DMX REFERENCE

CYCLONE (CM 150 IP)

ACME



Manufacturer	ACME
GDTF file	ACME_CYCLONE_CM_150_IP_166111.gdtf
GDTF revision	V1.40 · 2026-10-26
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1 About this manual

This document describes the CYCLONE (CM 150 IP) by ACME. It was compiled from the GDTF file ACME_CYCLONE_CM_150_IP_166111.gdtf from the GDTF-Share library.

File revision: “V1.40”.

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 ACME; 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	5.6 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 27CH	27	18	1, 28, 55, 82, ...
Mode 2 50CH	50	10	1, 51, 101, 151, ...
Mode 3 58CH	58	8	1, 59, 117, 175, ...

No light? Check these channels

- Mode 1 27CH: CH 22 Dimmer above 0; CH 24 Shutter 1 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”; CH 25 Shutter 2 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”
- Mode 2 50CH: CH 45 Dimmer above 0; CH 47 Shutter 1 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”; CH 48 Shutter 2 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”
- Mode 3 58CH: CH 53 Dimmer above 0; CH 55 Shutter 1 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”; CH 56 Shutter 2 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”



Read the manual before use



Do not stare into the light



Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

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

⚠ CAUTION

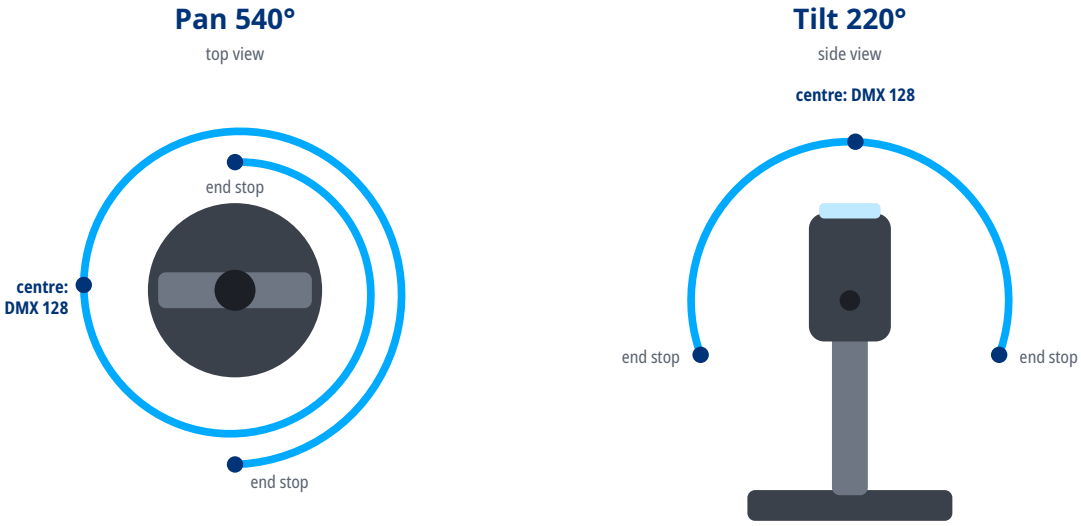
- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them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

⚠ WARNING

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

4 Product description

Range of movement



5 Installation

⚠ WARNING

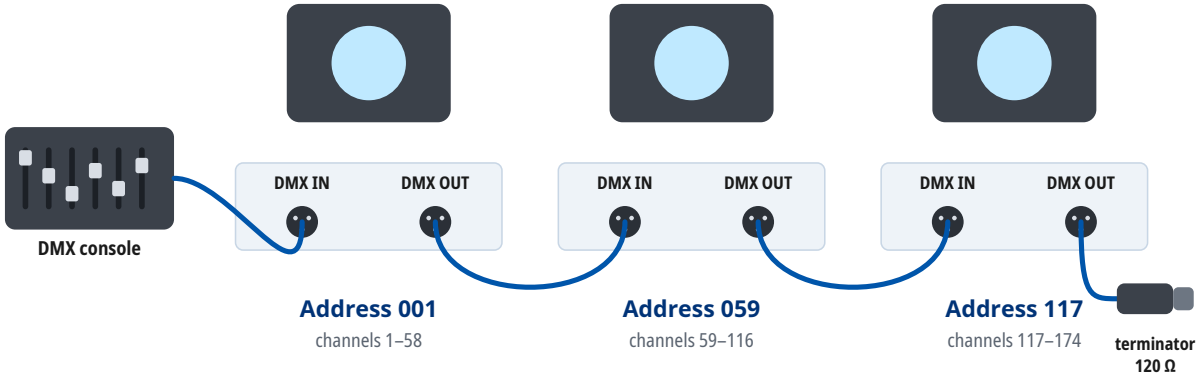
- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 5.6 kg.
- 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 3 58CH: every unit occupies 58 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 “Mode 3 58CH”: 58.
- 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 “Mode 3 58CH”, you can use, for example, the start addresses 1, 59, 117, 175.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.
- The device supports RDM (Remote Device Management), two-way communication with the controller over the DMX line.

