DMX REFERENCE

Robin T2 PC

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_T2_PC_151634.gdtf
GDTF revision	2026-07-21 Color control channel update
Generated	2026-11-24

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1 About this manual

This document describes the Robin T2 PC™ by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_T2_PC_151634.gdtf from the GDTF-Share library.

File revision: “2026-07-21 Color control channel 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	1,150 W
Weight	33 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 - CMY	35	14	1, 36, 71, 106, ...
Mode 1 - RGB	35	14	1, 36, 71, 106, ...
Mode 2 - Reduced CMY	24	21	1, 25, 49, 73, ...
Mode 2 - Reduced RGB	24	21	1, 25, 49, 73, ...
Mode 3 - Five colors	39	13	1, 40, 79, 118, ...

No light? Check these channels

- Mode 1 - CMY: CH 33 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 34 Dimmer above 0
- Mode 1 - RGB: CH 33 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 34 Dimmer above 0
- Mode 2 - Reduced CMY: CH 23 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 24 Dimmer above 0
- Mode 2 - Reduced RGB: CH 23 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 24 Dimmer above 0
- Mode 3 - Five colors: CH 37 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 38 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.

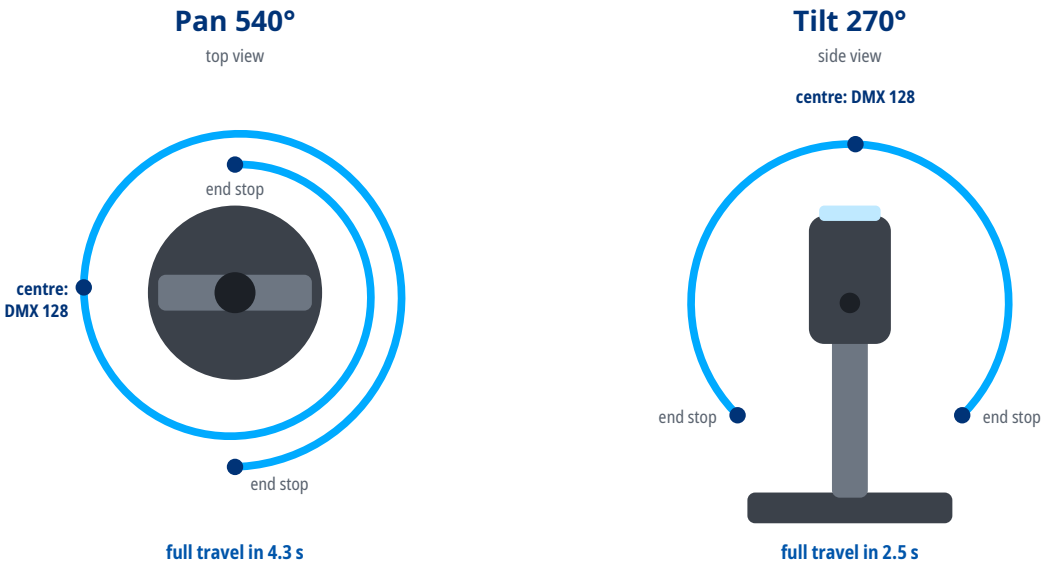
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do 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

“T2. Multispectral perfection, only further! While simultaneously maintaining the absolute colour finesse of Robe’s phenomenally successful T1 series, featuring the MSL™ (Multi-Spectral) LED engine, our T2 PC™ provides an enhanced output of over 16.000 lumens, measured at the front lens, via its 850W MSL™ source.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

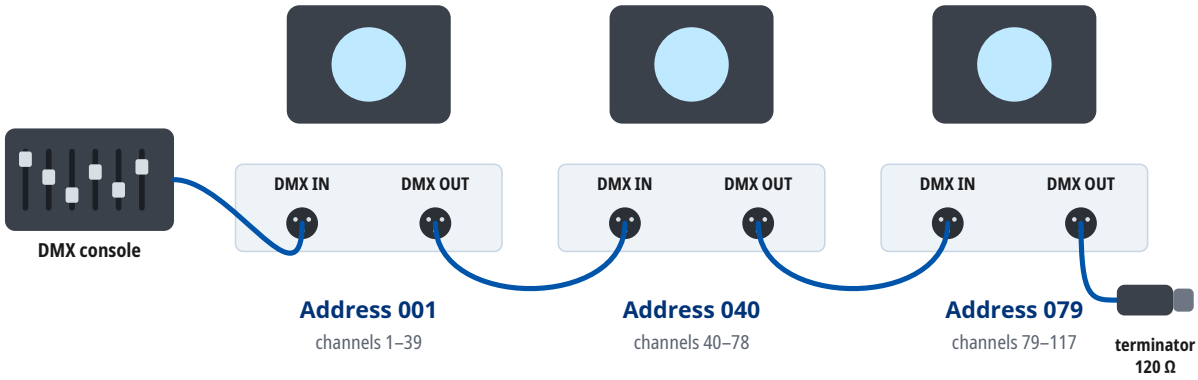
⚠ **WARNING**

- 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: 33 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 - Five colors: every unit occupies 39 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 - Five colors”: 39.
- 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 - Five colors”, you can use, for example, the start addresses 1, 40, 79, 118.
- 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 - CMY 35 channels	Mode 1 - RGB 35 channels	Mode 2 - Reduced CMY 24 channels	Mode 2 - Reduced RGB 24 channels	Mode 3 - Five colors 39 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3	1, 3
Dimmer	34	34	24	24	38
Dimmer resolution	16 bit	16 bit	8 bit	8 bit	16 bit
Shutter / strobe	33	33	23	23	37
Color mixing	12, 14, 16 *	12, 14, 16 *	9–11	9–11	5× (12–20)
Color temperature	18	18	12	12	22
Frost	24	24	15	15	28
Zoom	25	25	16	16	29
Effects / macros	11	11			11

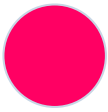
* The function works only when another channel switches it on; see the DMX table.

