DMX REFERENCE

Wash Z300

CKC Lighting



Manufacturer	CKC Lighting
GDTF file	CKC_Lighting_Wash_Z300_170257.gdtf
GDTF revision	Revision 1 · 2026-11-21
Generated	2026-11-23

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 7
9 DMX channels 10
Mode Extended 24CH 11
Mode Standard 19CH 18
Mode CMY Extended 20CH 19
Mode RGB Extended 20CH 20
Mode XY Extended 18CH 21
10 Technical specifications 22
11 Maintenance and cleaning 23
12 Troubleshooting 23
13 Disposal 24

1 About this manual

This document describes the Wash Z300 by CKC Lighting. It was compiled from the GDTF file CKC_Lighting_Wash_Z300_170257.gdtf from the GDTF-Share library.

File revision: “Revision 1”.

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
Power consumption	350 W
Weight	11.3 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Extended 24CH	24	21	1, 25, 49, 73, ...
Standard 19CH	19	26	1, 20, 39, 58, ...
CMY Extended 20CH	20	25	1, 21, 41, 61, ...
RGB Extended 20CH	20	25	1, 21, 41, 61, ...
XY Extended 18CH	18	28	1, 19, 37, 55, ...

No light? Check these channels

- Extended 24CH: CH 20 Shutter at 96–127 or 160–191 or 224–255
- Standard 19CH: CH 15 Shutter at 96–127 or 160–191 or 224–255
- CMY Extended 20CH: CH 16 Shutter at 96–127 or 160–191 or 224–255
- RGB Extended 20CH: CH 16 Shutter at 96–127 or 160–191 or 224–255
- XY Extended 18CH: CH 14 Shutter at 96–127 or 160–191 or 224–255


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

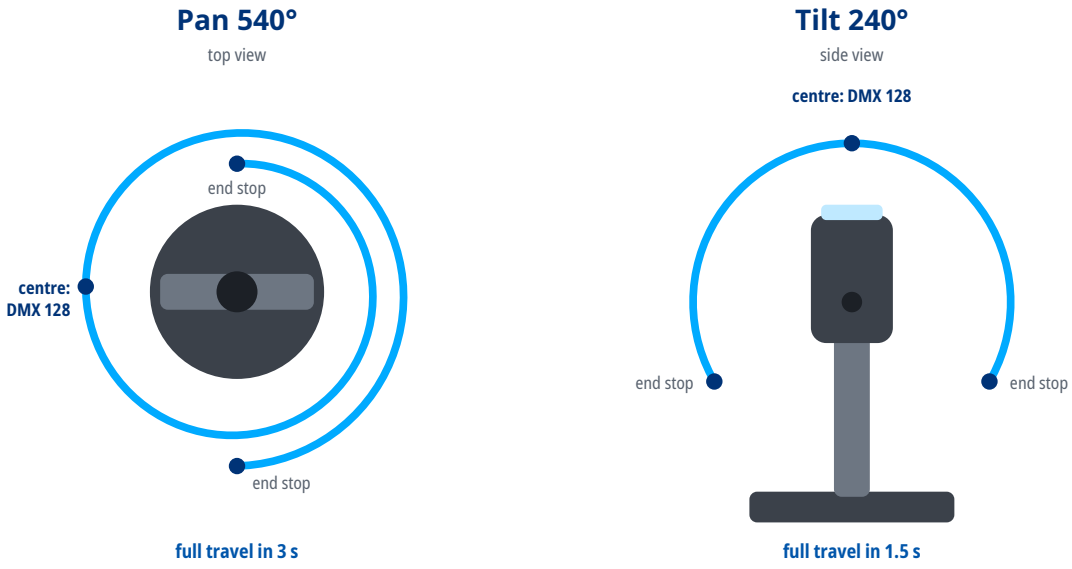
- This device emits intense light. Do not look directly into the light source or the beam at close range; doing so may damage your eyes.
- Do not aim the beam at the eyes of people or animals at close range, and do not view the light source through optical instruments (binoculars, camera lenses).
- Do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

> ⚠ **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



Full-travel times as stated in the GDTF file.

5 Installation

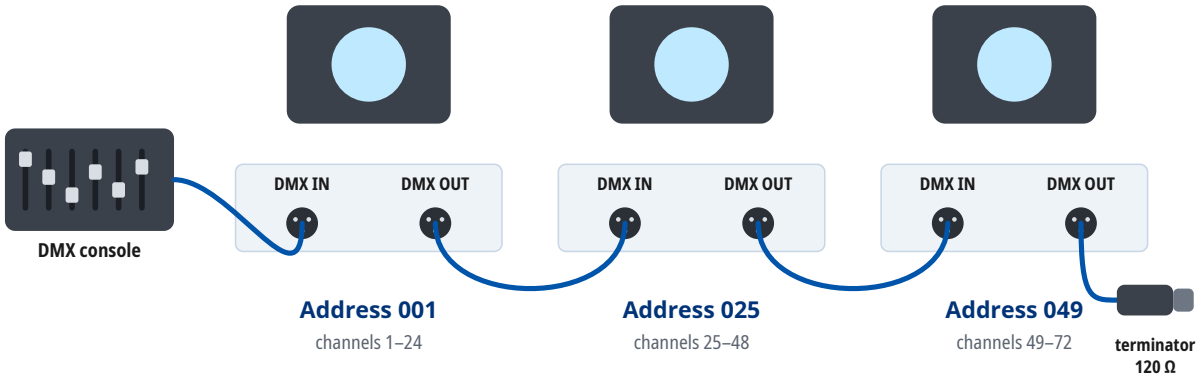
⚠ **WARNING**

- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 11.3 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 Extended 24CH: every unit occupies 24 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 “Extended 24CH”: 24.
- 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 “Extended 24CH”, you can use, for example, the start addresses 1, 25, 49, 73.
- 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

