DMX REFERENCE

Robin DL4F Wash

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_DL4F_Wash_97316.gdtf
GDTF revision	2025-05-20 Tilt physical value revision
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1 About this manual

This document describes the Robin DL4F Wash by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_DL4F_Wash_97316.gdtf from the GDTF-Share library.

File revision: “2025-05-20 Tilt physical value revision”.

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	550 W
Weight	21.5 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 RGBW	29	17	1, 30, 59, 88, ...
Mode 1 CMY	29	17	1, 30, 59, 88, ...
Mode 2 RGBW Reduced	23	22	1, 24, 47, 70, ...
Mode 2 CMY Reduced	23	22	1, 24, 47, 70, ...
Mode 3 RGBW Minimal	21	24	1, 22, 43, 64, ...
Mode 3 CMY Minimal	21	24	1, 22, 43, 64, ...

No light? Check these channels

- Mode 1 RGBW: CH 27 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 28 Dimmer above 0
- Mode 1 CMY: CH 27 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 28 Dimmer above 0
- Mode 2 RGBW Reduced: CH 22 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 23 Dimmer above 0
- Mode 2 CMY Reduced: CH 22 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 23 Dimmer above 0
- Mode 3 RGBW Minimal: CH 20 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 21 Dimmer above 0
- Mode 3 CMY Minimal: CH 20 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 21 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

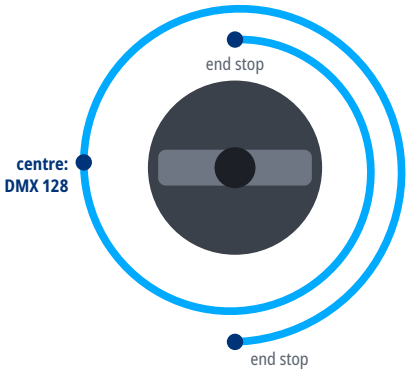
Description in the GDTF file

“This is the perfect companion to the ROBIN DL4S Profile, the new ROBIN DL4F Wash is based on the same RGBW LED module with improved brightness and with specifically modified color mixing and dimming for extra smooth, stepless operation especially at minimum brightness levels.”

Range of movement

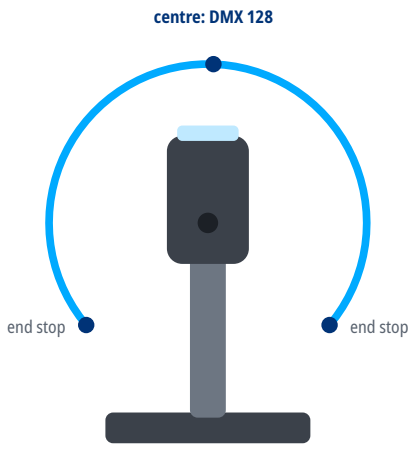
Pan 540°

top view



Tilt 260°

side view



5 Installation

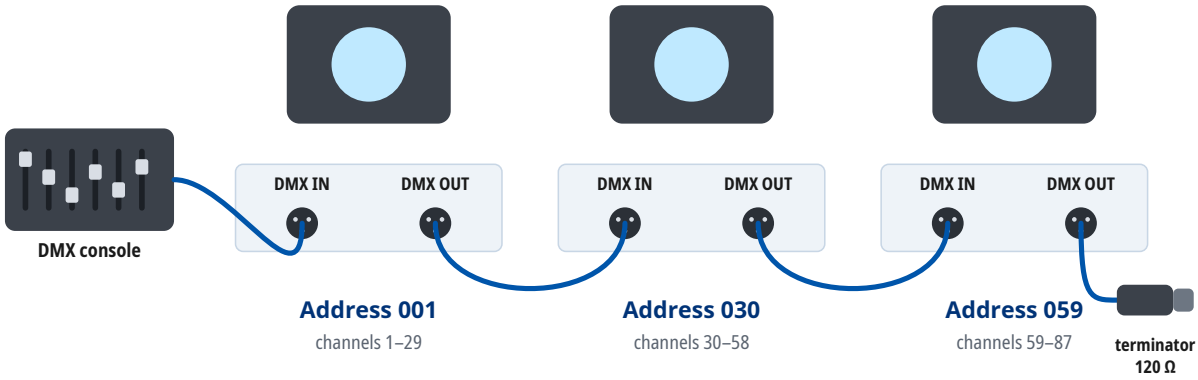
⚠ WARNING

- 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: 21.5 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 1 RGBW: every unit occupies 29 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

