DMX REFERENCE

HYPERZONE (CM 7 IP)

ACME



Manufacturer	ACME
GDTF file	ACME_HYPERZONE_CM_7_IP_167841.gdtf
GDTF revision	V1.70 · 2026-11-04
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1 About this manual

This document describes the HYPERZONE (CM 7 IP) by ACME. It was compiled from the GDTF file ACME_HYPERZONE_CM_7_IP_167841.gdtf from the GDTF-Share library.

File revision: “V1.70”.

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	24 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 19CH	19	26	1, 20, 39, 58, ...
Mode 2 41CH	41	12	1, 42, 83, 124, ...
Mode 3 20CH	20	25	1, 21, 41, 61, ...
Mode 4 42CH	42	12	1, 43, 85, 127, ...
Mode 5 21CH	21	24	1, 22, 43, 64, ...
Mode 6 43CH	43	11	1, 44, 87, 130, ...

No light? Check these channels

- Mode 1 19CH: CH 8 Dimmer above 0; CH 10 Shutter at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255
- Mode 2 41CH: CH 8 Dimmer above 0; CH 10 Strobe at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255
- Mode 3 20CH: CH 8 Dimmer above 0; CH 10 Shutter at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255
- Mode 4 42CH: CH 8 Dimmer above 0; CH 10 Strobe at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255
- Mode 5 21CH: CH 8 Dimmer above 0; CH 10 Shutter at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255
- Mode 6 43CH: CH 8 Dimmer above 0; CH 10 Strobe at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255


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

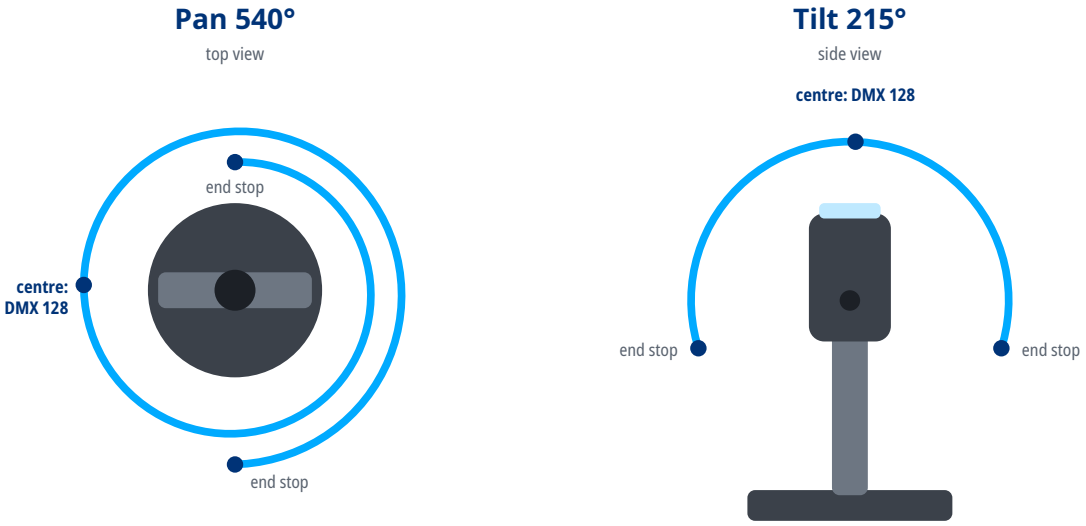
- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them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

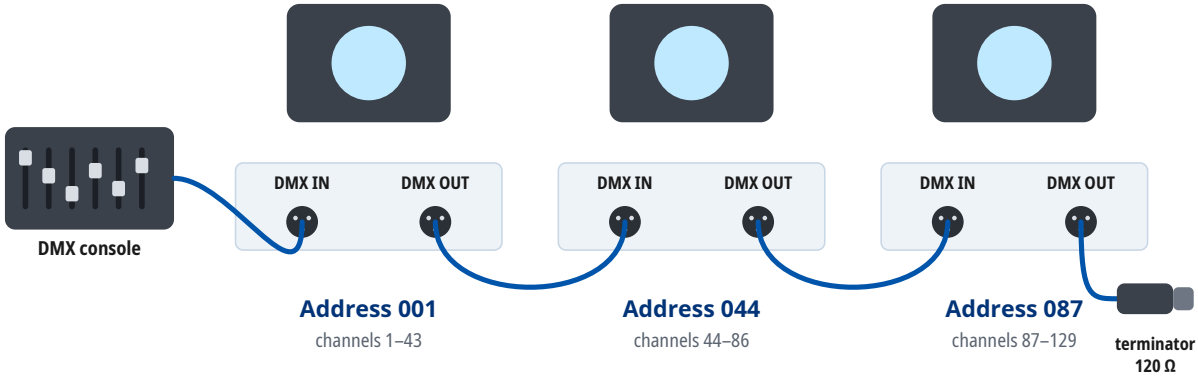
- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 24 kg.
- 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 6 43CH: every unit occupies 43 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 6 43CH”: 43.
- 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 6 43CH”, you can use, for example, the start addresses 1, 44, 87, 130.
- 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 19CH 19 channels	Mode 2 41CH 41 channels	Mode 3 20CH 20 channels	Mode 4 42CH 42 channels	Mode 5 21CH 21 channels	Mode 6 43CH 43 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3
Dimmer	8	8	8	8	8	8
Shutter / strobe	10	10	10	10	10	10
Color mixing	12–15	12–39	12–15	12–39	12–15	12–39
Color temperature	16	40	16	40	16	40
Color wheel	17	41	17	41	18	42
Zoom	6	6	6	6	6	6

