DMX REFERENCE

Robin Esprite PC

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_Esprite_PC_63634.gdtf
GDTF revision	2024-05-09 Beam output values update
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 8
9 DMX channels 10
Mode 1 - Standard 16 bit 11
Mode 2 - Reduced 8 bit 20
Mode 3 - Reduced 16 bit + green corre 24
Mode 4 - Reduced 8 bit + green corre 26
10 Technical specifications 28
11 Maintenance and cleaning 29
12 Troubleshooting 29
13 Disposal 30

1 About this manual

This document describes the Robin Esprite PC by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_Esprite_PC_63634.gdtf from the GDTF-Share library.

File revision: “2024-05-09 Beam output values update”.

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 Robe Lighting; product names and trademarks belong to their owners.

Safety notices are marked with signal words according to the severity of the hazard: DANGER – an imminent hazard that will result in death or serious injury; WARNING – a potential hazard that could result in death or serious injury; CAUTION – a potential hazard that could result in minor injury or property damage; NOTE – additional information for correct and safe use.

> **NOTE** This product is designed for stage and effect lighting. It is not suitable for household room illumination.

2 Quick reference

Parameter	Value
Power consumption	950 W
Weight	26.3 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 - Standard 16 bit	34	15	1, 35, 69, 103, ...
Mode 2 - Reduced 8 bit	30	17	1, 31, 61, 91, ...
Mode 3 - Reduced 16 bit + green corre	35	14	1, 36, 71, 106, ...
Mode 4 - Reduced 8 bit + green corre	31	16	1, 32, 63, 94, ...

No light? Check these channels

- Mode 1 - Standard 16 bit: CH 32 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 33 Dimmer above 0
- Mode 2 - Reduced 8 bit: CH 29 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 30 Dimmer above 0
- Mode 3 - Reduced 16 bit + green corre: CH 33 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 34 Dimmer above 0
- Mode 4 - Reduced 8 bit + green corre: CH 30 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 31 Dimmer above 0


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.

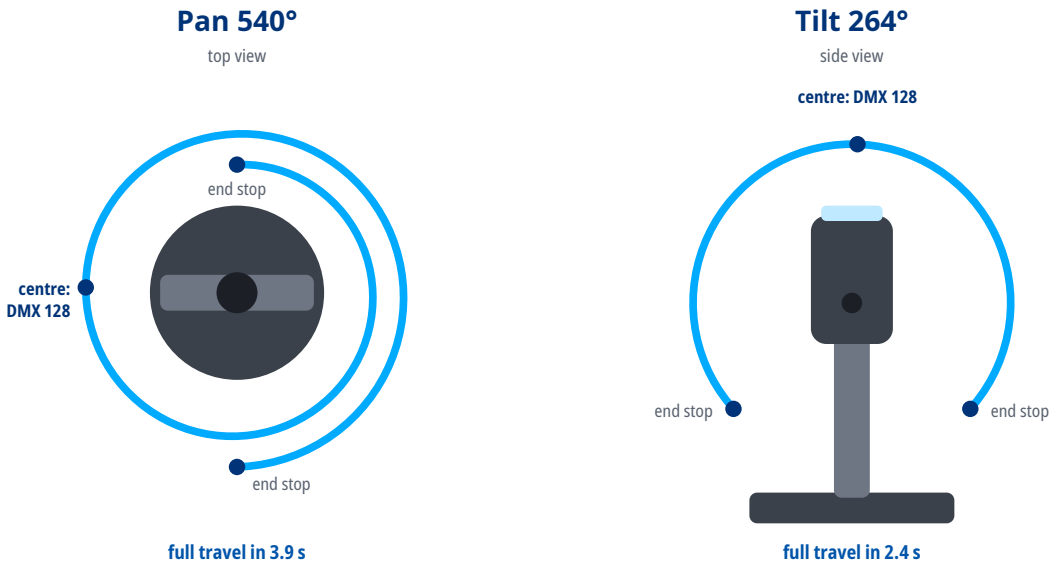
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do 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 ESPRITE PC offers you a dynamic, high performance wash light, whilst enjoying the many advantages of our TE™ Transferable Engine technology.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

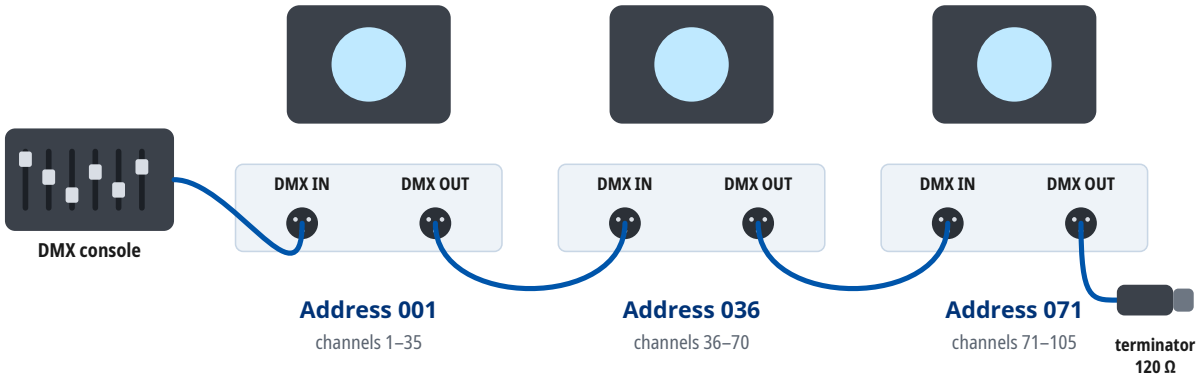
⚠ WARNING

- 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: 26.3 kg.
- Use suitable mounting hardware (for example truss clamps) and tighten all screw connections properly.
- Always secure the suspended device against falling with a safety cable of adequate load capacity, routed through a fixed point of the device and around the supporting structure.
- During installation and removal, keep people out of the area below the work position.
- Regularly inspect the fixings and the safety cable for damage, corrosion and loosening.

