 m	0.52 m	2.1 m
8 m	0.7 m	2.8 m
10 m	0.87 m	3.5 m
15 m	1.3 m	5.3 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.