DMX REFERENCE

Aqua Snake

LaserFX



Manufacturer	LaserFX
GDTF file	LaserFX_Aqua_Snake_169247.gdtf
GDTF revision	Update Beams · 2026-11-13
Generated	2026-11-24

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1 About this manual

This document describes the Aqua Snake by LaserFX. It was compiled from the GDTF file LaserFX_Aqua_Snake_169247.gdtf from the GDTF-Share library.

File revision: “Update Beams”.

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 LaserFX; 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

DMX modes

Mode	Channels	Units in one universe	First start addresses
314ch	314	1	1
182ch	182	2	1, 183
152ch	152	3	1, 153, 305
128ch	128	4	1, 129, 257, 385

No light? Check these channels

- 314ch: CH 11 Dimmer 1 above 0; CH 13 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 14 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 18 Dimmer 2 above 0; CH 43 Dimmer 3 above 0; CH 68 Dimmer 4 above 0; CH 93 Dimmer 5 above 0; CH 118 Dimmer 6 above 0; CH 143 Dimmer 7 above 0; CH 168 Dimmer 8 above 0; CH 193 Dimmer 9 above 0; CH 218 Dimmer 10 above 0; CH 243 Dimmer 11 above 0; CH 268 Dimmer 12 above 0; CH 293 Dimmer 13 above 0
- 182ch: CH 34 Dimmer 1 above 0; CH 36 Dimmer 2 above 0; CH 38 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 39 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”
- 152ch: CH 34 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 37 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”
- 128ch: CH 34 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 37 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 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.

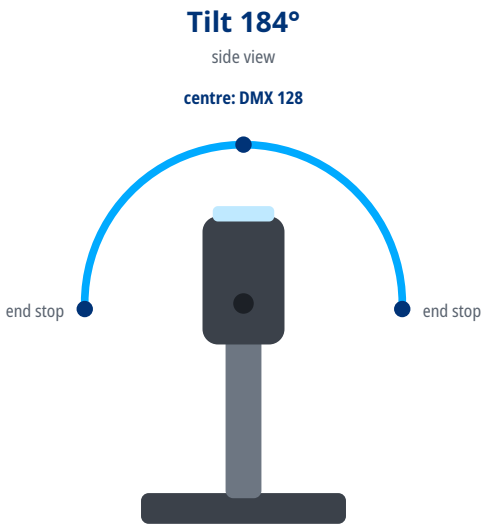
⚠ CAUTION

- 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.
> - 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.

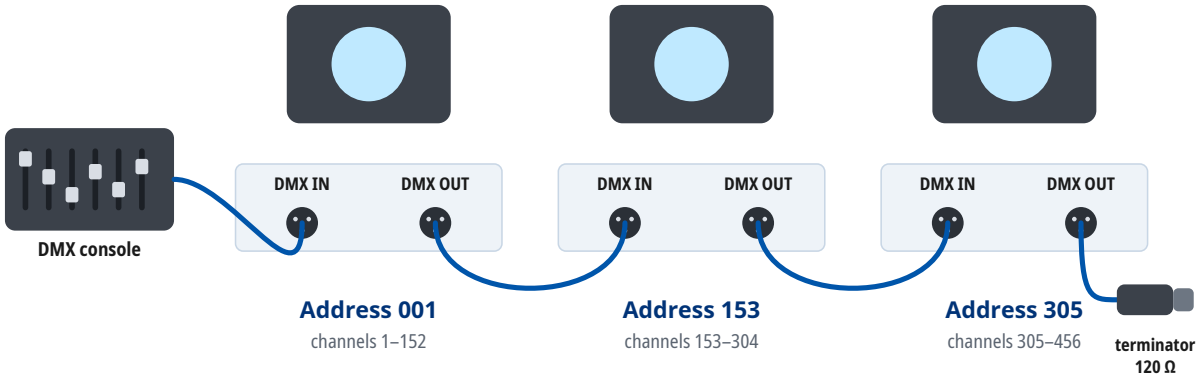
6 Connections

- 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 152ch: every unit occupies 152 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

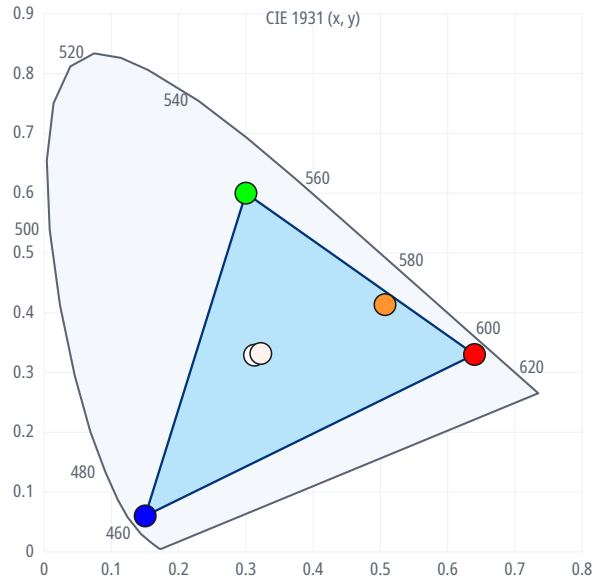
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “314ch”: 314.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

Functions in each DMX mode

	314ch 314 channels	182ch 182 channels	152ch 152 channels	128ch 128 channels
Pan / Tilt	12× (15–290)	12× (1–23)	12× (1–23)	12× (1–23)
Dimmer	13 channels (11–293)	34, 36	34, 35	34, 35
Dimmer resolution	16 bit	16 bit	8 bit	8 bit
Shutter / strobe	13, 14	38, 39	36, 37	36, 37
Color mixing	239 channels (20–314)	121 channels (63–347)	160 channels (57–339)	118 channels (57–337)
Color temperature	4	27	27	27
Zoom	23 channels (17–292)	23 channels (40–315)	23 channels (38–313)	23 channels (38–313)
Effects / macros	5, 7–10	28, 30–33	28, 30–33	28, 30–33
Pixel control	✓	12 + 12 + 12 cells	12 + 12 + 12 cells	12 + 12 + 12 cells

LED colors and the colors they mix



LED	x	y
R	0.640	0.330
G	0.300	0.600
B	0.150	0.060
W	0.313	0.329
CW	0.322	0.332
WW	0.507	0.413

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

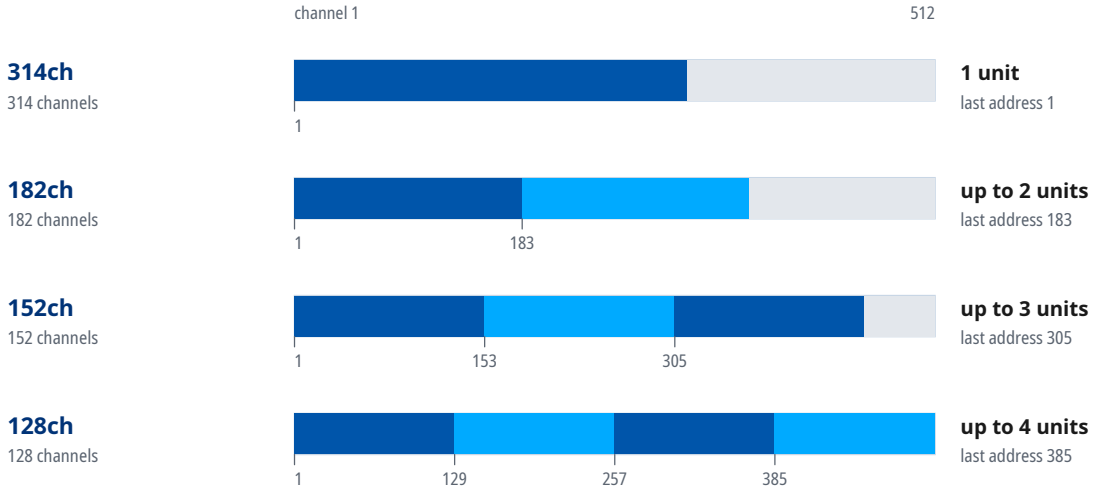
Cells (pixels)