8 Functions at a glance

Functions in each DMX mode

	Mode 1 27CH 27 channels	Mode 2 50CH 50 channels	Mode 3 58CH 58 channels
Pan / Tilt	4× (1–7)	4× (1–7)	4× (1–7)
Dimmer	22	45	53
Shutter / strobe	24, 25	47, 48	55, 56
Color mixing	11–14, 18–20	11–18, 21–52	37 channels (11–52)
Color temperature	16	20	28
Color wheel	17		
Zoom	8	8	8
Pixel control	✓	8 cells	8 cells

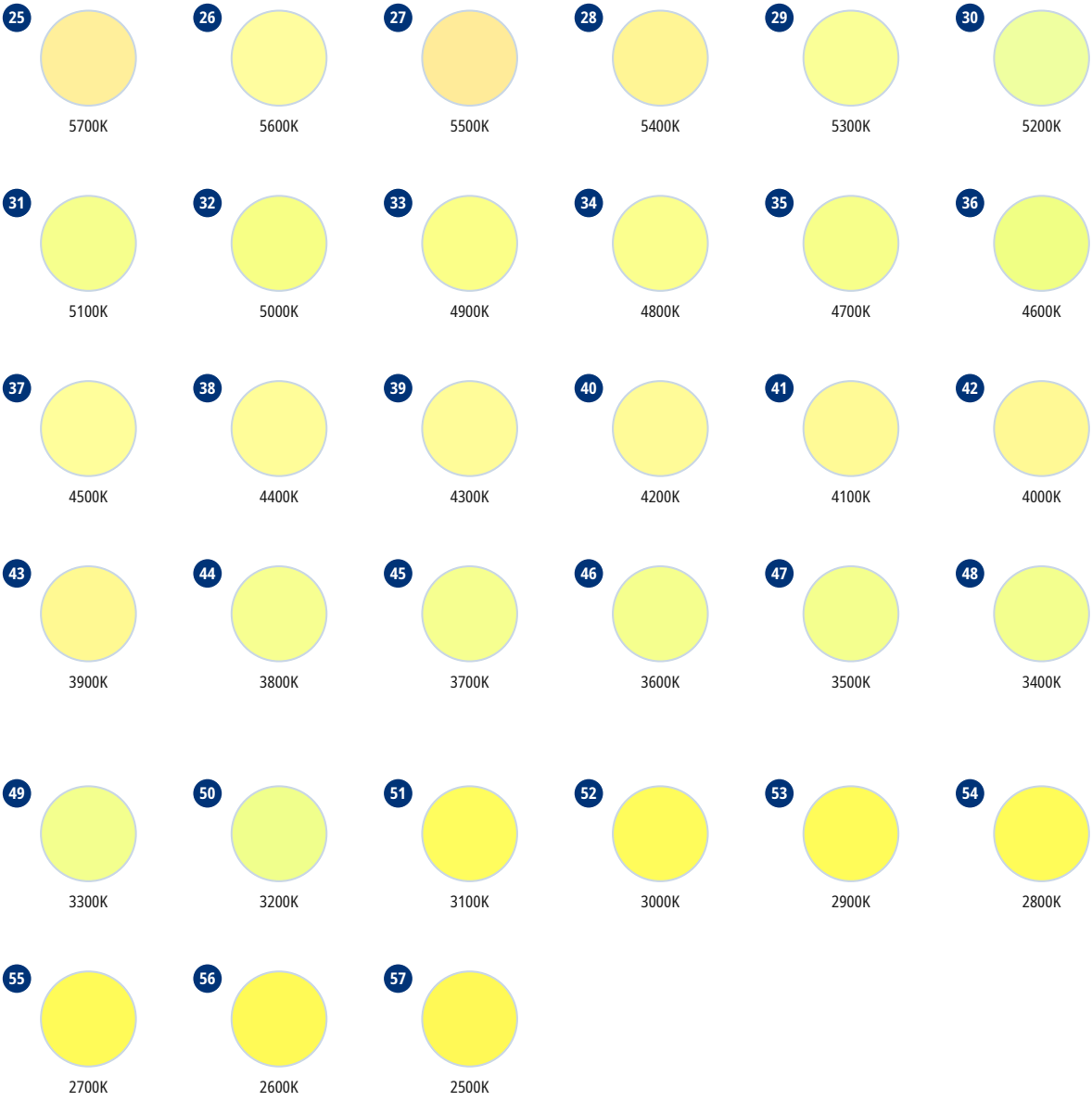
Color wheel 1

1. Open
2. LEE 790 Moroccan Pink
3. LEE 157 Pink
4. LEE 128 Bright Pink
5. LEE 332 Special Rose Pink
6. LEE 328 Follies Pink
7. LEE 194 Surprise Pink
8. LEE 181 Congo Blue
9. LEE 071 Tokyo Blue
10. LEE 120 Deep Blue
11. LEE 079 Just Blue
12. LEE 132 Medium Blue
13. LEE 200 Double CT Blue
14. LEE 161 State Blue
15. LEE 201 Full CT Blue
16. LEE 202 Half CT Blue
17. LEE 117 Steel Blue
18. LEE 353 Lighter Blue
19. LEE 118 Light Blue
20. LEE 116 Medium Blue Green
21. LEE 124 Dark Green
22. LEE 139 Primary Green
23. LEE 089 Moss Green
24. LEE 122 Fern Green

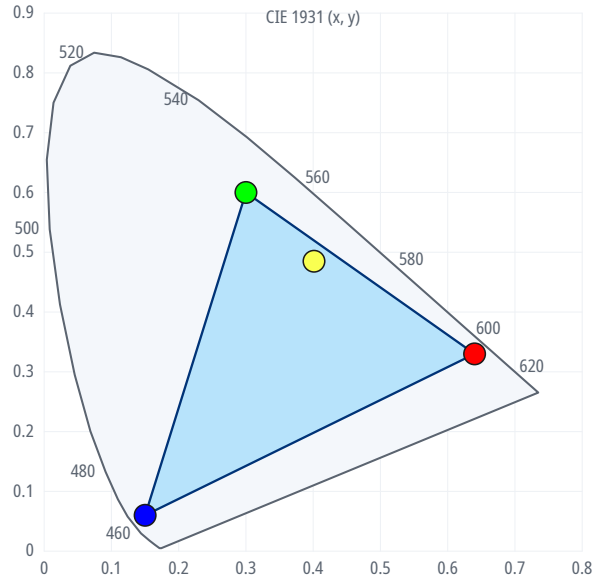
25 LEE 738 JAS Green
26 LEE 088 Lime Green
27 LEE 100 Spring Yellow
28 LEE 104 Deep Amber
29 LEE 179 Chrome Orange
30 LEE 105 Orange
31 LEE 021 Gold Amber
32 LEE 778 Millennium Gold
33 LEE 135 Deep Gold Amber
34 LEE 164 Flame Red