Color wheel

1. No function — DMX 0
2. Filter 4 (Medium Bastard Amber) — DMX 1–2
3. Filter 10 (Medium Yellow) — DMX 3–4
4. Filter 19 (Fire) — DMX 5–6
5. Filter 26 (Bright Red) — DMX 7–8
6. Filter 58 (Lavender) — DMX 9–10
7. Filter 68 (Sky Blue) — DMX 11–12
8. Filter 71 (Tokyo Blue) — DMX 13–14
9. Filter 79 (Just Blue) — DMX 15–16
10. Filter 88 (Lime Green) — DMX 17–18
11. Filter 90 (Dark Yellow Green) — DMX 19–20
12. Filter 100 (Spring Yellow) — DMX 21–22
13. Filter 101 (Yellow) — DMX 23–24
14. Filter 102 (Light Amber) — DMX 25–26
15. Filter 103 (Straw) — DMX 27–28
16. Filter 104 (Deep Amber) — DMX 29–30
17. Filter 105 (Orange) — DMX 31–32
18. Filter 106 (Primary Red) — DMX 33–34
19. Filter 111 (Dark Pink) — DMX 35–36
20. Filter 115 (Peacock Blue) — DMX 37–38
21. Filter 116 (Medium Blue - Green) — DMX 39–40
22. Filter 117 (Steel Blue) — DMX 41–42
23. Filter 118 (Light Blue) — DMX 43–44
24. Filter 119 (Dark Blue) — DMX 45–46

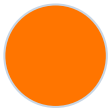
25 
Filter 120 (Deep Blue)
DMX 47–48

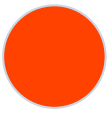
26
Filter 121 (Filter Green)
DMX 49–50

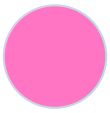
27 
Filter 128 (Bright Pink)
DMX 51–52

28 
Filter 131 (Marine Blue)
DMX 53–54

29 
Filter 132 (Medium Blue)
DMX 55–56

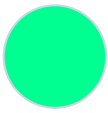
30 
Filter 134 (Golden Amber)
DMX 57–58

31 
Filter 135 (Deep Golden Amber)
DMX 59–60

32 
Filter 136 (Pale Lavender)
DMX 61–62

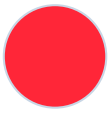
33
Filter 137 (Special Lavender)
DMX 63–64

34
Filter 138 (Pale Green)
DMX 65–66

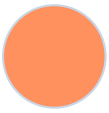
35 
Filter 139 (Primary Green)
DMX 67–68

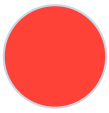
36 
Filter 141 (Bright Blue)
DMX 69–70

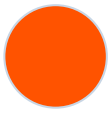
37 
Filter 147 (Apricot)
DMX 71–72

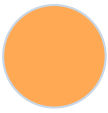
38 
Filter 148 (Bright Rose)
DMX 73–74

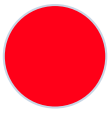
39 
Filter 152 (Pale Gold)
DMX 75–76

40 
Filter 154 (Pale Rose)
DMX 77–78

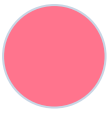
41 
Filter 157 (Pink)
DMX 79–80

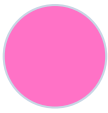
42 
Filter 158 (Deep Orange)
DMX 81–82

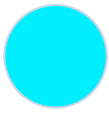
43 
Filter 162 (Bastard Amber)
DMX 83–84

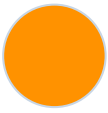
44 
Filter 164 (Flame Red)
DMX 85–86

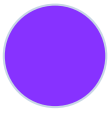
45 
Filter 165 (Daylight Blue)
DMX 87–88

46 
Filter 169 (Lilac Tint)
DMX 89–90

47 
Filter 170 (Deep Lavender)
DMX 91–92

48 
Filter 172 (Lagoon Blue)
DMX 93–94

49 
Filter 179 (Chrome Orange)
DMX 95–96

50 
Filter 180 (Dark Lavender)
DMX 97–98

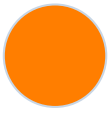
51 
Filter 181 (Congo Blue)
DMX 99–100

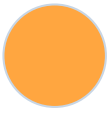
52 
Filter 197 (Alice Blue)
DMX 101–102

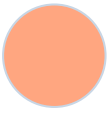
53 
Filter 201 (Full CT Blue)
DMX 103–104

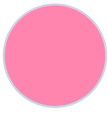
54 
Filter 202 (Half CT Blue)
DMX 105–106

55
Filter 203 (Quarter CT Blue)
DMX 107–108

56 
Filter 204 (Full CT Orange)
DMX 109–110

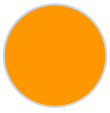
57 
Filter 205 (Half CT Orange)
DMX 111–112