	Extended 24CH 24 channels	Standard 19CH 19 channels	CMY Extended 20CH 20 channels	RGB Extended 20CH 20 channels	XY Extended 18CH 18 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3	1, 3
Dimmer	21	16	17	17	15
Shutter / strobe	20	15	16	16	14
Color mixing	5× (5–13)	5–9	5, 7, 9	5, 7, 9	
Color temperature	15	10	11	11	9
Color wheel	18	13	14	14	12
Zoom	19	14	15	15	13

Color wheel

1 Pale yellow DMX 1
2 Straw DMX 2
3 Gold tint DMX 3
4 Spring yellow DMX 4
5 Medium yellow DMX 5
6 Yellow DMX 6
7 Deep amber DMX 7
8 Deep straw DMX 8
9 Loving amber DMX 9
10 Gold amber DMX 10
11 Orange DMX 11
12 Deep orange DMX 12
13 Dark amber DMX 13
14 Millenium gold DMX 14
15 Deep golden amber DMX 15
16 Scarlet DMX 16
17 Primary red DMX 17
18 Bright red DMX 18
19 Medium red DMX 19
20 Fire DMX 20
21 Pink DMX 21
22 Medium pink DMX 22
23 Dark pink DMX 23
24 Bright pink DMX 24
25 Bright rose DMX 25
26 Special rose pink DMX 26
27 Vanity fair DMX 27
28 Magenta DMX 28
29 Dark magenta DMX 29
30 Rose purple DMX 30
31 Mauve DMX 31
32 Medium purple DMX 32
33 Lavender DMX 33
34 Palace blue DMX 34
35 Dark blue DMX 35
36 Medium blue DMX 36
37 Deep blue DMX 37
38 Daylight blue DMX 38
39 Slate blue DMX 39
40 Light blue DMX 40
41 Sky blue DMX 41
42 Pale navy blue DMX 42
43 Marine blue DMX 43
44 Peacock blue DMX 44
45 Lagoon blue DMX 45
46 Medium blue green DMX 46
47 Dark yellow green DMX 47
48 Primary green DMX 48

49 Fern green **DMX 49**

50 Moss green **DMX 50**

51 Dark green **DMX 51**

52 Lime green **DMX 52**

53 Pale green **DMX 53**

54 Quarter CT Blue **DMX 54**

55 Half CT Blue **DMX 55**

56 FULL CT Blue **DMX 56**

57 Double CT Blue **DMX 57**

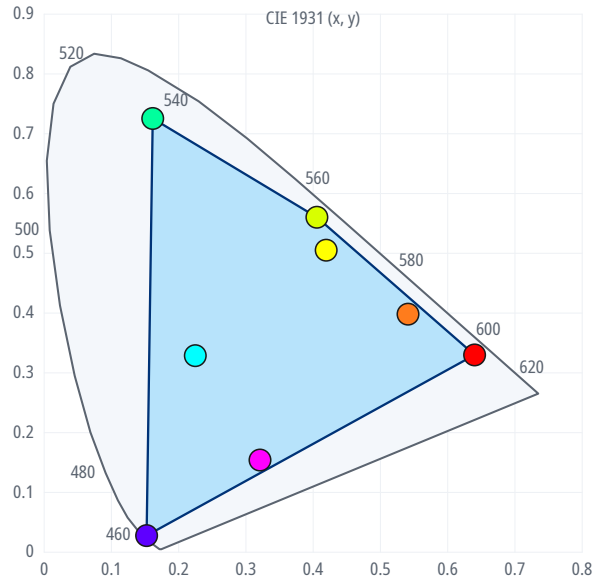
58 Quarter CT Orange **DMX 58**

59 Half CT Orange **DMX 59**

60 FULL CT Orange **DMX 60**

61 Forcolor open **DMX 0**

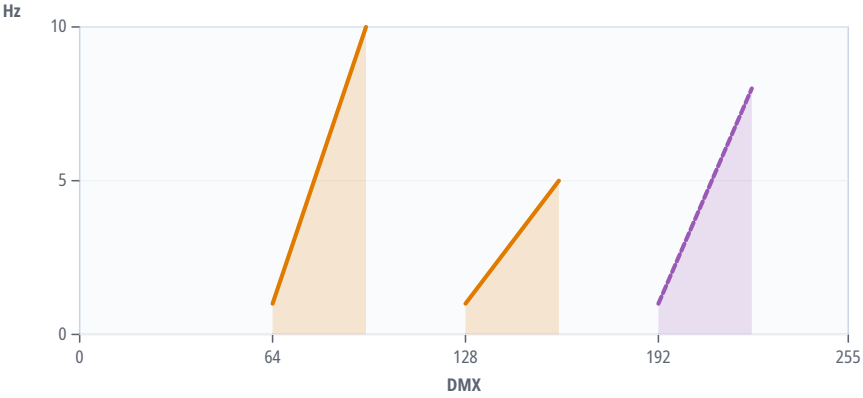
LED colors and the colors they mix



LED	x	y
Red	0.640	0.330
Green	0.161	0.726
Blue	0.152	0.028
Lime	0.406	0.560
Amber	0.541	0.398
Cyan	0.225	0.329
Magenta	0.321	0.154
Yellow	0.419	0.505