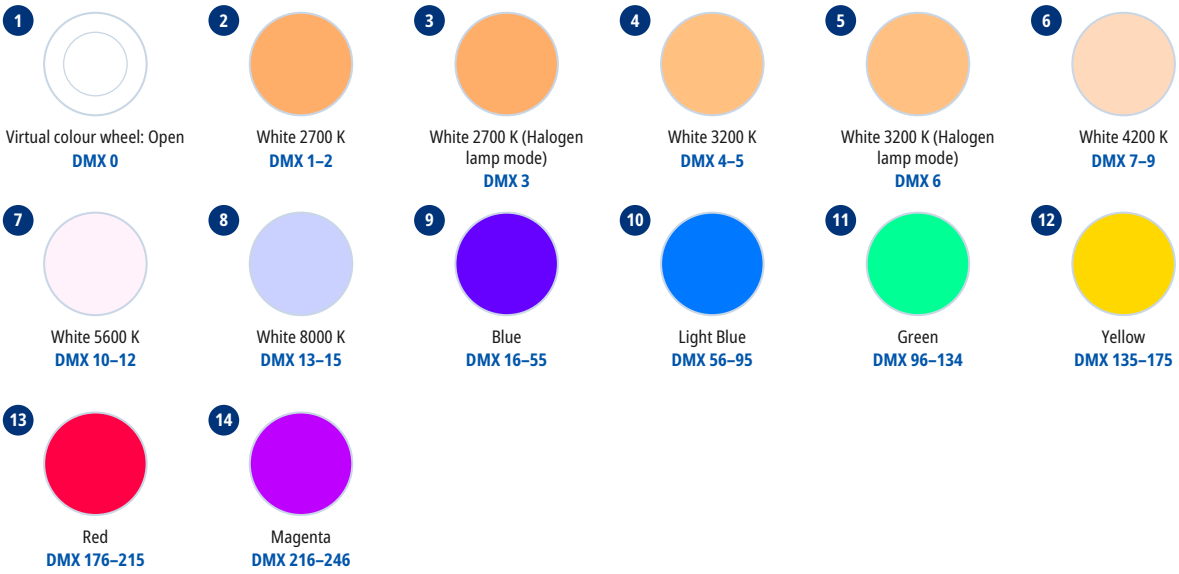
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Mode 1 RGBW”: 29.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 1 RGBW”, you can use, for example, the start addresses 1, 30, 59, 88.
- 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

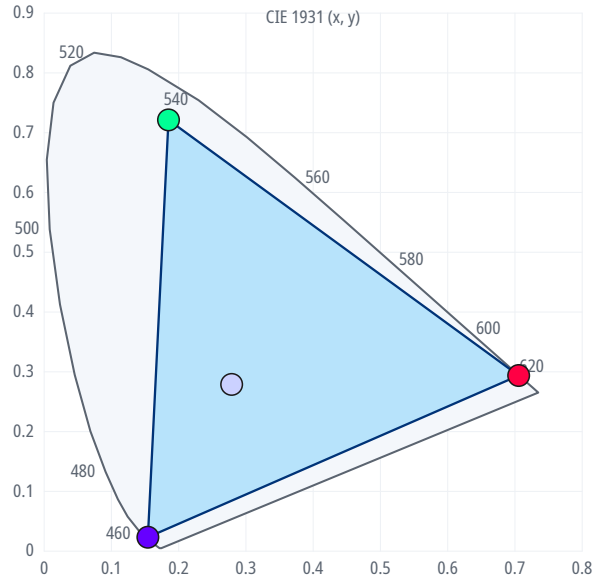
Functions in each DMX mode

	Mode 1 RGBW 29 channels	Mode 1 CMY 29 channels	Mode 2 RGBW Reduced 23 channels	Mode 2 CMY Reduced 23 channels	Mode 3 RGBW Minimal 21 channels	Mode 3 CMY Minimal 21 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3	1, 2	1, 2
Pan / Tilt resolution	16 bit	16 bit	16 bit	16 bit	8 bit	8 bit
Dimmer	28	28	23	23	21	21
Dimmer resolution	16 bit	16 bit	8 bit	8 bit	8 bit	8 bit
Shutter / strobe	27	27	22	22	20	20
Color mixing	4× (8–14)	8, 10, 12	8–11	8–10	6–9	6–8
Color temperature	16	16	12	12	10	10
Color wheel	7	7	7	7	5	5
Zoom	18	18	14	14	12	12
Effects / macros	25	25	20	20	18	18

Color wheel



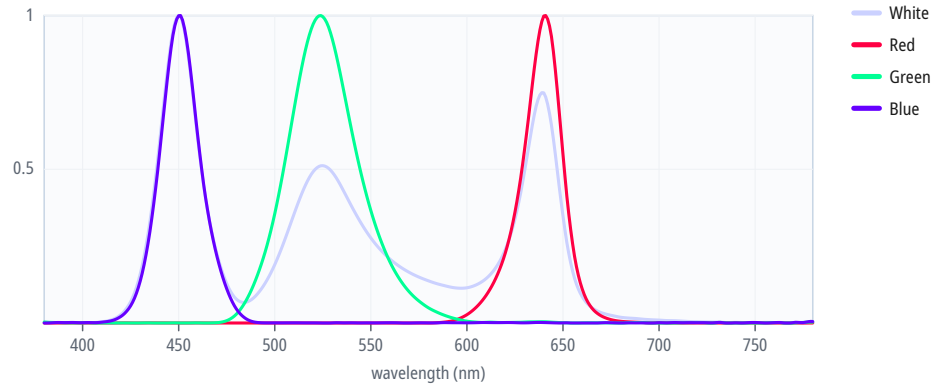
LED colors and the colors they mix



LED	x	y	nm
White	0.279	0.279	
Red	0.706	0.294	629
Green	0.185	0.721	530
Blue	0.154	0.023	453