58 
Filter 206 (Quarter CT Orange)
DMX 113–114

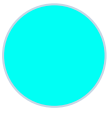
59 
Filter 247 (Filter Minus Green)
DMX 115–116

60
Filter 248 (Half Minus Green)
DMX 117–118

61
Filter 281 (Three Quarter CT Blue)
DMX 119–120

62 
Filter 285 (Three Quarter CT Orange)
DMX 121–122

63 
Filter 352 (Glacier Blue)
DMX 123–124

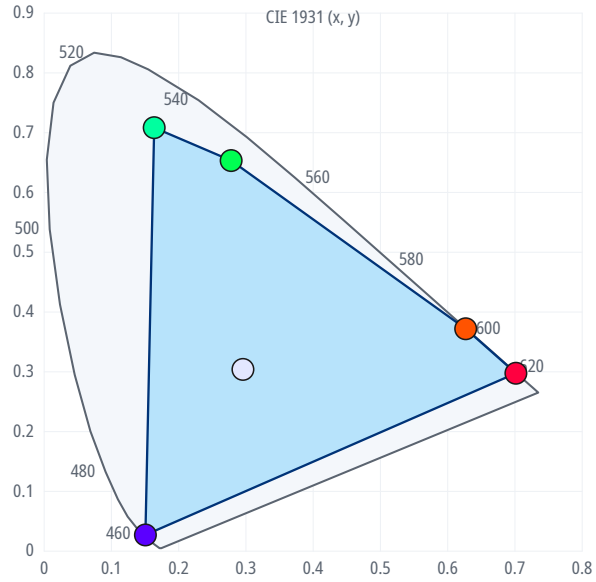
64 
Filter 353 (Lighter Blue)
DMX 125–126

65
Filter 715 (Cabana Blue)
DMX 127–128

66
Filter 778 (Millennium Gold)
DMX 129–130

67
Filter 793 (Vanity Fair)
DMX 131–132

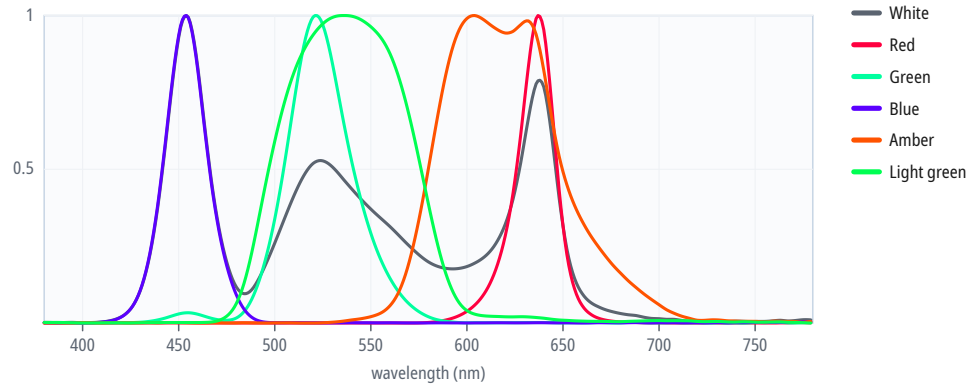
LED colors and the colors they mix



LED	x	y	nm
White	0.296	0.304	
Red	0.701	0.298	626
Green	0.164	0.708	524
Blue	0.151	0.027	456
Amber	0.627	0.372	600
Light green	0.278	0.653	545

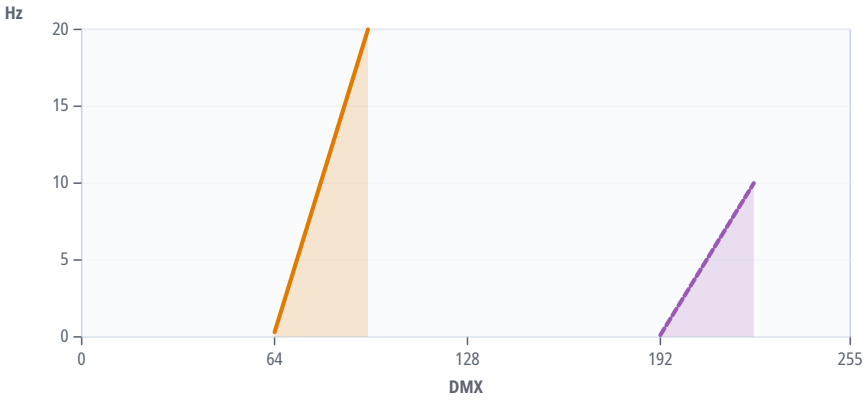
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