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

Strobe rate



CH 20 · Extended 24CH

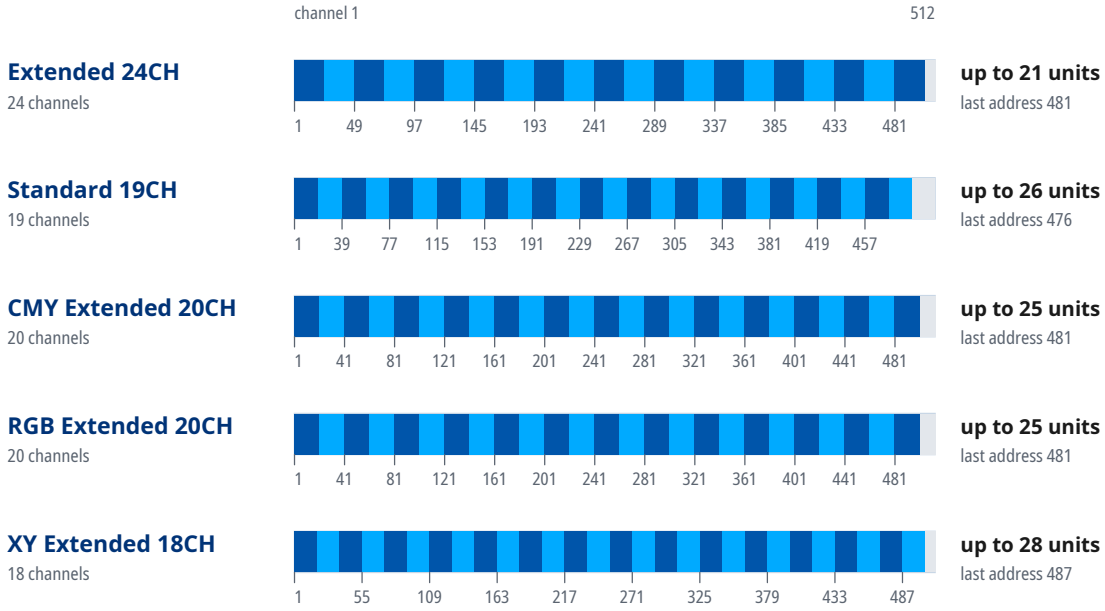
64–95: 1–10 Hz
Strobe

128–159: 1–5 Hz
Pulse

192–223: 1–8 Hz
Random

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extended 24CH”

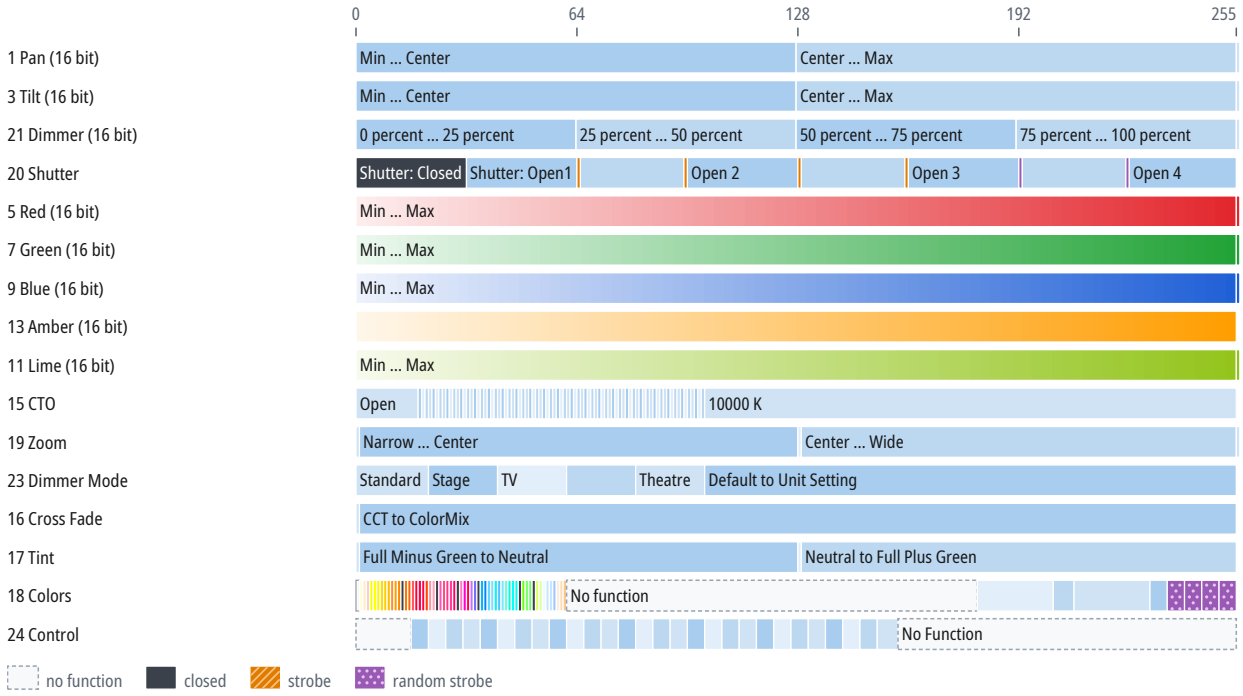
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	121	11	241	16	361
2	25	7	145	12	265	17	385
3	49	8	169	13	289	18	409
4	73	9	193	14	313	19	433
5	97	10	217	15	337	20	457

