DMX REFERENCE

Robin Viva CMY

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_Viva_CMY_75307.gdtf
GDTF revision	2024-10-08 3D models revision
Generated	2026-11-24

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1 About this manual

This document describes the Robin Viva™ CMY by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_Viva_CMY_75307.gdtf from the GDTF-Share library.

File revision: “2024-10-08 3D models 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	500 W
Weight	19 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 - Standard 16 bit	32	16	1, 33, 65, 97, ...
Mode 2 - Reduced 8 bit	26	19	1, 27, 53, 79, ...

No light? Check these channels

- Mode 1 - Standard 16 bit: CH 30 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 31 Dimmer above 0
- Mode 2 - Reduced 8 bit: CH 25 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 26 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.

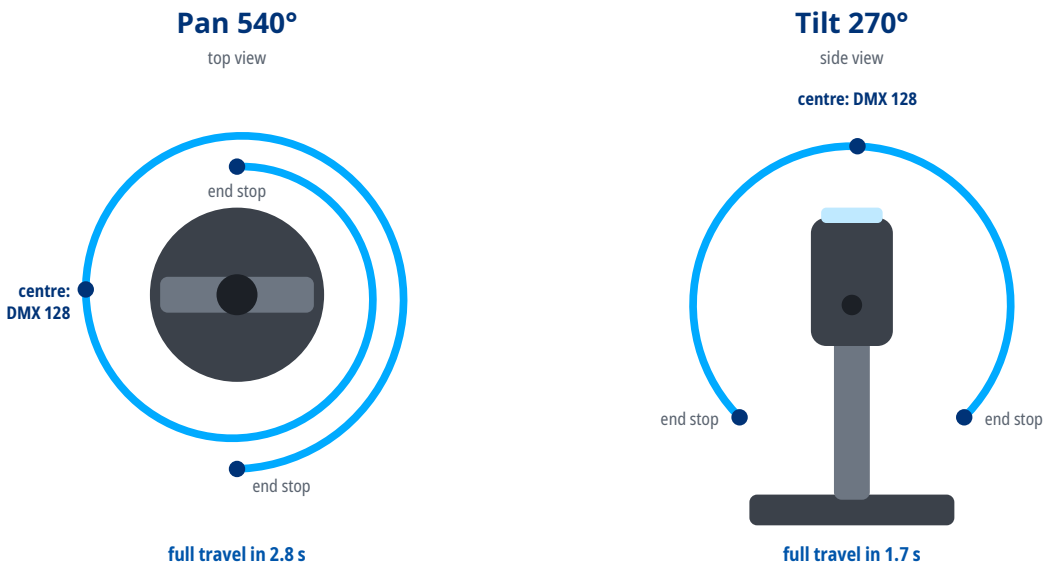
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

“Powerfully smooth, Robe’s VIVA CMY combines brightness of exceptionally clear zero-fringing white beam together with continuous color transitions of CMY mixing.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