1 CH 1	2 CH 26	3 CH 51	4 CH 76	5 CH 101	6 CH 126	7 CH 151	8 CH 176	9 CH 201	10 CH 226	11 CH 251	12 CH 276

12 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “314ch”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “314ch”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	U6 · 1	11	U11 · 1	16	U16 · 1
2	U2 · 1	7	U7 · 1	12	U12 · 1	17	U17 · 1
3	U3 · 1	8	U8 · 1	13	U13 · 1	18	U18 · 1
4	U4 · 1	9	U9 · 1	14	U14 · 1	19	U19 · 1
5	U5 · 1	10	U10 · 1	15	U15 · 1	20	U20 · 1

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.

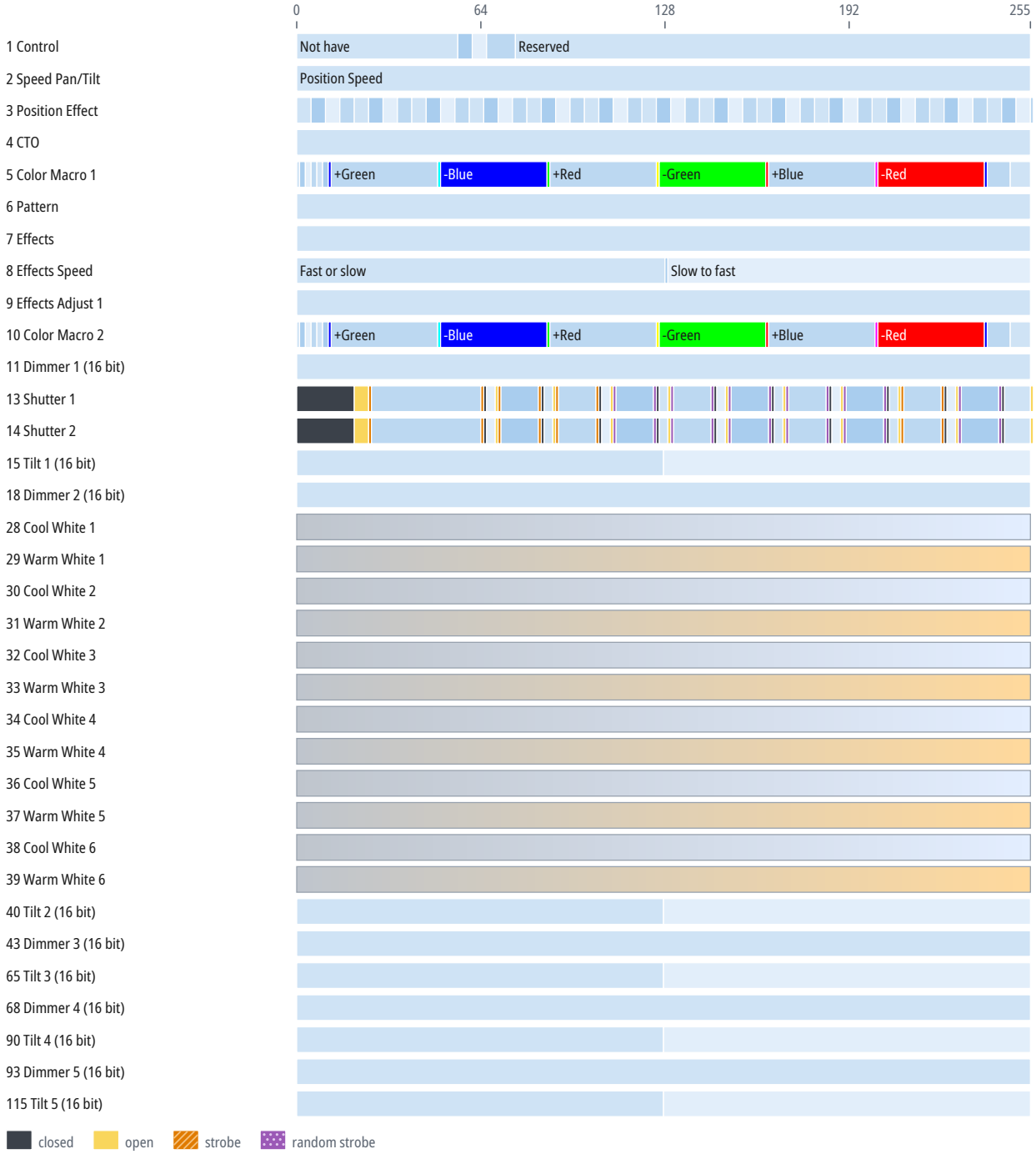
Mode 314ch

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

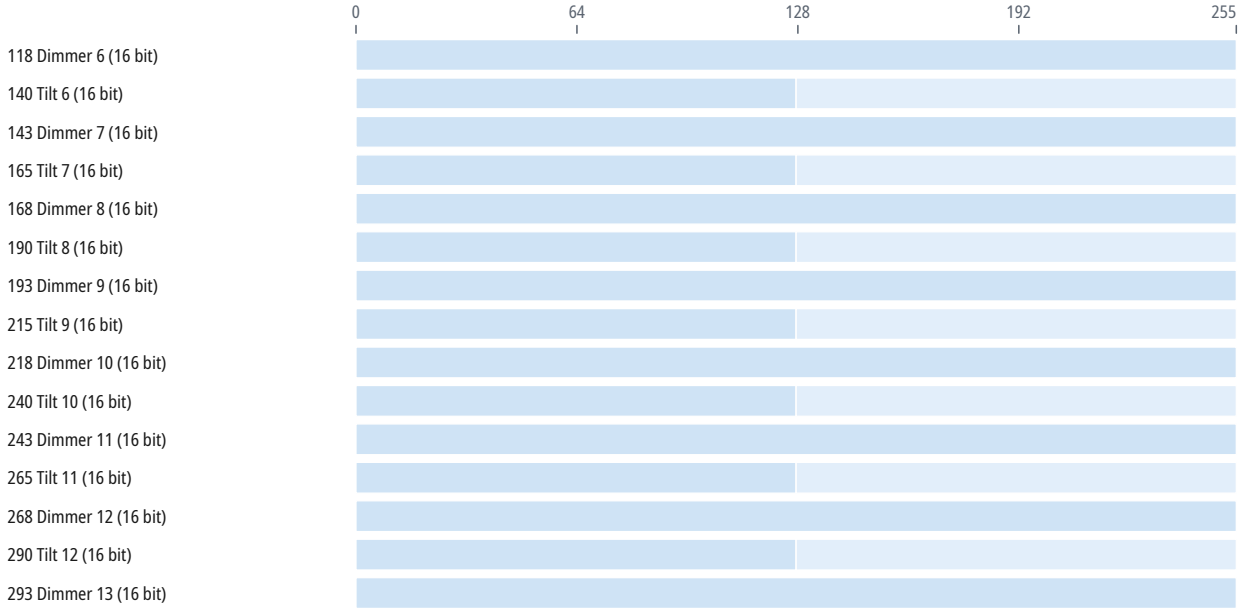
If the device receives DMX in this mode but gives no light, check these channels: CH 11 Dimmer 1 above 0; CH 13 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 14 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 18 Dimmer 2 above 0; CH 43 Dimmer 3 above 0; CH 68 Dimmer 4 above 0; CH 93 Dimmer 5 above 0; CH 118 Dimmer 6 above 0; CH 143 Dimmer 7 above 0; CH 168 Dimmer 8 above 0; CH 193 Dimmer 9 above 0; CH 218 Dimmer 10 above 0; CH 243 Dimmer 11 above 0; CH 268 Dimmer 12 above 0; CH 293 Dimmer 13 above 0. The GDTF file gives these values for a console's Highlight function: CH 20 Red 1 0, CH 22 Green 1 0, CH 24 Blue 1 0, CH 28 Cool White 1 100, CH 30 Cool White 2 100, CH 32 Cool White 3 100, CH 34 Cool White 4 100, CH 36 Cool White 5 100, CH 38 Cool White 6 100, CH 45 Red 2 0, CH 47 Green 2 0, CH 49 Blue 2 0, CH 53 Cool White 7 100, CH 55 Cool White 8 100, CH 57 Cool White 9 100, CH 59 Cool White 10 100, CH 61 Cool White 11 100, CH 63 Cool White 12 100, CH 70 Red 3 0, CH 72 Green 3 0, CH 74 Blue 3 0, CH 78 Cool White 13 100, CH 80 Cool White 14 100, CH 82 Cool White 15 100, CH 84 Cool White 16 100, CH 86 Cool White 17 100, CH 88 Cool White 18 100, CH 95 Red 4 0, CH 97 Green 4 0, CH 99 Blue 4 0, CH 103 Cool White 19 100, CH 105 Cool White 20 100, CH 107 Cool White 21 100, CH 109 Cool White 22 100, CH 111 Cool White 23 100, CH 113 Cool White 24 100, CH 120 Red 5 0, CH 122 Green 5 0, CH 124 Blue 5 0, CH 128 Cool White 25 100, CH 130 Cool White 26 100, CH 132 Cool White 27 100, CH 134 Cool White 28 100, CH 136 Cool White 29 100, CH 138 Cool White 30 100, CH 145 Red 6 0, CH 147 Green 6 0, CH 149 Blue 6 0, CH 153 Cool White 31 100, CH 155 Cool White 32 100, CH 157 Cool White 33 100, CH 159 Cool White