Mode Extended 24CH

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 20 Shutter at 96–127 or 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 5 Red 255, CH 7 Green 255, CH 9 Blue 255, CH 11 Lime 255, CH 13 Amber 255, CH 15 CTO 0, CH 20 Shutter 50, CH 21 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Red	0–255	Min ... Max
		255	Max
6	Red Fine	0–255	Fine adjustment of CH 5
7	Green	0–255	Min ... Max
		255	Max
8	Green Fine	0–255	Fine adjustment of CH 7
9	Blue	0–255	Min ... Max
		255	Max
10	Blue Fine	0–255	Fine adjustment of CH 9

CH	Function	DMX	Description
11	Lime	0–255	Min … Max
		255	Max
12	Lime Fine	0–255	Fine adjustment of CH 11
13	Amber	0–255	
14	Amber Fine	0–255	Fine adjustment of CH 13
15	CTO	0–17	Open
		18	1800
		19	1900
		20	2000
		21	2100
		22	2200
		23	2300
		24	2400
		25	2500
		26	2600
		27	2700
		28	2800
		29	2900
		30	3000
		31	3100
		32	3200
		33	3300
		34	3400
		35	3500
		36	3600
		37	3700
		38	3800
		39	3900
		40	4000
		41	4100
		42	4200
		43	4300
		44	4400
		45	4500
		46	4600
		47	4700
		48	4800
		49	4900
		50	5000
		51	5100
		52	5200
		53	5300

CH	Function	DMX	Description
15	CTO (continued)	54	5400
		55	5500
		56	5600
		57	5700
		58	5800
		59	5900
		60	6000
		61	6100
		62	6200
		63	6300
		64	6400
		65	6500
		66	6600
		67	6700
		68	6800
		69	6900
		70	7000
		71	7100
		72	7200
		73	7300
		74	7400
		75	7500
		76	7600
		77	7700
		78	7800
		79	7900
		80	8000
		81	8100
		82	8200
		83	8300
		84	8400
		85	8500
		86	8600
		87	8700
		88	8800
		89	8900
		90	9000
		91	9100
		92	9200
		93	9300
		94	9400
		95	9500

CH	Function	DMX	Description
15	CTO (continued)	96	9600
		97	9700
		98	9800
		99	9900
		100	10000
		101–255	10000 K
16	Cross Fade	0	CCT
		1–255	CCT to ColorMix
17	Tint	0	Idle
		1–127	Full Minus Green to Neutral
		128	Neutral White
		129–255	Neutral to Full Plus Green
18	Colors	0	Forcolor open
		1	Pale yellow
		2	Straw
		3	Gold tint
		4	Spring yellow
		5	Medium yellow
		6	Yellow
		7	Deep amber
		8	Deep straw
		9	Loving amber
		10	Gold amber
		11	Orange
		12	Deep orange
		13	Dark amber
		14	Millenium gold
		15	Deep golden amber
		16	Scarlet
		17	Primary red
		18	Bright red
		19	Medium red
		20	Fire
		21	Pink
		22	Medium pink
		23	Dark pink
		24	Bright pink
		25	Bright rose
		26	Special rose pink
		27	Vanity fair
		28	Magenta
		29	Dark magenta

CH	Function	DMX	Description
18	Colors (continued)	30	Rose purple
		31	Mauve
		32	Medium purple
		33	Lavender
		34	Palace blue
		35	Dark blue
		36	Medium blue
		37	Deep blue
		38	Daylight blue
		39	Slate blue
		40	Light blue
		41	Sky blue
		42	Pale navy blue
		43	Marine blue
		44	Peacock blue
		45	Lagoon blue
		46	Medium blue green
		47	Dark yellow green
		48	Primary green
		49	Fern green
		50	Moss green
		51	Dark green
		52	Lime green
		53	Pale green
		54	Quarter CT Blue
		55	Half CT Blue
		56	FULL CT Blue
		57	Double CT Blue
		58	Quarter CT Orange
		59	Half CT Orange
		60	FULL CT Orange
		61–179	No function
		180–201	Fast to slow CW (180–6.67 °/s)
		202–207	Spin: Stop
		208–229	Slow to fast CCW (6.67–180 °/s)
		230–234	Spin: open
		235–239	Random Fast (10–7 Hz)
		240–244	Random Medium (6–4 Hz)
		245–249	Random Slow (3–1 Hz)
		250–255	Random: open
19	Zoom	0	Narrow
		1–127	Narrow ... Center