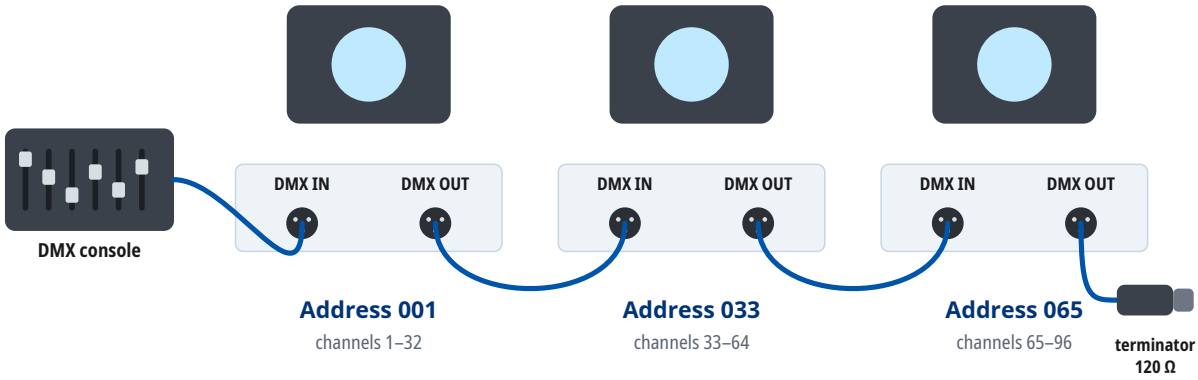
⚠ **WARNING**

- 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: 19 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 - Standard 16 bit: every unit occupies 32 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 - Standard 16 bit”: 32.
- 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 - Standard 16 bit”, you can use, for example, the start addresses 1, 33, 65, 97.
- 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 32 channels	Mode 2 - Reduced 8 bit 26 channels
Pan / Tilt	**1, 3**	**1, 3**
Dimmer	**31**	**26**
Dimmer resolution	16 bit	8 bit
Shutter / strobe	**30**	**25**
Color mixing	**9–11 ***	**8–10 ***
Color wheel	**7**	**7**
Gobo wheel	**16, 17**	**15, 16**
Gobo rotation	**18 ***	**17 ***
Prism	**20, 21**	**18, 19**
Frost	**22**	**20**
Zoom	**25**	**22**
Focus	**27**	**23**
Iris	**23**	**21**
Effects / macros	**12, 15, 20**	**11, 14, 18**

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

Color wheel 1

1. Open/white — **DMX 0–8**
2. Deep red — **DMX 9–26**
3. Green — **DMX 27–45**
4. 2700K — **DMX 46–63**
5. Orange — **DMX 64–81**
6. Lavander — **DMX 82–99**
7. Congo Blue — **DMX 100–118**

Gobo wheel 1

1
Static Gobo: Open/Hole
DMX 0–8

2 
Gobo 1
DMX 9–17

3 
Gobo 2
DMX 18–26

4 
Gobo 3
DMX 27–35

5 
Gobo 4
DMX 36–44

6 
Gobo 5
DMX 45–53

7 
Gobo 6
DMX 54–62

8 
Gobo 7
DMX 63–71

9 
Gobo 8
DMX 72–80

10 
Gobo9
DMX 81–92

Gobo wheel 2

1
Gobo Index: Open/Hole
DMX 0–3

2 
Gobo Index: Gobo1
DMX 4–7

3 
Gobo Index: Gobo2
DMX 8–11

4 
Gobo Index: Gobo3
DMX 12–15

5 
Gobo Index: Gobo4
DMX 16–19

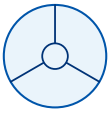
6 
Gobo Index: Gobo5
DMX 20–23

7 
Gobo Index: Gobo6
DMX 24–27

8 
Lines With Wheels
DMX 28–32

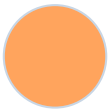
Prism

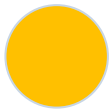
1
Prism: Open
DMX 0

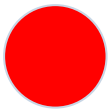
2 
3 facets
Prism
DMX 20–128

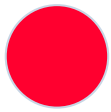
Color wheel 2

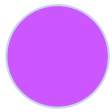
1
No function
DMX 0

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 24 (Scarlet)
DMX 7–8

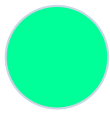
6 
Filter 58 (Lavender)
DMX 9–10

7 
Filter 68 (Sky Blue)
DMX 11–12

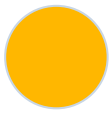
8 
Filter 71 (Tokyo Blue)
DMX 13–14

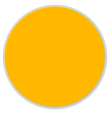
9 
Filter 79 (Just Blue)
DMX 15–16

10
Filter 88 (Lime Green)
DMX 17–18

11 
Filter 90 (Dark Yellow Green)
DMX 19–20

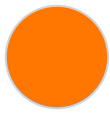
12 
Filter 100 (Spring Yellow)
DMX 21–22

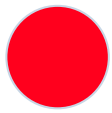
13 
Filter 101 (Yellow)
DMX 23–24

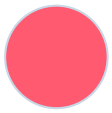
14 
Filter 102 (Light Amber)
DMX 25–26

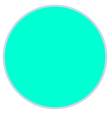
15 
Filter 103 (Straw)
DMX 27–28

16 
Filter 104 (Deep Amber)
DMX 29–30

17 
Filter 105 (Orange)
DMX 31–32

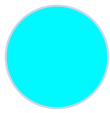
18 
Filter 781 (Terry Red)
DMX 33–34

19 
Filter 111 (Dark Pink)
DMX 35–36

20 
Filter 115 (Peacock Blue)
DMX 37–38

21
Filter 505 (Sally Green)
DMX 39–40

22
Filter 117 (Steel Blue)
DMX 41–42

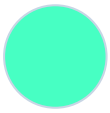
23 
Filter 118 (Light Blue)
DMX 43–44

24
Filter 724 (Ocean Blue)
DMX 45–46

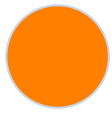
25
Filter 725 (Old Steel Blue)
DMX 47–48

