DMX REFERENCE

MuseFresnel70CTPlus

Prolights



Manufacturer	Prolights
GDTF file	Prolights_MuseFresnel70CTPlus_151334.gdtf
GDTF revision	Rev 019 - Extensive Spectrum Data, Uploaded to GDTF Share. · 2026-07-17
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1 About this manual

This document describes the MuseFresnel70CTPlus by Prolights. It was compiled from the GDTF file Prolights_MuseFresnel70CTPlus_151334.gdtf from the GDTF-Share library.

File revision: “Rev 019 - Extensive Spectrum Data, Uploaded to GDTF Share.”.

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 Prolights; 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	1,450 W
Weight	29.5 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Basic_CTC	35	14	1, 36, 71, 106, ...
Standard_RGB	41	12	1, 42, 83, 124, ...
Standard_CMY	41	12	1, 42, 83, 124, ...
Advanced_xy	40	12	1, 41, 81, 121, ...
RAW	46	11	1, 47, 93, 139, ...

No light? Check these channels

- Basic_CTC: CH 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- Standard_RGB: CH 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- Standard_CMY: CH 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- Advanced_xy: CH 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- RAW: CH 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”


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

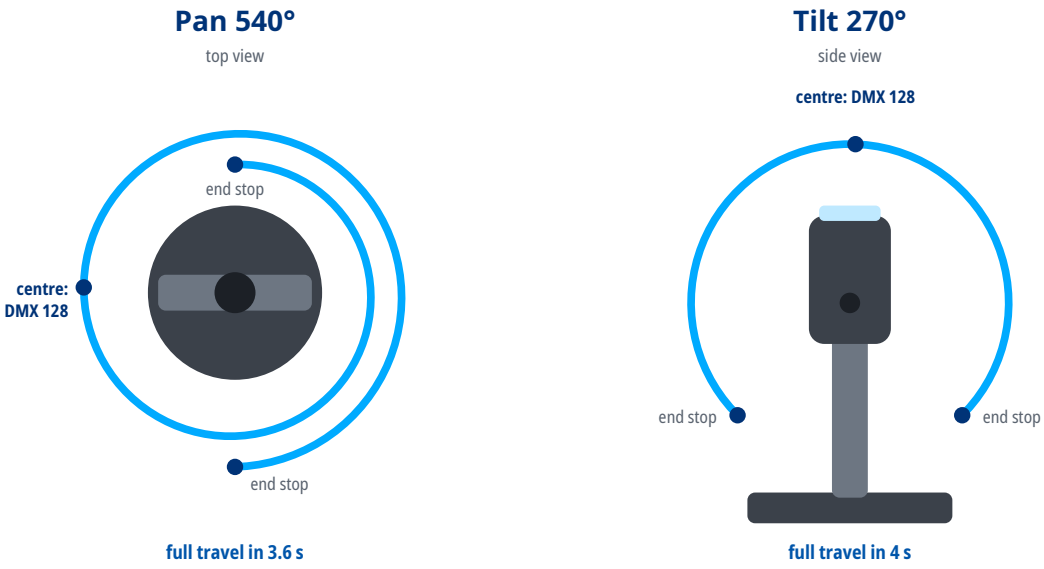
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, 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

Description in the GDTF file

“The Muse Fresnel70CT+ series represents a breakthrough in moving wash lights, available in multiple sizes and setting a new benchmark for Theatres, TV, and film sets of any scale. These fixtures combine the benefits of remote repositioning and beam control with the appeal of multicolored LED Fresnel fixtures.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

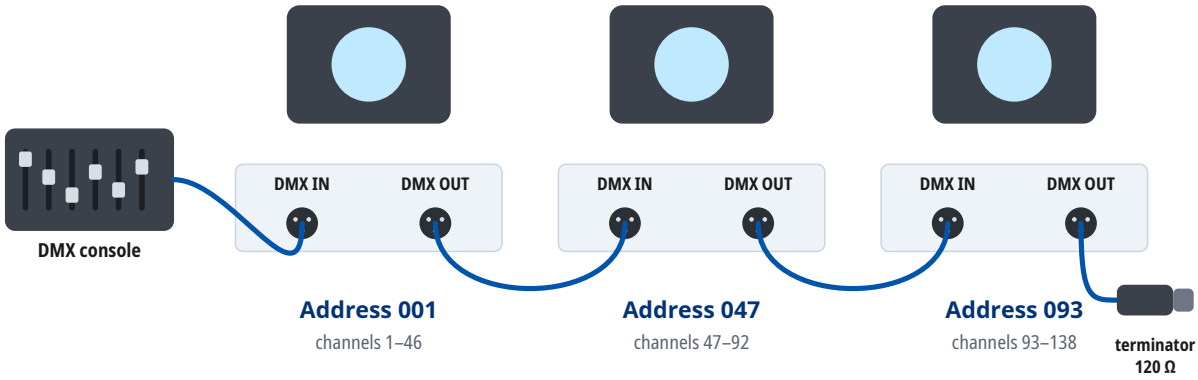
⚠ **WARNING**

- 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: 29.5 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 RAW: every unit occupies 46 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 “RAW”: 46.
- 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 “RAW”, you can use, for example, the start addresses 1, 47, 93, 139.
- 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

	Basic_CTC 35 channels	Standard_RGB 41 channels	Standard_CMY 41 channels	Advanced_xy 40 channels	RAW 46 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3	1, 3
Dimmer	5	5	5	5	5
Shutter / strobe	7	7	7	7	7
Color mixing		8, 10, 12	8, 10, 12		6× (8–18)
Color temperature	8	15	15	13	21
Color wheel	14	20	20	19	25
Frost	17	23	23	22	28
Zoom	20	26	26	25	31
Focus	22	28	28	27	33
Iris	18	24	24	23	29
Effects / macros	32	19, 38	19, 38	37	43

Prism



Beam Shaper: Open
DMX 0–29

Indexing
DMX 30–59

Color wheel 1

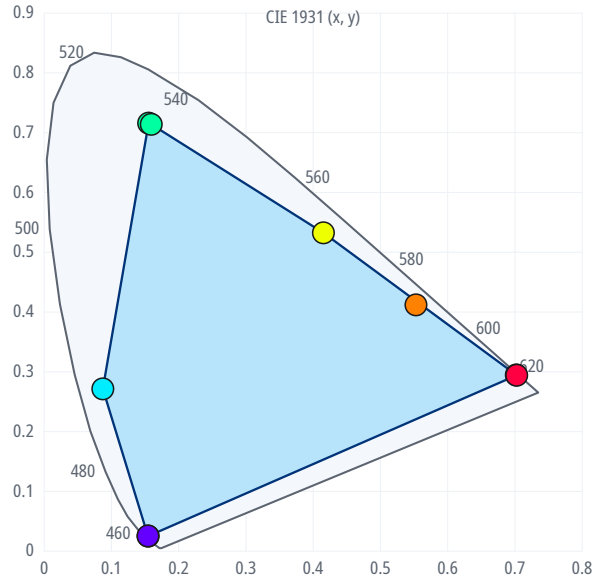


49 Lavender
50 Light Lavender
51 Pink Carnation
52 Medium Pink
53 Light Pink
54 Sunset Red
55 Dark Amber
56 Gold Amber
57 Medium Amber
58 Fire
59 Surprise Peach
60 Straw Tint
61 Medium Yellow
62 Lee Minus Green
63 Pale Gold 1
64 Orange 1
65 Deep Straw
66 Rose Purple
67 Deep Purple
68 Soft Green
69 2800K
70 3000K
71 3200K
72 3400K
73 3600K
74 3800K
75 4000K
76 4200K
77 4400K
78 4600K
79 4800K
80 5000K
81 5200K
82 5400K
83 5600K
84 6000K
85 6500K
86 7000K
87 8000K
88 9000K
89 10000K
90 Full On

Color wheel 2

1 Color Pos: Open
DMX 0
2 Color Pos: Dark Red
DMX 26
3 Color Pos: Dark Green
DMX 52
4 Color Pos: Dark Blue
DMX 78
5 Color Pos: Dark Magenta
DMX 104
6 Color Pos: Congo Blue
DMX 130

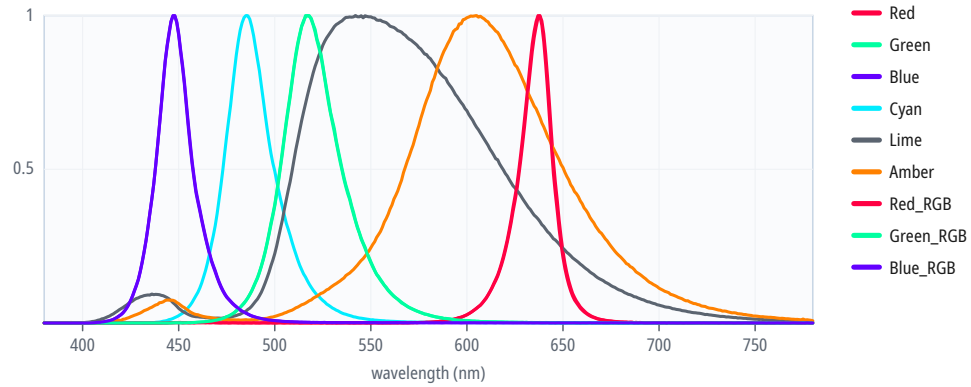
LED colors and the colors they mix



LED	x	y	nm
Red	0.702	0.295	628
Green	0.155	0.716	524
Blue	0.155	0.025	454
Cyan	0.087	0.272	488
Lime	0.415	0.532	568
Amber	0.553	0.412	591
Red_RGB	0.703	0.294	629
Green_RGB	0.159	0.714	525
Blue_RGB	0.154	0.025	454