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



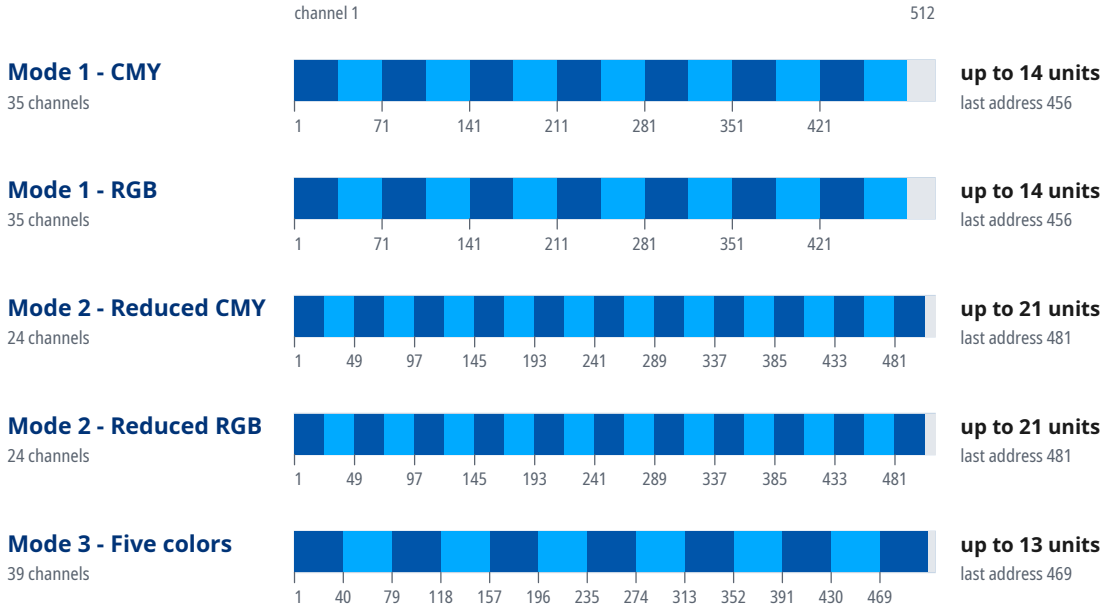
CH 37 · Mode 3 - Five colors

64–95: 0.3–20 Hz
Strobe

192–223: 0.125–10 Hz
Random strobe from slow to fast

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 3 - Five colors”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	196	11	391	16	U2 · 79
2	40	7	235	12	430	17	U2 · 118
3	79	8	274	13	469	18	U2 · 157
4	118	9	313	14	U2 · 1	19	U2 · 196
5	157	10	352	15	U2 · 40	20	U2 · 235

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 - CMY	35	1
Mode 1 - RGB	35	1
Mode 2 - Reduced CMY	24	2
Mode 2 - Reduced RGB	24	2
Mode 3 - Five colors	39	3

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 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 11 Color Macro 0, CH 12 Cyan 0, CH 14 Magenta 0, CH 16 Yellow 0, CH 33 Shutter 32, CH 34 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
		2–254	Max Speed Mode ... Min Speed Mode
		255	Min Speed Mode
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 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
		60–69	No function
		70–74	Fan mode Auto
		75–79	Fan mode High
		80–84	Quiet mode Fans ON at blackout
		85–89	Quiet mode Fans OFF at blackout
		90–94	Fans mode: CPC-fans OFF
		95–119	No Feature: No function
		120–124	Parking position ON
		125–129	Parking position OFF
		130–139	Fixture reset (except pan/tilt)
		140–149	Position Reset
		150–179	No Feature: No function
		180–189	Zoom/focus/frost/prism reset
		190–199	Barnodoors/Scrim reset
		200–209	Total fixture reset
		210–211	Green/Blue correction calibration
		212–239	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
		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

CH	Function	DMX	Description
8	LED Frequency Adjust (continued)	2–127	LED Frequency (step -126...-1)
		128	Selected LED frequency
		129–254	LED Frequency (step 1...126)
		255	Selected LED Frequency
9	Color Control	0–29	No Feature: No function
		30–34	Standard CTO 8000-2700K
		35–39	Extended CTO 10000-1800K
		40–44	Colour mixing mode: CMY (DMX mode 1 and 2 only)
		45–49	Colour mixing mode: RGB (DMX mode 1 and 2 only)
		50–54	Dimmer curve Square law
		55–59	Dimmer curve Linear
		60–79	No function
		80–84	Tungsten effect simulation (750W): On
		85–89	Tungsten effect simulation (1000W): On
		90–94	Tungsten effect simulation (1200W): On
		95–99	Tungsten effect simulation (2000W): On
		100–104	Tungsten effect simulation (2500W): On
		105–109	Tungsten effect simulation: Off
		110–114	Save user colour
		115–119	Chromatic white On
		120–124	Chromatic white Off
		125–129	Light output stability On
		130–134	Light output stability Off
		135–139	Uniformity On
		140–144	Uniformity Off
		145–152	No Feature: No function
		153–154	1800K/High intensity
		155–156	2700K/High intensity
		157–158	3200K/High intensity
		159–160	4200K/High intensity
		161–162	5600K/High intensity
		163–164	8000K/High intensity
		165–166	10000K/High intensity
		167–168	1800K/High CRI
		169–170	2700K/High CRI
		171–172	3200K/High CRI
		173–174	4200K/High CRI
		175–176	5600K/High CRI
		177–178	8000K/High CRI
		179–180	10000K/High CRI
		181–182	Save Green/Blue correction
		183–255	No function

CH	Function	DMX	Description
10	CRI Mode	0	CRI 80
		1–254	CRI 80 ... CRI 90+
		255	CRI 90+
11	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)
		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)

CH	Function	DMX	Description
11	Color Macro (continued)	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)
		133–202	Multicolor 1...70
		203–215	Reserved
		216–217	User colour 1
		218–219	User colour 2
		220–221	User colour 3
		222–223	User colour 4
		224–225	User colour 5
		226–227	User colour 6
		228–229	User colour 7
		230–231	User colour 8
		232–233	User colour 9
		234–235	User colour 10
		236–245	Rainbow effect (with fade time) from slow - > fast
		246–255	Rainbow effect (without fade time) from slow - > fast