Color wheel 2

1 Open
2 8000K
3 7900K
4 7800k
5 7700k
6 7600k
7 7500K
8 7400K
9 7300K
10 7200K
11 7100K
12 7000K
13 6900K
14 6800K
15 6700K
16 6600K
17 6500K
18 6400K
19 6300K
20 6200K
21 6100K
22 6000K
23 5900K
24 5800K


25
5700K
26
5600K
27
5500K
28
5400K
29
5300K
30
5200K
31
5100K
32
5000K
33
4900K
34
4800K
35
4700K
36
4600K
37
4500K
38
4400K
39
4300K
40
4200K
41
4100K
42
4000K
43
3900K
44
3800K
45
3700K
46
3600K
47
3500K
48
3400K
49
3300K
50
3200K
51
3100K
52
3000K
53
2900K
54
2800K
55
2700K
56
2600K
57
2500K

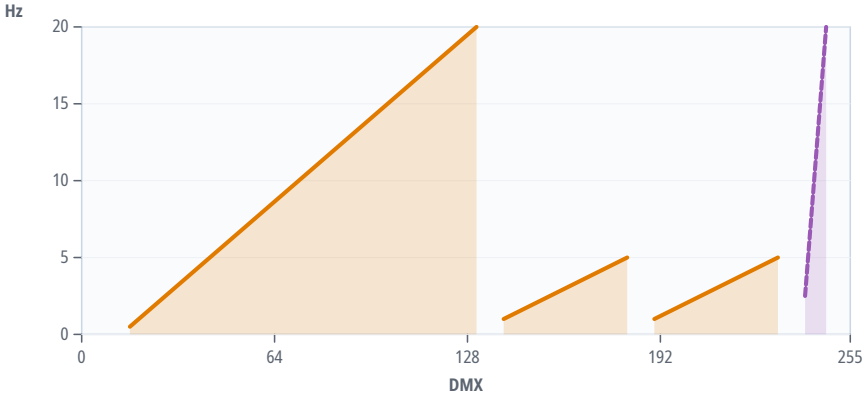
LED colors and the colors they mix



LED	x	y
Red	0.640	0.330
Green	0.300	0.600
Blue	0.150	0.060
Lime	0.401	0.485

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

Strobe rate

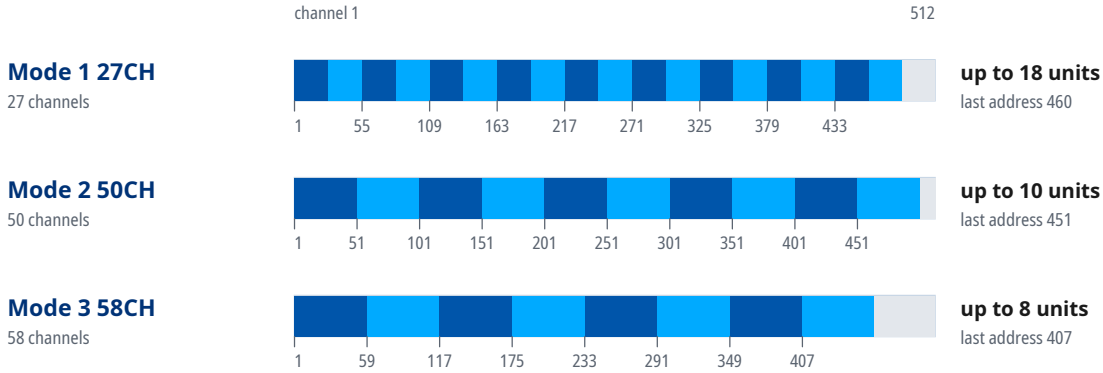


CH 47 · Mode 2 50CH

- 16–131: 0.5–20 Hz Strobe
- 140–181: 1–5 Hz Pulse Open
- 190–231: 1–5 Hz Pulse Close
- 240–247: 2.5–20 Hz Strobe Random

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 3 58CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	291	11	U2 · 117	16	U2 · 407
2	59	7	349	12	U2 · 175	17	U3 · 1
3	117	8	407	13	U2 · 233	18	U3 · 59
4	175	9	U2 · 1	14	U2 · 291	19	U3 · 117
5	233	10	U2 · 59	15	U2 · 349	20	U3 · 175

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.