6 Connections

- Use shielded cable designed for DMX512 with an impedance of 110 Ω. Ordinary microphone cable is not suitable for DMX, especially over longer distances.
- Connect the devices in a daisy chain: connect the DMX OUT of one device to the DMX IN of the next. Do not split the line with Y-cables or wire it in a star; the line may be split only with a DMX splitter.
- Connect the shield to pin 1 only. Do not connect the shield (ground) to the metal shell of the connector; this can cause short circuits or erratic behavior.
- XLR pin assignment: pin 1 – shield (ground), pin 2 – Data- (Data Complement), pin 3 – Data+ (Data True). On 5-pin connectors, pins 4 and 5 are not connected; a 5-pin connector can be connected to a 3-pin one with a cable adapter.
- Terminate the end of the line (for impedance matching): plug an XLR connector with a 120 Ω, ¼ W resistor between pins 2 and 3 into the DMX OUT of the last device. This reduces the risk of erratic behavior.
- Connect no more than 32 devices to one DMX line. For more devices or longer runs, use a DMX splitter or booster.

DMX line



Mode 3 - Reduced 16 bit + green corre: every unit occupies 35 channels from its address. At most 32 units on one line; for more units or longer runs use a DMX splitter. A 120 Ω terminator closes the last DMX OUT.

7 Operation

Setting the DMX address

- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Mode 3 - Reduced 16 bit + green corre”: 35.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- For several devices in a row in the DMX mode “Mode 3 - Reduced 16 bit + green corre”, you can use, for example, the start addresses 1, 36, 71, 106.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.
- The device supports RDM (Remote Device Management), two-way communication with the controller over the DMX line.

8 Functions at a glance

Functions in each DMX mode

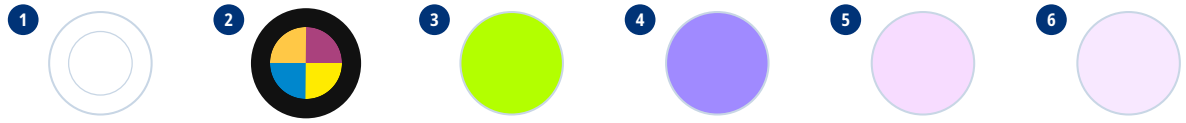
	Mode 1 - Standard 16 bit 34 channels	Mode 2 - Reduced 8 bit 30 channels	Mode 3 - Reduced 16 bit + green corre 35 channels	Mode 4 - Reduced 8 bit + green corre 31 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3
Dimmer	33	30	34	31
Dimmer resolution	16 bit	8 bit	16 bit	8 bit
Shutter / strobe	32	29	33	30
Color mixing	14–16	12–14	14–16	12–14
Color temperature	17	15	17	15
Color wheel	10, 12	10, 11	10, 12	10, 11
Frost	23	21	24	22
Zoom	24	22	25	23
Effects / macros	18	16	19	17

Color wheel



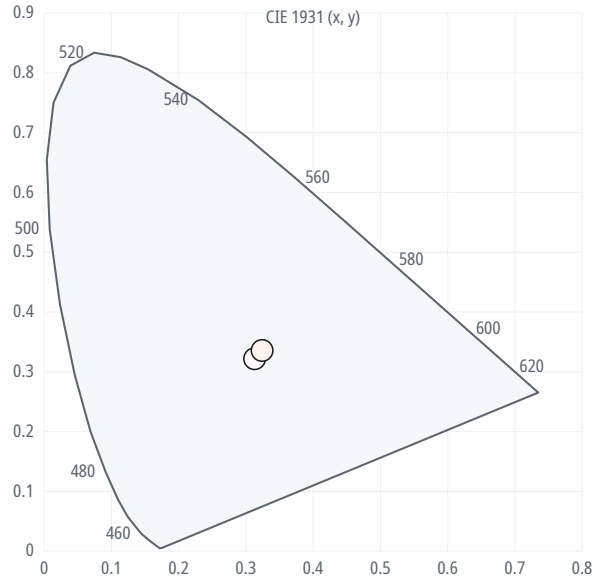
1. Open/white — DMX 0–10
2. Deep red — DMX 11–31
3. Deep blue — DMX 32–53
4. Orange — DMX 54–75
5. Green — DMX 76–96
6. Congo Blue — DMX 97–117

Gobo wheel



1. Open/white — DMX 0–10
2. Multicolor — DMX 11–31
3. Laser green — DMX 32–53
4. Lavander — DMX 54–75
5. CRI 80 — DMX 76–96
6. CRI 90 — DMX 97–117