CH	Function	DMX	Description
12	Cyan		When CH 11 is 0:
		0–255	Min ... Max
		255	Max
			When CH 11 is 1–255:
		0–255	
13	Cyan Fine	0–255	Fine adjustment of CH 12
14	Magenta		When CH 11 is 0:
		0–255	Min ... Max
		255	Max
			When CH 11 is 1–255:
		0–255	
15	Magenta Fine	0–255	Fine adjustment of CH 14
16	Yellow		When CH 11 is 0:
		0–255	Min ... Max
		255	Max
			When CH 11 is 1–255:
		0–255	
17	Yellow Fine	0–255	Fine adjustment of CH 16
18	CTO	0–1	8000 K
		2–64	7978 K - > 6622 K (7978–6622 K)
		65	6600 K
		66–109	6578K - > 5622 K (6578–5622 K)
		110	5600 K
		111–179	5580 K - > 4220 K (5580–4220 K)
		180	4200 K
		181–229	4180 K - > 3220 K (4180–3220 K)
		230	3200 K
		231–254	3180 K - > 2720 K (3180–2720 K)
		255	2700K
19	Tint		Green correction
		0	Uncorrected white 1
		1–127	Minus green - > Uncorrected white
		128	Uncorrected white 2
		129–254	Uncorrected white - > Plus green
		255	Uncorrected white 3
20	Color Mix Mode	0–9	Virtual colours (Virtual has priority)
		10–19	Maximum mode (highest values have priority)
		20–29	Minimum mode (lowest values have priority)
		30–39	Multiply mode (multiply Virtual and Colour mix)
		40–49	Addition mode (Virtual + Colour mix)
		50–59	Subtraction mode (Virtual - Colour mix)
		60–69	Inverted Subtraction mode (Colour mix - Virtual)

CH	Function	DMX	Description
20	Color Mix Mode (continued)	70–79	White Point Off
		80–128	Reserved
		129	Crossfade Virtual only
		130–254	Crossfade between Virtual and Colour mix
		255	Crossfade Color mix only
21	Frame Speed		Barndoors/Zoom/Frost time
		0	Standard mode
		1	Min time mode
		2–254	Min time mode ... Max time mode
		255	Max time mode
22	Scrim Position	0	No function
		1–255	Scrim inserting
23	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
24	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
		170–255	Medium Frost: Open
25	Zoom	0–255	Max ... Min
		255	Min
26	Zoom Fine	0–255	Fine adjustment of CH 25
27	Edge Color Correction	0	Min
		1–254	Min ... max
		255	Max
28	Shaper Rotation	0	Min
		1–127	Min ... center

CH	Function	DMX	Description
28	Shaper Rotation (continued)	128	Center
		129–254	Center … max
		255	Max
29	Blade 4 A		Barndoor 4 - movement
		0	Min
		1–254	Min … max
		255	Max
30	Blade 3 A		Barndoor 3 - movement
		0	Min
		1–254	Min … max
		255	Max
31	Blade 2 A		Barndoor 2 - movement
		0	Min
		1–254	Min … max
		255	Max
32	Blade 1 A		Barndoor 1 - movement
		0	Min
		1–254	Min … max
		255	Max
33	Shutter	0–31	Open/Closed: Closed
		32–63	Open/Closed: Open
		64–67	Strobe: Slow to fast 1/12 (0.295–0.445 Hz)
		68–79	Strobe: Slow to fast 1/12 … Slow to fast 6/12 (0.495–3.31 Hz)
		80–82	Strobe: Slow to fast 6/12 (3.87–4.66 Hz)
		83–94	Strobe: Slow to fast 6/12 … Slow to fast 12/12 (5.02–17 Hz)
		95	Strobe: Slow to fast 12/12
		96–127	Open
		128–130	Strobe Pulse Open: Slow to fast 1/7 (0.112–0.167 Hz)
		131–134	Strobe Pulse Open: Slow to fast 1/7 … Slow to fast 4/7 (0.194–0.276 Hz)
		135–136	Strobe Pulse Open: Slow to fast 4/7 (0.303–0.329 Hz)
		137–140	Strobe Pulse Open: Slow to fast 4/7 … Slow to fast 7/7 (0.355–0.433 Hz)
		141–143	Strobe Pulse Open: Slow to fast 7/7 (0.486–0.589 Hz)
		144–145	Strobe Pulse Close: Fast to slow 1/7 (0.589–0.538 Hz)
		146–149	Strobe Pulse Close: Fast to slow 1/7 … Fast to slow 4/7 (0.486–0.382 Hz)
		150–151	Strobe Pulse Close: Fast to slow 4/7 (0.355–0.329 Hz)
		152–155	Strobe Pulse Close: Fast to slow 4/7 … Fast to slow 7/7 (0.303–0.221 Hz)
		156–159	Strobe Pulse Close: Fast to slow 7/7 (0.194–0.112 Hz)
		160–191	Open
		192–223	Random strobe from slow to fast (0.125–10 Hz)

CH	Function	DMX	Description
33	Shutter (continued)	224–255	Open
34	Dimmer	0–255	Closed ... Open
		255	Open
35	Dimmer Fine	0–255	Fine adjustment of CH 34