34 100, CH 161 Cool White 35 100, CH 163 Cool White 36 100, CH 170 Red 7 0, CH 172 Green 7 0, CH 174 Blue 7 0, CH 178 Cool White 37 100, CH 180 Cool White 38 100, CH 182 Cool White 39 100, CH 184 Cool White 40 100, CH 186 Cool White 41 100, CH 188 Cool White 42 100, CH 195 Red 8 0, CH 197 Green 8 0, CH 199 Blue 8 0, CH 203 Cool White 43 100, CH 205 Cool White 44 100, CH 207 Cool White 45 100, CH 209 Cool White 46 100, CH 211 Cool White 47 100, CH 213 Cool White 48 100, CH 220 Red 9 0, CH 222 Green 9 0, CH 224 Blue 9 0, CH 228 Cool White 49 100, CH 230 Cool White 50 100, CH 232 Cool White 51 100, CH 234 Cool White 52 100, CH 236 Cool White 53 100, CH 238 Cool White 54 100, CH 245 Red 10 0, CH 247 Green 10 0, CH 249 Blue 10 0, CH 253 Cool White 55 100, CH 255 Cool White 56 100, CH 257 Cool White 57 100, CH 259 Cool White 58 100, CH 261 Cool White 59 100, CH 263 Cool White 60 100, CH 270 Red 11 0, CH 272 Green 11 0, CH 274 Blue 11 0, CH 278 Cool White 61 100, CH 280 Cool White 62 100, CH 282 Cool White 63 100, CH 284 Cool White 64 100, CH 286 Cool White 65 100, CH 288 Cool White 66 100, CH 295 Red 12 0, CH 297 Green 12 0, CH 299 Blue 12 0, CH 303 Cool White 67 100, CH 305 Cool White 68 100, CH 307 Cool White 69 100, CH 309 Cool White 70 100, CH 311 Cool White 71 100, CH 313 Cool White 72 100.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Control	0–55	Not have
		56–60	Y-axis motor reset
		61–65	Scaling motor reset
		66–75	Full reset
		76–255	Reserved
2	Speed Pan/Tilt		Position Speed
		0–255	Position Speed
3	Position Effect	0–4	No macro
		5–9	Macro1
		10–14	Macro2
		15–19	Macro3
		20–24	Macro4
		25–29	Macro5
		30–34	Macro6
		35–39	Macro7
		40–44	Macro8
		45–49	Macro9
		50–54	Macro10
		55–59	Macro11
		60–64	Macro12
		65–69	Macro13
		70–74	Macro14
		75–79	Macro15
		80–84	Macro16
		85–89	Macro17

CH	Function	DMX	Description
3	Position Effect (continued)	90–94	Macro18
		95–99	Macro19
		100–104	Macro20
		105–109	Macro21
		110–114	Macro22
		115–119	Macro23
		120–124	Macro24
		125–129	Macro25
		130–134	Macro26
		135–139	Macro27
		140–144	Macro28
		145–149	Macro29
		150–154	Macro30
		155–159	Macro31
		160–164	Macro32
		165–169	Macro33
		170–174	Macro34
		175–179	Macro35
		180–184	Macro36
		185–189	Macro37
		190–194	Macro38
		195–199	Macro39
		200–204	Macro40
		205–209	Macro41
		210–214	Macro42
		215–219	Macro43
		220–224	Macro44
		225–229	Macro45
		230–234	Macro46
		235–239	Macro47
		240–244	Macro48
		245–249	Macro49
		250–254	Macro50
		255	Macro51
4	CTO	0–255	19000–2700 K
5	Color Macro 1	0	Not have
		1–2	White 2700K
		3–4	White 3200K
		5–6	White 4200K
		7–8	White 5600K
		9–10	White 8000K
		11	Blue