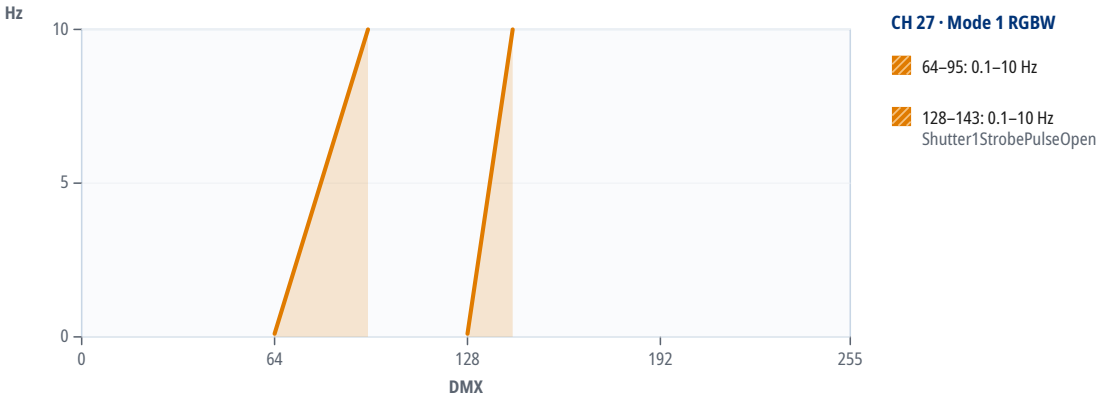
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Spectra of the light sources



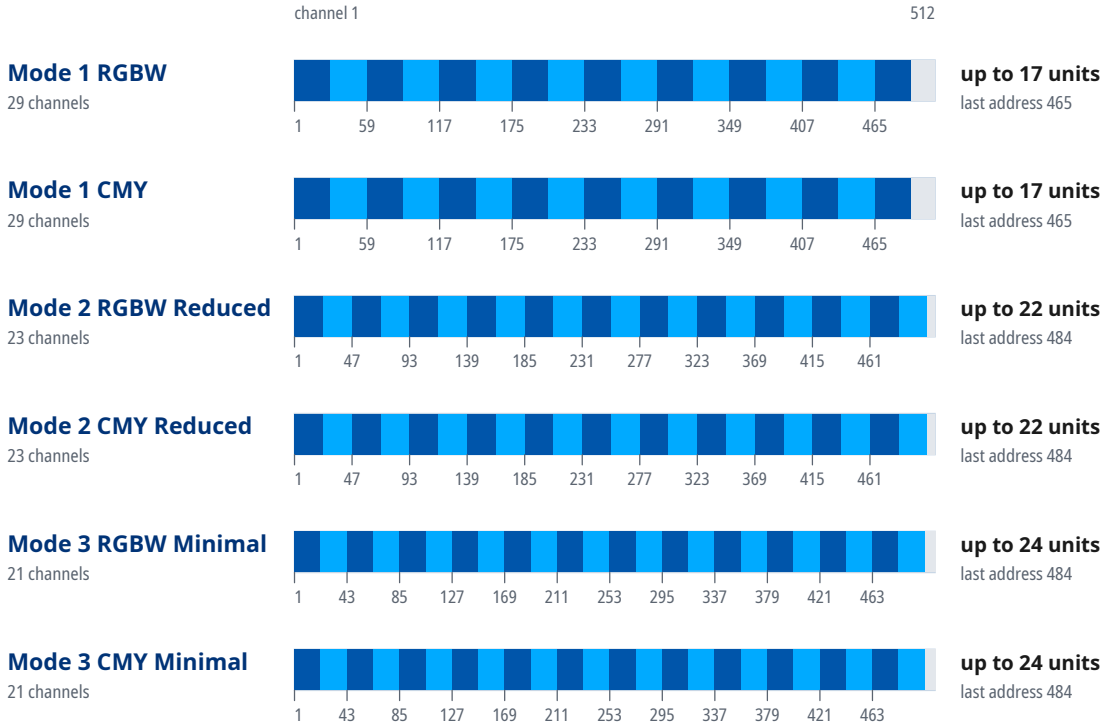
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 1 RGBW”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	146	11	291	16	436
2	30	7	175	12	320	17	465
3	59	8	204	13	349	18	U2 · 1
4	88	9	233	14	378	19	U2 · 30
5	117	10	262	15	407	20	U2 · 59

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 1 RGBW

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 27 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 28 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Color Macro 0, CH 8 Red 255, CH 10 Green 255, CH 12 Blue 255, CH 14 White 255, CH 27 Shutter 32, CH 28 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
		128–255	Tilt
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0	Standard mode
		1	Max Speed Mode
		2–254	Max Speed Mode ... Min Speed Mode
		255	Min Speed Mode
6	Control	0–4	Flight Case Position OFF

CH	Function	DMX	Description
6	Control (continued)	5–9	Flight Case Position ON
		10–14	Wired DMX
		15–19	Wireless DMX
		20–24	White point 8000K ON
		25–29	White point 8000K OFF
		30–39	RGB colour mixing mode
		40–49	CMY colour mixing mode
		50–59	PT mode: Speed
		60–69	PT mode: Time
		70–79	BO while PAN TILT moving: ON
		80–89	BO while PAN TILT moving: OFF
		90–94	DL Colour compatible mode On
		95–99	DL Colour compatible mode Off
		100–104	Dimmer curve: Square law
		105–109	Dimmer curve: Linear
		110–129	No Feature: Reserved
		130–139	Fixture reset (except pan/tilt)
		140–149	Pan/Tilt reset
		150–159	No Feature: Reserved
		160–179	No function
		180–189	Zoom/Frost reset
		190–199	Beam shaper reset
		200–209	Total fixture reset
		210–239	No Feature: Reserved
		240	Disable Theatre mode
		241	Theatre mode - automatic control of fan noise
		242–255	Theatre mode - fan noise control from min to max
7	Color Macro	0	Virtual colour wheel: Open
		1–2	White 2700 K
		3	White 2700 K (Halogen lamp mode)
		4–5	White 3200 K
		6	White 3200 K (Halogen lamp mode)
		7–9	White 4200 K
		10–12	White 5600 K
		13–15	White 8000 K
		16–55	Blue
		56–95	Light Blue
		96–134	Green
		135–175	Yellow
		176–215	Red
		216–246	Magenta
		247	Blue