Color wheel

1. Open — DMX 0–9
2. 790 Moroccan Pink — DMX 10–16
3. 157 Pink — DMX 17–23
4. 332 Special Rose Pink — DMX 24–30
5. 328 Follies Pink — DMX 31–37
6. 345 Fuchsia Pink — DMX 38–44
7. 194 Surprise Pink — DMX 45–51
8. 181 Congo Blue — DMX 52–58
9. 071 Tokyo Blue — DMX 59–65
10. 120 Deep Blue — DMX 66–72
11. 079 Just Blue — DMX 73–79
12. 132 Medium Blue — DMX 80–86
13. 200 Double CT Blue — DMX 87–93
14. 161 State Blue — DMX 94–100
15. 201 Full CT Blue — DMX 101–107
16. 202 Half CT Blue — DMX 108–114
17. 117 Steel Blue — DMX 115–121
18. 353 Lighter Blue — DMX 122–128
19. 118 Light Blue — DMX 129–135
20. 116 Medium Blue Green — DMX 136–142
21. 124 Dark Green — DMX 143–149
22. 139 Primary Green — DMX 150–156
23. 089 Moss Green — DMX 157–163
24. 122 Fern Green — DMX 164–170

25 738 JAS Green **DMX 171–177**

26 088 JAS Green **DMX 178–184**

27 100 Spring Yellow **DMX 185–191**

28 104 Deep Amber **DMX 192–198**

29 179 Chrome Orange **DMX 199–205**

30 105 Orange **DMX 206–212**

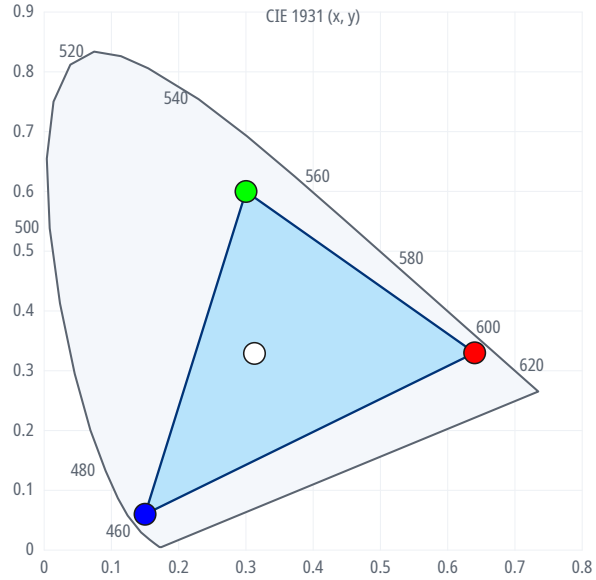
31 021 Gold Amber **DMX 213–219**

32 778 Gold Amber **DMX 220–226**

33 135 Deep Gold Amber **DMX 227–233**

34 164 Flame Red **DMX 234–255**

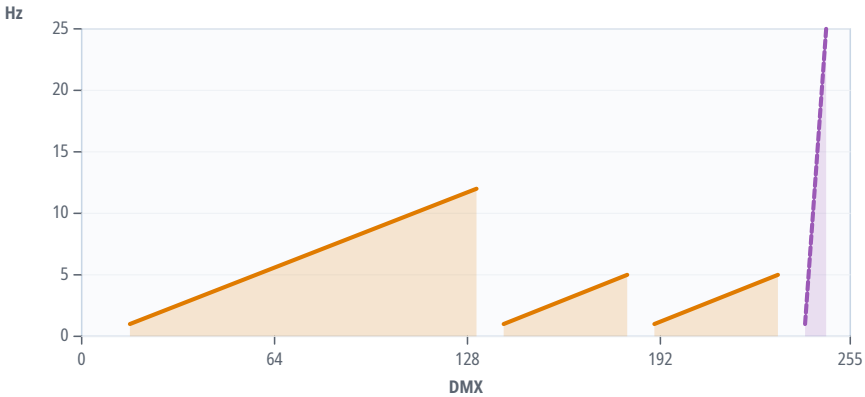
LED colors and the colors they mix



LED	x	y
Red	0.640	0.330
Green	0.300	0.600
Blue	0.150	0.060
White	0.313	0.329

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

Strobe rate



CH 10 · Mode 5 21CH

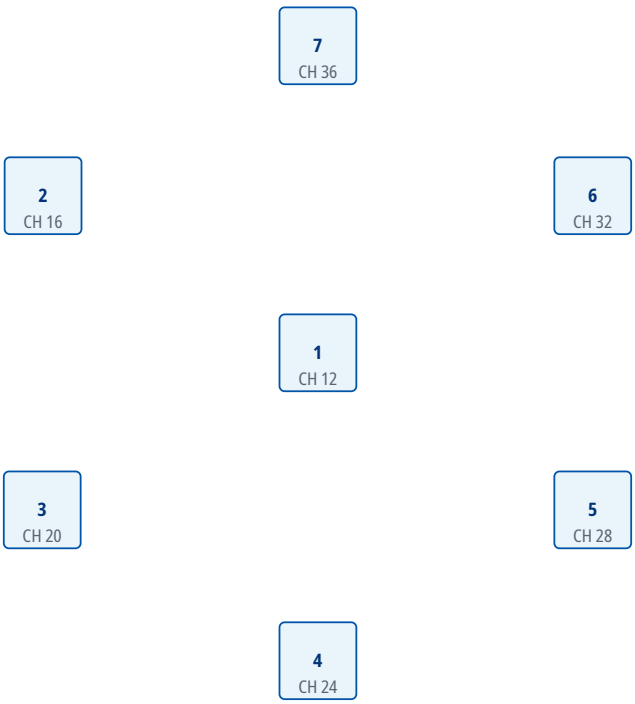