CH	Function	DMX	Description
5	Color Macro 1 (continued)	12–48	+Green
		49	Cyan
		50–86	-Blue
		87	Green
		88–124	+Red
		125	Yellow
		126–162	-Green
		163	Red
		164–200	+Blue
		201	Magenta
		202–238	-Red
		239	Blue
		240–247	Color fade
		248–255	Color snap
6	Pattern	0–255	
7	Effects	0–255	
8	Effects Speed		Macro Speed 1
		0–127	Fast or slow
		128	Cease
		129–255	Slow to fast
9	Effects Adjust 1	0–255	
10	Color Macro 2	0	Not have
		1–2	White 2700K
		3–4	White 3200K
		5–6	White 4200K
		7–8	White 5600K
		9–10	White 8000K
		11	Blue
		12–48	+Green
		49	Cyan
		50–86	-Blue
		87	Green
		88–124	+Red
		125	Yellow
		126–162	-Green
		163	Red
		164–200	+Blue
		201	Magenta
		202–238	-Red
		239	Blue
		240–247	Color fade
		248–255	Color snap

CH	Function	DMX	Description
11	Dimmer 1	0–255	
12	Dimmer 1 Fine	0–255	Fine adjustment of CH 11
13	Shutter 1	0–19	Open light: Close
		20–24	Open light: Open
		25	Fast to slow: fast
		26–63	Fast to slow: fast ... slow
		64	Fast to slow: slow
		65	Open light: Close
		66–68	Open light: Close ... Open
		69	Open light: Open
		70	Strobe 100-0 / fast to slow: fast
		71–83	Strobe 100-0 / fast to slow: fast ... slow
		84	Strobe 100-0 / fast to slow: slow
		85	Open light: Close
		86–88	Open light: Close ... Open
		89	Open light: Open
		90	Strobe 0-100 / fast to slow: fast
		91–103	Strobe 0-100 / fast to slow: fast ... slow
		104	Strobe 0-100 / fast to slow: slow
		105	Open light: Close
		106–108	Open light: Close ... Open
		109	Open light: Open
		110	Random strobe / fast to slow: fast
		111–123	Random strobe / fast to slow: fast ... slow
		124	Random strobe / fast to slow: slow
		125	Open light: Close
		126–128	Open light: Close ... Open
		129	Open light: Open
		130	Random strobe 100-0 / fast to slow: fast
		131–143	Random strobe 100-0 / fast to slow: fast ... slow
		144	Random strobe 100-0 / fast to slow: slow
		145	Open light: Close
		146–148	Open light: Close ... Open
		149	Open light: Open
		150	Random strobe 0-100 / fast to slow: fast
		151–163	Random strobe 0-100 / fast to slow: fast ... slow
		164	Random strobe 0-100 / fast to slow: slow
		165	Open light: Close
		166–168	Open light: Close ... Open
		169	Open light: Open
		170	Pulse strobe / fast to slow: fast
		171–183	Pulse strobe / fast to slow: fast ... slow

CH	Function	DMX	Description
13	Shutter 1 (continued)	184	Pulse strobe / fast to slow: slow
		185	Open light: Close
		186–188	Open light: Close … Open
		189	Open light: Open
		190	Random pulse strobe / fast to slow: fast
		191–203	Random pulse strobe / fast to slow: fast … slow
		204	Random pulse strobe / fast to slow: slow
		205	Open light: Close
		206–208	Open light: Close … Open
		209	Open light: Open
		210	Strobe 0-100-0 / fast to slow: fast
		211–223	Strobe 0-100-0 / fast to slow: fast … slow
		224	Strobe 0-100-0 / fast to slow: slow
		225	Open light: Close
		226–228	Open light: Close … Open
		229	Open light: Open
		230	Random pulse strobe / fast to slow: fast
		231–243	Random pulse strobe / fast to slow: fast … slow
		244	Random pulse strobe / fast to slow: slow
		245	Open light: Close
		246–254	Open light: Close … Open
		255	Open light: Open
14	Shutter 2	0–19	Open light: Close
		20–24	Open light: Open
		25	Fast to slow: fast
		26–63	Fast to slow: fast … slow
		64	Fast to slow: slow
		65	Open light: Close
		66–68	Open light: Close … Open
		69	Open light: Open
		70	Strobe 100-0 / fast to slow: fast
		71–83	Strobe 100-0 / fast to slow: fast … slow
		84	Strobe 100-0 / fast to slow: slow
		85	Open light: Close
		86–88	Open light: Close … Open
		89	Open light: Open
		90	Strobe 0-100 / fast to slow: fast
		91–103	Strobe 0-100 / fast to slow: fast … slow
		104	Strobe 0-100 / fast to slow: slow
		105	Open light: Close
		106–108	Open light: Close … Open
		109	Open light: Open

CH	Function	DMX	Description
14	Shutter 2 (continued)	110	Random strobe / fast to slow: fast
		111–123	Random strobe / fast to slow: fast ... slow
		124	Random strobe / fast to slow: slow
		125	Open light: Close
		126–128	Open light: Close ... Open
		129	Open light: Open
		130	Random strobe 100-0 / fast to slow: fast
		131–143	Random strobe 100-0 / fast to slow: fast ... slow
		144	Random strobe 100-0 / fast to slow: slow
		145	Open light: Close
		146–148	Open light: Close ... Open
		149	Open light: Open
		150	Random strobe 0-100 / fast to slow: fast
		151–163	Random strobe 0-100 / fast to slow: fast ... slow
		164	Random strobe 0-100 / fast to slow: slow
		165	Open light: Close
		166–168	Open light: Close ... Open
		169	Open light: Open
		170	Pulse strobe / fast to slow: fast
		171–183	Pulse strobe / fast to slow: fast ... slow
		184	Pulse strobe / fast to slow: slow
		185	Open light: Close
		186–188	Open light: Close ... Open
		189	Open light: Open
		190	Random pulse strobe / fast to slow: fast
		191–203	Random pulse strobe / fast to slow: fast ... slow
		204	Random pulse strobe / fast to slow: slow
		205	Open light: Close
		206–208	Open light: Close ... Open
		209	Open light: Open
		210	Strobe 0-100-0 / fast to slow: fast
		211–223	Strobe 0-100-0 / fast to slow: fast ... slow
		224	Strobe 0-100-0 / fast to slow: slow
		225	Open light: Close
		226–228	Open light: Close ... Open
		229	Open light: Open
		230	Random pulse strobe / fast to slow: fast
		231–243	Random pulse strobe / fast to slow: fast ... slow
		244	Random pulse strobe / fast to slow: slow
		245	Open light: Close
		246–254	Open light: Close ... Open
		255	Open light: Open