CH	Function	DMX	Description
7	Color Macro (continued)	248–251	Rainbow effect from slow to fast
		252–255	Rainbow effect from fast to slow
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	White	0–255	Min ... Max
		255	Max
15	White Fine	0–255	Fine adjustment of CH 14
16	CTO	0	8000 K
		1–63	8000 K ... 5600 K
		64	5600 K
		65–127	5600 K ... 4200 K
		128	4200 K
		129–191	4200 K ... 3200 K
		192	3200 K
		193–254	3200 K ... 2700 K
		255	2700 K
17	Zoom Mode	0	Wide zoom OFF
		1–100	Wide zoom ON
		101–255	Reserved
18	Zoom	0–255	Min ... Max
		255	Max
19	Zoom Fine	0–255	Fine adjustment of CH 18
20	Shaper Rotation	0	Min
		1–127	Min ... mid
		128	Mid
		129–254	Mid ... max
		255	Max
21	Blade 4 A		Blade 1 - movement
		0	Min
		1–254	Min ... Max
		255	Max
22	Blade 2 A		Blade 2 - movement
		0	Min
		1–254	Min ... Max
		255	Max

CH	Function	DMX	Description
23	Blade 1 A		Blade 3 - movement
		0	Min
		1–254	Min ... Max
		255	Max
24	Blade 3 A		Blade 4 - movement
		0	Min
		1–254	Min ... Max
		255	Max
25	Shaper Macros		Framing shutters macros
		0–3	No function
		4–7	Macro 1
		8–11	Macro 2
		12–15	Macro 3
		16–19	Macro 4
		20–23	Macro 5
		24–27	Macro 6
		28–31	Macro 7
		32–35	Macro 8
		36–39	Macro 9
		40–43	Macro 10
		44–47	Macro 11
		48–51	Macro 12
		52–55	Macro 13
		56–59	Macro 14
		60–63	Macro 15
		64–67	Macro 16
		68–71	Macro 17
		72–75	Macro 18
		76–79	Macro 19
		80–83	Macro 20
		84–87	Macro 21
		88–91	Macro 22
		92–95	Macro 23
		96–99	Macro 24
		100–103	Macro 25
		104–107	Macro 26
		108–111	Macro 27
		112–115	Macro 28
		116–119	Macro 29
		120–123	Macro 30
		124–127	Macro 31
		128–131	Macro 32

CH	Function	DMX	Description
25	Shaper Macros (continued)	132–135	Macro 33
		136–139	Macro 34
		140–143	Macro 35
		144–147	Macro 36
		148–151	Macro 37
		152–155	Macro 38
		156–159	Macro 39
		160–163	Macro 40
		164–167	Macro 41
		168–171	Macro 42
		172–175	Macro 43
		176–179	Macro 44
		180–183	Macro 45
		184–187	Macro 46
		188–191	Macro 47
		192–195	Macro 48
		196–199	Macro 49
		200–203	Macro 50
		204–207	Macro 51
		208–211	Macro 52
		212–255	Reserved
26	Shaper Macros Speed		Framing shutters macro speed
		0	Min
		1–254	Min ... max
		255	Max
27	Shutter	0–31	Shutter closed
		32–63	Open/Closed: Shutter open
		64	Strobe slow
		65–94	Strobe slow ... Strobe fast
		95	Strobe fast
		96–127	Shutter open
		128	Open pulsing slow
		129–142	Open pulsing slow ... Open pulsing fast
		143	Open pulsing fast
		144	Close pulsing fast
		145–158	Close pulsing fast ... Close pulsing slow
		159	Close pulsing slow
		160–191	Shutter open
		192	Strobe random slow
		193–222	Strobe random slow ... Strobe random fast
		223	Strobe random fast
		224–255	Shutter open