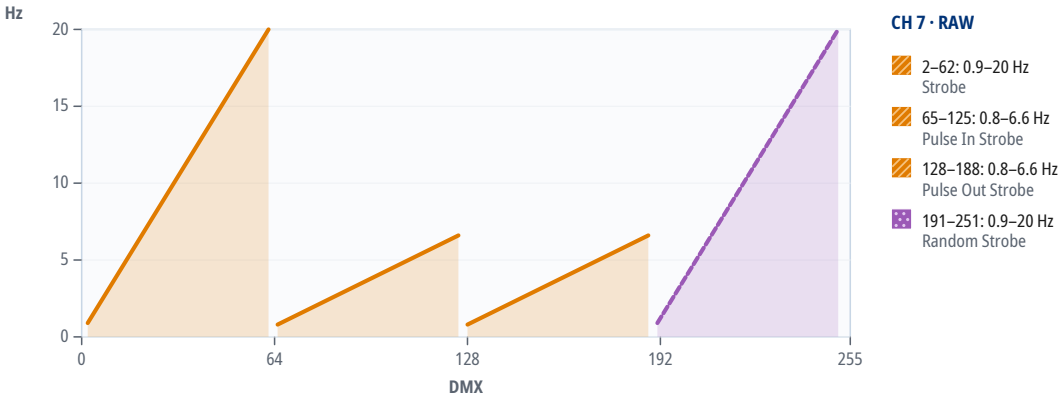
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Spectra of the light sources



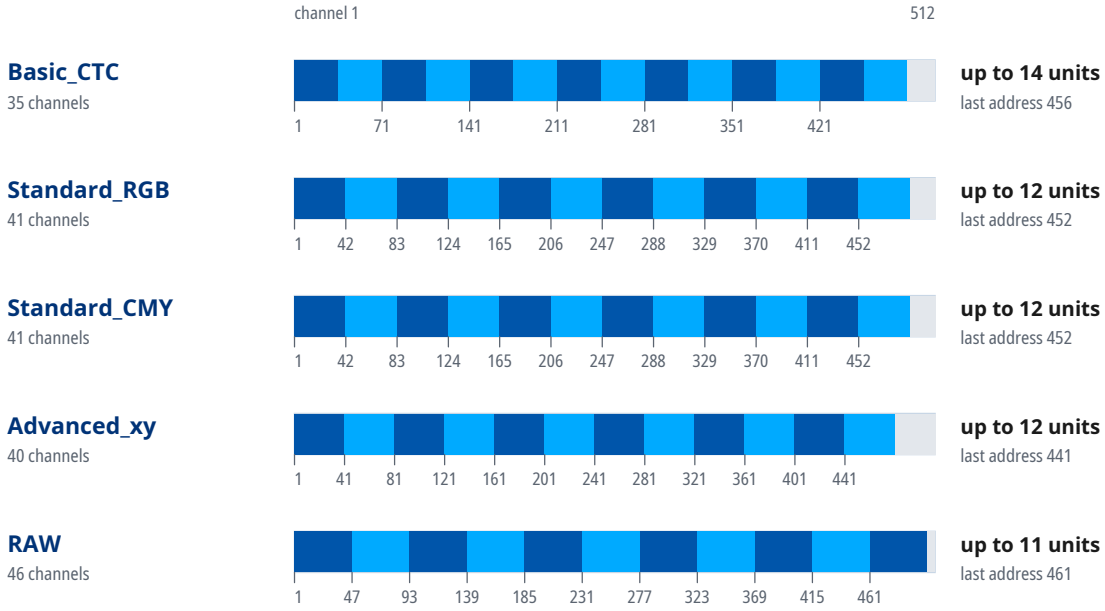
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “RAW”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	231	11	461	16	U2 · 185
2	47	7	277	12	U2 · 1	17	U2 · 231
3	93	8	323	13	U2 · 47	18	U2 · 277
4	139	9	369	14	U2 · 93	19	U2 · 323
5	185	10	415	15	U2 · 139	20	U2 · 369

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 Basic_CTC

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 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 7 Shutter 255, CH 14 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan 1
		128	Center
		128–255	Pan 1
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Tilt 1
		128	Center

CH	Function	DMX	Description
3	Tilt (continued)	128–255	Tilt 1
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer	0–255	Closed ... Open
		255	Open
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter	0–1	Open
		2–62	Strobe (0.9–20 Hz)
		63–64	Open_nofeature: Open
		65–125	Pulse In Strobe (0.8–6.6 Hz)
		126–127	Closed
		128–188	Pulse Out Strobe (0.8–6.6 Hz)
		189–190	Open_nofeature: Open
		191–251	Random Strobe (0.9–20 Hz)
		252–255	Open
8	Color Temperature	0–255	2200K ... 15000K
		255	15000K
9	Color Temperature Fine	0–255	Fine adjustment of CH 8
10	Tint	0–1	Neutral
		2–3	FullMinus
		4–126	MinusGreen
		127–128	Neutral
		129–253	PlusGreen
		254–255	FullPlus
11	CRI Mode	0–1	LedMode as Menu
		2–3	High Output - Lower CRI
		4–253	Linearly increase CRI
		254–255	Lower Output - High CRI
12	Gel Category	0–9	No function
		10–19	LEE Color Correction
		20–29	LEE Color Filters
		30–39	LEE 600 Series
		40–49	LEE Cosmetic Filters
		50–59	LEE 700 Series
		60–69	Rosco Color Correction
		70–79	Rosco CalColor
		80–89	Rosco Storaro Selection
		90–99	Rosco Cinelux
		100–109	Blackout
		110–255	No function
13	Gel Selector		When CH 12 is 60–69:
		0–1	3202 - Full CTB
		2–3	3203 - 3/4 CTB

CH	Function	DMX	Description
13	Gel Selector (continued)	4–5	3204 - 1/2 CTB
		6–7	3206 - 1/3 CTB
		8–9	3208 - 1/4 CTB
		10–11	3216 - 1/8 CTB
		12–13	3220 - Double CTB
		14–15	3407 - Full CTO
		16–17	3411 - 3/4 CTO
		18–19	3408 - 1/2 CTO
		20–21	3409 - 1/4 CTO
		22–23	3410 - 1/8 CTO
		24–25	3420 - Double CTO
		26–27	3441 - Full CTS
		28–29	3442 - 1/2 CTS
		30–31	3443 - 1/4 CTS
		32–33	3444 - 1/8 CTS
		34–35	3304 - Full Plusgreen
		36–37	3315 - 1/2 Plusgreen
		38–39	3316 - 1/4 Plusgreen
		40–41	3317 - 1/8 Plusgreen
		42–43	3308 - Full Minusgreen
		44–45	3309 - 3/4 Minusgreen
		46–47	3313 - 1/2 Minusgreen
		48–49	3314 - 1/4 Minusgreen
		50–51	3318 - 1/8 Minusgreen
		52–53	3310 - Fluorofilter
		54–55	3150 - Industrial Vapor
		56–57	3152 - Urban Vapor
		58–59	3107 - Tough Y-1
		60–61	3134 - Tough MT 54
		62–63	3106 - Tough MTY
		64–65	3102 - Tough MT2
		66–67	Blackout
		68–255	No function
			When CH 12 is 70–79:
		0–1	4215 - 15 Blue
		2–3	4230 - 30 Blue
		4–5	4260 - 60 Blue
		6–7	4290 - 90 Blue
		8–9	4307 - 7 Cyan
		10–11	4315 - 15 Cyan
		12–13	4330 - 30 Cyan
		14–15	4360 - 60 Cyan

CH	Function	DMX	Description
13	Gel Selector (continued)	16–17	4390 - 90 Cyan
		18–19	4415 - 15 Green
		20–21	4430 - 30 Green
		22–23	4460 - 60 Green
		24–25	4490 - 90 Green
		26–27	4515 - 15 Yellow
		28–29	4530 - 30 Yellow
		30–31	4560 - 60 Yellow
		32–33	4590 - 90 Yellow
		34–35	4615 - 15 Red
		36–37	4630 - 30 Red
		38–39	4660 - 60 Red
		40–41	4690 - 90 Red
		42–43	4715 - 15 Magenta
		44–45	4730 - 30 Magenta
		46–47	4760 - 60 Magenta
		48–49	4790 - 90 Magenta
		50–51	4815 - 15 Pink
		52–53	4830 - 30 Pink
		54–55	4860 - 60 Pink
		56–57	4890 - 90 Pink
		58–59	4915 - 15 Lavander
		60–61	4930 - 30 Lavander
		62–63	4960 - 60 Lavander
		64–65	4990 - 90 Lavander
		66–67	Blackout
		68–255	No function
			When CH 12 is 80–89:
		0–1	2001 - VS Red
		2–3	2202 - VS Orange
		4–5	2003 - VS Yellow
		6–7	2004 - VS Green
		8–9	2005 - VS Cyan
		10–11	2006 - VS Azure
		12–13	2007 - VS Blue
		14–15	2008 - VS Indigo
		16–17	2009 - VS Violet
		18–19	2010 - VS Magenta
		20–21	Blackout
		22–255	No function
			When CH 12 is 90–99:
		0–1	2 - Bastard Amber