CH	Function	DMX	Description
15	Tilt 1	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
16	Tilt 1 Fine	0–255	Fine adjustment of CH 15
17	Zoom 1	0–255	25–4°
18	Dimmer 2	0–255	
19	Dimmer 2 Fine	0–255	Fine adjustment of CH 18
20	Red 1	0–255	
21	Red 1 Fine	0–255	Fine adjustment of CH 20
22	Green 1	0–255	
23	Green 1 Fine	0–255	Fine adjustment of CH 22
24	Blue 1	0–255	
25	Blue 1 Fine	0–255	Fine adjustment of CH 24
26	White 1	0–255	
27	White 1 Fine	0–255	Fine adjustment of CH 26
28	Cool White 1	0–255	
29	Warm White 1	0–255	
30	Cool White 2	0–255	
31	Warm White 2	0–255	
32	Cool White 3	0–255	
33	Warm White 3	0–255	
34	Cool White 4	0–255	
35	Warm White 4	0–255	
36	Cool White 5	0–255	
37	Warm White 5	0–255	
38	Cool White 6	0–255	
39	Warm White 6	0–255	
40	Tilt 2	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
41	Tilt 2 Fine	0–255	Fine adjustment of CH 40
42	Zoom 2	0–255	25–4°
43	Dimmer 3	0–255	
44	Dimmer 3 Fine	0–255	Fine adjustment of CH 43
45	Red 2	0–255	
46	Red 2 Fine	0–255	Fine adjustment of CH 45
47	Green 2	0–255	
48	Green 2 Fine	0–255	Fine adjustment of CH 47
49	Blue 2	0–255	
50	Blue 2 Fine	0–255	Fine adjustment of CH 49
51	White 2	0–255	
52	White 2 Fine	0–255	Fine adjustment of CH 51

CH	Function	DMX	Description
53	Cool White 7	0–255	
54	Warm White 7	0–255	
55	Cool White 8	0–255	
56	Warm White 8	0–255	
57	Cool White 9	0–255	
58	Warm White 9	0–255	
59	Cool White 10	0–255	
60	Warm White 10	0–255	
61	Cool White 11	0–255	
62	Warm White 11	0–255	
63	Cool White 12	0–255	
64	Warm White 12	0–255	
65	Tilt 3	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
66	Tilt 3 Fine	0–255	Fine adjustment of CH 65
67	Zoom 3	0–255	25–4°
68	Dimmer 4	0–255	
69	Dimmer 4 Fine	0–255	Fine adjustment of CH 68
70	Red 3	0–255	
71	Red 3 Fine	0–255	Fine adjustment of CH 70
72	Green 3	0–255	
73	Green 3 Fine	0–255	Fine adjustment of CH 72
74	Blue 3	0–255	
75	Blue 3 Fine	0–255	Fine adjustment of CH 74
76	White 3	0–255	
77	White 3 Fine	0–255	Fine adjustment of CH 76
78	Cool White 13	0–255	
79	Warm White 13	0–255	
80	Cool White 14	0–255	
81	Warm White 14	0–255	
82	Cool White 15	0–255	
83	Warm White 15	0–255	
84	Cool White 16	0–255	
85	Warm White 16	0–255	
86	Cool White 17	0–255	
87	Warm White 17	0–255	
88	Cool White 18	0–255	
89	Warm White 18	0–255	
90	Tilt 4	0–127	Tilt 1
		128	Center
		128–255	Tilt 1

CH	Function	DMX	Description
91	Tilt 4 Fine	0–255	Fine adjustment of CH 90
92	Zoom 4	0–255	25–4°
93	Dimmer 5	0–255	
94	Dimmer 5 Fine	0–255	Fine adjustment of CH 93
95	Red 4	0–255	
96	Red 4 Fine	0–255	Fine adjustment of CH 95
97	Green 4	0–255	
98	Green 4 Fine	0–255	Fine adjustment of CH 97
99	Blue 4	0–255	
100	Blue 4 Fine	0–255	Fine adjustment of CH 99
101	White 4	0–255	
102	White 4 Fine	0–255	Fine adjustment of CH 101
103	Cool White 19	0–255	
104	Warm White 19	0–255	
105	Cool White 20	0–255	
106	Warm White 20	0–255	
107	Cool White 21	0–255	
108	Warm White 21	0–255	
109	Cool White 22	0–255	
110	Warm White 22	0–255	
111	Cool White 23	0–255	
112	Warm White 23	0–255	
113	Cool White 24	0–255	
114	Warm White 24	0–255	
115	Tilt 5	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
116	Tilt 5 Fine	0–255	Fine adjustment of CH 115
117	Zoom 5	0–255	25–4°
118	Dimmer 6	0–255	
119	Dimmer 6 Fine	0–255	Fine adjustment of CH 118
120	Red 5	0–255	
121	Red 5 Fine	0–255	Fine adjustment of CH 120
122	Green 5	0–255	
123	Green 5 Fine	0–255	Fine adjustment of CH 122
124	Blue 5	0–255	
125	Blue 5 Fine	0–255	Fine adjustment of CH 124
126	White 5	0–255	
127	White 5 Fine	0–255	Fine adjustment of CH 126
128	Cool White 25	0–255	
129	Warm White 25	0–255	
130	Cool White 26	0–255	

CH	Function	DMX	Description
131	Warm White 26	0–255	
132	Cool White 27	0–255	
133	Warm White 27	0–255	
134	Cool White 28	0–255	
135	Warm White 28	0–255	
136	Cool White 29	0–255	
137	Warm White 29	0–255	
138	Cool White 30	0–255	
139	Warm White 30	0–255	
140	Tilt 6	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
141	Tilt 6 Fine	0–255	Fine adjustment of CH 140
142	Zoom 6	0–255	25–4°
143	Dimmer 7	0–255	
144	Dimmer 7 Fine	0–255	Fine adjustment of CH 143
145	Red 6	0–255	
146	Red 6 Fine	0–255	Fine adjustment of CH 145
147	Green 6	0–255	
148	Green 6 Fine	0–255	Fine adjustment of CH 147
149	Blue 6	0–255	
150	Blue 6 Fine	0–255	Fine adjustment of CH 149
151	White 6	0–255	
152	White 6 Fine	0–255	Fine adjustment of CH 151
153	Cool White 31	0–255	
154	Warm White 31	0–255	
155	Cool White 32	0–255	
156	Warm White 32	0–255	
157	Cool White 33	0–255	
158	Warm White 33	0–255	
159	Cool White 34	0–255	
160	Warm White 34	0–255	
161	Cool White 35	0–255	
162	Warm White 35	0–255	
163	Cool White 36	0–255	
164	Warm White 36	0–255	
165	Tilt 7	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
166	Tilt 7 Fine	0–255	Fine adjustment of CH 165
167	Zoom 7	0–255	25–4°
168	Dimmer 8	0–255	

CH	Function	DMX	Description
169	Dimmer 8 Fine	0–255	Fine adjustment of CH 168
170	Red 7	0–255	
171	Red 7 Fine	0–255	Fine adjustment of CH 170
172	Green 7	0–255	
173	Green 7 Fine	0–255	Fine adjustment of CH 172
174	Blue 7	0–255	
175	Blue 7 Fine	0–255	Fine adjustment of CH 174
176	White 7	0–255	
177	White 7 Fine	0–255	Fine adjustment of CH 176
178	Cool White 37	0–255	
179	Warm White 37	0–255	
180	Cool White 38	0–255	
181	Warm White 38	0–255	
182	Cool White 39	0–255	
183	Warm White 39	0–255	
184	Cool White 40	0–255	
185	Warm White 40	0–255	
186	Cool White 41	0–255	
187	Warm White 41	0–255	
188	Cool White 42	0–255	
189	Warm White 42	0–255	
190	Tilt 8	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
191	Tilt 8 Fine	0–255	Fine adjustment of CH 190
192	Zoom 8	0–255	25–4°
193	Dimmer 9	0–255	
194	Dimmer 9 Fine	0–255	Fine adjustment of CH 193
195	Red 8	0–255	
196	Red 8 Fine	0–255	Fine adjustment of CH 195
197	Green 8	0–255	
198	Green 8 Fine	0–255	Fine adjustment of CH 197
199	Blue 8	0–255	
200	Blue 8 Fine	0–255	Fine adjustment of CH 199
201	White 8	0–255	
202	White 8 Fine	0–255	Fine adjustment of CH 201
203	Cool White 43	0–255	
204	Warm White 43	0–255	
205	Cool White 44	0–255	
206	Warm White 44	0–255	
207	Cool White 45	0–255	
208	Warm White 45	0–255	