RDM personalities

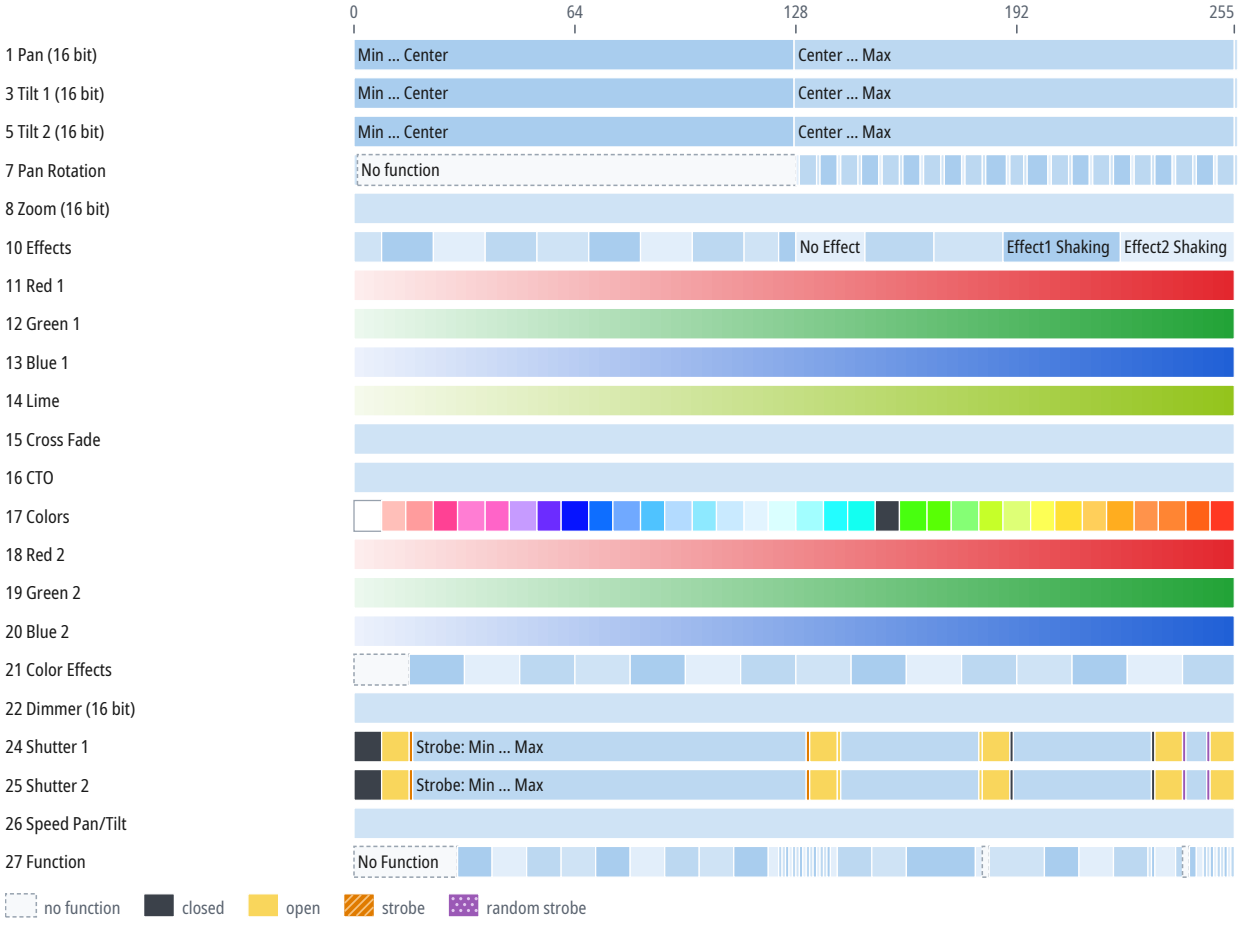
Mode	Channels	RDM personality
Mode 1 27CH	27	1
Mode 2 50CH	50	2
Mode 3 58CH	58	3

Mode 1 27CH

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 22 Dimmer above 0; CH 24 Shutter 1 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”; CH 25 Shutter 2 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 11 Red 1 255, CH 12 Green 1 255, CH 13 Blue 1 255, CH 18 Red 2 255, CH 19 Green 2 255, CH 20 Blue 2 255, CH 22 Dimmer 255, CH 24 Shutter 1 15, CH 25 Shutter 2 15.

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 1	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
4	Tilt 1 Fine	0–255	Fine adjustment of CH 3
5	Tilt 2		Pan 2
		0–127	Min ... Center
		128–255	Center ... Max

CH	Function	DMX	Description
5	Tilt 2 (continued)	255	Max
6	Tilt 2 Fine	0–255	Fine adjustment of CH 5
7	Pan Rotation	0	No function: Open
		1–127	No function
		128	CCW 100%
		129–133	CCW 100% ... CCW 90%
		134	CCW 90%
		135–139	CCW 90% ... CCW 80%
		140	CCW 80%
		141–145	CCW 80% ... CCW 70%
		146	CCW 70%
		147–151	CCW 70% ... CCW 60%
		152	CCW 60%
		153–157	CCW 60% ... CCW 50%
		158	CCW 50%
		159–163	CCW 50% ... CCW 40%
		164	CCW 40%
		165–169	CCW 40% ... CCW 30%
		170	CCW 30%
		171–175	CCW 30% ... CCW 20%
		176	CCW 20%
		177–181	CCW 20% ... CCW 10%
		182	CCW 10%
		183–188	CCW 10% ... CCW 1%
		189	CCW 1%
		190–193	Stop
		194	CW 1%
		195–200	CW 1% ... CW 10%
		201	CW 10%
		202–206	CW 10% ... CW 20%
		207	CW 20%
		208–212	CW 20% ... CW 30%
		213	CW 30%
		214–218	CW 30% ... CW 40%
		219	CW 40%
		220–224	CW 40% ... CW 50%
		225	CW 50%
		226–230	CW 50% ... CW 60%
		231	CW 60%
		232–236	CW 60% ... CW 70%
		237	CW 70%
		238–242	CW 70% ... CW 80%