16–131: 1–12 Hz
ShutterStrobe 1

140–181: 1–5 Hz
Shutter Pulse Open

190–231: 1–5 Hz
Shutter Pulse Close

240–247: 1–25 Hz
Strobe Random

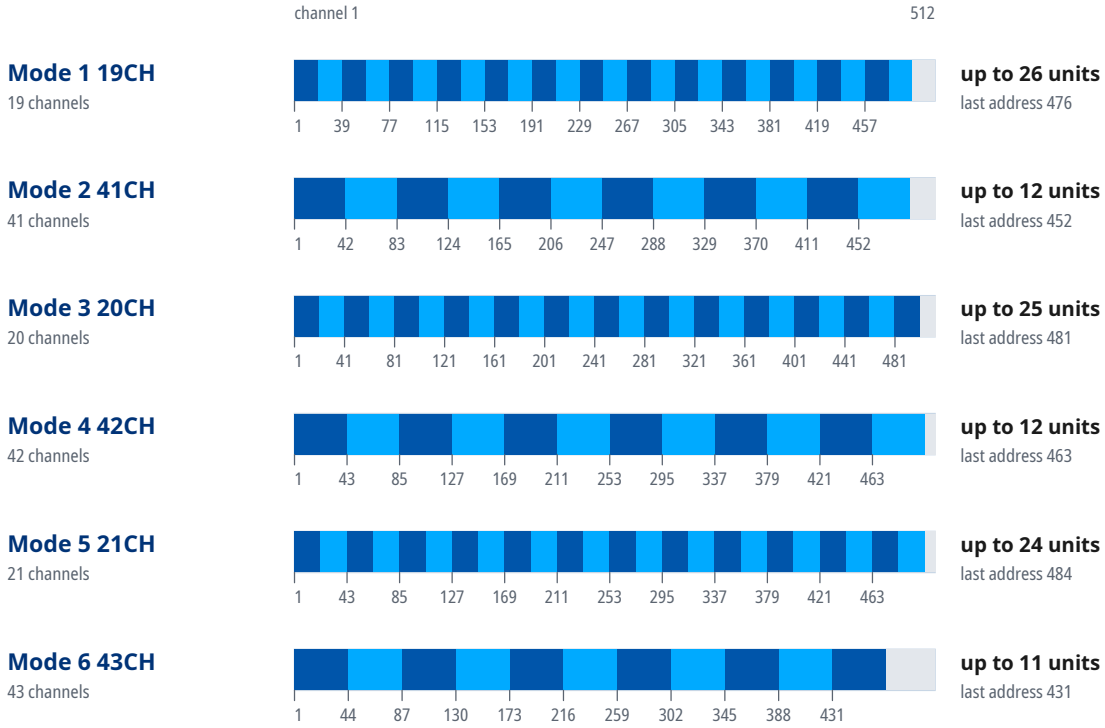
Cells (pixels)



7 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “Mode 5 21CH”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 6 43CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	216	11	431	16	U2 · 173
2	44	7	259	12	U2 · 1	17	U2 · 216
3	87	8	302	13	U2 · 44	18	U2 · 259
4	130	9	345	14	U2 · 87	19	U2 · 302
5	173	10	388	15	U2 · 130	20	U2 · 345

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

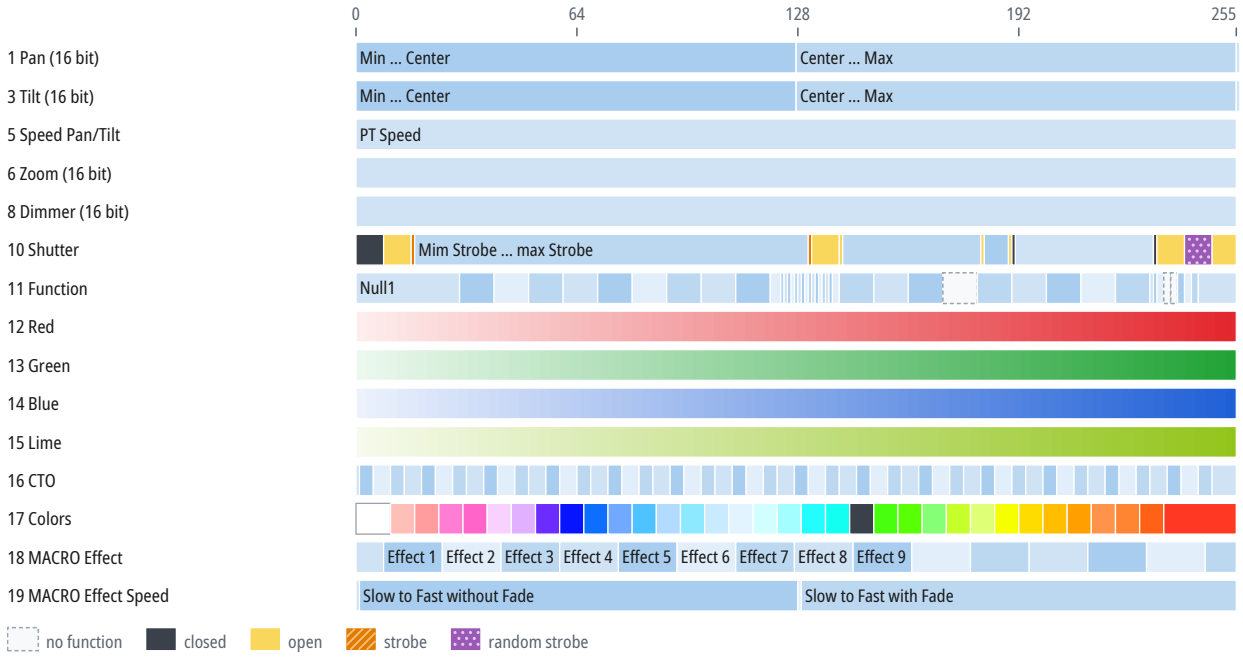
Mode	Channels	RDM personality
Mode 1 19CH	19	1
Mode 2 41CH	41	2
Mode 3 20CH	20	3
Mode 4 42CH	42	4
Mode 5 21CH	21	5
Mode 6 43CH	43	6

Mode 1 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 8 Dimmer above 0; CH 10 Shutter at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255. The GDTF file gives these values for a console's Highlight function: CH 8 Dimmer 255, CH 10 Shutter 12, CH 12 Red 255, CH 13 Green 255, CH 14 Blue 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Min ... Center
		127	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	Speed Pan/Tilt	0–255	PT Speed
6	Zoom	0–255	2.5–39°
7	Zoom Fine	0–255	Fine adjustment of CH 6
8	Dimmer	0–255	
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Shutter	0–7	Close
		8–15	Open
		16	Mim Strobe
		17–130	Mim Strobe ... max Strobe