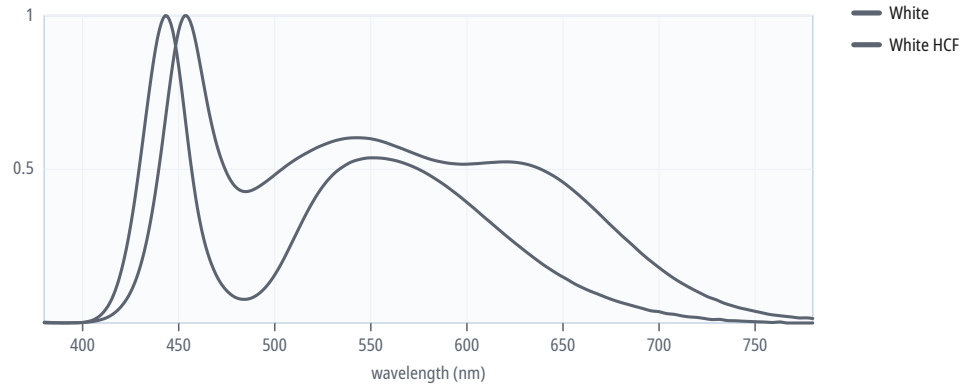
LED colors



LED	x	y
White	0.313	0.322
White HCF	0.324	0.336

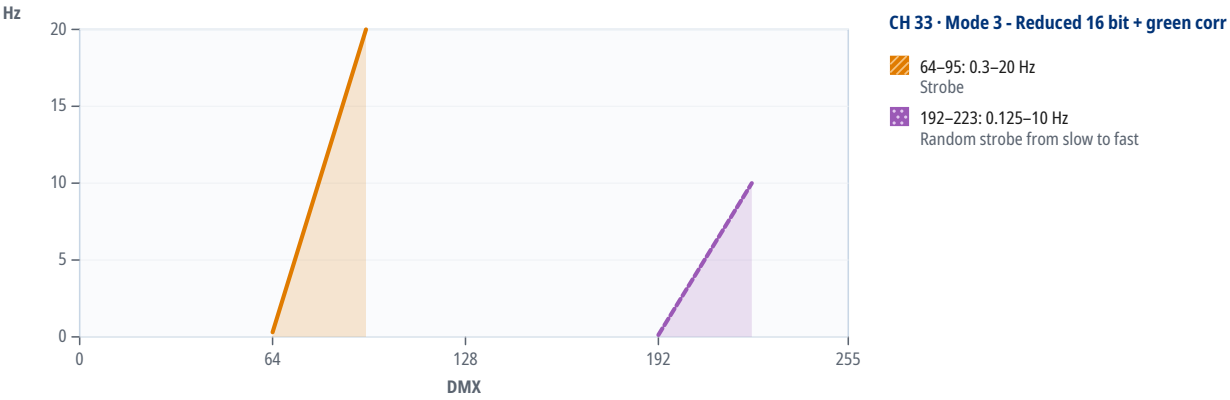
The dots are the LED colors the GDTF file states.

Spectra of the light sources



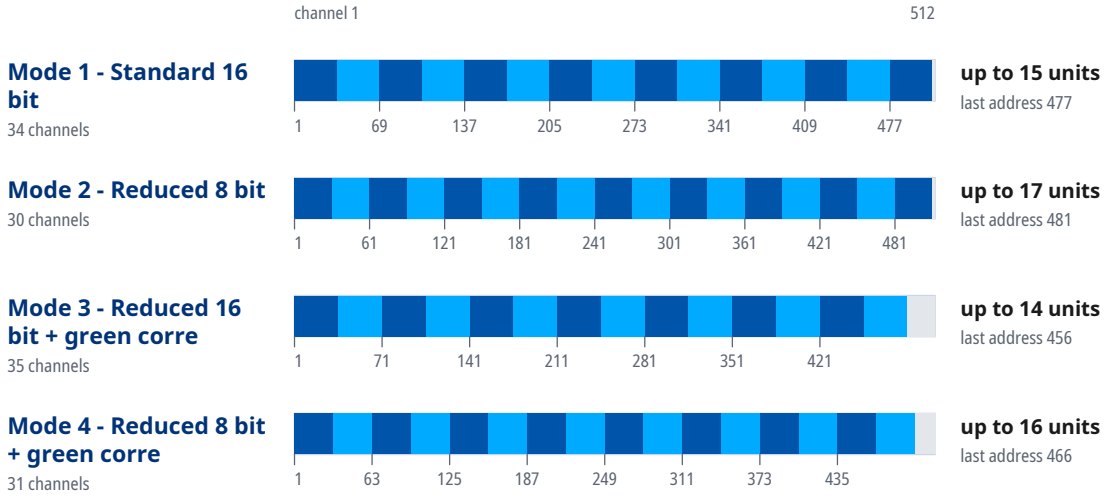
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 3 - Reduced 16 bit + green corre”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	176	11	351	16	U2 · 36
2	36	7	211	12	386	17	U2 · 71
3	71	8	246	13	421	18	U2 · 106
4	106	9	281	14	456	19	U2 · 141
5	141	10	316	15	U2 · 1	20	U2 · 176

Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

RDM personalities

Mode	Channels	RDM personality
Mode 1 - Standard 16 bit	34	1
Mode 2 - Reduced 8 bit	30	2
Mode 3 - Reduced 16 bit + green corre	35	3
Mode 4 - Reduced 8 bit + green corre	31	4

Mode 1 - Standard 16 bit

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 32 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 33 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 12 Colors 2 0, CH 14 Cyan 0, CH 15 Magenta 0, CH 16 Yellow 0, CH 17 CTO 0, CH 18 Color Macro 0, CH 32 Shutter 32, CH 33 Dimmer 255.

Channel functions at a glance



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

CH	Function	DMX	Description
3	Tilt (continued)	128–255	Tilt
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0	Standard mode
		1	Max speed mode
		2–255	Speed/Time max to min
6	Control	0–9	No Feature: No function
		10–14	Wired DMX
		15–19	Wireless DMX
		20–24	Display On
		25–29	Display Off
		30–39	No Feature: No function
		40–44	PT mode: Speed
		45–49	PT mode: Time
		50–54	BO while PAN TILT moving: ON
		55–59	BO while PAN TILT moving: OFF
		60–64	BO while Colour moving: ON
		65–69	BO while Colour moving: OFF
		70–79	No Feature: No function
		80–84	Fan mode Auto
		85–89	Fan mode High
		90–94	HighPower mode ON
		95–99	HighPower mode OFF
		100–104	No Feature: No function
		105–109	Dimmer curve Super square law
		110–114	Dimmer curve Square law
		115–119	Dimmer curve Linear
		120–124	Parking position ON
		125–129	Parking position OFF
		130–139	Reset except PT
		140–149	Position Reset
		150–159	Color system reset
		160–169	No Feature: No function
		170–174	Pan reset
		175–179	Tilt reset
		180–189	Zoom Focus Frost Prism reset
		190–199	Barndoors and Scrim reset
		200–209	Total reset
		210–239	No Feature: No function
		240	Disabled Quiet mode
		241–255	Quiet mode min to max
7	LED Frequency	0–4	PWM frequency from Display menu
		5–9	300 Hz