Mode 1 - RGB

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

If the device receives DMX in this mode but gives no light, check these channels: CH 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 11 Color Macro 0, CH 12 Red 255, CH 14 Green 255, CH 16 Blue 255, 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 - CMY” (p. 12)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - CMY” (p. 12)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - CMY” (p. 13)
6	Control		Same as CH 6 in the mode “Mode 1 - CMY” (p. 13)
7	LED Frequency		Same as CH 7 in the mode “Mode 1 - CMY” (p. 13)
8	LED Frequency Adjust		Same as CH 8 in the mode “Mode 1 - CMY” (p. 13)
9	Color Control		Same as CH 9 in the mode “Mode 1 - CMY” (p. 14)
10	CRI Mode		Same as CH 10 in the mode “Mode 1 - CMY” (p. 15)
11	Color Macro		Same as CH 11 in the mode “Mode 1 - CMY” (p. 15)
12	Red		When CH 11 is 0:
		0–255	Min ... Max
		255	Max
			When CH 11 is 1–255:
		0–255	
13	Red Fine	0–255	Fine adjustment of CH 12
14	Green		When CH 11 is 0:
		0–255	Min ... Max
		255	Max
			When CH 11 is 1–255:
		0–255	
15	Green Fine	0–255	Fine adjustment of CH 14
16	Blue		When CH 11 is 0:
		0–255	Min ... Max
		255	Max
			When CH 11 is 1–255:
		0–255	
17	Blue Fine	0–255	Fine adjustment of CH 16
18	CTO		Same as CH 18 in the mode “Mode 1 - CMY” (p. 17)
19	Tint		Same as CH 19 in the mode “Mode 1 - CMY” (p. 17)
20	Color Mix Mode		Same as CH 20 in the mode “Mode 1 - CMY” (p. 17)
21	Frame Speed		Same as CH 21 in the mode “Mode 1 - CMY” (p. 18)
22	Scrim Position		Same as CH 22 in the mode “Mode 1 - CMY” (p. 18)
23	Scrim Index		Same as CH 23 in the mode “Mode 1 - CMY” (p. 18)
24	Frost		Same as CH 24 in the mode “Mode 1 - CMY” (p. 18)
25	Zoom		Same as CH 25 in the mode “Mode 1 - CMY” (p. 18)
26	Zoom Fine	0–255	Fine adjustment of CH 25
27	Edge Color Correction		Same as CH 27 in the mode “Mode 1 - CMY” (p. 18)
28	Shaper Rotation		Same as CH 28 in the mode “Mode 1 - CMY” (p. 18)

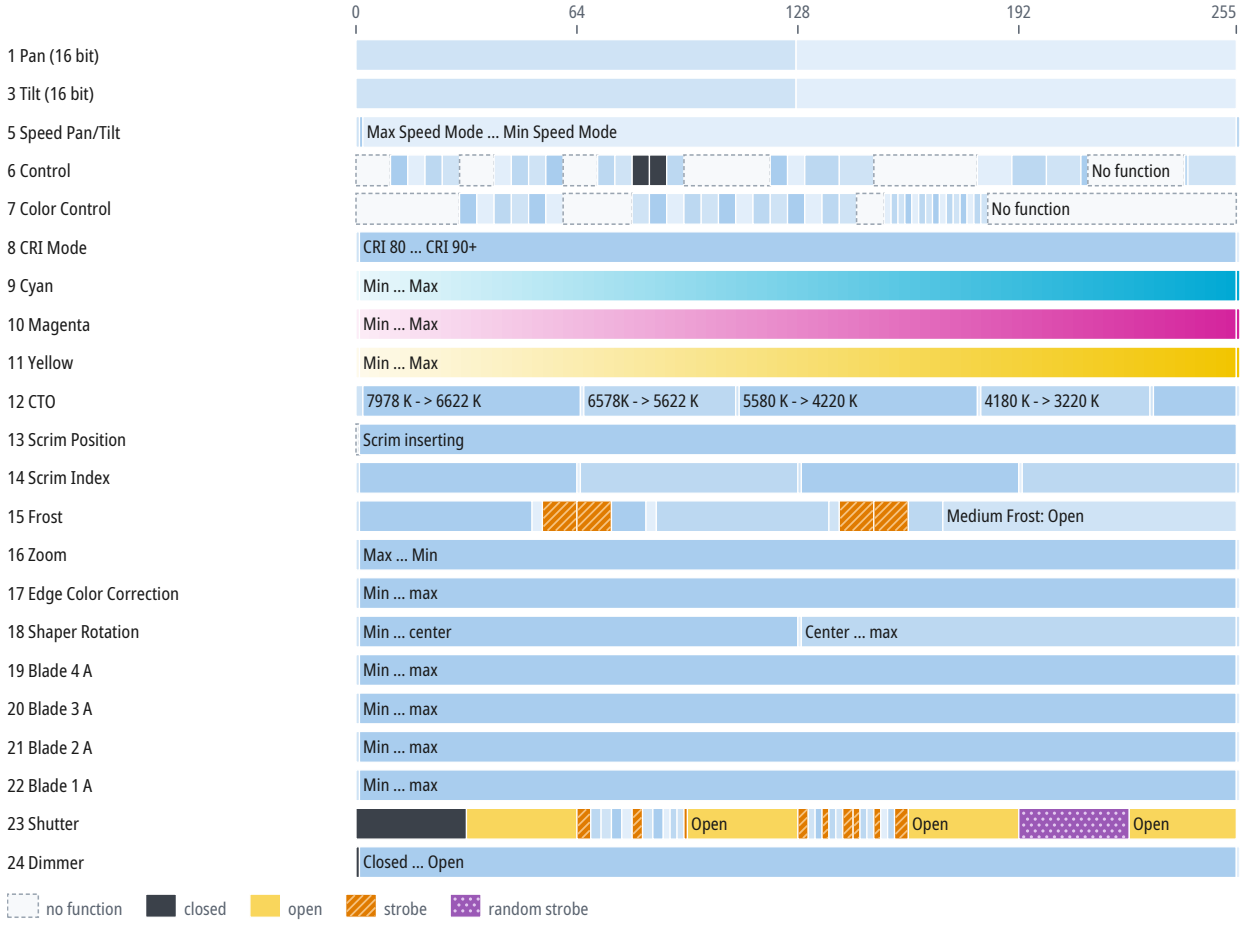
CH	Function	DMX	Description
29	Blade 4 A		Same as CH 29 in the mode “Mode 1 - CMY” (p. 19)
30	Blade 3 A		Same as CH 30 in the mode “Mode 1 - CMY” (p. 19)
31	Blade 2 A		Same as CH 31 in the mode “Mode 1 - CMY” (p. 19)
32	Blade 1 A		Same as CH 32 in the mode “Mode 1 - CMY” (p. 19)
33	Shutter		Same as CH 33 in the mode “Mode 1 - CMY” (p. 19)
34	Dimmer		Same as CH 34 in the mode “Mode 1 - CMY” (p. 20)
35	Dimmer Fine	0–255	Fine adjustment of CH 34