CH	Function	DMX	Description
10	Shutter (continued)	131	Max Strobe
		132–139	Open 2
		140	Min Pulse Open
		141–180	Min Pulse Open ... max Pulse Open
		181	Max Pulse Open
		182–189	Open 3
		190	Min Pulse Close
		191–230	Min Pulse Close ... max Pulse Close
		231	Max Pulse Close
		232–239	Open 4
		240–247	Strobe Random (1–25 Hz)
		248–255	Open 5
11	Function	0–29	Null1
		30–39	Dim Curve Linear
		40–49	Dim Square Law
		50–59	Dim Inv Square Law
		60–69	Dim Curve S
		70–79	Quiet
		80–89	Auto
		90–99	Super Quiet
		100–109	Enable
		110–119	Disable
		120–122	LEDFrequency: Null
		123	900HZ
		124	1000HZ
		125	1100HZ
		126	1200HZ
		127	1300HZ
		128	1400HZ
		129	1500HZ
		130	2500HZ
		131	4000HZ
		132	5000HZ
		133	6000HZ
		134	10KHZ
		135	15KHZ
		136	20KHZ
		137	25KHZ
		138–139	LEDFrequency: Null
		140–149	PT Reset
		150–159	Zoom Reset
		160–169	Color Calibration: On

CH	Function	DMX	Description
11	Function (continued)	170–179	Color Calibration: Off
		180–189	High CRI
		190–199	High Output
		200–209	All Reset
		210–219	Dimmer Mode: Fast
		220–229	Smooth
		230	Dimming Start Mode: High
		231	Dimming Start Mode: Low
		232–233	Sun Protection Mode: On
		234–235	Sun Protection Mode: Off
		236–237	Defog: Off
		238–239	Upright
		240–241	Side Hang
		242–243	Inrerted Hang
		244–255	Defog: Null
12	Red	0–255	
13	Green	0–255	
14	Blue	0–255	
15	Lime	0–255	
16	CTO	0	Open
		1–4	8000K
		5–9	7900K
		10–13	7800K
		14–18	7700K
		19–22	7600K
		23–27	7500k
		28–31	7400k
		32–36	7300k
		37–40	7200k
		41–45	7100k
		46–49	7000k
		50–54	6900k
		55–58	6800k
		59–63	6700k
		64–67	6600k
		68–72	6500k
		73–76	6400k
		77–81	6300k
		82–85	6200k
		86–90	6100k
		91–94	6000k
		95–99	5900k

CH	Function	DMX	Description
16	CTO (continued)	100–103	5800k
		104–108	5700k
		109–112	5600k
		113–117	5500k
		118–121	5400k
		122–126	5300k
		127–130	5200k
		131–135	5100k
		136–139	5000k
		140–144	4900k
		145–148	4800k
		149–153	4700k
		154–157	4600k
		158–162	4500k
		163–166	4400k
		167–171	4300k
		172–175	4200k
		176–180	4100k
		181–184	4000k
		185–189	3900k
		190–193	3800k
		194–198	3700k
		199–202	3600k
		203–207	3500k
		208–211	3400k
		212–216	3300k
		217–220	3200k
		221–225	3100k
		226–229	3000k
		230–234	2900k
		235–238	2800k
		239–243	2700k
		244–247	2600k
		248–255	2500k
17	Colors	0–9	Open
		10–16	790 Moroccan Pink
		17–23	157 Pink
		24–30	332 Special Rose Pink
		31–37	328 Follies Pink
		38–44	345 Fuchsia Pink
		45–51	194 Surprise Pink
		52–58	181 Congo Blue

CH	Function	DMX	Description
17	Colors (continued)	59–65	071 Tokyo Blue
		66–72	120 Deep Blue
		73–79	079 Just Blue
		80–86	132 Medium Blue
		87–93	200 Double CT Blue
		94–100	161 State Blue
		101–107	201 Full CT Blue
		108–114	202 Half CT Blue
		115–121	117 Steel Blue
		122–128	353 Lighter Blue
		129–135	118 Light Blue
		136–142	116 Medium Blue Green
		143–149	124 Dark Green
		150–156	139 Primary Green
		157–163	089 Moss Green
		164–170	122 Fern Green
		171–177	738 JAS Green
		178–184	088 JAS Green
		185–191	100 Spring Yellow
		192–198	104 Deep Amber
		199–205	179 Chrome Orange
		206–212	105 Orange
		213–219	021 Gold Amber
		220–226	778 Gold Amber
		227–233	135 Deep Gold Amber
		234–255	164 Flame Red
18	MACRO Effect	0–7	Null
		8–24	Effect 1
		25–41	Effect 2
		42–58	Effect 3
		59–75	Effect 4
		76–92	Effect 5
		93–109	Effect 6
		110–126	Effect 7
		127–143	Effect 8
		144–160	Effect 9
		161–177	Effect 10
		178–194	Effect 11
		195–211	Effect 12
		212–228	Effect 13
		229–245	Effect 14
		246–255	Effect 15