CH	Function	DMX	Description
19	Zoom (continued)	128	Center
		129–254	Center ... Wide
		255	Wide
20	Shutter	0–31	Shutter: Closed
		32–63	Shutter: Open1
		64	Min Strobe
		65–94	Min Strobe ... Max Strobe
		95	Max Strobe
		96–127	Open 2
		128	Min Pulse
		129–158	Min Pulse ... Max Pulse
		159	Max Pulse
		160–191	Open 3
		192	Min Random
		193–222	Min Random ... Max Random
		223	Max Random
		224–255	Open 4
21	Dimmer	0–63	0 percent ... 25 percent
		63	25 percent
		64–127	25 percent ... 50 percent
		127	50 percent
		128–191	50 percent ... 75 percent
		191	75 percent
		192–255	75 percent ... 100 percent
		255	100 percent
22	Dimmer Fine	0–255	Fine adjustment of CH 21
23	Dimmer Mode	0–20	Standard
		21–40	Stage
		41–60	TV
		61–80	Architectural
		81–100	Theatre
		101–255	Default to Unit Setting
24	Control	0–15	No function
		16–20	Invert Pan on (Hold 3s)
		21–25	Invert Pan off (Hold 5s)
		26–30	Invert Tilt on (Hold 3s)
		31–35	Invert Tilt off (Hold 5s)
		36–40	Fan Mute (Hold 3s)
		41–45	Fan Studio(Hold 3s)
		46–50	Fan Low(Hold 3s)
		51–55	Fan High(Hold 3s)
		56–60	Fan Auto(Hold 3s)

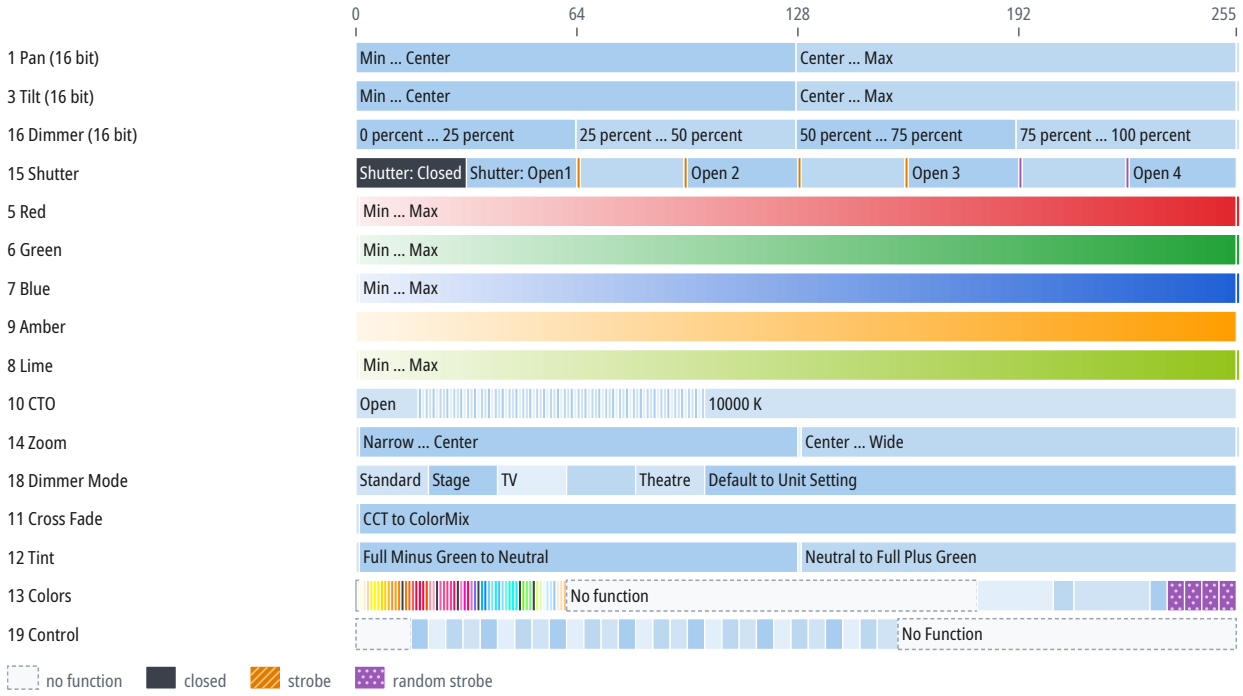
CH	Function	DMX	Description
24	Control (continued)	61–65	Linear Dimmer Curve (hold 3s)
		66–70	Square Dimmer Curve (hold 3s)
		71–75	Inv-Square Dimmer Curve (hold 3s)
		76–80	S - Dimmer Curve (hold 3s)
		81–85	1200 Hz (hold 3s)
		86–90	3600 Hz (hold 3s)
		91–95	5000 Hz (hold 3s)
		96–100	10000 Hz (hold 3s)
		101–105	15000 Hz (hold 3s)
		106–110	20000 Hz (hold 3s)
		111–115	25000 Hz (hold 3s)
		116–120	Reset Pan/Tilt (Hold 3s)
		121–125	Reset All Functions (Hold 3s)
		126–130	DTW ON
		131–135	DTW OFF(Default)
		136–140	Highest Fidelity
		141–145	Highest Output (Default)
		146–150	Bright(Default)
		151–156	Uniform
		157–255	No Function