CH	Function	DMX	Description
7	Pan Rotation (continued)	243	CW 80%
		244–248	CW 80% ... CW 90%
		249	CW 90%
		250–254	CW 90% ... CW 100%
		255	CW 100%
8	Zoom	0–255	40–2.5°
9	Zoom Fine	0–255	Fine adjustment of CH 8
10	Effects	0–7	No Effect
		8–22	Effect 1 Square
		23–37	Effect 2 Square
		38–52	Effect 1 Shaking Square
		53–67	Effect 2 Shaking Square
		68–82	Effect 1 Cross
		83–97	Effect 2 Cross
		98–112	Effect 1 Shaking Cross
		113–122	Effect 1 Shaking Cross ... Effect 2 Shaking Cross
		123–127	Effect 2 Shaking Cross
		128–147	No Effect
		148–167	Effect1
		168–187	Effect2
		188–221	Effect1 Shaking
		222–255	Effect2 Shaking
11	Red 1	0–255	
12	Green 1	0–255	
13	Blue 1	0–255	
14	Lime	0–255	
15	Cross Fade	0–255	
16	CTO	0–255	8000–2500 K
17	Colors	0–7	Open
		8–14	LEE 790 Moroccan Pink
		15–22	LEE 157 Pink
		23–29	LEE 128 Bright Pink
		30–37	LEE 332 Special Rose Pink
		38–44	LEE 328 Follies Pink
		45–52	LEE 194 Surprise Pink
		53–59	LEE 181 Congo Blue
		60–67	LEE 071 Tokyo Blue
		68–74	LEE 120 Deep Blue
		75–82	LEE 079 Just Blue
		83–89	LEE 132 Medium Blue
		90–97	LEE 200 Double CT Blue
		98–104	LEE 161 State Blue

CH	Function	DMX	Description
17	Colors (continued)	105–112	LEE 201 Full CT Blue
		113–119	LEE 202 Half CT Blue
		120–127	LEE 117 Steel Blue
		128–135	LEE 353 Lighter Blue
		136–142	LEE 118 Light Blue
		143–150	LEE 116 Medium Blue Green
		151–157	LEE 124 Dark Green
		158–165	LEE 139 Primary Green
		166–172	LEE 089 Moss Green
		173–180	LEE 122 Fern Green
		181–187	LEE 738 JAS Green
		188–195	LEE 088 Lime Green
		196–202	LEE 100 Spring Yellow
		203–210	LEE 104 Deep Amber
		211–217	LEE 179 Chrome Orange
		218–225	LEE 105 Orange
		226–232	LEE 021 Gold Amber
		233–240	LEE 778 Millennium Gold
		241–247	LEE 135 Deep Gold Amber
		248–255	LEE 164 Flame Red
18	Red 2	0–255	
19	Green 2	0–255	
20	Blue 2	0–255	
21	Color Effects	0–15	No Function
		16–31	Macro Effect 1 Fast to Slow
		32–47	Macro Effect 2 Fast to Slow
		48–63	Macro Effect 3 Fast to Slow
		64–79	Macro Effect 4 Fast to Slow
		80–95	Macro Effect 5 Fast to Slow
		96–111	Macro Effect 6 Fast to Slow
		112–127	Macro Effect 7 Fast to Slow
		128–143	Macro Effect 8 Fast to Slow
		144–159	Macro Effect 9 Fast to Slow
		160–175	Macro Effect 10 Fast to Slow
		176–191	Macro Effect 11 Fast to Slow
		192–207	Macro Effect 12 Fast to Slow
		208–223	Macro Effect 13 Fast to Slow
		224–239	Macro Effect 14 Fast to Slow
		240–255	Macro Effect 15 Fast to Slow
22	Dimmer	0–255	
23	Dimmer Fine	0–255	Fine adjustment of CH 22
24	Shutter 1	0–7	Close

CH	Function	DMX	Description
24	Shutter 1 (continued)	8–15	Open
		16	Strobe: Min
		17–130	Strobe: Min ... Max
		131	Strobe: Max
		132–139	Open
		140	Min Pulse Open
		141–180	Min Pulse Open ... Max Pulse Open
		181	Max Pulse Open
		182–189	Open
		190	Min Pulse Close
		191–230	Min Pulse Close ... Max Pulse Close
		231	Max Pulse Close
		232–239	Open
		240	Min Random
		241–246	Min Random ... Max Random
		247	Max Random
		248–255	Open
25	Shutter 2	0–7	Close
		8–15	Open
		16	Strobe: Min
		17–130	Strobe: Min ... Max
		131	Strobe: Max
		132–139	Open
		140	Min Pulse Open
		141–180	Min Pulse Open ... Max Pulse Open
		181	Max Pulse Open
		182–189	Open
		190	Min Pulse Close
		191–230	Min Pulse Close ... Max Pulse Close
		231	Max Pulse Close
		232–239	Open
		240	Min Random
		241–246	Min Random ... Max Random
		247	Max Random
		248–255	Open
26	Speed Pan/Tilt	0–255	
27	Function	0–29	No Function
		30–39	Dimmer Linear
		40–49	Square law
		50–59	Inv SQ law
		60–69	S curve
		70–79	Auto