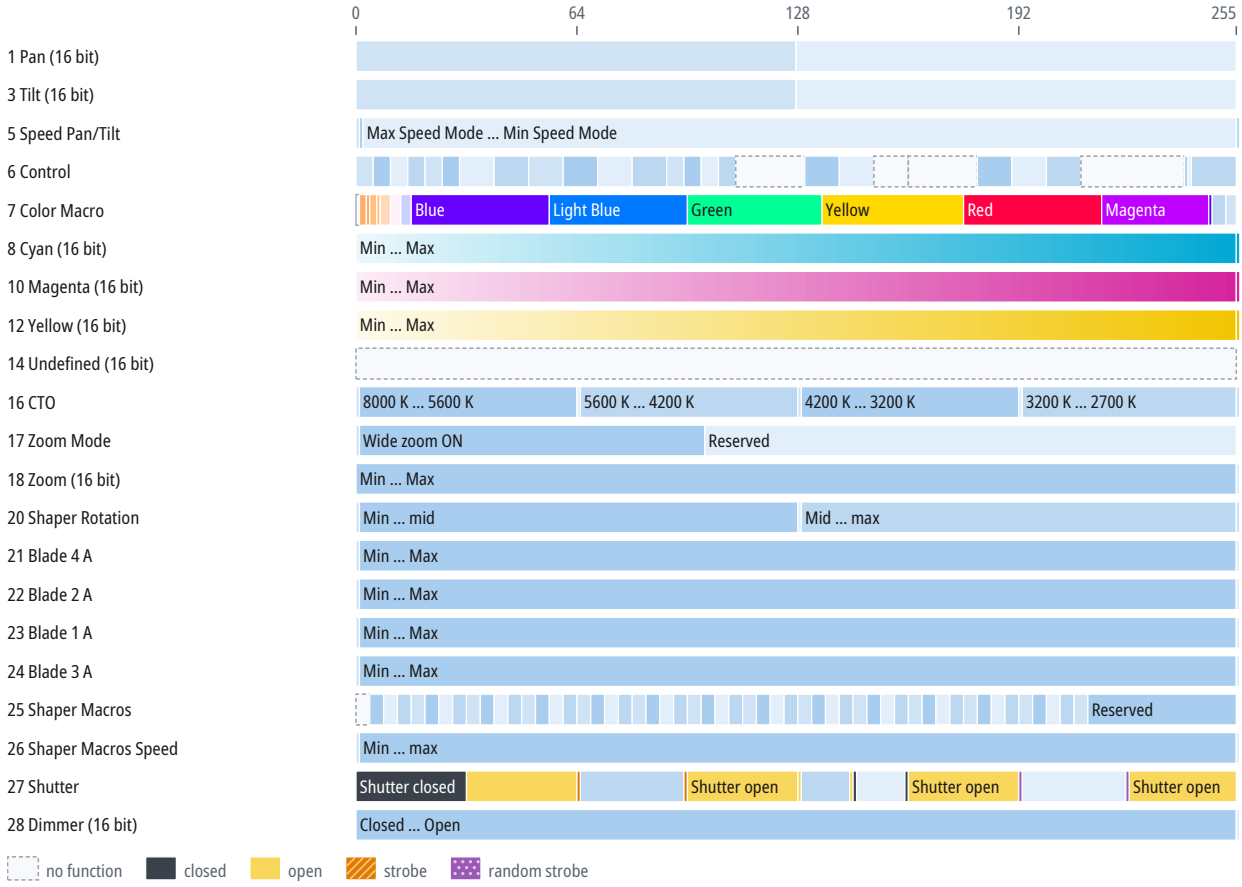
CH	Function	DMX	Description
28	Dimmer		Dimmer intensity
		0–255	Closed ... Open
		255	Open
29	Dimmer Fine	0–255	Fine adjustment of CH 28

Mode 1 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 27 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 28 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Color Macro 0, CH 8 Cyan 0, CH 10 Magenta 0, CH 12 Yellow 0, CH 27 Shutter 32, CH 28 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 RGBW” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 RGBW” (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 RGBW” (p. 11)
6	Control		Same as CH 6 in the mode “Mode 1 RGBW” (p. 11)
7	Color Macro		Same as CH 7 in the mode “Mode 1 RGBW” (p. 12)
8	Cyan	0–255	Min ... Max

CH	Function	DMX	Description
8	Cyan (continued)	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	Undefined	0–255	
15	Undefined Fine	0–255	Fine adjustment of CH 14
16	CTO		Same as CH 16 in the mode “Mode 1 RGBW” (p. 13)
17	Zoom Mode		Same as CH 17 in the mode “Mode 1 RGBW” (p. 13)
18	Zoom		Same as CH 18 in the mode “Mode 1 RGBW” (p. 13)
19	Zoom Fine	0–255	Fine adjustment of CH 18
20	Shaper Rotation		Same as CH 20 in the mode “Mode 1 RGBW” (p. 13)
21	Blade 4 A		Same as CH 21 in the mode “Mode 1 RGBW” (p. 13)
22	Blade 2 A		Same as CH 22 in the mode “Mode 1 RGBW” (p. 13)
23	Blade 1 A		Same as CH 23 in the mode “Mode 1 RGBW” (p. 14)
24	Blade 3 A		Same as CH 24 in the mode “Mode 1 RGBW” (p. 14)
25	Shaper Macros		Same as CH 25 in the mode “Mode 1 RGBW” (p. 14)
26	Shaper Macros Speed		Same as CH 26 in the mode “Mode 1 RGBW” (p. 15)
27	Shutter		Same as CH 27 in the mode “Mode 1 RGBW” (p. 15)
28	Dimmer		Same as CH 28 in the mode “Mode 1 RGBW” (p. 16)
29	Dimmer Fine	0–255	Fine adjustment of CH 28

Mode 2 RGBW Reduced

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

If the device receives DMX in this mode but gives no light, check these channels: CH 22 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 23 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Color Macro 0, CH 8 Red 255, CH 9 Green 255, CH 10 Blue 255, CH 11 White 255, CH 22 Shutter 32, CH 23 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 RGBW” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 RGBW” (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 RGBW” (p. 11)
6	Control		Same as CH 6 in the mode “Mode 1 RGBW” (p. 11)
7	Color Macro		Same as CH 7 in the mode “Mode 1 RGBW” (p. 12)
8	Red	0	Min
		1–254	Min ... Max
		255	Max
9	Green	0	Min
		1–254	Min ... Max
		255	Max