CH	Function	DMX	Description
209	Cool White 46	0–255	
210	Warm White 46	0–255	
211	Cool White 47	0–255	
212	Warm White 47	0–255	
213	Cool White 48	0–255	
214	Warm White 48	0–255	
215	Tilt 9	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
216	Tilt 9 Fine	0–255	Fine adjustment of CH 215
217	Zoom 9	0–255	25–4°
218	Dimmer 10	0–255	
219	Dimmer 10 Fine	0–255	Fine adjustment of CH 218
220	Red 9	0–255	
221	Red 9 Fine	0–255	Fine adjustment of CH 220
222	Green 9	0–255	
223	Green 9 Fine	0–255	Fine adjustment of CH 222
224	Blue 9	0–255	
225	Blue 9 Fine	0–255	Fine adjustment of CH 224
226	White 9	0–255	
227	White 9 Fine	0–255	Fine adjustment of CH 226
228	Cool White 49	0–255	
229	Warm White 49	0–255	
230	Cool White 50	0–255	
231	Warm White 50	0–255	
232	Cool White 51	0–255	
233	Warm White 51	0–255	
234	Cool White 52	0–255	
235	Warm White 52	0–255	
236	Cool White 53	0–255	
237	Warm White 53	0–255	
238	Cool White 54	0–255	
239	Warm White 54	0–255	
240	Tilt 10	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
241	Tilt 10 Fine	0–255	Fine adjustment of CH 240
242	Zoom 10	0–255	25–4°
243	Dimmer 11	0–255	
244	Dimmer 11 Fine	0–255	Fine adjustment of CH 243
245	Red 10	0–255	
246	Red 10 Fine	0–255	Fine adjustment of CH 245

CH	Function	DMX	Description
247	Green 10	0–255	
248	Green 10 Fine	0–255	Fine adjustment of CH 247
249	Blue 10	0–255	
250	Blue 10 Fine	0–255	Fine adjustment of CH 249
251	White 10	0–255	
252	White 10 Fine	0–255	Fine adjustment of CH 251
253	Cool White 55	0–255	
254	Warm White 55	0–255	
255	Cool White 56	0–255	
256	Warm White 56	0–255	
257	Cool White 57	0–255	
258	Warm White 57	0–255	
259	Cool White 58	0–255	
260	Warm White 58	0–255	
261	Cool White 59	0–255	
262	Warm White 59	0–255	
263	Cool White 60	0–255	
264	Warm White 60	0–255	
265	Tilt 11	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
266	Tilt 11 Fine	0–255	Fine adjustment of CH 265
267	Zoom 11	0–255	25–4°
268	Dimmer 12	0–255	
269	Dimmer 12 Fine	0–255	Fine adjustment of CH 268
270	Red 11	0–255	
271	Red 11 Fine	0–255	Fine adjustment of CH 270
272	Green 11	0–255	
273	Green 11 Fine	0–255	Fine adjustment of CH 272
274	Blue 11	0–255	
275	Blue 11 Fine	0–255	Fine adjustment of CH 274
276	White 11	0–255	
277	White 11 Fine	0–255	Fine adjustment of CH 276
278	Cool White 61	0–255	
279	Warm White 61	0–255	
280	Cool White 62	0–255	
281	Warm White 62	0–255	
282	Cool White 63	0–255	
283	Warm White 63	0–255	
284	Cool White 64	0–255	
285	Warm White 64	0–255	
286	Cool White 65	0–255	

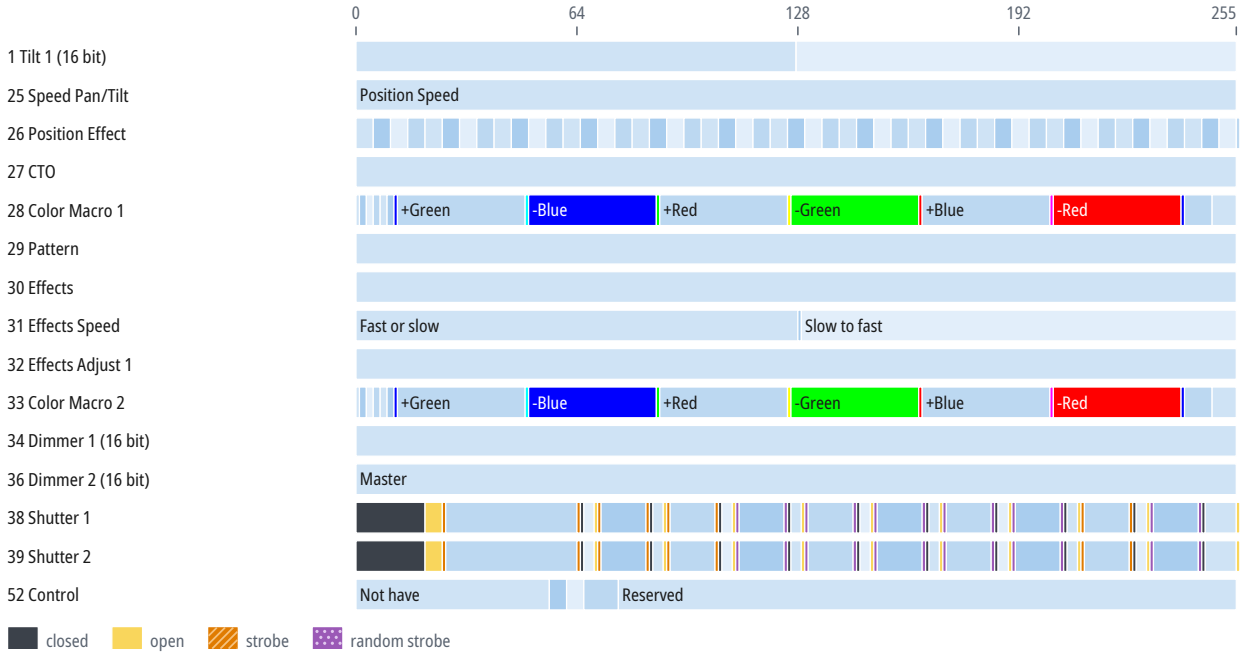
CH	Function	DMX	Description
287	Warm White 65	0–255	
288	Cool White 66	0–255	
289	Warm White 66	0–255	
290	Tilt 12	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
291	Tilt 12 Fine	0–255	Fine adjustment of CH 290
292	Zoom 12	0–255	25–4°
293	Dimmer 13	0–255	
294	Dimmer 13 Fine	0–255	Fine adjustment of CH 293
295	Red 12	0–255	
296	Red 12 Fine	0–255	Fine adjustment of CH 295
297	Green 12	0–255	
298	Green 12 Fine	0–255	Fine adjustment of CH 297
299	Blue 12	0–255	
300	Blue 12 Fine	0–255	Fine adjustment of CH 299
301	White 12	0–255	
302	White 12 Fine	0–255	Fine adjustment of CH 301
303	Cool White 67	0–255	
304	Warm White 67	0–255	
305	Cool White 68	0–255	
306	Warm White 68	0–255	
307	Cool White 69	0–255	
308	Warm White 69	0–255	
309	Cool White 70	0–255	
310	Warm White 70	0–255	
311	Cool White 71	0–255	
312	Warm White 71	0–255	
313	Cool White 72	0–255	
314	Warm White 72	0–255	