Mode Standard 19CH

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 15 Shutter at 96–127 or 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 5 Red 255, CH 6 Green 255, CH 7 Blue 255, CH 8 Lime 255, CH 9 Amber 255, CH 10 CTO 0, CH 15 Shutter 50, CH 16 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended 24CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended 24CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Red	0	Min
		1–254	Min ... Max
		255	Max
6	Green	0	Min
		1–254	Min ... Max
		255	Max
7	Blue	0	Min
		1–254	Min ... Max
		255	Max
8	Lime	0	Min
		1–254	Min ... Max
		255	Max
9	Amber	0–255	

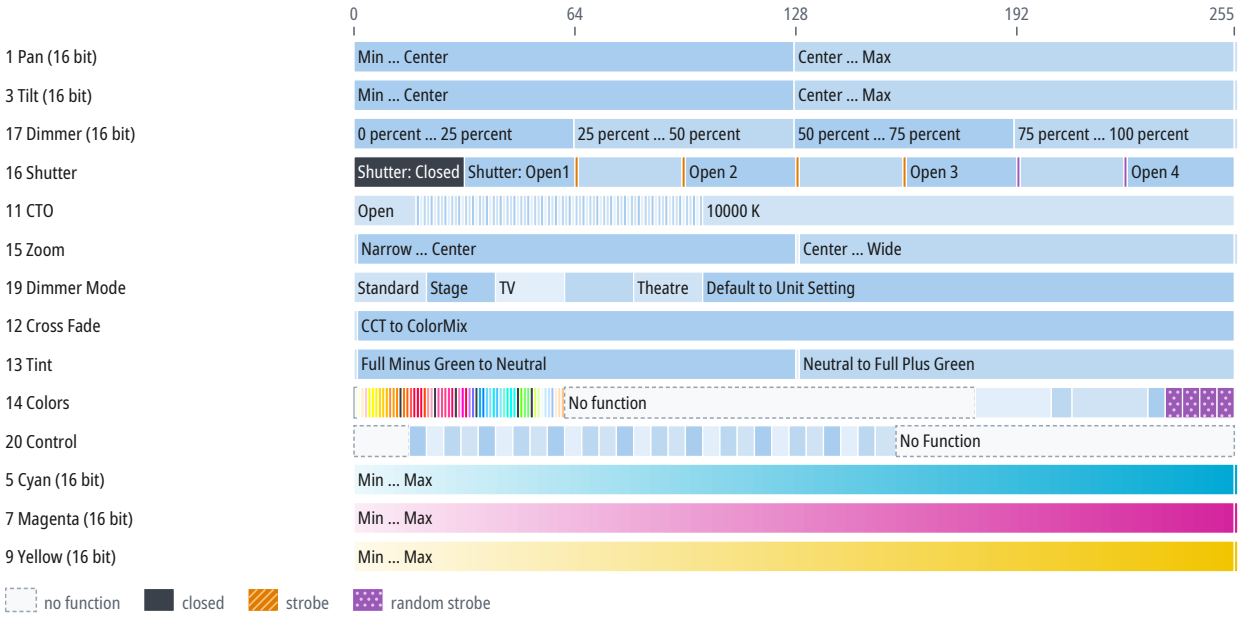
CH	Function	DMX	Description
10	CTO		Same as CH 15 in the mode “Extended 24CH” (p. 12)
11	Cross Fade		Same as CH 16 in the mode “Extended 24CH” (p. 14)
12	Tint		Same as CH 17 in the mode “Extended 24CH” (p. 14)
13	Colors		Same as CH 18 in the mode “Extended 24CH” (p. 14)
14	Zoom		Same as CH 19 in the mode “Extended 24CH” (p. 15)
15	Shutter		Same as CH 20 in the mode “Extended 24CH” (p. 16)
16	Dimmer		Same as CH 21 in the mode “Extended 24CH” (p. 16)
17	Dimmer Fine	0–255	Fine adjustment of CH 16
18	Dimmer Mode		Same as CH 23 in the mode “Extended 24CH” (p. 16)
19	Control		Same as CH 24 in the mode “Extended 24CH” (p. 16)

Mode CMY Extended 20CH

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 16 Shutter at 96–127 or 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 5 Cyan 0, CH 7 Magenta 0, CH 9 Yellow 0, CH 11 CTO 0, CH 16 Shutter 50, CH 17 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended 24CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended 24CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Cyan	0–255	Min ... Max
		255	Max
6	Cyan Fine	0–255	Fine adjustment of CH 5
7	Magenta	0–255	Min ... Max
		255	Max