CH	Function	DMX	Description
7	LED Frequency (continued)	10–14	600 Hz
		15–19	1200 Hz
		20–24	2400 Hz
		25–255	No function
8	LED Frequency Adjust	0–1	Selected LED frequency
		2–127	LED Frequency (step -126...-1)
		128	Selected LED frequency
		129–254	LED Frequency (step 1...126)
		255	Selected LED Frequency
9	Intensity Indication	0–10	No function
		11–20	Indication of drop of max light intensity
		21–30	Set drop by 6-10% (RED)
		31–40	Set drop by 11-15% (Green)
		41–50	Set drop by 16-20% (BLUE)
		51–60	Set drop by 21-25% (CYAN)
		61–70	Set drop by 26-30% (MAGENTA)
		71–80	Set drop by 31-35% (YELLOW)
		81–90	Set drop by 36-40% (ORANGE)
		91–100	Original intensity (WHITE)
		101–255	No function
10	Colors	0–10	Open/white
		11–31	Deep red
		32–53	Deep blue
		54–75	Orange
		76–96	Green
		97–117	Congo Blue
		118–127	Open/white
		128–129	Open/white step
		130–141	Deep red step
		142–153	Deep blue step
		154–165	Orange step
		166–177	Green step
		178–189	Congo blue step
		190–191	Color 1 Wheel Spin: Fast to slow 1/9 (576–402.2 °/s)
		192–194	Color 1 Wheel Spin: Fast to slow 2/9 (402.2–249.8 °/s)
		195–197	Color 1 Wheel Spin: Fast to slow 3/9 (249.8–166 °/s)
		198–201	Color 1 Wheel Spin: Fast to slow 4/9 (166–101.8 °/s)
		202–204	Color 1 Wheel Spin: Fast to slow 5/9 (101.8–77.6 °/s)
		205–206	Color 1 Wheel Spin: Fast to slow 6/9 (77.6–57.7 °/s)
		207–209	Color 1 Wheel Spin: Fast to slow 7/9 (57.7–31.6 °/s)
		210–211	Color 1 Wheel Spin: Fast to slow 8/9 (31.6–15.5 °/s)
		212–215	Color 1 Wheel Spin: Fast to slow 9/9 (15.5–1.86 °/s)

CH	Function	DMX	Description
10	Colors (continued)	216–217	No Rotation middle
		218–220	Color 1 Wheel Spin: Slow to fast 1/9 (1.86–15.5 °/s)
		221–222	Color 1 Wheel Spin: Slow to fast 2/9 (15.5–31.6 °/s)
		223–225	Color 1 Wheel Spin: Slow to fast 3/9 (31.6–57.7 °/s)
		226–227	Color 1 Wheel Spin: Slow to fast 4/9 (57.7–77.6 °/s)
		228–230	Color 1 Wheel Spin: Slow to fast 5/9 (77.6–101.8 °/s)
		231–234	Color 1 Wheel Spin: Slow to fast 6/9 (101.8–166 °/s)
		235–237	Color 1 Wheel Spin: Slow to fast 7/9 (166–249.8 °/s)
		238–240	Color 1 Wheel Spin: Slow to fast 8/9 (249.8–402.2 °/s)
		241–243	Color 1 Wheel Spin: Slow to fast 9/9 (402.2–576 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
11	Colors Fine	0–255	Fine adjustment of CH 10
12	Colors 2	0–10	Open/white
		11–31	Multicolor
		32–53	Laser green
		54–75	Lavander
		76–96	CRI 80
		97–117	CRI 90
		118–129	Open/white
		130–141	Multicolor
		142–153	Laser green
		154–165	Lavander
		166–177	CRI 80
		178–189	CRI 90
		190–191	Color 2 Wheel Spin: Fast to slow 1/9 (576–402.2 °/s)
		192–194	Color 2 Wheel Spin: Fast to slow 2/9 (402.2–249.8 °/s)
		195–197	Color 2 Wheel Spin: Fast to slow 3/9 (249.8–166 °/s)
		198–201	Color 2 Wheel Spin: Fast to slow 4/9 (166–101.8 °/s)
		202–204	Color 2 Wheel Spin: Fast to slow 5/9 (101.8–77.6 °/s)
		205–206	Color 2 Wheel Spin: Fast to slow 6/9 (77.6–57.7 °/s)
		207–209	Color 2 Wheel Spin: Fast to slow 7/9 (57.7–31.6 °/s)
		210–211	Color 2 Wheel Spin: Fast to slow 8/9 (31.6–15.5 °/s)
		212–215	Color 2 Wheel Spin: Fast to slow 9/9 (15.5–1.86 °/s)
		216–217	No rotation middle
		218–220	Color 2 Wheel Spin: Slow to fast 1/9 (1.86–15.5 °/s)
		221–222	Color 2 Wheel Spin: Slow to fast 2/9 (15.5–31.6 °/s)
		223–225	Color 2 Wheel Spin: Slow to fast 3/9 (31.6–57.7 °/s)
		226–227	Color 2 Wheel Spin: Slow to fast 4/9 (57.7–77.6 °/s)
		228–230	Color 2 Wheel Spin: Slow to fast 5/9 (77.6–101.8 °/s)
		231–234	Color 2 Wheel Spin: Slow to fast 6/9 (101.8–166 °/s)
		235–237	Color 2 Wheel Spin: Slow to fast 7/9 (166–249.8 °/s)

CH	Function	DMX	Description
12	Colors 2 (continued)	238–240	Color 2 Wheel Spin: Slow to fast 8/9 (249.8–402.2 °/s)
		241–243	Color 2 Wheel Spin: Slow to fast 9/9 (402.2–576 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
13	Colors 2 Fine	0–255	Fine adjustment of CH 12
14	Cyan	0	Min
		1–254	Min ... Max
		255	Max
15	Magenta	0	Min
		1–254	Min ... Max
		255	Max
16	Yellow	0	Min
		1–254	Min ... Max
		255	Max
17	CTO	0	6700K
		1–254	6700K ... 3000K
		255	3000K
18	Color Macro	0	No function
		1–2	Filter 4 (Medium Bastard Amber)
		3–4	Filter 10 (Medium Yellow)
		5–6	Filter 19 (Fire)
		7–8	Filter 26 (Bright Red)
		9–10	Filter 58 (Lavender)
		11–12	Filter 68 (Sky Blue)
		13–14	Filter 71 (Tokyo Blue)
		15–16	Filter 79 (Just Blue)
		17–18	Filter 88 (Lime Green)
		19–20	Filter 90 (Dark Yellow Green)
		21–22	Filter 100 (Spring Yellow)
		23–24	Filter 101 (Yellow)
		25–26	Filter 102 (Light Amber)
		27–28	Filter 103 (Straw)
		29–30	Filter 104 (Deep Amber)
		31–32	Filter 105 (Orange)
		33–34	Filter 106 (Primary Red)
		35–36	Filter 111 (Dark Pink)
		37–38	Filter 115 (Peacock Blue)
		39–40	Filter 116 (Medium Blue-Green)
		41–42	Filter 117 (Steel Blue)
		43–44	Filter 118 (Light Blue)
		45–46	Filter 119 (Dark Blue)
		47–48	Filter 120 (Deep Blue)