CH	Function	DMX	Description
13	Gel Selector (continued)	2–3	302 - Pale Bastard Amber
		4–5	6 - No Color Straw
		6–7	8 - Pale Gold
		8–9	310 - Daffodil
		10–11	12 - Straw
		12–13	16 - Light Amber
		14–15	316 - Gallo Gold
		16–17	17 - Light Flame
		18–19	18 - Flame
		20–21	318 - Mayan Sun
		22–23	21 - Golden Amber
		24–25	321 - Soft Golden Amber
		26–27	23 - Orange
		28–29	325 - Henny Sky
		30–31	26 - Light Red
		32–33	33 - No Color Pink
		34–35	333 - Blush Pink
		36–37	34 - Flesh Pink
		38–39	37 - Pale Rose Pink
		40–41	41 - Salmon
		42–43	42 - Deep Salmon
		44–45	44 - Middle Rose
		46–47	47 - Light Rose Purple
		48–49	51 - Surprise Pink
		50–51	60 - No Color Blue
		52–53	360 - Clearwater
		54–55	62 - Booster Blue
		56–57	362 - Tipton Blue
		58–59	364 - Blue Bell
		60–61	65 - Daylight Blue
		62–63	365 - Tharon Delft Blue
		64–65	375 - Cerulean Blue
		66–67	376 - Bermuda Blue
		68–69	77 - Green Blue
		70–71	378 - Alice Blue
		72–73	80 - Primary Blue
		74–75	381 - Baldassari Blue
		76–77	83 - Medium Blue
		78–79	87 - Pale Yellow Green
		80–81	88 - Light Green
		82–83	89 - Moss Green
		84–85	91 - Primary Green

CH	Function	DMX	Description
13	Gel Selector (continued)	86–87	92 - Turquoise
		88–89	93 - Blue Green
		90–91	99 - Chocolate
		92–93	Blackout
		94–255	No function
			When CH 12 is 10–19:
		0–1	200 - Double CTB
		2–3	201 - Full CTB
		4–5	281 - 3/4 CTB
		6–7	202 - 1/2 CTB
		8–9	203 - 1/4 CTB
		10–11	218 - 1/8 CTB
		12–13	287 - Double CTO
		14–15	204 - Full CTO
		16–17	285 - 3/4 CTO
		18–19	205 - 1/2 CTO
		20–21	206 - 1/4 CTO
		22–23	223 - 1/8 CTO
		24–25	283 - 1 1/2 CTB
		26–27	286 - 1 1/2 CTO
		28–29	441 - Full CTS
		30–31	442 - 1/2 CTS
		32–33	443 - 1/4 CTS
		34–35	444 - 1/8 CTS
		36–37	207 - Full CTO + 3 ND
		38–39	208 - Full CTO + 6 ND
		40–41	212 - LCT Yellow Y1
		42–43	213 - White Flame Green
		44–45	219 - LEE Fluorescent Green
		46–47	230 - Super Correction LCT Y
		48–49	232 - Super Correction WF Green
		50–51	236 - HMI to TW
		52–53	237 - CID to TW
		54–55	238 - CSI to TW
		56–57	241 - LEE Fluorescent 5700K
		58–59	242 - LEE Fluorescent 4300K
		60–61	243 - LEE Fluorescent 3600K
		62–63	244 - LEE Plus Green
		64–65	245 - 1/2 Plus Green
		66–67	246 - 1/4 Plus Green
		68–69	278 - 1/8 Plus Green
		70–71	247 - LEE Minus Green

CH	Function	DMX	Description
13	Gel Selector (continued)	72–73	248 - 1/2 Minus Green
		74–75	249 - 1/4 Minus Green
		76–77	279 - 1/8 Minus Green
		78–79	Blackout
		80–255	No function
			When CH 12 is 20–29:
		0–1	2 - Rose Pink
		2–3	3 - Lavander Tint
		4–5	4 - Medium Bastard Amber
		6–7	7 - Pale Yellow
		8–9	8 -Dark Salmon
		10–11	9 - Pale Amber Gold
		12–13	10 - Medium Yellow
		14–15	13 - Straw Tint
		16–17	17 - Surprise Peach
		18–19	19 - Fire
		20–21	20 - Medium Amber
		22–23	21 - Gold Amber
		24–25	22 - Dark Amber
		26–27	24 - Scarlet
		28–29	25 - Sunset Red
		30–31	26 - Bright Red
		32–33	35 - Light Pink
		34–35	36 - Medium Pink
		36–37	46 - Dark Magenta
		38–39	48 - Rose Purple
		40–41	52 - Light Lavander
		42–43	53 - Paler Lavander
		44–45	58 - Lavander
		46–47	61 - Mist Blue
		48–49	63 - Pale Blue
		50–51	68 - Sky Blue
		52–53	75 - Evening Blue
		54–55	79 - Just Blue
		56–57	85 - Deeper Blue
		58–59	88 - Lime Green
		60–61	89 - Moss Green
		62–63	90 - Dark Yellow Green
		64–65	100 - Spring Yellow
		66–67	101 - Yellow
		68–69	102 - Light Amber
		70–71	103 - Straw

CH	Function	DMX	Description
13	Gel Selector (continued)	72–73	104 - Deep Amber
		74–75	106 - Primary Red
		76–77	107 - Light Rose
		78–79	108 - English Rose
		80–81	109 - Light Salmon
		82–83	110 - Middle Rose
		84–85	111 - Dark Pink
		86–87	113 - Magenta
		88–89	115 - Peacock Blue
		90–91	117 - Steel Blue
		92–93	118 - Light Blue
		94–95	120 - Deep Blue
		96–97	121 - LEE Green
		98–99	122 - Fern Green
		100–101	124 - Dark Green
		102–103	127 - Smokey Pink
		104–105	128 - Bright Pink
		106–107	131 - Marine Blue
		108–109	134 - Golden Amber
		110–111	135 - Deep Golden Amber
		112–113	136 - Pale Lavander
		114–115	137 - Special Lavander
		116–117	138 - Pale Green
		118–119	140 - Summer Blue
		120–121	142 - Pale Violet
		122–123	143 - Pale Navy Blue
		124–125	144 - No Color Blue
		126–127	147 - Apricot
		128–129	148 - Bright Rose
		130–131	151 - Gold Tint
		132–133	152 - Pale Gold
		134–135	153 - Pale Salmon
		136–137	154 - Pale Rose
		138–139	156 - Chocolate
		140–141	157 - Pink
		142–143	159 - No Color Straw
		144–145	161 - Slate Blue
		146–147	162 - Bastard Amber
		148–149	164 - Flame Red
		150–151	165 - Daylight Blue
		152–153	169 - Lilac Tint
		154–155	170 - Deep Lavander

CH	Function	DMX	Description
13	Gel Selector (continued)	156–157	174 - Dark Steel Blue
		158–159	176 - Loving Amber
		160–161	180 - Dark Lavander
		162–163	182 - Light Red
		164–165	192 - Flesh Pink
		166–167	194 - Surprise Pink
		168–169	195 - Zenith Blue
		170–171	196 - True Blue
		172–173	197 - Alice Blue
		174–175	198 - Palace Blue
		176–177	199 - Regal Blue
		178–179	Blackout
		180–255	No function
			When CH 12 is 30–39:
		0–1	600 - Arctic White
		2–3	601 - Silver
		4–5	602 - Platinum
		6–7	603 - Moonlight White
		8–9	604 - Full CT 85
		10–11	650 - Industry Sodium
		12–13	651 - HI Sodium
		14–15	652 - Urban Sodium
		16–17	653 - LO Sodium
		18–19	Blackout
		20–255	No function
			When CH 12 is 40–49:
		0–1	184 - Cosmetic Peach
		2–3	186 - Cosmetic Silver Rose
		4–5	187 - Cosmetic Rouge
		6–7	188 - Cosmetic Highlight
		8–9	189 - Cosmetic Silver Moss
		10–11	191 - Cosmetic Aqua Blue
		12–13	705 - Lily Frost
		14–15	717 - Shanklin Frost
		16–17	718 - Half Shanklin Frost
		18–19	720 - Durham Daylight Frost
		20–21	749 - Hampshire Rose
		22–23	774 - Soft Amber Key 1
		24–25	775 - Soft Amber Key 2
		26–27	791 - Moroccan Frost
		28–29	217 - Blue Diffusion
		30–31	221 - Blue Frost