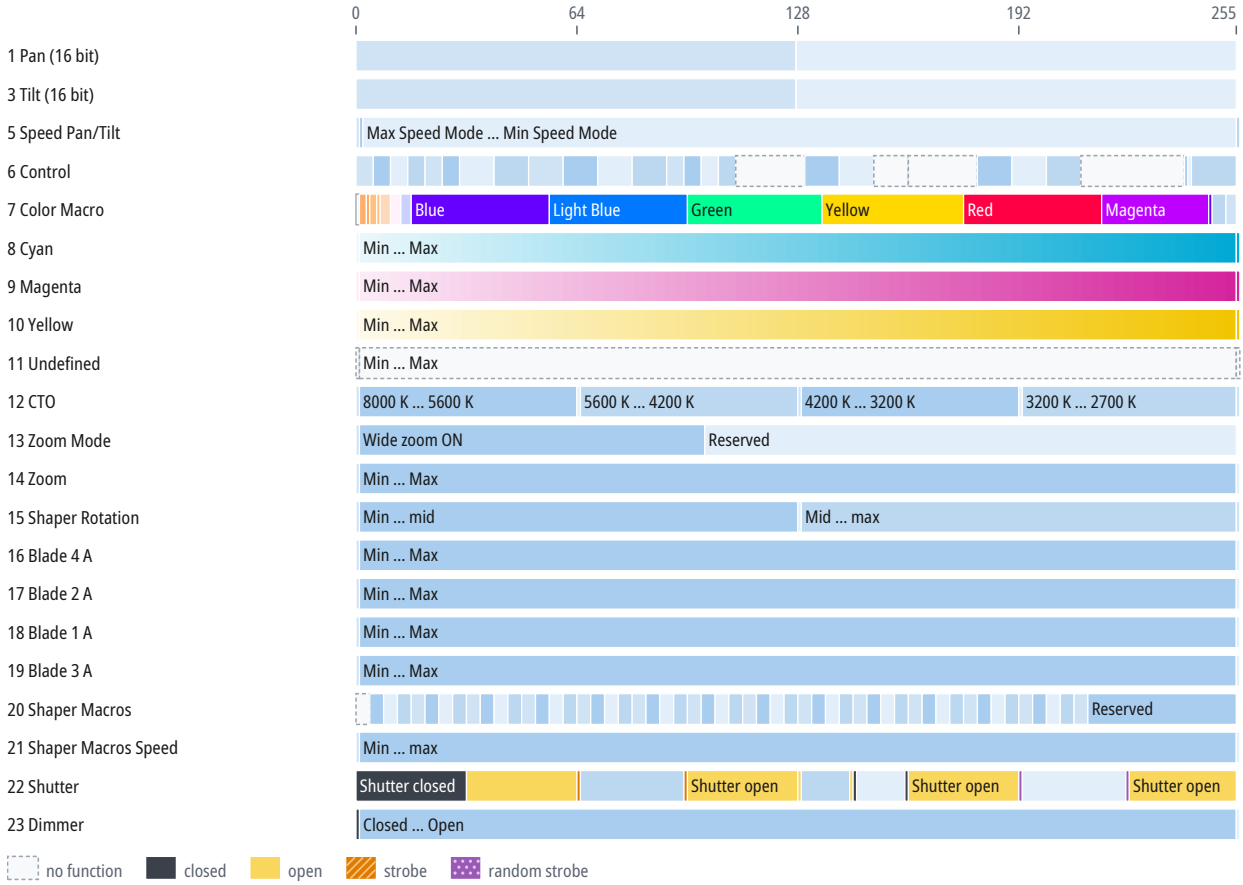
CH	Function	DMX	Description
10	Blue	0	Min
		1–254	Min ... Max
		255	Max
11	White	0	Min
		1–254	Min ... Max
		255	Max
12	CTO		Same as CH 16 in the mode “Mode 1 RGBW” (p. 13)
13	Zoom Mode		Same as CH 17 in the mode “Mode 1 RGBW” (p. 13)
14	Zoom	0	Min
		1–254	Min ... Max
		255	Max
15	Shaper Rotation		Same as CH 20 in the mode “Mode 1 RGBW” (p. 13)
16	Blade 4 A		Same as CH 21 in the mode “Mode 1 RGBW” (p. 13)
17	Blade 2 A		Same as CH 22 in the mode “Mode 1 RGBW” (p. 13)
18	Blade 1 A		Same as CH 23 in the mode “Mode 1 RGBW” (p. 14)
19	Blade 3 A		Same as CH 24 in the mode “Mode 1 RGBW” (p. 14)
20	Shaper Macros		Same as CH 25 in the mode “Mode 1 RGBW” (p. 14)
21	Shaper Macros Speed		Same as CH 26 in the mode “Mode 1 RGBW” (p. 15)
22	Shutter		Same as CH 27 in the mode “Mode 1 RGBW” (p. 15)
23	Dimmer		Dimmer intensity
		0	Closed
		1–254	Closed ... Open
		255	Open

Mode 2 CMY Reduced

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

If the device receives DMX in this mode but gives no light, check these channels: CH 22 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 23 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Color Macro 0, CH 8 Cyan 0, CH 9 Magenta 0, CH 10 Yellow 0, CH 22 Shutter 32, CH 23 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 RGBW” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 RGBW” (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 RGBW” (p. 11)
6	Control		Same as CH 6 in the mode “Mode 1 RGBW” (p. 11)
7	Color Macro		Same as CH 7 in the mode “Mode 1 RGBW” (p. 12)
8	Cyan	0	Min
		1–254	Min ... Max
		255	Max
9	Magenta	0	Min
		1–254	Min ... Max
		255	Max