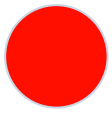
26
Filter 121 (Filter Green)
DMX 49–50

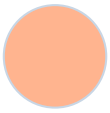
27 
Filter 128 (Bright Pink)
DMX 51–52

28 
Filter 131 (Marine Blue)
DMX 53–54

29 
Filter 132 (Medium Blue)
DMX 55–56

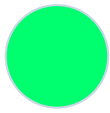
30 
Filter 134 (Golden Amber)
DMX 57–58

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

32 
Filter 136 (Pale Lavender)
DMX 61–62

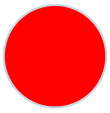
33
Filter 137 (Special Lavender)
DMX 63–64

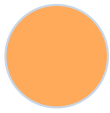
34
Filter 138 (Pale Green)
DMX 65–66

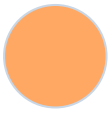
35 
Filter 139 (Primary Green)
DMX 67–68

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**

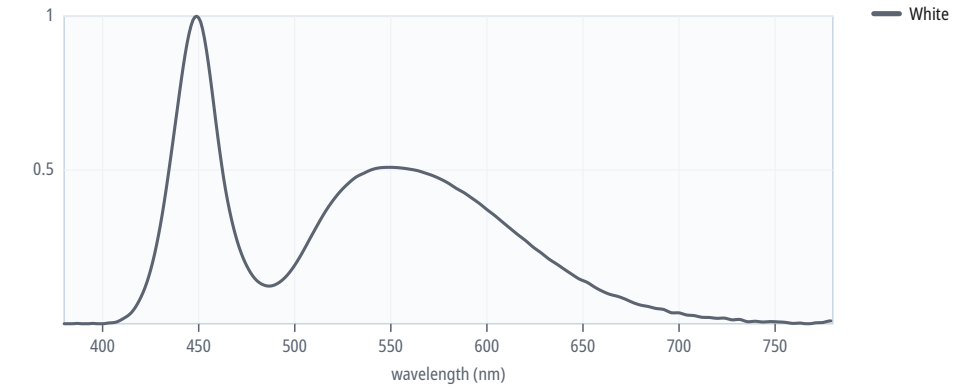
64 Filter 353 (Lighter Blue) **DMX 125–126**

65 Filter 715 (Cabana Blue) **DMX 127–128**

66 Filter 778 (Millennium Gold) **DMX 129–130**

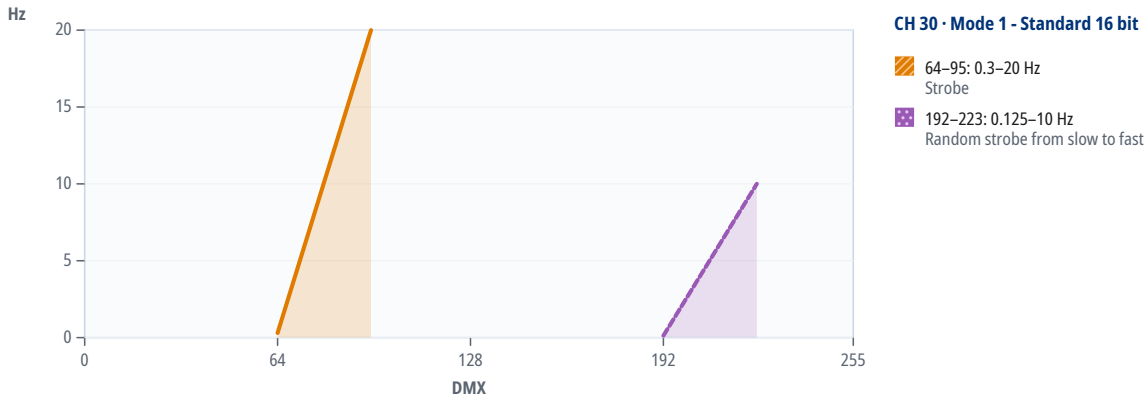
67 Filter 328 (Follies Pink) **DMX 131–133**