CH	Function	DMX	Description
18	Color Macro (continued)	49–50	Filter 121 (Filter Green)
		51–52	Filter 128 (Bright Pink)
		53–54	Filter 131 (Marine Blue)
		55–56	Filter 132 (Medium Blue)
		57–58	Filter 134 (Golden Amber)
		59–60	Filter 135 (Deep Golden Amber)
		61–62	Filter 136 (Pale Lavender)
		63–64	Filter 137 (Special Lavender)
		65–66	Filter 138 (Pale Green)
		67–68	Filter 139 (Primary Green)
		69–70	Filter 141 (Bright Blue)
		71–72	Filter 147 (Apricot)
		73–74	Filter 148 (Bright Rose)
		75–76	Filter 152 (Pale Gold)
		77–78	Filter 154 (Pale Rose)
		79–80	Filter 157 (Pink)
		81–82	Filter 158 (Deep Orange)
		83–84	Filter 162 (Bastard Amber)
		85–86	Filter 164 (Flame Red)
		87–88	Filter 165 (Daylight Blue)
		89–90	Filter 169 (Lilac Tint)
		91–92	Filter 170 (Deep Lavender)
		93–94	Filter 172 (Lagoon Blue)
		95–96	Filter 179 (Chrome Orange)
		97–98	Filter 180 (Dark Lavender)
		99–100	Filter 181 (Congo Blue)
		101–102	Filter 197 (Alice Blue)
		103–104	Filter 201 (Full CT Blue)
		105–106	Filter 202 (Half CT Blue)
		107–108	Filter 203 (Quarter CT Blue)
		109–110	Filter 204 (Full CT Orange)
		111–112	Filter 205 (Half CT Orange)
		113–114	Filter 206 (Quarter CT Orange)
		115–116	Filter 247 (Filter Minus Green)
		117–118	Filter 248 (Half Minus Green)
		119–120	Filter 281 (Three Quarter CT Blue)
		121–122	Filter 285 (Three Quarter CT Orange)
		123–124	Filter 352 (Glacier Blue)
		125–126	Filter 353 (Lighter Blue)
		127–128	Filter 715 (Cabana Blue)
		129–130	Filter 778 (Millennium Gold)
		131–132	Filter 793 (Vanity Fair)

CH	Function	DMX	Description
18	Color Macro (continued)	133–255	No function
19	Color Mix Speed		CMY CTO Gobo speed
		0	Speed max
		1–254	Speed max ... Speed min
		255	Speed min
20	Color Mix Time	0	Function is off
		1	Time min
		2–254	Time min ... Time max
		255	Time max
21	Scrim Position	0	No function
		1–255	Scrim inserting
22	Scrim Index	0	Scrim indexing 0 deg
		1–63	Scrim indexing 0 deg ... Scrim indexing 90 deg
		64	Scrim indexing 90 deg
		65–127	Scrim indexing 90 deg ... Scrim indexing 180 deg
		128	Scrim indexing 180 deg
		129–191	Scrim indexing 180 deg ... Scrim indexing 270 deg
		192	Scrim indexing 270 deg
		193–254	Scrim indexing 270 deg ... Scrim indexing 360 deg
		255	Scrim indexing 360 deg
23	Frost	0	Light Frost: Open
		1–50	Light Frost from 0% to 100%
		51–53	100% Light frost
		54–63	Light Frost: Pulse closing from slow to fast
		64–73	Light Frost: Pulse opening from fast to slow
		74–83	Light Frost: Ramping from fast to slow
		84–86	Medium Frost: Open
		87–136	Medium Frost from 0% to 100%
		137–139	100% Medium Frost
		140–149	Medium Frost: Pulse closing from slow to fast
		150–159	Medium Frost: Pulse opening from fast to slow
		160–169	Medium Frost: Ramping from fast to slow
		170–172	Combined Frost: Open
		173–222	Combined Frost from 0% to 100%
		223–225	100% Combined Frost
		226–235	Combined Frost: Pulse closing from slow to fast
		236–245	Combined Frost: Pulse opening from fast to slow
		246–255	Combined Frost: Ramping from fast to slow
24	Zoom	0–255	Max ... min
		255	Min
25	Zoom Fine	0–255	Fine adjustment of CH 24
26	Edge Color Corection	0	Min

CH	Function	DMX	Description
26	Edge Color Corection (continued)	1–254	Min ... max
		255	Max
27	Shaper Rotation	0	Min
		1–127	Min ... center
		128	Center
		129–254	Center ... max
		255	Max
28	Blade 2 A		Blade 2 - movement
		0	Min
		1–254	Min ... max
		255	Max
29	Blade 1 A		Blade 1 - movement
		0	Min
		1–254	Min ... max
		255	Max
30	Blade 4 A		Blade 4 - movement
		0	Min
		1–254	Min ... max
		255	Max
31	Blade 3 A		Blade 3 - movement
		0	Min
		1–254	Min ... max
		255	Max
32	Shutter	0–31	Open/Closed: Closed
		32–63	Open/Closed: Open
		64–67	Strobe: Slow to fast 1/12 (0.304–0.51 Hz)
		68–79	Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.51–9.83 Hz)
		80–82	Strobe: Slow to fast 6/12 (10.5–11.7 Hz)
		83–94	Strobe: Slow to fast 6/12 ... Slow to fast 12/12 (12.4–19.4 Hz)
		95	Strobe: Slow to fast 12/12
		96–127	Open
		128–130	Strobe Pulse Open: Slow to fast 1/7 (0.119–0.209 Hz)
		131–134	Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.209–0.328 Hz)
		135–136	Strobe Pulse Open: Slow to fast 4/7 (0.328–0.387 Hz)
		137–140	Strobe Pulse Open: Slow to fast 4/7 ... Slow to fast 7/7 (0.387–0.536 Hz)
		141–143	Strobe Pulse Open: Slow to fast 7/7 (0.536–0.656 Hz)
		144–145	Strobe Pulse Close: Fast to slow 1/7 (0.656–0.536 Hz)
		146–149	Strobe Pulse Close: Fast to slow 1/7 ... Fast to slow 4/7 (0.536–0.387 Hz)
		150–151	Strobe Pulse Close: Fast to slow 4/7 (0.387–0.328 Hz)