CH	Function	DMX	Description
13	Gel Selector (continued)	32–33	224 - Daylight Blue Frost
		34–35	Blackout
		36–255	No function
			When CH 12 is 50–59:
		0–1	700 - Perfect Lavander
		2–3	701 - Provence
		4–5	702 - Special Pale Lavander
		6–7	703 - Cold Lavander
		8–9	704 - Lily
		10–11	706 - Kings Fals Lavander
		12–13	708 - Cool Lavander
		14–15	709 - Electric Lilac
		16–17	710 - Spir Special Blue
		18–19	711 - Cold Blue
		20–21	712 - Bedford Blue
		22–23	714 - Elysian Blue
		24–25	715 - Cabana Blue
		26–27	716 - Mikkel Blue
		28–29	719 - Colour Wash Blue
		30–31	721 - Berry Blue
		32–33	723 - Virgin Blue
		34–35	724 - Ocean Blue
		36–37	725 - Old Steel Blue
		38–39	728 - Steel Green
		40–41	730 - Liberty Green
		42–43	731 - Dirty Ice
		44–45	733 - Damp Squib
		46–47	738 - JAS Green
		48–49	742 - Bram Brown
		50–51	744 - Dirty White
		52–53	746 - Brown
		54–55	747 Easy White
		56–57	748 - Seedy Pink
		58–59	763 - Wheat
		60–61	764 - Sun Colour Straw
		62–63	765 - LEE Yellow
		64–65	773 - Cardbox Amber
		66–67	776 - Nectarine
		68–69	778 - Millenium Gold
		70–71	779 - Bastard Pink
		72–73	781 - Terry Red
		74–75	789 - Blood Red

CH	Function	DMX	Description
13	Gel Selector (continued)	76–77	790 - Moroccan Pink
		78–79	794 - Pretty n' Pink
		80–81	795 - Magical Magenta
		82–83	Blackout
		84–255	No function
14	Colors	0	Color Pos: Open
		1–25	Open + Dark Red
		26	Color Pos: Dark Red
		27–51	Dark Red + Dark Green
		52	Color Pos: Dark Green
		53–77	Dark Green + Dark Blue
		78	Color Pos: Dark Blue
		79–103	Dark Blue + Dark Magenta
		104	Color Pos: Dark Magenta
		105–129	Dark Magenta + Congo Blue
		130	Color Pos: Congo Blue
		131–155	Congo Blue + Open
		156–159	Color Pos: Open
		160–165	Color Slot: Open
		166–171	Color Slot: Dark Red
		172–177	Color Slot: Dark Green
		178–183	Color Slot: Dark Blue
		184–189	Color Slot: Dark Magenta
		190–199	Color Slot: Congo Blue
		200	CW SPin: Fast
		201–223	CW SPin: Fast2Slow (393.6–8.42 °/s)
		224	CW SPin: Slow
		225–230	Stop
		231	CCW Spin: Slow
		232–254	CCW Spin: SLow2Fast (8.42–393.6 °/s)
		255	CCW Spin: Fast
15	Beam Shaper	0–29	Beam Shaper: Open
		30–59	Indexing
		60–89	Rotation
		90–255	Reserved
16	Beam Shaper Rotation		When CH 15 is 0–59:
		0	Beam Shaper Pos
		1–127	Min
		128	Center
		129–255	Max
			When CH 15 is 60–89:
		0	No rotation

CH	Function	DMX	Description
16	Beam Shaper Rotation (continued)	1–127	Fast to slow CW (360–1 °/s)
		128	No rotation
		129–255	Slow to fast CW (1–360 °/s)
17	Frost		Light Frost
		0	Open
		1–254	Open ... Light Frost max
		255	Light Frost max
18	Iris	0–1	Iris Open
		1–127	Large ... Small
		127	Small
		127–128	Iris
		128–129	Iris Close
		129–130	Iris Closed
		130–154	Iris Pulse Close: Fast ... Slow
		154	Iris Pulse Close: Slow
		154–155	Iris Pulse Close
		155–179	Iris Pulse Open: Slow ... Fast
		179	Iris Pulse Open: Fast
		179–180	Iris Pulse Open
		180–204	Iris Random Pulse Close: Slow ... Fast
		204	Iris Random Pulse Close: Fast
		204–205	Iris Random Pulse Close
		205–229	Iris Random Pulse Open: Slow ... Fast
		229	Iris Random Pulse Open: Fast
		229–230	Iris Random Pulse Open
		230–255	No function
19	Iris Fine	0–255	Fine adjustment of CH 18
20	Zoom	0–255	Narrow ... Wide
		255	Wide
21	Zoom Fine	0–255	Fine adjustment of CH 20
22	Focus	0	Min
		1–126	Min ... Mid
		127	Mid
		128–254	Mid ... Max
		255	Max
23	Blade 1 A	0	Out
		1–254	Out ... In
		255	In
24	Blade 1 Rotation	0–127	From -25 degrees to 0
		128	0 degrees
		129–255	From 0 degrees to +25
25	Blade 2 A	0	Out

CH	Function	DMX	Description
25	Blade 2 A (continued)	1–254	Out … In
		255	In
26	Blade 2 Rotation	0–127	From -25 degrees to 0
		128	0 degrees
		129–255	From 0 degrees to +25
27	Blade 3 A	0	Out
		1–254	Out … In
		255	In
28	Blade 3 Rotation	0–127	From -25 degrees to 0
		128	0 degrees
		129–255	From 0 degrees to +25
29	Blade 4 A	0	Out
		1–254	Out … In
		255	In
30	Blade 4 Rotation	0–127	From -25 degrees to 0
		128	0 degrees
		129–255	From 0 degrees to +25
31	Shaper Rotation	0–127	Left to Center
		128	Center
		129–255	Center To Right
32	Shaper Macros	0–3	No function
		4–10	1
		11–17	2
		18–24	3
		25–31	4
		32–38	5
		39–45	6
		46–52	7
		53–59	8
		60–66	9
		67–73	10
		74–80	11
		81–87	12
		88–94	13
		95–101	14
		102–108	15
		109–115	16
		116–122	17
		123–129	18
		130–136	19
		137–143	20
		144–150	21

CH	Function	DMX	Description
32	Shaper Macros (continued)	151–157	22
		158–164	23
		165–171	24
		172–178	25
		179–185	26
		186–192	27
		193–199	28
		200–206	29
		207–213	30
		214–220	31
		221–227	32
		228–234	33
		235–241	34
		242–248	35
		249–255	36
33	Shaper Macros Speed	0	Slow
		1–254	Slow ... Fast
		255	Fast
34	LED Frequency		PWM Adjustment
		0–7	No function (PWM from menu)
		8–127	Adjustment -20% to 0%
		128–135	PWM from menu
		136–255	Adjustment 0% to +20%
35	Control	0–1	No function
		2–3	Pan Reverse ON
		4–5	Pan Resverse OFF
		6–7	Tilt Reverse ON
		8–9	Tilt Reverse OFF
		10–11	P/T Mode Fast
		12–13	P/T Mode Mid
		14–15	P/T Mode Slow
		16–35	No function
		36–37	DISPLAY ON
		38–39	DISPLAY 10S
		40–41	DISPLAY 20S
		42–43	DISPLAY 30S
		44–45	FLIP DISPLAY ON
		46–47	FLIP DISPLAY OFF
		48–49	FLIP DISPLAY AUTO
		50–51	KEY LOCK ON
		52–53	KEY LOCK OFF
		54–55	FAN MODE AUT0

CH	Function	DMX	Description
35	Control (continued)	56–57	FAN MODE SILENT
		58–59	FAN MODE HIGH
		60–61	NO SIGNAL HOLD
		62–63	NO SIGNAL BLACKOUT
		64–67	No function
		68–69	LINEAR
		70–71	S-CURVE
		72–73	SQUARE LAW
		74–75	INVERSE SQUARE LAW
		76–77	HIGH RES@LOW
		78–79	DIMMER SPEED AUTO
		80–81	DIMMER SPEED FAST
		82–83	DIMMER SPEED MEDIUM
		84–85	DIMMER SPEED SLOW
		86–87	DIMMER SPEED OFF
		88–89	FADE OFF END
		90–91	SNAP OFF END
		92–93	Spektra: ON
		94–95	PURE COLORS
		96–97	Spektra: OFF
		98–99	HQ
		100–101	HB
		102–103	WHITE POINT 3200K
		104–105	WHITE POINT 4000K
		106–107	WHITE POINT 5600K
		108–109	WHITE POINT 6000K
		110–111	WHITE POINT 6500K
		112–113	WHITE POINT 8000K
		114–115	600Hz
		116–117	1200Hz
		118–119	2000Hz
		120–121	4000Hz
		122–123	6000Hz
		124–125	25KHz
		126–127	50kHz
		128–129	Tungsten Emulation: ON
		130–131	Tungsten Emulation: OFF
		132–133	COLOR RGB
		134–135	COLOR CMY
		136–137	INVERT ZOOM OFF
		138–139	INVERT ZOOM ON
		140–141	Invert Blades OFF

CH	Function	DMX	Description
35	Control (continued)	142–143	Invert Blades ON
		144–199	Reserved
		200–201	All Reset
		202–203	PanTilt Reset
		204–205	Zoom/Focus Reset
		206–207	ColorWheel Reset
		208–209	Reserved 1
		210–211	Effect Reset
		212–213	All Blades Reset
		214–251	No function
		252–253	ControlChannel Reset
		254–255	Reserved 2