Spectra of the light sources



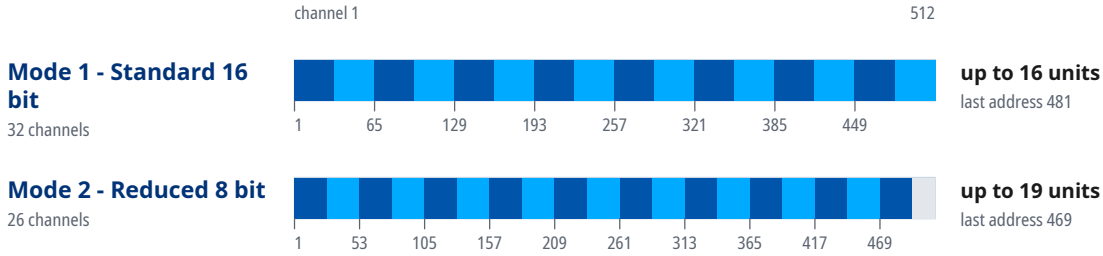
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 1 - Standard 16 bit”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	161	11	321	16	481
2	33	7	193	12	353	17	U2 · 1
3	65	8	225	13	385	18	U2 · 33
4	97	9	257	14	417	19	U2 · 65
5	129	10	289	15	449	20	U2 · 97

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	32	1
Mode 2 - Reduced 8 bit	26	2

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 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 7 Colors 0, CH 9 Cyan 0, CH 10 Magenta 0, CH 11 Yellow 0, CH 12 Color Macro 0, CH 30 Shutter 32, CH 31 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

CH	Function	DMX	Description
5	Speed Pan/Tilt (continued)	2–254	Max ... min
		255	Min
6	Control	0–9	No function
		10–14	Wired DMX
		15–19	Wireless DMX
		20–24	Display On
		25–29	Display Off
		30–49	No function
		50–54	Dimmer curve: Square law
		55–59	Dimmer curve: Linear
		60–64	Fans mode: Auto
		65–69	Fans mode: High
		70–89	No function
		90–94	P/T speed mode
		95–99	P/T time mode
		100–104	BO while PAN TILT moving: ON
		105–109	BO while PAN TILT moving: OFF
		110–114	BO while color wheels moving: ON
		115–119	BO while color wheels moving: OFF
		120–139	No function
		140–149	Pan/Tilt reset
		150–159	ColorReset
		160–169	Gobo/Iris Reset
		170–179	Reserved 5
		180–189	Zoom/Focus/Iris/Prism Reset
		190–199	Reserved 6
		200–209	Total Reset
		210–218	Reserved 7
		219–220	RoboSpot enabled
		221–222	RoboSpot disabled except faders and PT
		223–224	RoboSpot fully disabled
		225–239	No function
		240	Disable Quiet mode
		241–255	Quiet Mode min to max
7	Colors	0–8	Open/white
		9–27	Deep red
		27–45	Green
		46–63	2700K
		64–81	Orange
		82–99	Lavander
		100–118	Congo Blue
		119–127	Open/White

CH	Function	DMX	Description
7	Colors (continued)	128–129	Open/White step
		130–139	Deep red step
		140–149	Green step
		150–159	2700K step
		160–169	Orange step0
		170–179	Lavender step
		180–189	Congo Blue step
		190–191	Color 1 Wheel Spin: Fast to slow - Fast (474.9–432.2 °/s)
		192–211	Color 1 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (432.2–72.6 °/s)
		212–215	Color 1 Wheel Spin: Fast to slow - Slow (72.6–16.5 °/s)
		216–217	No rotation middle
		218–220	Color 1 Wheel Spin: Slow to fast - Slow (16.5–72.6 °/s)
		221–240	Color 1 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast (72.6–432.2 °/s)
		241–243	Color 1 Wheel Spin: Slow to fast - Fast (432.2–474.9 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
8	Colors Fine	0–255	Fine adjustment of CH 7
9	Cyan		When CH 12 is 0:
		0	Min
		1–254	Min ... max
		255	Max
			When CH 12 is 1–255:
		0–255	
10	Magenta		When CH 12 is 0:
		0	Min
		1–254	Min ... max
		255	Max
			When CH 12 is 1–255:
		0–255	
11	Yellow		When CH 12 is 0:
		0	Min
		1–254	Min ... max
		255	Max
			When CH 12 is 1–255:
		0–255	
12	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 24 (Scarlet)
		9–10	Filter 58 (Lavender)