Mode 2 - Reduced 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 23 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 24 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 9 Cyan 0, CH 10 Magenta 0, CH 11 Yellow 0, CH 23 Shutter 32, CH 24 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - CMY” (p. 12)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - CMY” (p. 12)

CH	Function	DMX	Description
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - CMY” (p. 13)
6	Control		Same as CH 6 in the mode “Mode 1 - CMY” (p. 13)
7	Color Control		Same as CH 9 in the mode “Mode 1 - CMY” (p. 14)
8	CRI Mode		Same as CH 10 in the mode “Mode 1 - CMY” (p. 15)
9	Cyan	0	Min
		1–254	Min ... Max
		255	Max
10	Magenta	0	Min
		1–254	Min ... Max
		255	Max
11	Yellow	0	Min
		1–254	Min ... Max
		255	Max
12	CTO		Same as CH 18 in the mode “Mode 1 - CMY” (p. 17)
13	Scrim Position		Same as CH 22 in the mode “Mode 1 - CMY” (p. 18)
14	Scrim Index		Same as CH 23 in the mode “Mode 1 - CMY” (p. 18)
15	Frost		Same as CH 24 in the mode “Mode 1 - CMY” (p. 18)
16	Zoom	0	Max
		1–254	Max ... Min
		255	Min
17	Edge Color Correction		Same as CH 27 in the mode “Mode 1 - CMY” (p. 18)
18	Shaper Rotation		Same as CH 28 in the mode “Mode 1 - CMY” (p. 18)
19	Blade 4 A		Same as CH 29 in the mode “Mode 1 - CMY” (p. 19)
20	Blade 3 A		Same as CH 30 in the mode “Mode 1 - CMY” (p. 19)
21	Blade 2 A		Same as CH 31 in the mode “Mode 1 - CMY” (p. 19)
22	Blade 1 A		Same as CH 32 in the mode “Mode 1 - CMY” (p. 19)
23	Shutter		Same as CH 33 in the mode “Mode 1 - CMY” (p. 19)
24	Dimmer	0	Closed
		1–254	Closed ... Open
		255	Open

Mode 2 - Reduced RGB

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

If the device receives DMX in this mode but gives no light, check these channels: CH 23 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 24 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 9 Red 255, CH 10 Green 255, CH 11 Blue 255, CH 23 Shutter 32, CH 24 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - CMY” (p. 12)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - CMY” (p. 12)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - CMY” (p. 13)
6	Control		Same as CH 6 in the mode “Mode 1 - CMY” (p. 13)
7	Color Control		Same as CH 9 in the mode “Mode 1 - CMY” (p. 14)
8	CRI Mode		Same as CH 10 in the mode “Mode 1 - CMY” (p. 15)
9	Red	0	Min
		1–254	Min ... Max
		255	Max
10	Green	0	Min

CH	Function	DMX	Description
10	Green (continued)	1–254	Min ... Max
		255	Max
11	Blue	0	Min
		1–254	Min ... Max
		255	Max
12	CTO		Same as CH 18 in the mode “Mode 1 - CMY” (p. 17)
13	Scrim Position		Same as CH 22 in the mode “Mode 1 - CMY” (p. 18)
14	Scrim Index		Same as CH 23 in the mode “Mode 1 - CMY” (p. 18)
15	Frost		Same as CH 24 in the mode “Mode 1 - CMY” (p. 18)
16	Zoom		Same as CH 16 in the mode “Mode 2 - Reduced CMY” (p. 23)
17	Edge Color Correction		Same as CH 27 in the mode “Mode 1 - CMY” (p. 18)
18	Shaper Rotation		Same as CH 28 in the mode “Mode 1 - CMY” (p. 18)
19	Blade 4 A		Same as CH 29 in the mode “Mode 1 - CMY” (p. 19)
20	Blade 3 A		Same as CH 30 in the mode “Mode 1 - CMY” (p. 19)
21	Blade 2 A		Same as CH 31 in the mode “Mode 1 - CMY” (p. 19)
22	Blade 1 A		Same as CH 32 in the mode “Mode 1 - CMY” (p. 19)
23	Shutter		Same as CH 33 in the mode “Mode 1 - CMY” (p. 19)
24	Dimmer		Same as CH 24 in the mode “Mode 2 - Reduced CMY” (p. 23)