CH	Function	DMX	Description
27	Function (continued)	80–89	Quiet
		90–99	Super Quiet
		100–109	Led Frequency Setting Enable
		110–119	Led Frequency Setting Disable
		120–122	No Function 2
		123	900Hz
		124	1000Hz
		125	1100Hz
		126	1200Hz
		127	1300Hz
		128	1400Hz
		129	1500Hz
		130	2500Hz
		131	4000Hz
		132	5000Hz
		133	6000Hz
		134	10000Hz
		135	15000Hz
		136	20000Hz
		137	25000Hz
		138–139	No Function 3
		140–149	PT Reset
		150–159	Effect Reset
		160–179	No Function 4
		180–181	Sun Protection Mode: On
		182–183	Sun Protection Mode: Off
		184–199	No Function 5
		200–209	Reset all
		210–219	Dimmer Speed: Fast
		220–229	Smooth
		230	Dimming Start Mode: High
		231	Dimming Start Mode: Low
		232–237	No Function 6
		238–239	CCT Calibration: On
		240–241	CCT Calibration: Off
		242–243	Pan Roll Swap: Yes
		244–245	Pan Roll Swap: No
		246	Pan Invert: Yes
		247	Pan Invert: No
		248	Tilt Invert: Yes
		249	Tilt Invert: No
		250	Roll Invert: Yes

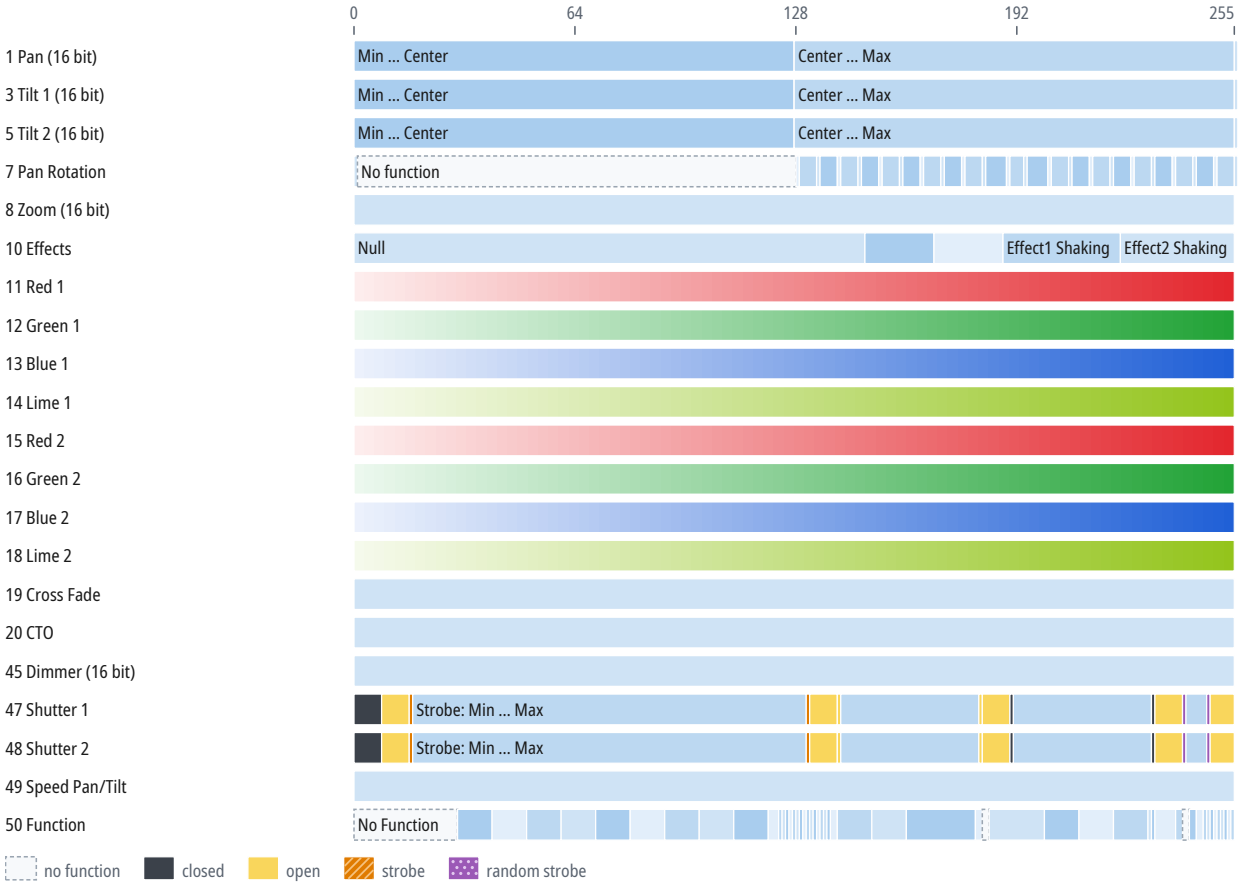
CH	Function	DMX	Description
27	Function (continued)	251	Roll Invert: No
		252	Zoom Invert: Yes
		253	Zoom Invert: No
		254–255	No Function 7

Mode 2 50CH

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 45 Dimmer above 0; CH 47 Shutter 1 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”; CH 48 Shutter 2 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 11 Red 1 255, CH 12 Green 1 255, CH 13 Blue 1 255, CH 15 Red 2 255, CH 16 Green 2 255, CH 17 Blue 2 255, CH 21 Red 255 (the same in each of the 8 cells), CH 22 Green 255 (the same in each of the 8 cells), CH 23 Blue 255 (the same in each of the 8 cells), CH 45 Dimmer 255, CH 47 Shutter 1 15, CH 48 Shutter 2 15.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 27CH” (p. 12)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt 1		Same as CH 3 in the mode “Mode 1 27CH” (p. 12)
4	Tilt 1 Fine	0–255	Fine adjustment of CH 3
5	Tilt 2		Same as CH 5 in the mode “Mode 1 27CH” (p. 12)