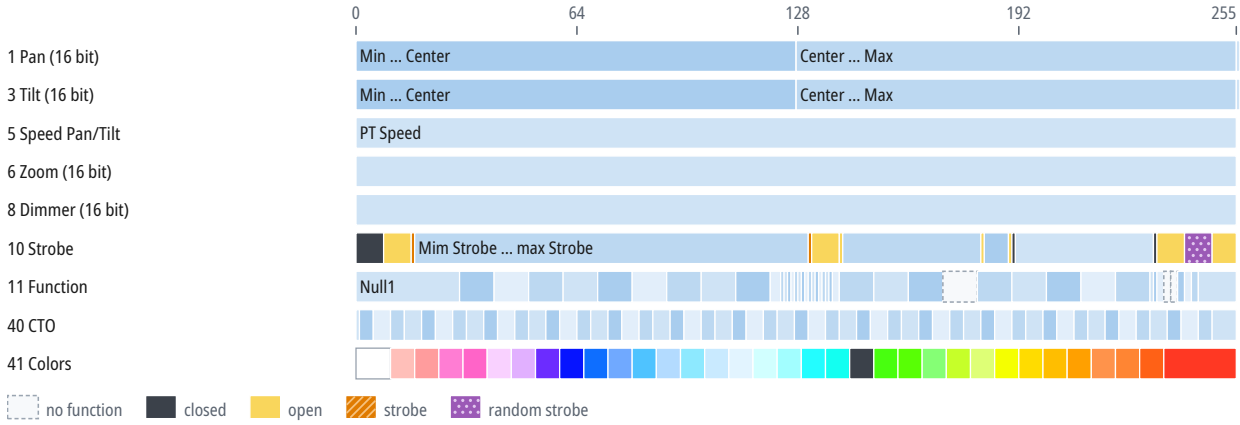
CH	Function	DMX	Description
19	MACRO Effect Speed		Eff Speed
		0	Stop
		1–127	Slow to Fast without Fade
		128	Stop
		129–255	Slow to Fast with Fade

Mode 2 41CH

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 8 Dimmer above 0; CH 10 Strobe at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255. The GDTF file gives these values for a console's Highlight function: CH 8 Dimmer 255, CH 10 Strobe 12, CH 12 Red 1 255, CH 13 Green 1 255, CH 14 Blue 1 255, CH 16 Red 2 255, CH 17 Green 2 255, CH 18 Blue 2 255, CH 20 Red 3 255, CH 21 Green 3 255, CH 22 Blue 3 255, CH 24 Red 4 255, CH 25 Green 4 255, CH 26 Blue 4 255, CH 28 Red 5 255, CH 29 Green 5 255, CH 30 Blue 5 255, CH 32 Red 6 255, CH 33 Green 6 255, CH 34 Blue 6 255, CH 36 Red 7 255, CH 37 Green 7 255, CH 38 Blue 7 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 19CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 19CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	PT Speed
6	Zoom	0–255	2.5–39°
7	Zoom Fine	0–255	Fine adjustment of CH 6
8	Dimmer	0–255	
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Strobe	0–7	Close
		8–15	Open
		16	Mim Strobe
		17–130	Mim Strobe ... max Strobe
		131	Max Strobe
		132–139	Open 2

CH	Function	DMX	Description
10	Strobe (continued)	140	Min Pulse Open
		141–180	Min Pulse Open ... max Pulse Open
		181	Max Pulse Open
		182–189	Open 3
		190	Min Pulse Close
		191–230	Min Pulse Close ... max Pulse Close
		231	Max Pulse Close
		232–239	Open 4
		240–247	Strobe Random (1–25 Hz)
		248–255	Open 5
11	Function		Same as CH 11 in the mode “Mode 1 19CH” (p. 12)
12	Red 1	0–255	
13	Green 1	0–255	
14	Blue 1	0–255	
15	Lime 1	0–255	
16	Red 2	0–255	
17	Green 2	0–255	
18	Blue 2	0–255	
19	Lime 2	0–255	
20	Red 3	0–255	
21	Green 3	0–255	
22	Blue 3	0–255	
23	Lime 3	0–255	
24	Red 4	0–255	
25	Green 4	0–255	
26	Blue 4	0–255	
27	Lime 4	0–255	
28	Red 5	0–255	
29	Green 5	0–255	
30	Blue 5	0–255	
31	Lime 5	0–255	
32	Red 6	0–255	
33	Green 6	0–255	
34	Blue 6	0–255	
35	Lime 6	0–255	
36	Red 7	0–255	
37	Green 7	0–255	
38	Blue 7	0–255	
39	Lime 7	0–255	
40	CTO		Same as CH 16 in the mode “Mode 1 19CH” (p. 13)
41	Colors	0–9	Open
		10–16	790 Moroccan Pink