Mode Standard_RGB

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 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 7 Shutter 255, CH 8 Red 255, CH 10 Green 255, CH 12 Blue 255, CH 14 CTC<>COLORS 255, CH 19 Color Macro 0, CH 20 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Basic_CTC” (p. 13)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Basic_CTC” (p. 13)

CH	Function	DMX	Description
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer		Same as CH 5 in the mode “Basic_CTC” (p. 14)
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter		Same as CH 7 in the mode “Basic_CTC” (p. 14)
8	Red	0–255	Min ... Max
		255	Max
9	Red Fine	0–255	Fine adjustment of CH 8
10	Green	0–255	Min ... Max
		255	Max
11	Green Fine	0–255	Fine adjustment of CH 10
12	Blue	0–255	Min ... Max
		255	Max
13	Blue Fine	0–255	Fine adjustment of CH 12
14	CTC<>COLORS	0	CCT
		1–254	CCT ... RAW COLORS
		255	RAW COLORS
15	Color Temperature		Same as CH 8 in the mode “Basic_CTC” (p. 14)
16	Color Temperature Fine	0–255	Fine adjustment of CH 15
17	Tint		Same as CH 10 in the mode “Basic_CTC” (p. 14)
18	CRI Mode		Same as CH 11 in the mode “Basic_CTC” (p. 14)
19	Color Macro	0–1	Open
		2–3	Red
		4–5	Green
		6–7	Blue
		8–9	Cyan
		10–11	Magenta
		12–13	Yellow
		14–15	Dirty White
		16–17	Alice Blue
		18–19	Congo Blue
		20–21	Dark Steel Blue
		22–23	Deep Lavender
		24–25	Lilac Ting
		26–27	Daylight Blue
		28–29	Flame Red
		30–31	Bastard Amber
		32–33	Deep Orange
		34–35	Pale Gold
		36–37	Apricot
		38–39	Bright Blue
		40–41	Primary Green
		42–43	Special Lavender

CH	Function	DMX	Description
19	Color Macro (continued)	44–45	Pale Lavender
		46–47	Deep Golden Amber
		48–49	Medium Blue
		50–51	Bright Pink
		52–53	Mauve
		54–55	Dark Green
		56–57	Lee Green
		58–59	Dark Blue
		60	Light Blue
		61	Steel Blue
		62–63	Medium Blue-Green
		64–65	Peacock Blue
		66–67	Magenta
		68–69	Magenta ... Dark Pink
		70–71	Dark Pink
		72–73	Middle Rose
		74–75	Light Salmon
		76–77	English Rose
		78–79	Light Rose
		80–81	Orange
		82–83	Deep Amber
		84–85	Straw
		86–87	Light Amber
		88–89	Spring Yellow
		90–91	Dark Yellow Green
		92–93	Just Blue
		94–95	Sky Blue
		96–97	Lavender
		98–99	Light Lavender
		100–101	Pink Carnation
		102–103	Medium Pink
		104–105	Light Pink
		106–107	Sunset Red
		108–109	Dark Amber
		110–111	Gold Amber
		112–113	Medium Amber
		114–115	Fire
		116–117	Surprise Peach
		118–119	Straw Tint
		120–121	Medium Yellow
		122–123	Lee Minus Green
		124–125	Pale Gold

CH	Function	DMX	Description
19	Color Macro (continued)	126–127	Orange
		128–129	Deep Straw
		130–131	Rose Purple
		132–133	Deep Purple
		134–135	Soft Green
		136–211	TBD
		212–213	2800K
		214–215	3000K
		216–217	3200K
		218–219	3400K
		220–221	3600K
		222–223	3800K
		224–225	4000K
		226–227	4200K
		228–229	4400K
		230–231	4600K
		232–233	4800K
		234–235	5000K
		236–237	5200K
		238–239	5400K
		240–241	5600K
		242–243	6000K
		244–245	6500K
		246–247	7000K
		248–249	8000K
		250–251	9000K
		252–253	10000K
		254–255	6xLED ON
20	Colors		Same as CH 14 in the mode “Basic_CTC” (p. 23)
21	Beam Shaper		Same as CH 15 in the mode “Basic_CTC” (p. 23)
22	Beam Shaper Rotation		When CH 21 is 0–59:
		0	Beam Shaper Pos
		1–127	Min
		128	Center
		129–255	Max
			When CH 21 is 60–89:
		0	No rotation
		1–127	Fast to slow CW (360–1 °/s)
		128	No rotation
		129–255	Slow to fast CW (1–360 °/s)
23	Frost		Same as CH 17 in the mode “Basic_CTC” (p. 24)
24	Iris		Same as CH 18 in the mode “Basic_CTC” (p. 24)

CH	Function	DMX	Description
25	Iris Fine	0–255	Fine adjustment of CH 24
26	Zoom		Same as CH 20 in the mode “Basic_CTC” (p. 24)
27	Zoom Fine	0–255	Fine adjustment of CH 26
28	Focus		Same as CH 22 in the mode “Basic_CTC” (p. 24)
29	Blade 1 A		Same as CH 23 in the mode “Basic_CTC” (p. 24)
30	Blade 1 Rotation		Same as CH 24 in the mode “Basic_CTC” (p. 24)
31	Blade 2 A		Same as CH 25 in the mode “Basic_CTC” (p. 24)
32	Blade 2 Rotation		Same as CH 26 in the mode “Basic_CTC” (p. 25)
33	Blade 3 A		Same as CH 27 in the mode “Basic_CTC” (p. 25)
34	Blade 3 Rotation		Same as CH 28 in the mode “Basic_CTC” (p. 25)
35	Blade 4 A		Same as CH 29 in the mode “Basic_CTC” (p. 25)
36	Blade 4 Rotation		Same as CH 30 in the mode “Basic_CTC” (p. 25)
37	Shaper Rotation		Same as CH 31 in the mode “Basic_CTC” (p. 25)
38	Shaper Macros		Same as CH 32 in the mode “Basic_CTC” (p. 25)
39	Shaper Macros Speed		Same as CH 33 in the mode “Basic_CTC” (p. 26)
40	LED Frequency		Same as CH 34 in the mode “Basic_CTC” (p. 26)
41	Control		Same as CH 35 in the mode “Basic_CTC” (p. 26)

Mode Standard_CMY

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 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 7 Shutter 255, CH 8 Cyan 0, CH 10 Magenta 0, CH 12 Yellow 0, CH 14 CTC<>COLORS 255, CH 19 Color Macro 0, CH 20 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Basic_CTC” (p. 13)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Basic_CTC” (p. 13)

CH	Function	DMX	Description
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer		Same as CH 5 in the mode “Basic_CTC” (p. 14)
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter		Same as CH 7 in the mode “Basic_CTC” (p. 14)
8	Cyan	0–255	Min ... Max
		255	Max
9	Cyan Fine	0–255	Fine adjustment of CH 8
10	Magenta	0–255	Min ... Max
		255	Max
11	Magenta Fine	0–255	Fine adjustment of CH 10
12	Yellow	0–255	Min ... Max
		255	Max
13	Yellow Fine	0–255	Fine adjustment of CH 12
14	CTC<>COLORS		Same as CH 14 in the mode “Standard_RGB” (p. 30)
15	Color Temperature		Same as CH 8 in the mode “Basic_CTC” (p. 14)
16	Color Temperature Fine	0–255	Fine adjustment of CH 15
17	Tint		Same as CH 10 in the mode “Basic_CTC” (p. 14)
18	CRI Mode		Same as CH 11 in the mode “Basic_CTC” (p. 14)
19	Color Macro		Same as CH 19 in the mode “Standard_RGB” (p. 30)
20	Colors		Same as CH 14 in the mode “Basic_CTC” (p. 23)
21	Beam Shaper		Same as CH 15 in the mode “Basic_CTC” (p. 23)
22	Beam Shaper Rotation		Same as CH 22 in the mode “Standard_RGB” (p. 32)
23	Frost		Same as CH 17 in the mode “Basic_CTC” (p. 24)
24	Iris		Same as CH 18 in the mode “Basic_CTC” (p. 24)
25	Iris Fine	0–255	Fine adjustment of CH 24
26	Zoom		Same as CH 20 in the mode “Basic_CTC” (p. 24)
27	Zoom Fine	0–255	Fine adjustment of CH 26
28	Focus		Same as CH 22 in the mode “Basic_CTC” (p. 24)
29	Blade 1 A		Same as CH 23 in the mode “Basic_CTC” (p. 24)
30	Blade 1 Rotation		Same as CH 24 in the mode “Basic_CTC” (p. 24)
31	Blade 2 A		Same as CH 25 in the mode “Basic_CTC” (p. 24)
32	Blade 2 Rotation		Same as CH 26 in the mode “Basic_CTC” (p. 25)
33	Blade 3 A		Same as CH 27 in the mode “Basic_CTC” (p. 25)
34	Blade 3 Rotation		Same as CH 28 in the mode “Basic_CTC” (p. 25)
35	Blade 4 A		Same as CH 29 in the mode “Basic_CTC” (p. 25)
36	Blade 4 Rotation		Same as CH 30 in the mode “Basic_CTC” (p. 25)
37	Shaper Rotation		Same as CH 31 in the mode “Basic_CTC” (p. 25)
38	Shaper Macros		Same as CH 32 in the mode “Basic_CTC” (p. 25)
39	Shaper Macros Speed		Same as CH 33 in the mode “Basic_CTC” (p. 26)
40	LED Frequency		Same as CH 34 in the mode “Basic_CTC” (p. 26)
41	Control		Same as CH 35 in the mode “Basic_CTC” (p. 26)