CH	Function	DMX	Description
32	Shutter (continued)	152–155	Strobe Pulse Close: Fast to slow 4/7 ... Fast to slow 7/7 (0.328–0.209 Hz)
		156–159	Strobe Pulse Close: Fast to slow 7/7 (0.209–0.119 Hz)
		160–191	Open
		192–223	Random strobe from slow to fast (0.125–10 Hz)
		224–255	Open
33	Dimmer	0–255	Closed ... Open
		255	Open
34	Dimmer Fine	0–255	Fine adjustment of CH 33

Mode 2 - Reduced 8 bit

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 29 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 30 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 11 Colors 2 0, CH 12 Cyan 0, CH 13 Magenta 0, CH 14 Yellow 0, CH 15 CTO 0, CH 16 Color Macro 0, CH 29 Shutter 32, CH 30 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - Standard 16 bit” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - Standard 16 bit” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - Standard 16 bit” (p. 12)
6	Control		Same as CH 6 in the mode “Mode 1 - Standard 16 bit” (p. 12)

CH	Function	DMX	Description
7	LED Frequency	0–4	PWM frequency from Display menu (0–0.17 Hz)
		5–9	300 Hz
		10–14	600 Hz
		15–19	1200 Hz
		20–24	2400 Hz
		25–255	No function
8	LED Frequency Adjust		Same as CH 8 in the mode “Mode 1 - Standard 16 bit” (p. 13)
9	Intensity Indication		Same as CH 9 in the mode “Mode 1 - Standard 16 bit” (p. 13)
10	Colors	0–11	Open/white
		12–32	Deep red
		33–54	Deep blue
		55–76	Orange
		77–97	Green
		98–118	Congo Blue
		119–127	Open/white
		128–129	Open/white step
		130–141	Deep red step
		142–153	Deep blue step
		154–165	Orange step
		166–177	Green step
		178–189	Congo blue step
		190–191	Color 1 Wheel Spin: Fast to slow 1/9 (576–402.2 °/s)
		192–194	Color 1 Wheel Spin: Fast to slow 2/9 (402.2–249.8 °/s)
		195–197	Color 1 Wheel Spin: Fast to slow 3/9 (249.8–166 °/s)
		198–201	Color 1 Wheel Spin: Fast to slow 4/9 (166–101.8 °/s)
		202–204	Color 1 Wheel Spin: Fast to slow 5/9 (101.8–77.6 °/s)
		205–206	Color 1 Wheel Spin: Fast to slow 6/9 (77.6–57.7 °/s)
		207–209	Color 1 Wheel Spin: Fast to slow 7/9 (57.7–31.6 °/s)
		210–211	Color 1 Wheel Spin: Fast to slow 8/9 (31.6–15.5 °/s)
		212–215	Color 1 Wheel Spin: Fast to slow 9/9 (15.5–1.86 °/s)
		216–217	No Rotation middle
		218–220	Color 1 Wheel Spin: Slow to fast 1/9 (1.86–15.5 °/s)
		221–222	Color 1 Wheel Spin: Slow to fast 2/9 (15.5–31.6 °/s)
		223–225	Color 1 Wheel Spin: Slow to fast 3/9 (31.6–57.7 °/s)
		226–227	Color 1 Wheel Spin: Slow to fast 4/9 (57.7–77.6 °/s)
		228–230	Color 1 Wheel Spin: Slow to fast 5/9 (77.6–101.8 °/s)
		231–234	Color 1 Wheel Spin: Slow to fast 6/9 (101.8–166 °/s)
		235–237	Color 1 Wheel Spin: Slow to fast 7/9 (166–249.8 °/s)
		238–240	Color 1 Wheel Spin: Slow to fast 8/9 (249.8–402.2 °/s)
		241–243	Color 1 Wheel Spin: Slow to fast 9/9 (402.2–576 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow

CH	Function	DMX	Description
11	Colors 2	0–11	Open/white
		12–32	Multicolor
		33–54	Laser green
		55–76	Lavander
		77–97	CRI 80
		98–118	CRI 90
		119–127	Open/white
		128	Color 2
		129	Open/white
		130–141	Multicolor
		142–153	Laser green
		154–165	Lavander
		166–177	CRI 80
		178–189	CRI 90
		190–191	Color 2 Wheel Spin: Fast to slow 1/9 (576–402.2 °/s)
		192–194	Color 2 Wheel Spin: Fast to slow 2/9 (402.2–249.8 °/s)
		195–197	Color 2 Wheel Spin: Fast to slow 3/9 (249.8–166 °/s)
		198–201	Color 2 Wheel Spin: Fast to slow 4/9 (166–101.8 °/s)
		202–204	Color 2 Wheel Spin: Fast to slow 5/9 (101.8–77.6 °/s)
		205–206	Color 2 Wheel Spin: Fast to slow 6/9 (77.6–57.7 °/s)
		207–209	Color 2 Wheel Spin: Fast to slow 7/9 (57.7–31.6 °/s)
		210–211	Color 2 Wheel Spin: Fast to slow 8/9 (31.6–15.5 °/s)
		212–215	Color 2 Wheel Spin: Fast to slow 9/9 (15.5–1.86 °/s)
		216–217	No rotation middle
		218–220	Color 2 Wheel Spin: Slow to fast 1/9 (1.86–15.5 °/s)
		221–222	Color 2 Wheel Spin: Slow to fast 2/9 (15.5–31.6 °/s)
		223–225	Color 2 Wheel Spin: Slow to fast 3/9 (31.6–57.7 °/s)
		226–227	Color 2 Wheel Spin: Slow to fast 4/9 (57.7–77.6 °/s)
		228–230	Color 2 Wheel Spin: Slow to fast 5/9 (77.6–101.8 °/s)
		231–234	Color 2 Wheel Spin: Slow to fast 6/9 (101.8–166 °/s)
		235–237	Color 2 Wheel Spin: Slow to fast 7/9 (166–249.8 °/s)
		238–240	Color 2 Wheel Spin: Slow to fast 8/9 (249.8–402.2 °/s)
		241–243	Color 2 Wheel Spin: Slow to fast 9/9 (402.2–576 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
12	Cyan		Same as CH 14 in the mode “Mode 1 - Standard 16 bit” (p. 15)
13	Magenta		Same as CH 15 in the mode “Mode 1 - Standard 16 bit” (p. 15)
14	Yellow		Same as CH 16 in the mode “Mode 1 - Standard 16 bit” (p. 15)
15	CTO		Same as CH 17 in the mode “Mode 1 - Standard 16 bit” (p. 15)
16	Color Macro		Same as CH 18 in the mode “Mode 1 - Standard 16 bit” (p. 15)
17	Color Mix Speed		Same as CH 19 in the mode “Mode 1 - Standard 16 bit” (p. 17)
18	Color Mix Time		Same as CH 20 in the mode “Mode 1 - Standard 16 bit” (p. 17)

CH	Function	DMX	Description
19	Scrim Position		Same as CH 21 in the mode “Mode 1 - Standard 16 bit” (p. 17)
20	Scrim Index		Same as CH 22 in the mode “Mode 1 - Standard 16 bit” (p. 17)
21	Frost		Same as CH 23 in the mode “Mode 1 - Standard 16 bit” (p. 17)
22	Zoom	0	Max
		1–254	Max ... min
		255	Min
23	Edge Color Corection		Same as CH 26 in the mode “Mode 1 - Standard 16 bit” (p. 17)
24	Shaper Rotation		Same as CH 27 in the mode “Mode 1 - Standard 16 bit” (p. 18)
25	Blade 2 A		Same as CH 28 in the mode “Mode 1 - Standard 16 bit” (p. 18)
26	Blade 1 A		Same as CH 29 in the mode “Mode 1 - Standard 16 bit” (p. 18)
27	Blade 4 A		Same as CH 30 in the mode “Mode 1 - Standard 16 bit” (p. 18)
28	Blade 3 A		Same as CH 31 in the mode “Mode 1 - Standard 16 bit” (p. 18)
29	Shutter		Same as CH 32 in the mode “Mode 1 - Standard 16 bit” (p. 18)
30	Dimmer	0	Closed
		1–254	Closed ... Open
		255	Open

Mode 3 - Reduced 16 bit + green corre

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 33 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 34 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 12 Colors 2 0, CH 14 Cyan 0, CH 15 Magenta 0, CH 16 Yellow 0, CH 17 CTO 0, CH 19 Color Macro 0, CH 33 Shutter 32, CH 34 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - Standard 16 bit” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - Standard 16 bit” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - Standard 16 bit” (p. 12)

CH	Function	DMX	Description
6	Control		Same as CH 6 in the mode “Mode 1 - Standard 16 bit” (p. 12)
7	LED Frequency		Same as CH 7 in the mode “Mode 1 - Standard 16 bit” (p. 12)
8	LED Frequency Adjust		Same as CH 8 in the mode “Mode 1 - Standard 16 bit” (p. 13)
9	Intensity Indication		Same as CH 9 in the mode “Mode 1 - Standard 16 bit” (p. 13)
10	Colors		Same as CH 10 in the mode “Mode 1 - Standard 16 bit” (p. 13)
11	Colors Fine	0–255	Fine adjustment of CH 10
12	Colors 2		Same as CH 12 in the mode “Mode 1 - Standard 16 bit” (p. 14)
13	Colors 2 Fine	0–255	Fine adjustment of CH 12
14	Cyan		Same as CH 14 in the mode “Mode 1 - Standard 16 bit” (p. 15)
15	Magenta		Same as CH 15 in the mode “Mode 1 - Standard 16 bit” (p. 15)
16	Yellow		Same as CH 16 in the mode “Mode 1 - Standard 16 bit” (p. 15)
17	CTO		Same as CH 17 in the mode “Mode 1 - Standard 16 bit” (p. 15)
18	Tint	0	Uncorrected white
		1	Minus green
		2–127	Minus green ... Uncorrected white
		128	Uncorrected white
		129–254	Uncorrected white ... Plus green
		255	Plus green
19	Color Macro		Same as CH 18 in the mode “Mode 1 - Standard 16 bit” (p. 15)
20	Color Mix Speed		Same as CH 19 in the mode “Mode 1 - Standard 16 bit” (p. 17)
21	Color Mix Time		Same as CH 20 in the mode “Mode 1 - Standard 16 bit” (p. 17)
22	Scrim Position		Same as CH 21 in the mode “Mode 1 - Standard 16 bit” (p. 17)
23	Scrim Index		Same as CH 22 in the mode “Mode 1 - Standard 16 bit” (p. 17)
24	Frost		Same as CH 23 in the mode “Mode 1 - Standard 16 bit” (p. 17)
25	Zoom		Same as CH 24 in the mode “Mode 1 - Standard 16 bit” (p. 17)
26	Zoom Fine	0–255	Fine adjustment of CH 25
27	Edge Color Corection		Same as CH 26 in the mode “Mode 1 - Standard 16 bit” (p. 17)
28	Shaper Rotation		Same as CH 27 in the mode “Mode 1 - Standard 16 bit” (p. 18)
29	Blade 2 A		Same as CH 28 in the mode “Mode 1 - Standard 16 bit” (p. 18)
30	Blade 1 A		Same as CH 29 in the mode “Mode 1 - Standard 16 bit” (p. 18)
31	Blade 4 A		Same as CH 30 in the mode “Mode 1 - Standard 16 bit” (p. 18)
32	Blade 3 A		Same as CH 31 in the mode “Mode 1 - Standard 16 bit” (p. 18)
33	Shutter		Same as CH 32 in the mode “Mode 1 - Standard 16 bit” (p. 18)
34	Dimmer		Same as CH 33 in the mode “Mode 1 - Standard 16 bit” (p. 19)
35	Dimmer Fine	0–255	Fine adjustment of CH 34