CH	Function	DMX	Description
10	Yellow	0	Min
		1–254	Min ... Max
		255	Max
11	Undefined	0	Min
		1–254	Min ... Max
		255	Max
12	CTO		Same as CH 16 in the mode “Mode 1 RGBW” (p. 13)
13	Zoom Mode		Same as CH 17 in the mode “Mode 1 RGBW” (p. 13)
14	Zoom		Same as CH 14 in the mode “Mode 2 RGBW Reduced” (p. 19)
15	Shaper Rotation		Same as CH 20 in the mode “Mode 1 RGBW” (p. 13)
16	Blade 4 A		Same as CH 21 in the mode “Mode 1 RGBW” (p. 13)
17	Blade 2 A		Same as CH 22 in the mode “Mode 1 RGBW” (p. 13)
18	Blade 1 A		Same as CH 23 in the mode “Mode 1 RGBW” (p. 14)
19	Blade 3 A		Same as CH 24 in the mode “Mode 1 RGBW” (p. 14)
20	Shaper Macros		Same as CH 25 in the mode “Mode 1 RGBW” (p. 14)
21	Shaper Macros Speed		Same as CH 26 in the mode “Mode 1 RGBW” (p. 15)
22	Shutter		Same as CH 27 in the mode “Mode 1 RGBW” (p. 15)
23	Dimmer		Same as CH 23 in the mode “Mode 2 RGBW Reduced” (p. 19)

Mode 3 RGBW Minimal

If the device receives DMX in this mode but gives no light, check these channels: CH 20 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 21 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 5 Color Macro 0, CH 6 Red 255, CH 7 Green 255, CH 8 Blue 255, CH 9 White 255, CH 20 Shutter 32, CH 21 Dimmer 255.

Channel functions at a glance



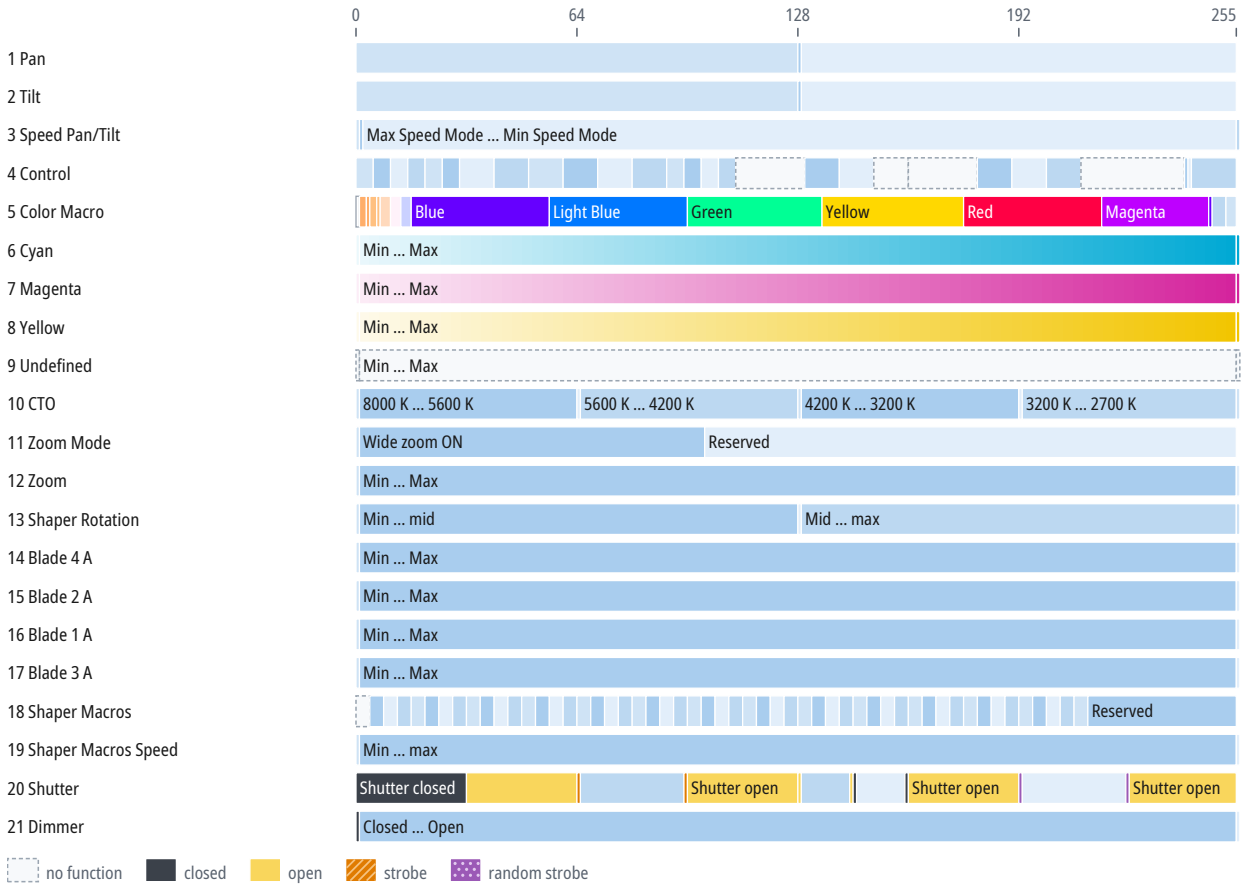
CH	Function	DMX	Description
1	Pan	0–127	Pan
		128	Center
		129–255	Pan
2	Tilt	0–127	Tilt
		128	Center
		129–255	Tilt
3	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 RGBW” (p. 11)
4	Control		Same as CH 6 in the mode “Mode 1 RGBW” (p. 11)
5	Color Macro		Same as CH 7 in the mode “Mode 1 RGBW” (p. 12)
6	Red		Same as CH 8 in the mode “Mode 2 RGBW Reduced” (p. 18)
7	Green		Same as CH 9 in the mode “Mode 2 RGBW Reduced” (p. 18)
8	Blue		Same as CH 10 in the mode “Mode 2 RGBW Reduced” (p. 19)
9	White		Same as CH 11 in the mode “Mode 2 RGBW Reduced” (p. 19)
10	CTO		Same as CH 16 in the mode “Mode 1 RGBW” (p. 13)