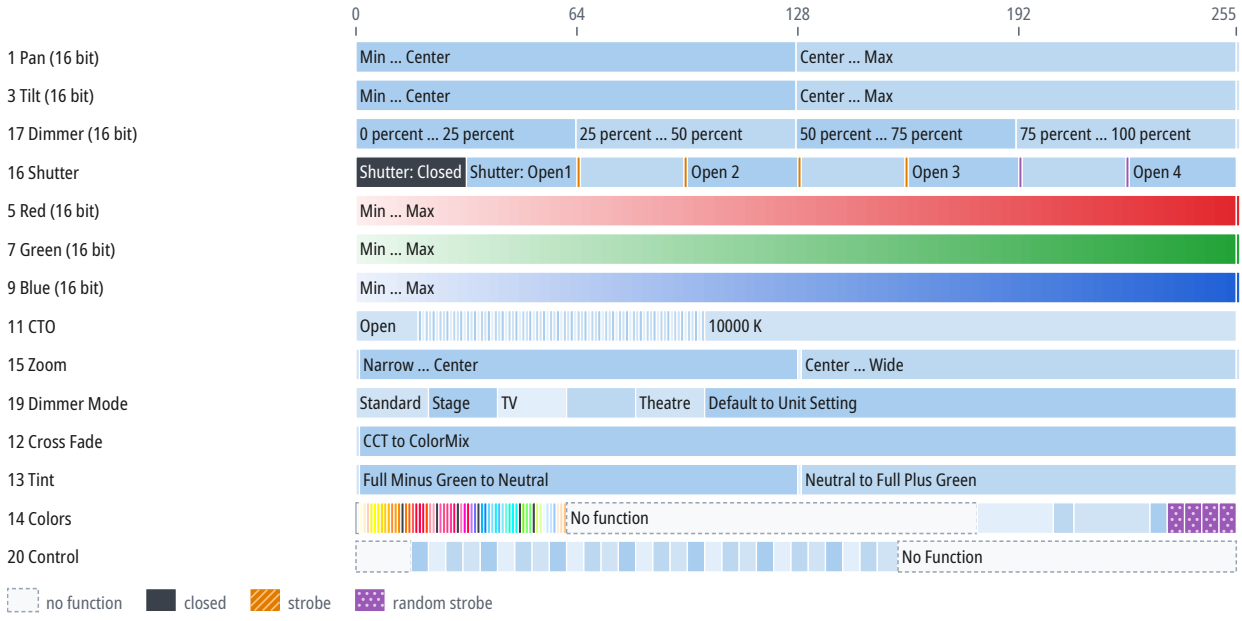
CH	Function	DMX	Description
8	Magenta Fine	0–255	Fine adjustment of CH 7
9	Yellow	0–255	Min ... Max
		255	Max
10	Yellow Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 15 in the mode “Extended 24CH” (p. 12)
12	Cross Fade		Same as CH 16 in the mode “Extended 24CH” (p. 14)
13	Tint		Same as CH 17 in the mode “Extended 24CH” (p. 14)
14	Colors		Same as CH 18 in the mode “Extended 24CH” (p. 14)
15	Zoom		Same as CH 19 in the mode “Extended 24CH” (p. 15)
16	Shutter		Same as CH 20 in the mode “Extended 24CH” (p. 16)
17	Dimmer		Same as CH 21 in the mode “Extended 24CH” (p. 16)
18	Dimmer Fine	0–255	Fine adjustment of CH 17
19	Dimmer Mode		Same as CH 23 in the mode “Extended 24CH” (p. 16)
20	Control		Same as CH 24 in the mode “Extended 24CH” (p. 16)

Mode RGB Extended 20CH

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 16 Shutter at 96–127 or 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 5 Red 255, CH 7 Green 255, CH 9 Blue 255, CH 11 CTO 0, CH 16 Shutter 50, CH 17 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended 24CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended 24CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Red		Same as CH 5 in the mode “Extended 24CH” (p. 11)