Mode Advanced_xy

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 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 7 Shutter 255, CH 19 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Basic_CTC” (p. 13)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Basic_CTC” (p. 13)

CH	Function	DMX	Description
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer		Same as CH 5 in the mode “Basic_CTC” (p. 14)
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter		Same as CH 7 in the mode “Basic_CTC” (p. 14)
8	CIE X	0–255	Min ... Max
		255	Max
9	CIE X Fine	0–255	Fine adjustment of CH 8
10	CIE Y	0–255	Min ... Max
		255	Max
11	CIE Y Fine	0–255	Fine adjustment of CH 10
12	CTC<>XY	0	CCT
		1–254	CCT ... XY
		255	XY
13	Color Temperature		Same as CH 8 in the mode “Basic_CTC” (p. 14)
14	Color Temperature Fine	0–255	Fine adjustment of CH 13
15	Tint		Same as CH 10 in the mode “Basic_CTC” (p. 14)
16	CRI Mode		Same as CH 11 in the mode “Basic_CTC” (p. 14)
17	Gel Category		Same as CH 12 in the mode “Basic_CTC” (p. 14)
18	Gel Selector		When CH 17 is 60–69:
		0–1	3202 - Full CTB
		2–3	3203 - 3/4 CTB
		4–5	3204 - 1/2 CTB
		6–7	3206 - 1/3 CTB
		8–9	3208 - 1/4 CTB
		10–11	3216 - 1/8 CTB
		12–13	3220 - Double CTB
		14–15	3407 - Full CTO
		16–17	3411 - 3/4 CTO
		18–19	3408 - 1/2 CTO
		20–21	3409 - 1/4 CTO
		22–23	3410 - 1/8 CTO
		24–25	3420 - Double CTO
		26–27	3441 - Full CTS
		28–29	3442 - 1/2 CTS
		30–31	3443 - 1/4 CTS
		32–33	3444 - 1/8 CTS
		34–35	3304 - Full Plusgreen
		36–37	3315 - 1/2 Plusgreen
		38–39	3316 - 1/4 Plusgreen
		40–41	3317 - 1/8 Plusgreen
		42–43	3308 - Full Minusgreen

CH	Function	DMX	Description
18	Gel Selector (continued)	44–45	3309 - 3/4 Minusgreen
		46–47	3313 - 1/2 Minusgreen
		48–49	3314 - 1/4 Minusgreen
		50–51	3318 - 1/8 Minusgreen
		52–53	3310 - Fluorofilter
		54–55	3150 - Industrial Vapor
		56–57	3152 - Urban Vapor
		58–59	3107 - Tough Y-1
		60–61	3134 - Tough MT 54
		62–63	3106 - Tough MTY
		64–65	3102 - Tough MT2
		66–67	Blackout
		68–255	No function
			When CH 17 is 70–79:
		0–1	4215 - 15 Blue
		2–3	4230 - 30 Blue
		4–5	4260 - 60 Blue
		6–7	4290 - 90 Blue
		8–9	4307 - 7 Cyan
		10–11	4315 - 15 Cyan
		12–13	4330 - 30 Cyan
		14–15	4360 - 60 Cyan
		16–17	4390 - 90 Cyan
		18–19	4415 - 15 Green
		20–21	4430 - 30 Green
		22–23	4460 - 60 Green
		24–25	4490 - 90 Green
		26–27	4515 - 15 Yellow
		28–29	4530 - 30 Yellow
		30–31	4560 - 60 Yellow
		32–33	4590 - 90 Yellow
		34–35	4615 - 15 Red
		36–37	4630 - 30 Red
		38–39	4660 - 60 Red
		40–41	4690 - 90 Red
		42–43	4715 - 15 Magenta
		44–45	4730 - 30 Magenta
		46–47	4760 - 60 Magenta
		48–49	4790 - 90 Magenta
		50–51	4815 - 15 Pink
		52–53	4830 - 30 Pink

CH	Function	DMX	Description
18	Gel Selector (continued)	54–55	4860 - 60 Pink
		56–57	4890 - 90 Pink
		58–59	4915 - 15 Lavander
		60–61	4930 - 30 Lavander
		62–63	4960 - 60 Lavander
		64–65	4990 - 90 Lavander
		66–67	Blackout
		68–255	No function
			When CH 17 is 80–89:
		0–1	2001 - VS Red
		2–3	2202 - VS Orange
		4–5	2003 - VS Yellow
		6–7	2004 - VS Green
		8–9	2005 - VS Cyan
		10–11	2006 - VS Azure
		12–13	2007 - VS Blue
		14–15	2008 - VS Indigo
		16–17	2009 - VS Violet
		18–19	2010 - VS Magenta
		20–21	Blackout
		22–255	No function
			When CH 17 is 90–99:
		0–1	2 - Bastard Amber
		2–3	302 - Pale Bastard Amber
		4–5	6 - No Color Straw
		6–7	8 - Pale Gold
		8–9	310 - Daffodil
		10–11	12 - Straw
		12–13	16 - Light Amber
		14–15	316 - Gallo Gold
		16–17	17 - Light Flame
		18–19	18 - Flame
		20–21	318 - Mayan Sun
		22–23	21 - Golden Amber
		24–25	321 - Soft Golden Amber
		26–27	23 - Orange
		28–29	325 - Henny Sky
		30–31	26 - Light Red
		32–33	33 - No Color Pink
		34–35	333 - Blush Pink
		36–37	34 - Flesh Pink

CH	Function	DMX	Description
18	Gel Selector (continued)	38–39	37 - Pale Rose Pink
		40–41	41 - Salmon
		42–43	42 - Deep Salmon
		44–45	44 - Middle Rose
		46–47	47 - Light Rose Purple
		48–49	51 - Surprise Pink
		50–51	60 - No Color Blue
		52–53	360 - Clearwater
		54–55	62 - Booster Blue
		56–57	362 - Tipton Blue
		58–59	364 - Blue Bell
		60–61	65 - Daylight Blue
		62–63	365 - Tharon Delft Blue
		64–65	375 - Cerulean Blue
		66–67	376 - Bermuda Blue
		68–69	77 - Green Blue
		70–71	378 - Alice Blue
		72–73	80 - Primary Blue
		74–75	381 - Baldassari Blue
		76–77	83 - Medium Blue
		78–79	87 - Pale Yellow Green
		80–81	88 - Light Green
		82–83	89 - Moss Green
		84–85	91 - Primary Green
		86–87	92 - Turquoise
		88–89	93 - Blue Green
		90–91	99 - Chocolate
		92–93	Blackout
		94–255	No function
			When CH 17 is 10–19:
		0–1	200 - Double CTB
		2–3	201 - Full CTB
		4–5	281 - 3/4 CTB
		6–7	202 - 1/2 CTB
		8–9	203 - 1/4 CTB
		10–11	218 - 1/8 CTB
		12–13	287 - Double CTO
		14–15	204 - Full CTO
		16–17	285 - 3/4 CTO
		18–19	205 - 1/2 CTO
		20–21	206 - 1/4 CTO
		22–23	223 - 1/8 CTO

CH	Function	DMX	Description
18	Gel Selector (continued)	24–25	283 - 1 1/2 CTB
		26–27	286 - 1 1/2 CTO
		28–29	441 - Full CTS
		30–31	442 - 1/2 CTS
		32–33	443 - 1/4 CTS
		34–35	444 - 1/8 CTS
		36–37	207 - Full CTO + 3 ND
		38–39	208 - Full CTO + 6 ND
		40–41	212 - LCT Yellow Y1
		42–43	213 - White Flame Green
		44–45	219 - LEE Fluorescent Green
		46–47	230 - Super Correction LCT Y
		48–49	232 - Super Correction WF Green
		50–51	236 - HMI to TW
		52–53	237 - CID to TW
		54–55	238 - CSI to TW
		56–57	241 - LEE Fluorescent 5700K
		58–59	242 - LEE Fluorescent 4300K
		60–61	243 - LEE Fluorescent 3600K
		62–63	244 - LEE Plus Green
		64–65	245 - 1/2 Plus Green
		66–67	246 - 1/4 Plus Green
		68–69	278 - 1/8 Plus Green
		70–71	247 - LEE Minus Green
		72–73	248 - 1/2 Minus Green
		74–75	249 - 1/4 Minus Green
		76–77	279 - 1/8 Minus Green
		78–79	Blackout
		80–255	No function
			When CH 17 is 20–29:
		0–1	2 - Rose Pink
		2–3	3 - Lavander Tint
		4–5	4 - Medium Bastard Amber
		6–7	7 - Pale Yellow
		8–9	8 -Dark Salmon
		10–11	9 - Pale Amber Gold
		12–13	10 - Medium Yellow
		14–15	13 - Straw Tint
		16–17	17 - Surprise Peach
		18–19	19 - Fire
		20–21	20 - Medium Amber
		22–23	21 - Gold Amber