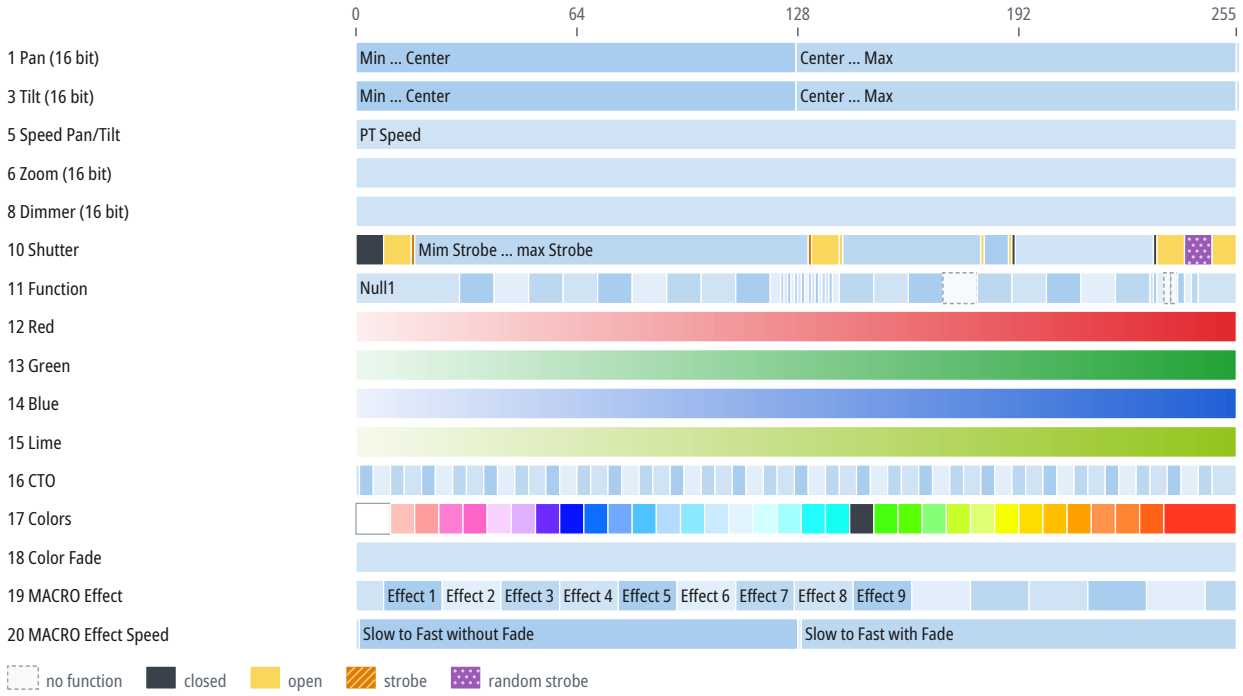
CH	Function	DMX	Description
41	Colors (continued)	17–23	157 Pink
		24–30	332 Special Rose Pink
		31–37	328 Follies Pink
		38–44	345 Fuchsia Pink
		45–51	194 Surprise Pink
		52–58	181 Congo Blue
		59–65	071 Tokyo Blue
		66–72	120 Deep Blue
		73–79	079 Just Blue
		80–86	132 Medium Blue
		87–93	200 Double CT Blue
		94–100	161 State Blue
		101–107	201 Full CT Blue
		108–114	202 Half CT Blue
		115–121	117 Half CT Blue
		122–128	353 Lighter Blue
		129–135	118 Light Blue
		136–142	116 Medium Blue Green
		143–149	124 Dark Green
		150–156	139 Primary Green
		157–163	089 Moss Green
		164–170	122 Fern Green
		171–177	738 JAS Green
		178–184	088 JAS Green
		185–191	100 Spring Yellow
		192–198	104 Deep Amber
		199–205	179 Chrome Orange
		206–212	105 Orange
		213–219	021 Gold Amber
		220–226	778 Millennium Gold
		227–233	135 Deep Gold Amber
		234–255	164 Flame Red

Mode 3 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 8 Dimmer above 0; CH 10 Shutter at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255. The GDTF file gives these values for a console's Highlight function: CH 8 Dimmer 255, CH 10 Shutter 12, CH 12 Red 255, CH 13 Green 255, CH 14 Blue 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 19CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 19CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	PT Speed
6	Zoom	0–255	2.5–39°
7	Zoom Fine	0–255	Fine adjustment of CH 6
8	Dimmer	0–255	
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Shutter		Same as CH 10 in the mode “Mode 1 19CH” (p. 11)
11	Function		Same as CH 11 in the mode “Mode 1 19CH” (p. 12)
12	Red	0–255	
13	Green	0–255	
14	Blue	0–255	
15	Lime	0–255	
16	CTO		Same as CH 16 in the mode “Mode 1 19CH” (p. 13)
17	Colors		Same as CH 17 in the mode “Mode 1 19CH” (p. 14)

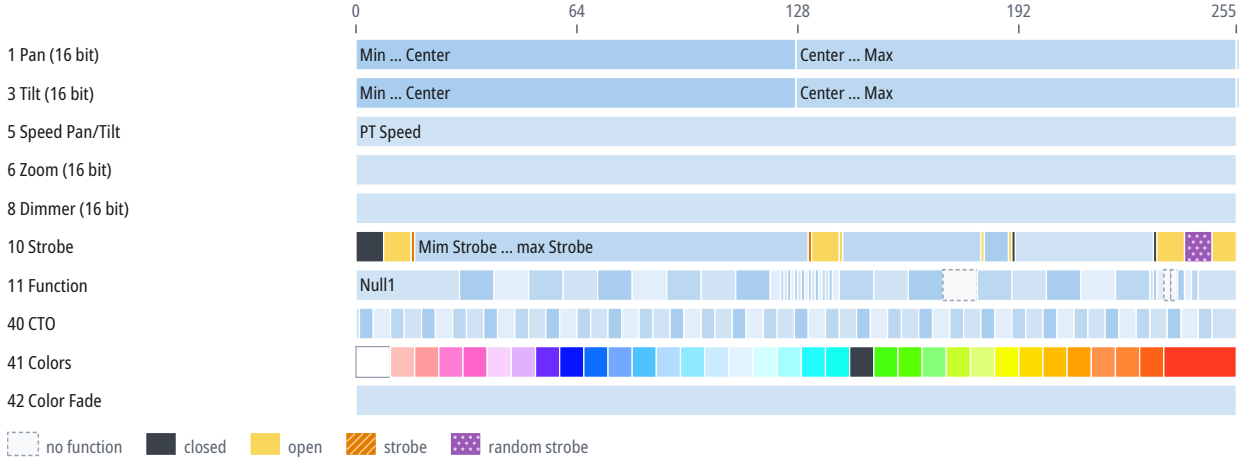
CH	Function	DMX	Description
18	Color Fade	0–255	
19	MACRO Effect		Same as CH 18 in the mode “Mode 1 19CH” (p. 15)
20	MACRO Effect Speed		Same as CH 19 in the mode “Mode 1 19CH” (p. 16)

Mode 4 42CH

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 8 Dimmer above 0; CH 10 Strobe at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255. The GDTF file gives these values for a console's Highlight function: CH 8 Dimmer 255, CH 10 Strobe 12, CH 12 Red 1 255, CH 13 Green 1 255, CH 14 Blue 1 255, CH 16 Red 2 255, CH 17 Green 2 255, CH 18 Blue 2 255, CH 20 Red 3 255, CH 21 Green 3 255, CH 22 Blue 3 255, CH 24 Red 4 255, CH 25 Green 4 255, CH 26 Blue 4 255, CH 28 Red 5 255, CH 29 Green 5 255, CH 30 Blue 5 255, CH 32 Red 6 255, CH 33 Green 6 255, CH 34 Blue 6 255, CH 36 Red 7 255, CH 37 Green 7 255, CH 38 Blue 7 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 19CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 19CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	PT Speed
6	Zoom	0–255	2.5–39°
7	Zoom Fine	0–255	Fine adjustment of CH 6
8	Dimmer	0–255	
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Strobe		Same as CH 10 in the mode “Mode 2 41CH” (p. 16)
11	Function		Same as CH 11 in the mode “Mode 1 19CH” (p. 12)
12	Red 1	0–255	
13	Green 1	0–255	
14	Blue 1	0–255	
15	Lime 1	0–255	
16	Red 2	0–255	