CH	Function	DMX	Description
6	Tilt 2 Fine	0–255	Fine adjustment of CH 5
7	Pan Rotation		Same as CH 7 in the mode “Mode 1 27CH” (p. 13)
8	Zoom	0–255	40–2.5°
9	Zoom Fine	0–255	Fine adjustment of CH 8
10	Effects	0–147	Null
		148–167	Effect1
		168–187	Effect2
		188–221	Effect1 Shaking
		222–255	Effect2 Shaking
11	Red 1	0–255	
12	Green 1	0–255	
13	Blue 1	0–255	
14	Lime 1	0–255	
15	Red 2	0–255	
16	Green 2	0–255	
17	Blue 2	0–255	
18	Lime 2	0–255	
19	Cross Fade	0–255	
20	CTO	0–255	8000–2500 K
21	Red 3	0–255	
22	Green 3	0–255	
23	Blue 3	0–255	
45	Dimmer	0–255	
46	Dimmer Fine	0–255	Fine adjustment of CH 45
47	Shutter 1		Same as CH 24 in the mode “Mode 1 27CH” (p. 15)
48	Shutter 2		Same as CH 25 in the mode “Mode 1 27CH” (p. 16)
49	Speed Pan/Tilt	0–255	
50	Function		Same as CH 27 in the mode “Mode 1 27CH” (p. 16)

CH 21–44: 8 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 21–23); the table below gives each cell's channel numbers.

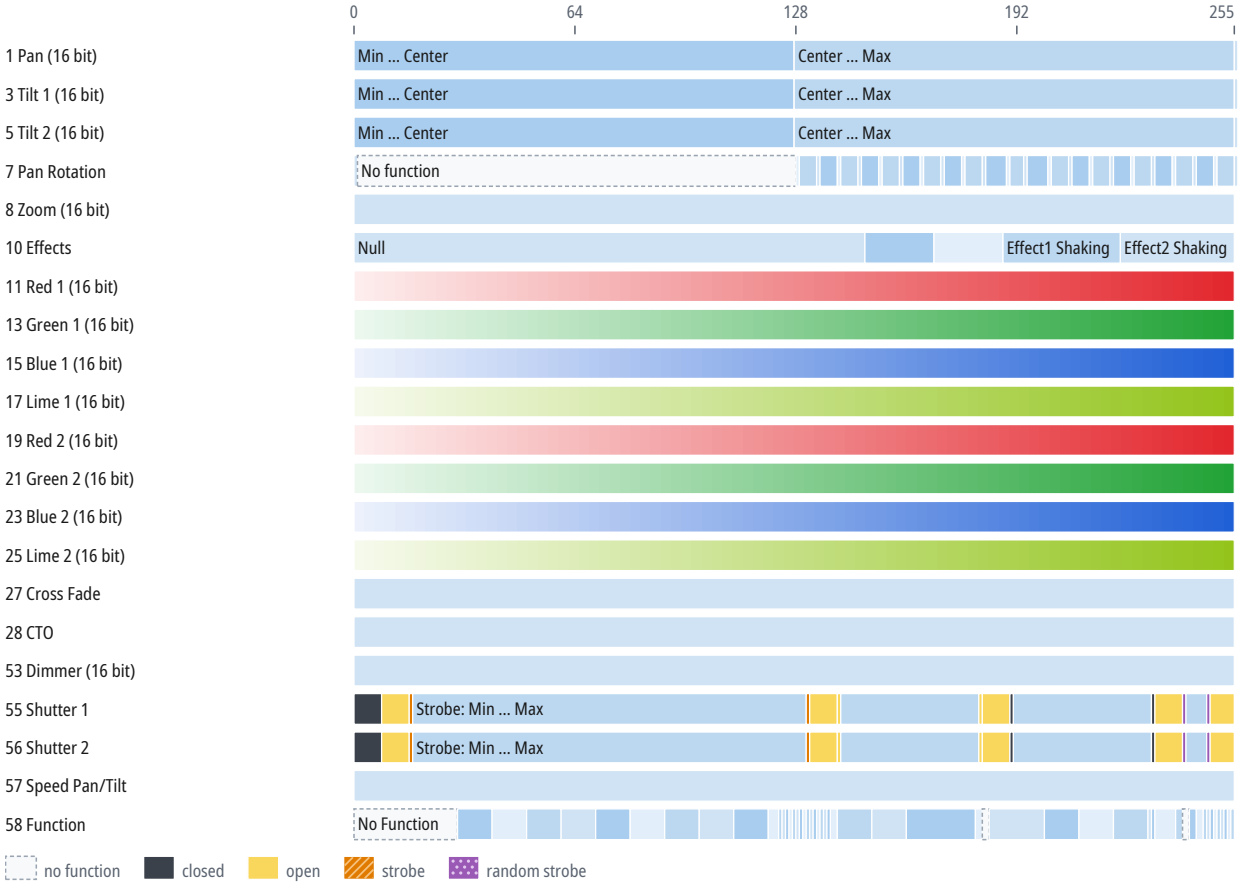
Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	21	22	23	2	24	25	26	3	27	28	29
4	30	31	32	5	33	34	35	6	36	37	38
7	39	40	41	8	42	43	44				