CH	Function	DMX	Description
18	Gel Selector (continued)	24–25	22 - Dark Amber
		26–27	24 - Scarlet
		28–29	25 - Sunset Red
		30–31	26 - Bright Red
		32–33	35 - Light Pink
		34–35	36 - Medium Pink
		36–37	46 - Dark Magenta
		38–39	48 - Rose Purple
		40–41	52 - Light Lavander
		42–43	53 - Paler Lavander
		44–45	58 - Lavander
		46–47	61 - Mist Blue
		48–49	63 - Pale Blue
		50–51	68 - Sky Blue
		52–53	75 - Evening Blue
		54–55	79 - Just Blue
		56–57	85 - Deeper Blue
		58–59	88 - Lime Green
		60–61	89 - Moss Green
		62–63	90 - Dark Yellow Green
		64–65	100 - Spring Yellow
		66–67	101 - Yellow
		68–69	102 - Light Amber
		70–71	103 - Straw
		72–73	104 - Deep Amber
		74–75	106 - Primary Red
		76–77	107 - Light Rose
		78–79	108 - English Rose
		80–81	109 - Light Salmon
		82–83	110 - Middle Rose
		84–85	111 - Dark Pink
		86–87	113 - Magenta
		88–89	115 - Peacock Blue
		90–91	117 - Steel Blue
		92–93	118 - Light Blue
		94–95	120 - Deep Blue
		96–97	121 - LEE Green
		98–99	122 - Fern Green
		100–101	124 - Dark Green
		102–103	127 - Smokey Pink
		104–105	128 - Bright Pink
		106–107	131 - Marine Blue

CH	Function	DMX	Description
18	Gel Selector (continued)	108–109	134 - Golden Amber
		110–111	135 - Deep Golden Amber
		112–113	136 - Pale Lavander
		114–115	137 - Special Lavander
		116–117	138 - Pale Green
		118–119	140 - Summer Blue
		120–121	142 - Pale Violet
		122–123	143 - Pale Navy Blue
		124–125	144 - No Color Blue
		126–127	147 - Apricot
		128–129	148 - Bright Rose
		130–131	151 - Gold Tint
		132–133	152 - Pale Gold
		134–135	153 - Pale Salmon
		136–137	154 - Pale Rose
		138–139	156 - Chocolate
		140–141	157 - Pink
		142–143	159 - No Color Straw
		144–145	161 - Slate Blue
		146–147	162 - Bastard Amber
		148–149	164 - Flame Red
		150–151	165 - Daylight Blue
		152–153	169 - Lilac Tint
		154–155	170 - Deep Lavander
		156–157	174 - Dark Steel Blue
		158–159	176 - Loving Amber
		160–161	180 - Dark Lavander
		162–163	182 - Light Red
		164–165	192 - Flesh Pink
		166–167	194 - Surprise Pink
		168–169	195 - Zenith Blue
		170–171	196 - True Blue
		172–173	197 - Alice Blue
		174–175	198 - Palace Blue
		176–177	199 - Regal Blue
		178–179	Blackout
		180–255	No function
			When CH 17 is 30–39:
		0–1	600 - Arctic White
		2–3	601 - Silver
		4–5	602 - Platinum
		6–7	603 - Moonlight White

CH	Function	DMX	Description
18	Gel Selector (continued)	8–9	604 - Full CT 85
		10–11	650 - Industry Sodium
		12–13	651 - HI Sodium
		14–15	652 - Urban Sodium
		16–17	653 - LO Sodium
		18–19	Blackout
		20–255	No function
			When CH 17 is 40–49:
		0–1	184 - Cosmetic Peach
		2–3	186 - Cosmetic Silver Rose
		4–5	187 - Cosmetic Rouge
		6–7	188 - Cosmetic Highlight
		8–9	189 - Cosmetic Silver Moss
		10–11	191 - Cosmetic Aqua Blue
		12–13	705 - Lily Frost
		14–15	717 - Shanklin Frost
		16–17	718 - Half Shanklin Frost
		18–19	720 - Durham Daylight Frost
		20–21	749 - Hampshire Rose
		22–23	774 - Soft Amber Key 1
		24–25	775 - Soft Amber Key 2
		26–27	791 - Moroccan Frost
		28–29	217 - Blue Diffusion
		30–31	221 - Blue Frost
		32–33	224 - Daylight Blue Frost
		34–35	Blackout
		36–255	No function
			When CH 17 is 50–59:
		0–1	700 - Perfect Lavander
		2–3	701 - Provence
		4–5	702 - Special Pale Lavander
		6–7	703 - Cold Lavander
		8–9	704 - Lily
		10–11	706 - Kings Fals Lavander
		12–13	708 - Cool Lavander
		14–15	709 - Electric Lilac
		16–17	710 - Spir Special Blue
		18–19	711 - Cold Blue
		20–21	712 - Bedford Blue
		22–23	714 - Elysian Blue
		24–25	715 - Cabana Blue
		26–27	716 - Mikkel Blue

CH	Function	DMX	Description
18	Gel Selector (continued)	28–29	719 - Colour Wash Blue
		30–31	721 - Berry Blue
		32–33	723 - Virgin Blue
		34–35	724 - Ocean Blue
		36–37	725 - Old Steel Blue
		38–39	728 - Steel Green
		40–41	730 - Liberty Green
		42–43	731 - Dirty Ice
		44–45	733 - Damp Squib
		46–47	738 - JAS Green
		48–49	742 - Bram Brown
		50–51	744 - Dirty White
		52–53	746 - Brown
		54–55	747 Easy White
		56–57	748 - Seedy Pink
		58–59	763 - Wheat
		60–61	764 - Sun Colour Straw
		62–63	765 - LEE Yellow
		64–65	773 - Cardbox Amber
		66–67	776 - Nectarine
		68–69	778 - Millenium Gold
		70–71	779 - Bastard Pink
		72–73	781 - Terry Red
		74–75	789 - Blood Red
		76–77	790 - Moroccan Pink
		78–79	794 - Pretty n' Pink
		80–81	795 - Magical Magenta
		82–83	Blackout
		84–255	No function
19	Colors		Same as CH 14 in the mode “Basic_CTC” (p. 23)
20	Beam Shaper		Same as CH 15 in the mode “Basic_CTC” (p. 23)
21	Beam Shaper Rotation		When CH 20 is 0–59:
		0	Beam Shaper Pos
		1–127	Min
		128	Center
		129–255	Max
			When CH 20 is 60–89:
		0	No rotation
		1–127	Fast to slow CW (360–1 °/s)
		128	No rotation
		129–255	Slow to fast CW (1–360 °/s)
22	Frost		Same as CH 17 in the mode “Basic_CTC” (p. 24)