Mode 3 - Five colors

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 37 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 38 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 11 Color Macro 0, CH 12 Red 255, CH 14 Green 255, CH 16 Blue 255, CH 18 Amber 255, CH 20 Lime 255, CH 37 Shutter 32, CH 38 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - CMY” (p. 12)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 - CMY” (p. 12)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 1 - CMY” (p. 13)

CH	Function	DMX	Description
6	Control		Same as CH 6 in the mode “Mode 1 - CMY” (p. 13)
7	LED Frequency		Same as CH 7 in the mode “Mode 1 - CMY” (p. 13)
8	LED Frequency Adjust		Same as CH 8 in the mode “Mode 1 - CMY” (p. 13)
9	Color Control		Same as CH 9 in the mode “Mode 1 - CMY” (p. 14)
10	CRI Mode		Same as CH 10 in the mode “Mode 1 - CMY” (p. 15)
11	Color Macro		Same as CH 11 in the mode “Mode 1 - CMY” (p. 15)
12	Red		Same as CH 12 in the mode “Mode 1 - RGB” (p. 21)
13	Red Fine	0–255	Fine adjustment of CH 12
14	Green		Same as CH 14 in the mode “Mode 1 - RGB” (p. 21)
15	Green Fine	0–255	Fine adjustment of CH 14
16	Blue		Same as CH 16 in the mode “Mode 1 - RGB” (p. 21)
17	Blue Fine	0–255	Fine adjustment of CH 16
18	Amber	0–255	Min ... Max
		255	Max
19	Amber Fine	0–255	Fine adjustment of CH 18
20	Lime		Light Green
		0–255	Min ... Max
		255	Max
21	Lime Fine	0–255	Fine adjustment of CH 20
22	CTO		Same as CH 18 in the mode “Mode 1 - CMY” (p. 17)
23	Tint		Same as CH 19 in the mode “Mode 1 - CMY” (p. 17)
24	Color Mix Mode		Same as CH 20 in the mode “Mode 1 - CMY” (p. 17)
25	Frame Speed		Same as CH 21 in the mode “Mode 1 - CMY” (p. 18)
26	Scrim Position		Same as CH 22 in the mode “Mode 1 - CMY” (p. 18)
27	Scrim Index		Same as CH 23 in the mode “Mode 1 - CMY” (p. 18)
28	Frost		Same as CH 24 in the mode “Mode 1 - CMY” (p. 18)
29	Zoom		Same as CH 25 in the mode “Mode 1 - CMY” (p. 18)
30	Zoom Fine	0–255	Fine adjustment of CH 29
31	Edge Color Correction		Same as CH 27 in the mode “Mode 1 - CMY” (p. 18)
32	Shaper Rotation		Same as CH 28 in the mode “Mode 1 - CMY” (p. 18)
33	Blade 4 A		Same as CH 29 in the mode “Mode 1 - CMY” (p. 19)
34	Blade 3 A		Same as CH 30 in the mode “Mode 1 - CMY” (p. 19)
35	Blade 2 A		Same as CH 31 in the mode “Mode 1 - CMY” (p. 19)
36	Blade 1 A		Same as CH 32 in the mode “Mode 1 - CMY” (p. 19)
37	Shutter		Same as CH 33 in the mode “Mode 1 - CMY” (p. 19)
38	Dimmer		Same as CH 34 in the mode “Mode 1 - CMY” (p. 20)
39	Dimmer Fine	0–255	Fine adjustment of CH 38

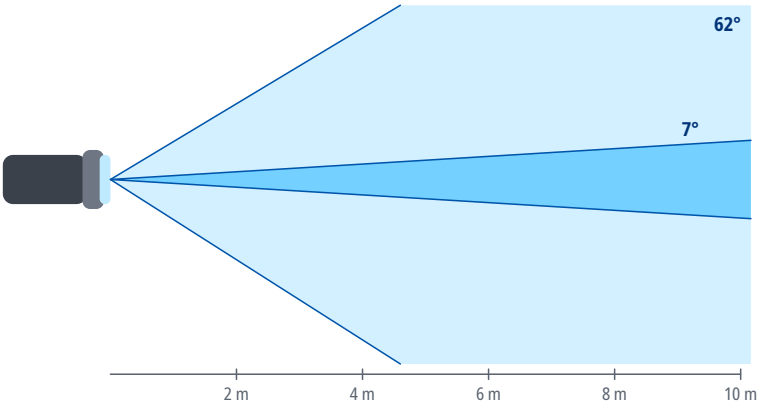
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	850 W
Luminous flux	16,314 lm
Color temperature	8,000 K
Color rendering index (CRI)	95
Optics	
Zoom	7–62°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45 IN/OUT
RDM	yes (manufacturer ID 0x5253, device model ID 0x011D)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	1,150 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	33 kg
Operating environment	
Operating temperature	-5 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–8000 K
Strobe frequency	0.3–20 Hz

Spot diameter



Distance	Ø 7°	Ø 62°
2 m	0.24 m	2.4 m
4 m	0.49 m	4.8 m
6 m	0.73 m	7.2 m
8 m	0.98 m	9.6 m
10 m	1.2 m	12 m
15 m	1.8 m	18 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.