Mode 3 58CH

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 53 Dimmer above 0; CH 55 Shutter 1 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”; CH 56 Shutter 2 at 8–15, 132–139, 182–189, 232–239 or 248–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 11 Red 1 255, CH 13 Green 1 255, CH 15 Blue 1 255, CH 19 Red 2 255, CH 21 Green 2 255, CH 23 Blue 2 255, CH 29 Red 255 (the same in each of the 8 cells), CH 30 Green 255 (the same in each of the 8 cells), CH 31 Blue 255 (the same in each of the 8 cells), CH 53 Dimmer 255, CH 55 Shutter 1 15, CH 56 Shutter 2 15.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 27CH” (p. 12)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt 1		Same as CH 3 in the mode “Mode 1 27CH” (p. 12)
4	Tilt 1 Fine	0–255	Fine adjustment of CH 3
5	Tilt 2		Same as CH 5 in the mode “Mode 1 27CH” (p. 12)
6	Tilt 2 Fine	0–255	Fine adjustment of CH 5
7	Pan Rotation		Same as CH 7 in the mode “Mode 1 27CH” (p. 13)
8	Zoom	0–255	40–2.5°
9	Zoom Fine	0–255	Fine adjustment of CH 8
10	Effects		Same as CH 10 in the mode “Mode 2 50CH” (p. 19)

CH	Function	DMX	Description
11	Red 1	0–255	
12	Red 1 Fine	0–255	Fine adjustment of CH 11
13	Green 1	0–255	
14	Green 1 Fine	0–255	Fine adjustment of CH 13
15	Blue 1	0–255	
16	Blue 1 Fine	0–255	Fine adjustment of CH 15
17	Lime 1	0–255	
18	Lime 1 Fine	0–255	Fine adjustment of CH 17
19	Red 2	0–255	
20	Red 2 Fine	0–255	Fine adjustment of CH 19
21	Green 2	0–255	
22	Green 2 Fine	0–255	Fine adjustment of CH 21
23	Blue 2	0–255	
24	Blue 2 Fine	0–255	Fine adjustment of CH 23
25	Lime 2	0–255	
26	Lime 2 Fine	0–255	Fine adjustment of CH 25
27	Cross Fade	0–255	
28	CTO	0–255	8000–2500 K
29	Red 3	0–255	
30	Green 3	0–255	
31	Blue 3	0–255	
53	Dimmer	0–255	
54	Dimmer Fine	0–255	Fine adjustment of CH 53
55	Shutter 1		Same as CH 24 in the mode “Mode 1 27CH” (p. 15)
56	Shutter 2		Same as CH 25 in the mode “Mode 1 27CH” (p. 16)
57	Speed Pan/Tilt	0–255	
58	Function		Same as CH 27 in the mode “Mode 1 27CH” (p. 16)

CH 29–52: 8 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 29–31); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	29	30	31	2	32	33	34	3	35	36	37
4	38	39	40	5	41	42	43	6	44	45	46
7	47	48	49	8	50	51	52				

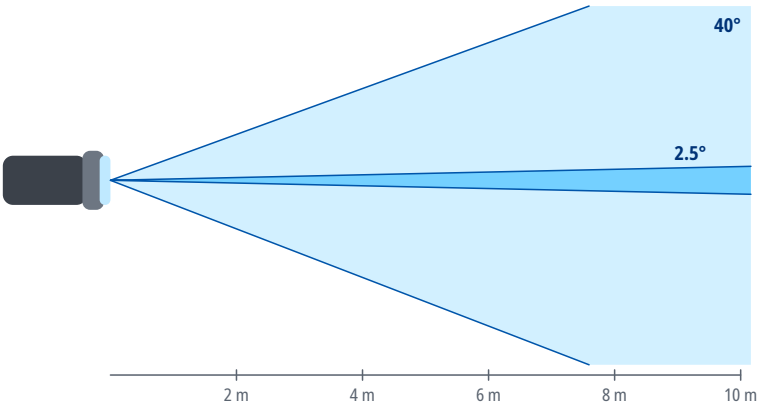
10 Technical specifications

Parameter	Value
Zoom	2.5–40°
Pan	540°
Tilt	220°
RDM	yes (manufacturer ID 0x3806, device model ID 0x05AD)
Weight	5.6 kg
Operating temperature	-10 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2500–8000 K
Strobe frequency	0.5–20 Hz

Spot diameter



Distance	Ø 2.5°	Ø 40°
2 m	0.09 m	1.5 m
4 m	0.17 m	2.9 m
6 m	0.26 m	4.4 m
8 m	0.35 m	5.8 m
10 m	0.44 m	7.3 m
15 m	0.65 m	10.9 m

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

11 Maintenance and cleaning

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

12 Troubleshooting

Problem	Remedy
The device does not switch on	Check the supply voltage, the cables and the fuse, if the device has one.
The device does not respond to DMX	Check the start address, the selected DMX mode and whether it matches the profile in the controller, the cable connection to DMX IN, and the controller output (universe).
The device behaves erratically or flickers	Check the terminator at the end of the line, the condition and wiring of the cables (shield on pin 1 only), the number of devices on the line (32 at most), and that the line is not split without a splitter.
Only some devices on the line respond	Check the cable and connectors between the last working and the first non-working device, and make sure all devices on the line are switched on.
Devices respond to the wrong channels or affect each other	Check that the addresses do not overlap and that the DMX mode on the devices matches the patch in the controller.
The device or the connected load does not light up although it receives DMX	Check the values of the dimmer, shutter and strobe channels against the DMX channel table. For the DMX modes for which the sources state it, the chapter DMX channels gives under the mode's heading which channels must be open.
Movement is reversed	Check whether Pan/Tilt inversion is enabled in the device menu or in the controller.
Moving parts do not reach the correct position after power-on or transport	Switch the device off and on again to reset the position, and make sure the transport lock, if any, is released. If this does not help, contact a service center.
Movement is jerky	Check the value of the Pan/Tilt speed channel, if the device has one, and the stability of the DMX signal.

13 Disposal

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

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

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

Recycle the packaging materials according to their type.