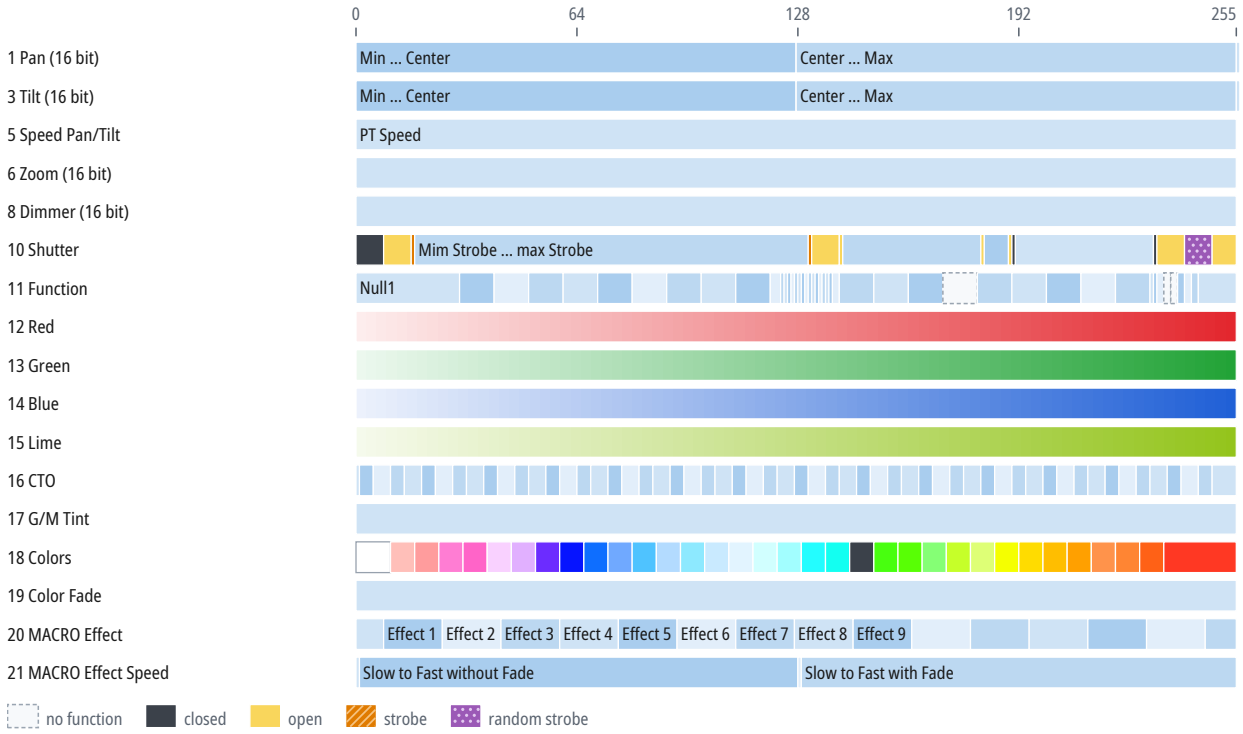
CH	Function	DMX	Description
17	Green 2	0–255	
18	Blue 2	0–255	
19	Lime 2	0–255	
20	Red 3	0–255	
21	Green 3	0–255	
22	Blue 3	0–255	
23	Lime 3	0–255	
24	Red 4	0–255	
25	Green 4	0–255	
26	Blue 4	0–255	
27	Lime 4	0–255	
28	Red 5	0–255	
29	Green 5	0–255	
30	Blue 5	0–255	
31	Lime 5	0–255	
32	Red 6	0–255	
33	Green 6	0–255	
34	Blue 6	0–255	
35	Lime 6	0–255	
36	Red 7	0–255	
37	Green 7	0–255	
38	Blue 7	0–255	
39	Lime 7	0–255	
40	CTO		Same as CH 16 in the mode “Mode 1 19CH” (p. 13)
41	Colors		Same as CH 41 in the mode “Mode 2 41CH” (p. 17)
42	Color Fade	0–255	

Mode 5 21CH

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 8 Dimmer above 0; CH 10 Shutter at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255. The GDTF file gives these values for a console's Highlight function: CH 8 Dimmer 255, CH 10 Shutter 12, CH 12 Red 255, CH 13 Green 255, CH 14 Blue 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 19CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 19CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	PT Speed
6	Zoom	0–255	2.5–39°
7	Zoom Fine	0–255	Fine adjustment of CH 6
8	Dimmer	0–255	
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Shutter		Same as CH 10 in the mode “Mode 1 19CH” (p. 11)
11	Function		Same as CH 11 in the mode “Mode 1 19CH” (p. 12)
12	Red	0–255	
13	Green	0–255	
14	Blue	0–255	
15	Lime	0–255	
16	CTO		Same as CH 16 in the mode “Mode 1 19CH” (p. 13)