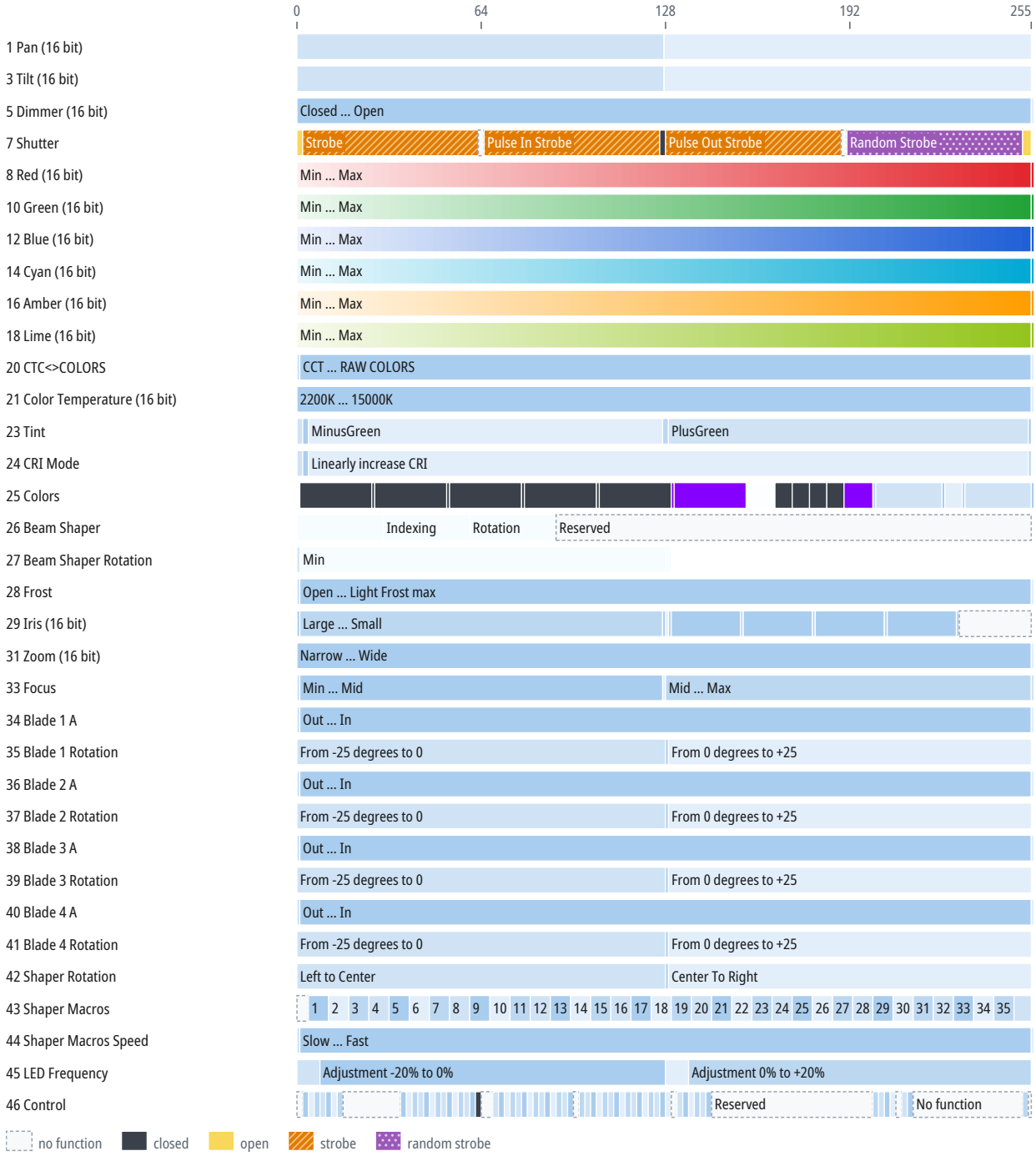
CH	Function	DMX	Description
23	Iris		Same as CH 18 in the mode “Basic_CTC” (p. 24)
24	Iris Fine	0–255	Fine adjustment of CH 23
25	Zoom		Same as CH 20 in the mode “Basic_CTC” (p. 24)
26	Zoom Fine	0–255	Fine adjustment of CH 25
27	Focus		Same as CH 22 in the mode “Basic_CTC” (p. 24)
28	Blade 1 A		Same as CH 23 in the mode “Basic_CTC” (p. 24)
29	Blade 1 Rotation		Same as CH 24 in the mode “Basic_CTC” (p. 24)
30	Blade 2 A		Same as CH 25 in the mode “Basic_CTC” (p. 24)
31	Blade 2 Rotation		Same as CH 26 in the mode “Basic_CTC” (p. 25)
32	Blade 3 A		Same as CH 27 in the mode “Basic_CTC” (p. 25)
33	Blade 3 Rotation		Same as CH 28 in the mode “Basic_CTC” (p. 25)
34	Blade 4 A		Same as CH 29 in the mode “Basic_CTC” (p. 25)
35	Blade 4 Rotation		Same as CH 30 in the mode “Basic_CTC” (p. 25)
36	Shaper Rotation		Same as CH 31 in the mode “Basic_CTC” (p. 25)
37	Shaper Macros		Same as CH 32 in the mode “Basic_CTC” (p. 25)
38	Shaper Macros Speed		Same as CH 33 in the mode “Basic_CTC” (p. 26)
39	LED Frequency		Same as CH 34 in the mode “Basic_CTC” (p. 26)
40	Control		Same as CH 35 in the mode “Basic_CTC” (p. 26)

Mode RAW

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 5 Dimmer above 0; CH 7 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 5 Dimmer 255, CH 7 Shutter 255, CH 8 Red 255, CH 10 Green 255, CH 12 Blue 255, CH 14 Cyan 255, CH 16 Amber 255, CH 18 Lime 255, CH 20 CTC<>COLORS 255, CH 25 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Basic_CTC” (p. 13)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Basic_CTC” (p. 13)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Dimmer		Same as CH 5 in the mode “Basic_CTC” (p. 14)
6	Dimmer Fine	0–255	Fine adjustment of CH 5
7	Shutter		Same as CH 7 in the mode “Basic_CTC” (p. 14)
8	Red		Same as CH 8 in the mode “Standard_RGB” (p. 30)
9	Red Fine	0–255	Fine adjustment of CH 8
10	Green		Same as CH 10 in the mode “Standard_RGB” (p. 30)
11	Green Fine	0–255	Fine adjustment of CH 10
12	Blue		Same as CH 12 in the mode “Standard_RGB” (p. 30)
13	Blue Fine	0–255	Fine adjustment of CH 12
14	Cyan	0–255	Min … Max
		255	Max
15	Cyan Fine	0–255	Fine adjustment of CH 14
16	Amber	0–255	Min … Max
		255	Max
17	Amber Fine	0–255	Fine adjustment of CH 16
18	Lime	0–255	Min … Max
		255	Max
19	Lime Fine	0–255	Fine adjustment of CH 18
20	CTC<>COLORS		Same as CH 14 in the mode “Standard_RGB” (p. 30)
21	Color Temperature		Same as CH 8 in the mode “Basic_CTC” (p. 14)
22	Color Temperature Fine	0–255	Fine adjustment of CH 21
23	Tint		Same as CH 10 in the mode “Basic_CTC” (p. 14)
24	CRI Mode		Same as CH 11 in the mode “Basic_CTC” (p. 14)
25	Colors		Same as CH 14 in the mode “Basic_CTC” (p. 23)
26	Beam Shaper		Same as CH 15 in the mode “Basic_CTC” (p. 23)
27	Beam Shaper Rotation		When CH 26 is 0–59:
		0	Beam Shaper Pos
		1–127	Min
		128	Center
		129–255	Max
			When CH 26 is 60–89:
		0	No rotation
		1–127	Fast to slow CW (360–1 °/s)
		128	No rotation
		129–255	Slow to fast CW (1–360 °/s)
28	Frost		Same as CH 17 in the mode “Basic_CTC” (p. 24)

CH	Function	DMX	Description
29	Iris		Same as CH 18 in the mode “Basic_CTC” (p. 24)
30	Iris Fine	0–255	Fine adjustment of CH 29
31	Zoom		Same as CH 20 in the mode “Basic_CTC” (p. 24)
32	Zoom Fine	0–255	Fine adjustment of CH 31
33	Focus		Same as CH 22 in the mode “Basic_CTC” (p. 24)
34	Blade 1 A		Same as CH 23 in the mode “Basic_CTC” (p. 24)
35	Blade 1 Rotation		Same as CH 24 in the mode “Basic_CTC” (p. 24)
36	Blade 2 A		Same as CH 25 in the mode “Basic_CTC” (p. 24)
37	Blade 2 Rotation		Same as CH 26 in the mode “Basic_CTC” (p. 25)
38	Blade 3 A		Same as CH 27 in the mode “Basic_CTC” (p. 25)
39	Blade 3 Rotation		Same as CH 28 in the mode “Basic_CTC” (p. 25)
40	Blade 4 A		Same as CH 29 in the mode “Basic_CTC” (p. 25)
41	Blade 4 Rotation		Same as CH 30 in the mode “Basic_CTC” (p. 25)
42	Shaper Rotation		Same as CH 31 in the mode “Basic_CTC” (p. 25)
43	Shaper Macros		Same as CH 32 in the mode “Basic_CTC” (p. 25)
44	Shaper Macros Speed		Same as CH 33 in the mode “Basic_CTC” (p. 26)
45	LED Frequency		Same as CH 34 in the mode “Basic_CTC” (p. 26)
46	Control		Same as CH 35 in the mode “Basic_CTC” (p. 26)

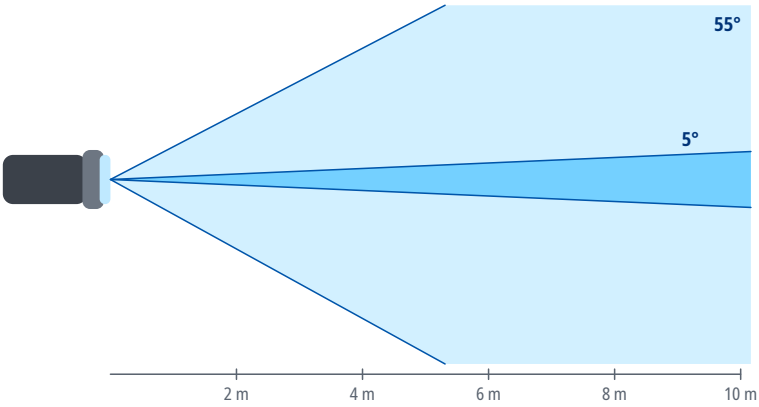
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	1,000 W
Luminous flux	29,290 lm
Color temperature	6,500 K
Color rendering index (CRI)	98
Optics	
Zoom	5–55°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT
RJ45 connectors	RJ45 IN
RDM	yes (manufacturer ID 0x15D0, device model ID 0xD192)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	1,450 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	29.5 kg
Operating environment	
Operating temperature	-10 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2200–15000 K
Strobe frequency	0.9–20 Hz
LED frequency	600–50000 Hz
Color wheel 2 rotation	up to 400 °/s (67 rpm)
Beam shaper rotation	up to 360 °/s (60 rpm)

Spot diameter



Distance	Ø 5°	Ø 55°
2 m	0.17 m	2.1 m
4 m	0.35 m	4.2 m
6 m	0.52 m	6.2 m
8 m	0.7 m	8.3 m
10 m	0.87 m	10.4 m
15 m	1.3 m	15.6 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.