Mode 4 - Reduced 8 bit + green corre

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 30 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 31 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 11 Colors 2 0, CH 12 Cyan 0, CH 13 Magenta 0, CH 14 Yellow 0, CH 15 CTO 0, CH 17 Color Macro 0, CH 30 Shutter 32, CH 31 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - Standard 16 bit” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - Standard 16 bit” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - Standard 16 bit” (p. 12)

CH	Function	DMX	Description
6	Control		Same as CH 6 in the mode “Mode 1 - Standard 16 bit” (p. 12)
7	LED Frequency		Same as CH 7 in the mode “Mode 2 - Reduced 8 bit” (p. 21)
8	LED Frequency Adjust		Same as CH 8 in the mode “Mode 1 - Standard 16 bit” (p. 13)
9	Intensity Indication		Same as CH 9 in the mode “Mode 1 - Standard 16 bit” (p. 13)
10	Colors		Same as CH 10 in the mode “Mode 2 - Reduced 8 bit” (p. 21)
11	Colors 2		Same as CH 11 in the mode “Mode 2 - Reduced 8 bit” (p. 22)
12	Cyan		Same as CH 14 in the mode “Mode 1 - Standard 16 bit” (p. 15)
13	Magenta		Same as CH 15 in the mode “Mode 1 - Standard 16 bit” (p. 15)
14	Yellow		Same as CH 16 in the mode “Mode 1 - Standard 16 bit” (p. 15)
15	CTO		Same as CH 17 in the mode “Mode 1 - Standard 16 bit” (p. 15)
16	Tint		Same as CH 18 in the mode “Mode 3 - Reduced 16 bit + green corre” (p. 25)
17	Color Macro		Same as CH 18 in the mode “Mode 1 - Standard 16 bit” (p. 15)
18	Color Mix Speed		Same as CH 19 in the mode “Mode 1 - Standard 16 bit” (p. 17)
19	Color Mix Time		Same as CH 20 in the mode “Mode 1 - Standard 16 bit” (p. 17)
20	Scrim Position		Same as CH 21 in the mode “Mode 1 - Standard 16 bit” (p. 17)
21	Scrim Index		Same as CH 22 in the mode “Mode 1 - Standard 16 bit” (p. 17)
22	Frost		Same as CH 23 in the mode “Mode 1 - Standard 16 bit” (p. 17)
23	Zoom		Same as CH 22 in the mode “Mode 2 - Reduced 8 bit” (p. 23)
24	Edge Color Corection		Same as CH 26 in the mode “Mode 1 - Standard 16 bit” (p. 17)
25	Shaper Rotation		Same as CH 27 in the mode “Mode 1 - Standard 16 bit” (p. 18)
26	Blade 2 A		Same as CH 28 in the mode “Mode 1 - Standard 16 bit” (p. 18)
27	Blade 1 A		Same as CH 29 in the mode “Mode 1 - Standard 16 bit” (p. 18)
28	Blade 4 A		Same as CH 30 in the mode “Mode 1 - Standard 16 bit” (p. 18)
29	Blade 3 A		Same as CH 31 in the mode “Mode 1 - Standard 16 bit” (p. 18)
30	Shutter		Same as CH 32 in the mode “Mode 1 - Standard 16 bit” (p. 18)
31	Dimmer		Same as CH 30 in the mode “Mode 2 - Reduced 8 bit” (p. 23)

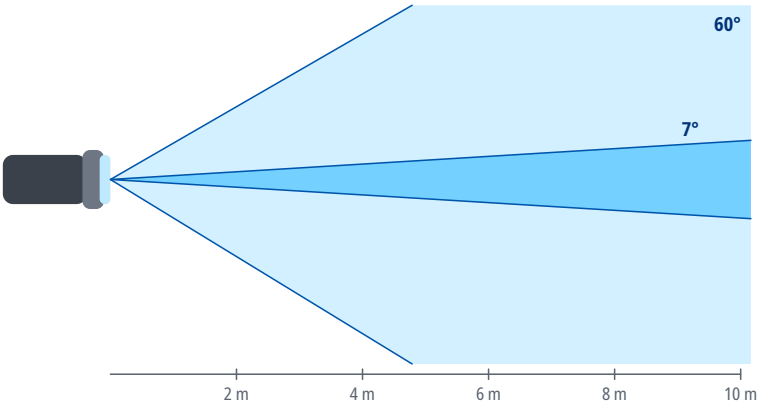
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	650 W
Luminous flux	19,528 lm
Color temperature	6,700 K
Color rendering index (CRI)	90
Optics	
Zoom	7–60°
Movement	
Pan	540°
Tilt	263.6°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45
RDM	yes (manufacturer ID 0x5253, device model ID 0x010B)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	950 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	26.3 kg
Operating environment	
Operating temperature	-5 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	3000–6700 K
Strobe frequency	0.3–20 Hz
LED frequency	0–0.17 Hz
Color wheel rotation	up to 576 °/s (96 rpm)
Color wheel rotation	up to 576 °/s (96 rpm)

Spot diameter



Distance	Ø 7°	Ø 60°
2 m	0.24 m	2.3 m
4 m	0.49 m	4.6 m
6 m	0.73 m	6.9 m
8 m	0.98 m	9.2 m
10 m	1.2 m	11.5 m
15 m	1.8 m	17.3 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.