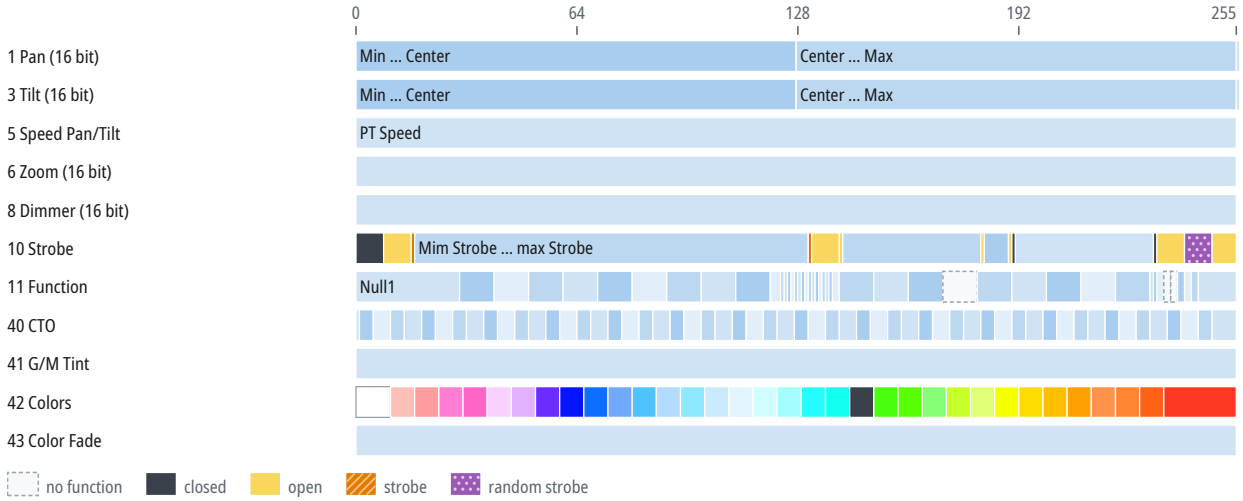
CH	Function	DMX	Description
17	G/M Tint	0–255	
18	Colors		Same as CH 17 in the mode “Mode 1 19CH” (p. 14)
19	Color Fade	0–255	
20	MACRO Effect		Same as CH 18 in the mode “Mode 1 19CH” (p. 15)
21	MACRO Effect Speed		Same as CH 19 in the mode “Mode 1 19CH” (p. 16)

Mode 6 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 8 Dimmer above 0; CH 10 Strobe at 8–15 “Open” or 132–139 or 182–189 or 232–239 or 248–255. The GDTF file gives these values for a console's Highlight function: CH 8 Dimmer 255, CH 10 Strobe 12, CH 12 Red 1 255, CH 13 Green 1 255, CH 14 Blue 1 255, CH 16 Red 2 255, CH 17 Green 2 255, CH 18 Blue 2 255, CH 20 Red 3 255, CH 21 Green 3 255, CH 22 Blue 3 255, CH 24 Red 4 255, CH 25 Green 4 255, CH 26 Blue 4 255, CH 28 Red 5 255, CH 29 Green 5 255, CH 30 Blue 5 255, CH 32 Red 6 255, CH 33 Green 6 255, CH 34 Blue 6 255, CH 36 Red 7 255, CH 37 Green 7 255, CH 38 Blue 7 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 19CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 19CH” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	PT Speed
6	Zoom	0–255	2.5–39°
7	Zoom Fine	0–255	Fine adjustment of CH 6
8	Dimmer	0–255	
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Strobe		Same as CH 10 in the mode “Mode 2 41CH” (p. 16)
11	Function		Same as CH 11 in the mode “Mode 1 19CH” (p. 12)
12	Red 1	0–255	
13	Green 1	0–255	

CH	Function	DMX	Description
14	Blue 1	0–255	
15	Lime 1	0–255	
16	Red 2	0–255	
17	Green 2	0–255	
18	Blue 2	0–255	
19	Lime 2	0–255	
20	Red 3	0–255	
21	Green 3	0–255	
22	Blue 3	0–255	
23	Lime 3	0–255	
24	Red 4	0–255	
25	Green 4	0–255	
26	Blue 4	0–255	
27	Lime 4	0–255	
28	Red 5	0–255	
29	Green 5	0–255	
30	Blue 5	0–255	
31	Lime 5	0–255	
32	Red 6	0–255	
33	Green 6	0–255	
34	Blue 6	0–255	
35	Lime 6	0–255	
36	Red 7	0–255	
37	Green 7	0–255	
38	Blue 7	0–255	
39	Lime 7	0–255	
40	CTO		Same as CH 16 in the mode “Mode 1 19CH” (p. 13)
41	G/M Tint	0–255	
42	Colors		Same as CH 41 in the mode “Mode 2 41CH” (p. 17)
43	Color Fade	0–255	

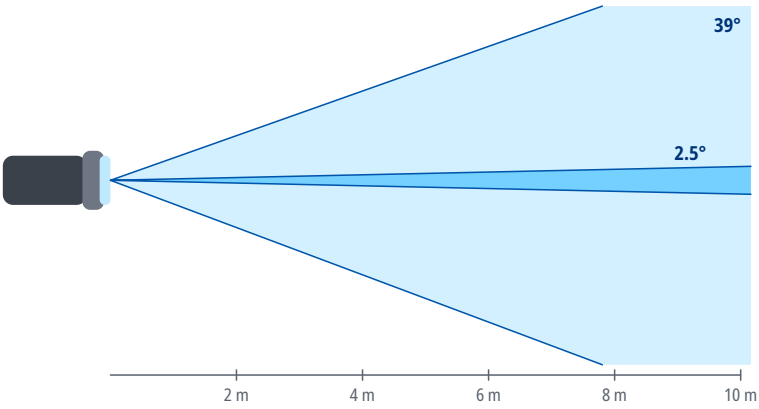
10 Technical specifications

Parameter	Value
Zoom	2.5–39°
Pan	540°
Tilt	215°
RDM	yes (manufacturer ID 0x3806, device model ID 0x0571)
Weight	24 kg
Operating temperature	-10 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2500–8000 K
Strobe frequency	1–12 Hz

Spot diameter



Distance	Ø 2.5°	Ø 39°
2 m	0.09 m	1.4 m
4 m	0.17 m	2.8 m
6 m	0.26 m	4.2 m
8 m	0.35 m	5.7 m
10 m	0.44 m	7.1 m
15 m	0.65 m	10.6 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.