Mode 182ch

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 34 Dimmer 1 above 0; CH 36 Dimmer 2 above 0; CH 38 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 39 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 63 Red 0 (the same in each of the 12 cells), CH 65 Green 0 (the same in each of the 12 cells), CH 67 Blue 0 (the same in each of the 12 cells), CH 71 Cool White 100 (the same in each of the 12 cells).

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt 1	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
2	Tilt 1 Fine	0–255	Fine adjustment of CH 1
25	Speed Pan/Tilt		Same as CH 2 in the mode “314ch” (p. 11)
26	Position Effect		Same as CH 3 in the mode “314ch” (p. 11)
27	CTO	0–255	19000–2700 K
28	Color Macro 1		Same as CH 5 in the mode “314ch” (p. 12)
29	Pattern	0–255	
30	Effects	0–255	
31	Effects Speed		Same as CH 8 in the mode “314ch” (p. 13)
32	Effects Adjust 1	0–255	
33	Color Macro 2		Same as CH 10 in the mode “314ch” (p. 13)
34	Dimmer 1	0–255	
35	Dimmer 1 Fine	0–255	Fine adjustment of CH 34
36	Dimmer 2	0–255	Master

CH	Function	DMX	Description
37	Dimmer 2 Fine	0–255	Fine adjustment of CH 36
38	Shutter 1		Same as CH 13 in the mode “314ch” (p. 14)
39	Shutter 2		Same as CH 14 in the mode “314ch” (p. 15)
40	Zoom 1	0–255	25–4°
52	Control		Same as CH 1 in the mode “314ch” (p. 11)
63	Red 1	0–255	
64	Red 1 Fine	0–255	Fine adjustment of CH 63
65	Green 1	0–255	
66	Green 1 Fine	0–255	Fine adjustment of CH 65
67	Blue 1	0–255	
68	Blue 1 Fine	0–255	Fine adjustment of CH 67
69	White 1	0–255	
70	White 1 Fine	0–255	Fine adjustment of CH 69
71	Cool White 1	0–255	
72	Warm White 1	0–255	

CH 1–24: 12 cells of 2 channels each. Every cell works as cell 1 in the table above (CH 1–2); the table below gives each cell's channel numbers.

Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine
1	1	2	2	3	4	3	5	6	4	7	8
5	9	10	6	11	12	7	13	14	8	15	16
9	17	18	10	19	20	11	21	22	12	23	24

CH 40–51: 12 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 40); the table below gives each cell's channel numbers.

Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom
1	40	2	41	3	42	4	43	5	44	6	45
7	46	8	47	9	48	10	49	11	50	12	51

CH 63–182: 12 cells of 10 channels each. Every cell works as cell 1 in the table above (CH 63–72); the table below gives each cell's channel numbers.

Cell	Red	Red Fine	Green	Green Fine	Blue	Blue Fine	White	White Fine	Cool White	Warm White
1	63	64	65	66	67	68	69	70	71	72
2	73	74	75	76	77	78	79	80	81	82
3	83	84	85	86	87	88	89	90	91	92
4	93	94	95	96	97	98	99	100	101	102
5	103	104	105	106	107	108	109	110	111	112
6	113	114	115	116	117	118	119	120	121	122
7	123	124	125	126	127	128	129	130	131	132
8	133	134	135	136	137	138	139	140	141	142
9	143	144	145	146	147	148	149	150	151	152
10	153	154	155	156	157	158	159	160	161	162
11	163	164	165	166	167	168	169	170	171	172
12	173	174	175	176	177	178	179	180	181	182

Mode 152ch

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 34 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 37 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 57 Red 100 (the same in each of the 12 cells), CH 58 Green 100 (the same in each of the 12 cells), CH 59 Blue 100 (the same in each of the 12 cells), CH 63 Cool White 100 (the same in each of the 12 cells).

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt 1	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
2	Tilt 1 Fine	0–255	Fine adjustment of CH 1
25	Speed Pan/Tilt		Same as CH 2 in the mode “314ch” (p. 11)
26	Position Effect		Same as CH 3 in the mode “314ch” (p. 11)
27	CTO	0–255	19000–2700 K
28	Color Macro 1		Same as CH 5 in the mode “314ch” (p. 12)
29	Pattern	0–255	
30	Effects	0–255	
31	Effects Speed		Same as CH 8 in the mode “314ch” (p. 13)
32	Effects Adjust 1	0–255	
33	Color Macro 2		Same as CH 10 in the mode “314ch” (p. 13)

CH	Function	DMX	Description
34	Dimmer 1	0–255	
35	Dimmer 2	0–255	Master
36	Shutter 1		Same as CH 13 in the mode “314ch” (p. 14)
37	Shutter 2		Same as CH 14 in the mode “314ch” (p. 15)
38	Zoom 1	0–255	25–4°
50	Control		Same as CH 1 in the mode “314ch” (p. 11)
57	Red 1	0–255	
58	Green 1	0–255	
59	Blue 1	0–255	
60	White 1	0–255	
61	Cool White 1	0–255	
62	Warm White 1	0–255	
63	Cool White 2	0–255	
64	Warm White 2	0–255	

CH 1–24: 12 cells of 2 channels each. Every cell works as cell 1 in the table above (CH 1–2); the table below gives each cell's channel numbers.

Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine
1	1	2	2	3	4	3	5	6	4	7	8
5	9	10	6	11	12	7	13	14	8	15	16
9	17	18	10	19	20	11	21	22	12	23	24

CH 38–49: 12 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 38); the table below gives each cell's channel numbers.

Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom
1	38	2	39	3	40	4	41	5	42	6	43
7	44	8	45	9	46	10	47	11	48	12	49

CH 57–152: 12 cells of 8 channels each. Every cell works as cell 1 in the table above (CH 57–64); the table below gives each cell's channel numbers.