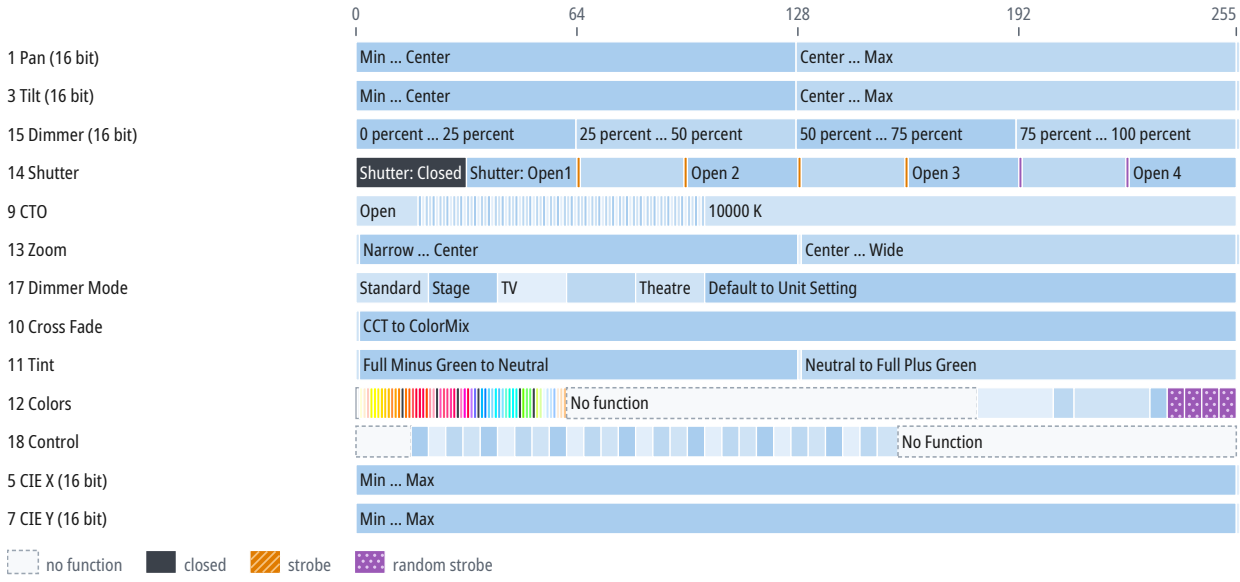
CH	Function	DMX	Description
6	Red Fine	0–255	Fine adjustment of CH 5
7	Green		Same as CH 7 in the mode “Extended 24CH” (p. 11)
8	Green Fine	0–255	Fine adjustment of CH 7
9	Blue		Same as CH 9 in the mode “Extended 24CH” (p. 11)
10	Blue Fine	0–255	Fine adjustment of CH 9
11	CTO		Same as CH 15 in the mode “Extended 24CH” (p. 12)
12	Cross Fade		Same as CH 16 in the mode “Extended 24CH” (p. 14)
13	Tint		Same as CH 17 in the mode “Extended 24CH” (p. 14)
14	Colors		Same as CH 18 in the mode “Extended 24CH” (p. 14)
15	Zoom		Same as CH 19 in the mode “Extended 24CH” (p. 15)
16	Shutter		Same as CH 20 in the mode “Extended 24CH” (p. 16)
17	Dimmer		Same as CH 21 in the mode “Extended 24CH” (p. 16)
18	Dimmer Fine	0–255	Fine adjustment of CH 17
19	Dimmer Mode		Same as CH 23 in the mode “Extended 24CH” (p. 16)
20	Control		Same as CH 24 in the mode “Extended 24CH” (p. 16)

Mode XY Extended 18CH

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 14 Shutter at 96–127 or 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 9 CTO 0, CH 14 Shutter 50, CH 15 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended 24CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended 24CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3

CH	Function	DMX	Description
5	CIE X	0–255	Min … Max
		255	Max
6	CIE X Fine	0–255	Fine adjustment of CH 5
7	CIE Y	0–255	Min … Max
		255	Max
8	CIE Y Fine	0–255	Fine adjustment of CH 7
9	CTO		Same as CH 15 in the mode “Extended 24CH” (p. 12)
10	Cross Fade		Same as CH 16 in the mode “Extended 24CH” (p. 14)
11	Tint		Same as CH 17 in the mode “Extended 24CH” (p. 14)
12	Colors		Same as CH 18 in the mode “Extended 24CH” (p. 14)
13	Zoom		Same as CH 19 in the mode “Extended 24CH” (p. 15)
14	Shutter		Same as CH 20 in the mode “Extended 24CH” (p. 16)
15	Dimmer		Same as CH 21 in the mode “Extended 24CH” (p. 16)
16	Dimmer Fine	0–255	Fine adjustment of CH 15
17	Dimmer Mode		Same as CH 23 in the mode “Extended 24CH” (p. 16)
18	Control		Same as CH 24 in the mode “Extended 24CH” (p. 16)

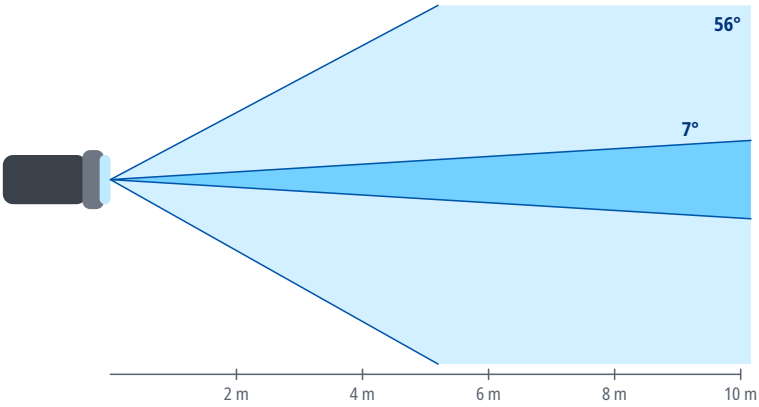
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	250 W
Luminous flux	9,015 lm
Color temperature	5,600 K
Color rendering index (CRI)	95
Optics	
Zoom	7–56°
Movement	
Pan	540°
Tilt	240°
Control	
DMX connection	3-pin XLR IN/OUT
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	350 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	11.3 kg
Operating environment	
Operating temperature	-20 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	1800–10000 K
Strobe frequency	1–10 Hz
LED frequency	1200–25000 Hz
Color wheel rotation	up to 180 °/s (30 rpm)

Spot diameter



Distance	Ø 7°	Ø 56°
2 m	0.24 m	2.1 m
4 m	0.49 m	4.3 m
6 m	0.73 m	6.4 m
8 m	0.98 m	8.5 m
10 m	1.2 m	10.6 m
15 m	1.8 m	16 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.

Problem	Remedy
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.