CH	Function	DMX	Description
11	Zoom Mode		Same as CH 17 in the mode “Mode 1 RGBW” (p. 13)
12	Zoom		Same as CH 14 in the mode “Mode 2 RGBW Reduced” (p. 19)
13	Shaper Rotation		Same as CH 20 in the mode “Mode 1 RGBW” (p. 13)
14	Blade 4 A		Same as CH 21 in the mode “Mode 1 RGBW” (p. 13)
15	Blade 2 A		Same as CH 22 in the mode “Mode 1 RGBW” (p. 13)
16	Blade 1 A		Same as CH 23 in the mode “Mode 1 RGBW” (p. 14)
17	Blade 3 A		Same as CH 24 in the mode “Mode 1 RGBW” (p. 14)
18	Shaper Macros		Same as CH 25 in the mode “Mode 1 RGBW” (p. 14)
19	Shaper Macros Speed		Same as CH 26 in the mode “Mode 1 RGBW” (p. 15)
20	Shutter		Same as CH 27 in the mode “Mode 1 RGBW” (p. 15)
21	Dimmer		Same as CH 23 in the mode “Mode 2 RGBW Reduced” (p. 19)

Mode 3 CMY Minimal

If the device receives DMX in this mode but gives no light, check these channels: CH 20 Shutter at 32–63, 96–127, 160–191, 224–255 “Shutter open” or 128 or 143; CH 21 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 5 Color Macro 0, CH 6 Cyan 0, CH 7 Magenta 0, CH 8 Yellow 0, CH 20 Shutter 32, CH 21 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 3 RGBW Minimal” (p. 22)
2	Tilt		Same as CH 2 in the mode “Mode 3 RGBW Minimal” (p. 22)
3	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 RGBW” (p. 11)
4	Control		Same as CH 6 in the mode “Mode 1 RGBW” (p. 11)
5	Color Macro		Same as CH 7 in the mode “Mode 1 RGBW” (p. 12)
6	Cyan		Same as CH 8 in the mode “Mode 2 CMY Reduced” (p. 20)
7	Magenta		Same as CH 9 in the mode “Mode 2 CMY Reduced” (p. 20)
8	Yellow		Same as CH 10 in the mode “Mode 2 CMY Reduced” (p. 21)
9	Undefined		Same as CH 11 in the mode “Mode 2 CMY Reduced” (p. 21)
10	CTO		Same as CH 16 in the mode “Mode 1 RGBW” (p. 13)
11	Zoom Mode		Same as CH 17 in the mode “Mode 1 RGBW” (p. 13)
12	Zoom		Same as CH 14 in the mode “Mode 2 RGBW Reduced” (p. 19)
13	Shaper Rotation		Same as CH 20 in the mode “Mode 1 RGBW” (p. 13)
14	Blade 4 A		Same as CH 21 in the mode “Mode 1 RGBW” (p. 13)
15	Blade 2 A		Same as CH 22 in the mode “Mode 1 RGBW” (p. 13)
16	Blade 1 A		Same as CH 23 in the mode “Mode 1 RGBW” (p. 14)
17	Blade 3 A		Same as CH 24 in the mode “Mode 1 RGBW” (p. 14)
18	Shaper Macros		Same as CH 25 in the mode “Mode 1 RGBW” (p. 14)
19	Shaper Macros Speed		Same as CH 26 in the mode “Mode 1 RGBW” (p. 15)
20	Shutter		Same as CH 27 in the mode “Mode 1 RGBW” (p. 15)
21	Dimmer		Same as CH 23 in the mode “Mode 2 RGBW Reduced” (p. 19)

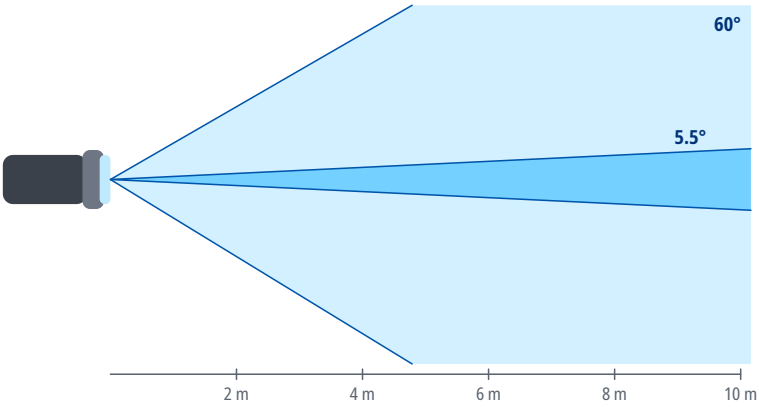
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	480 W
Luminous flux	5,160 lm
Color temperature	8,000 K
Color rendering index (CRI)	63
Optics	
Zoom	5.5–60°
Movement	
Pan	540°
Tilt	260°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45
RDM	yes (manufacturer ID 0x5253, device model ID 0x00AA)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	550 W
Power connectors	NAC3MPA IN
Dimensions and construction	
Weight	21.5 kg
Operating environment	
Operating temperature	0 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–8000 K
Strobe frequency	0.1–10 Hz

Spot diameter



Distance	Ø 5.5°	Ø 60°
2 m	0.19 m	2.3 m
4 m	0.38 m	4.6 m
6 m	0.58 m	6.9 m
8 m	0.77 m	9.2 m
10 m	0.96 m	11.5 m
15 m	1.4 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.