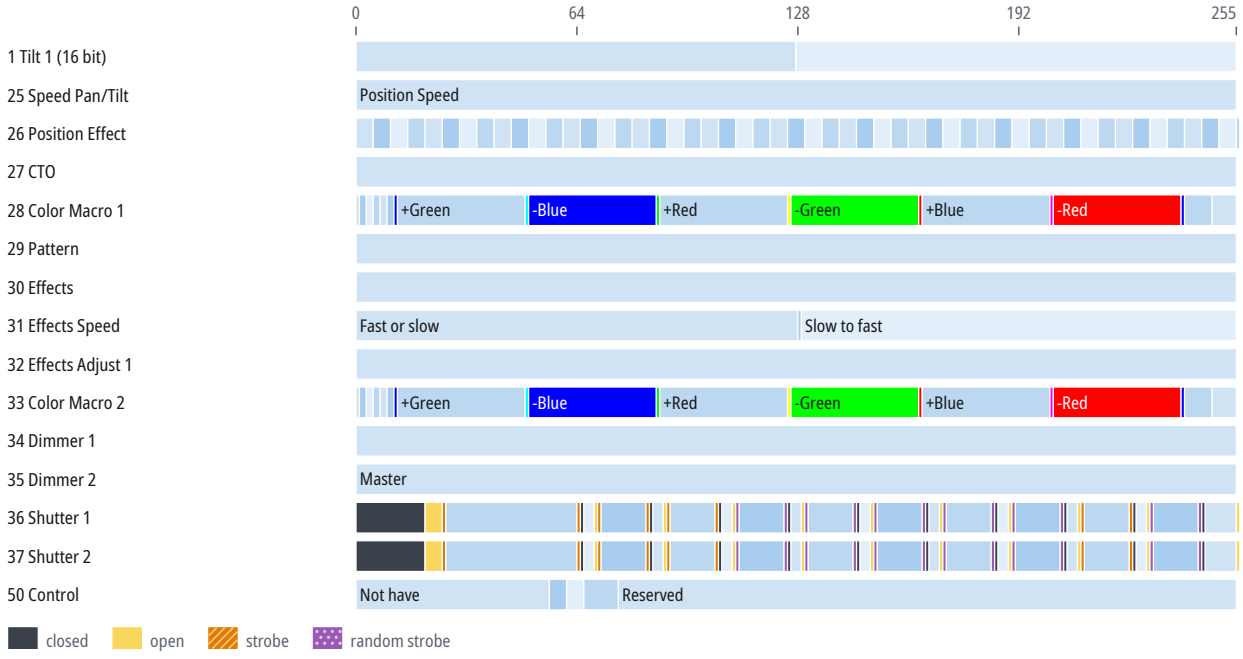
Cell	Red	Green	Blue	White	Cool White	Warm White	Cool White	Warm White
1	57	58	59	60	61	62	63	64
2	65	66	67	68	69	70	71	72
3	73	74	75	76	77	78	79	80
4	81	82	83	84	85	86	87	88
5	89	90	91	92	93	94	95	96
6	97	98	99	100	101	102	103	104
7	105	106	107	108	109	110	111	112
8	113	114	115	116	117	118	119	120
9	121	122	123	124	125	126	127	128
10	129	130	131	132	133	134	135	136
11	137	138	139	140	141	142	143	144
12	145	146	147	148	149	150	151	152

Mode 128ch

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 34 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Shutter 1 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”; CH 37 Shutter 2 at 20–24, 69, 89, 109, 129, 149, 169, 189, 209, 229 or 255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 57 Red 100 (the same in each of the 12 cells), CH 58 Green 100 (the same in each of the 12 cells), CH 59 Blue 100 (the same in each of the 12 cells), CH 61 Cool White 100 (the same in each of the 12 cells).

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt 1	0–127	Tilt 1
		128	Center
		128–255	Tilt 1
2	Tilt 1 Fine	0–255	Fine adjustment of CH 1
25	Speed Pan/Tilt		Same as CH 2 in the mode “314ch” (p. 11)
26	Position Effect		Same as CH 3 in the mode “314ch” (p. 11)
27	CTO	0–255	19000–2700 K
28	Color Macro 1		Same as CH 5 in the mode “314ch” (p. 12)
29	Pattern	0–255	
30	Effects	0–255	
31	Effects Speed		Same as CH 8 in the mode “314ch” (p. 13)
32	Effects Adjust 1	0–255	
33	Color Macro 2		Same as CH 10 in the mode “314ch” (p. 13)
34	Dimmer 1	0–255	
35	Dimmer 2	0–255	Master
36	Shutter 1		Same as CH 13 in the mode “314ch” (p. 14)

CH	Function	DMX	Description
37	Shutter 2		Same as CH 14 in the mode “314ch” (p. 15)
38	Zoom 1	0–255	25–4°
50	Control		Same as CH 1 in the mode “314ch” (p. 11)
57	Red 1	0–255	
58	Green 1	0–255	
59	Blue 1	0–255	
60	White 1	0–255	
61	Cool White 1	0–255	
62	Warm White 1	0–255	

CH 1–24: 12 cells of 2 channels each. Every cell works as cell 1 in the table above (CH 1–2); the table below gives each cell's channel numbers.

Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine	Cell	Tilt	Tilt Fine
1	1	2	2	3	4	3	5	6	4	7	8
5	9	10	6	11	12	7	13	14	8	15	16
9	17	18	10	19	20	11	21	22	12	23	24

CH 38–49: 12 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 38); the table below gives each cell's channel numbers.

Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom	Cell	Zoom
1	38	2	39	3	40	4	41	5	42	6	43
7	44	8	45	9	46	10	47	11	48	12	49

CH 57–128: 12 cells of 6 channels each. Every cell works as cell 1 in the table above (CH 57–62); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	White	Cool White	Warm White
1	57	58	59	60	61	62
2	63	64	65	66	67	68
3	69	70	71	72	73	74
4	75	76	77	78	79	80
5	81	82	83	84	85	86
6	87	88	89	90	91	92
7	93	94	95	96	97	98
8	99	100	101	102	103	104
9	105	106	107	108	109	110
10	111	112	113	114	115	116
11	117	118	119	120	121	122
12	123	124	125	126	127	128

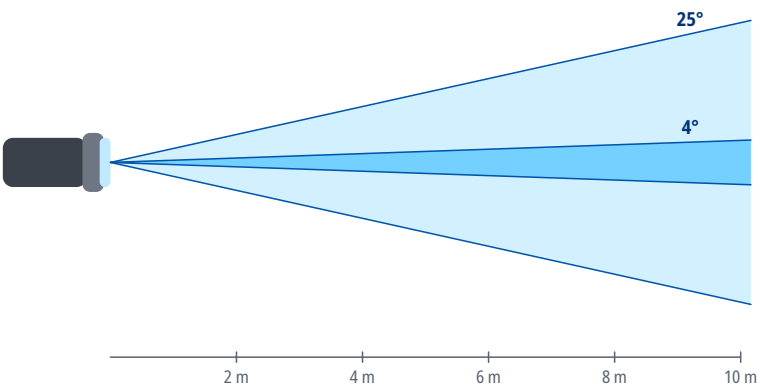
10 Technical specifications

Parameter	Value
Light source	LED
Zoom	4–25°
Tilt	184°
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–19000 K

Spot diameter



Distance	Ø 4°	Ø 25°
2 m	0.14 m	0.89 m
4 m	0.28 m	1.8 m
6 m	0.42 m	2.7 m
8 m	0.56 m	3.5 m
10 m	0.7 m	4.4 m
15 m	1 m	6.7 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.