CH	Function	DMX	Description
12	Color Macro (continued)	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 781 (Terry Red)
		35–36	Filter 111 (Dark Pink)
		37–38	Filter 115 (Peacock Blue)
		39–40	Filter 505 (Sally Green)
		41–42	Filter 117 (Steel Blue)
		43–44	Filter 118 (Light Blue)
		45–46	Filter 724 (Ocean Blue)
		47–48	Filter 725 (Old Steel 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)
		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)

CH	Function	DMX	Description
12	Color Macro (continued)	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 328 (Follies Pink)
		133–255	No function
13	Color Mix Speed	0–255	Effect speed max to min
14	Color Wheel Speed	0	No function
		1–225	Time of ColorWheel and CMY movement
		226–255	Color Whee CMYtime
15	Effects Speed	0	No function
		1–255	Effect time min to max (0.1–25.5 Hz)
16	Gobo	0–8	Static Gobo: Open/Hole
		9–17	Gobo 1
		18–26	Gobo 2
		27–35	Gobo 3
		36–44	Gobo 4
		45–53	Gobo 5
		54–62	Gobo 6
		63–71	Gobo 7
		72–80	Gobo 8
		81–91	Gobo 9
		92–103	Gobo1
		104–115	Gobo2
		116–127	Gobo3
		128–139	Gobo4
		140–151	Gobo5
		152–163	Gobo6

CH	Function	DMX	Description
16	Gobo (continued)	164–175	Gobo7
		176–187	Gobo8
		188–199	Gobo9
		200–201	Static Gobo Shake: Open/Hole
		202	Static Wheel Spin: Fast to slow 1/8
		203–205	Static Wheel Spin: Fast to slow 2/8 (485.8–257.1 °/s)
		206–209	Static Wheel Spin: Fast to slow 3/8 (257.1–68.4 °/s)
		210–212	Static Wheel Spin: Fast to slow 4/8 (68.4–16.8 °/s)
		213–214	Static Wheel Spin: Fast to slow 5/8 (16.8–14.4 °/s)
		215–216	Static Wheel Spin: Fast to slow 6/8 (14.4–7.48 °/s)
		217–218	Static Wheel Spin: Fast to slow 7/8 (up to 7.48 °/s (1.2 rpm))
		219–222	Static Wheel Spin: Fast to slow 8/8 (4.07–1.5 °/s)
		223–226	Static Wheel Spin: Slow to fast 1/8 (1.5–4.07 °/s)
		227–228	Static Wheel Spin: Slow to fast 2/8 (4.07–7.48 °/s)
		229–230	Static Wheel Spin: Slow to fast 3/8 (7.48–14.4 °/s)
		231–232	Static Wheel Spin: Slow to fast 4/8 (14.4–16.8 °/s)
		233–235	Static Wheel Spin: Slow to fast 5/8 (16.8–68.4 °/s)
		236–239	Static Wheel Spin: Slow to fast 6/8 (68.4–257.1 °/s)
		240–242	Static Wheel Spin: Slow to fast 7/8 (257.1–485.8 °/s)
		243	Static Wheel Spin: Slow to fast 8/8
		244–249	Random gobo selection by audio control
		250–255	Auto random gobo selection from fast to slow
17	Gobo 2	0–3	Gobo Index: Open/Hole
		4–7	Gobo Index: Gobo1
		8–11	Gobo Index: Gobo2
		12–15	Gobo Index: Gobo3
		16–19	Gobo Index: Gobo4
		20–23	Gobo Index: Gobo5
		24–27	Gobo Index: Gobo6
		28–31	Gobo Index: Gobo7
		32–35	Gobo Rotate: Gobo1
		36–39	Gobo Rotate: Gobo2
		40–43	Gobo Rotate: Gobo3
		44–47	Gobo Rotate: Gobo4
		48–51	Gobo Rotate: Gobo5
		52–55	Gobo Rotate: Gobo6
		56–59	Gobo Rotate: Gobo7
		60–69	Gobo 2 Select Shake Index: Gobo1
		70–79	Gobo 2 Select Shake Index: Gobo2
		80–89	Gobo 2 Select Shake Index: Gobo3
		90–99	Gobo 2 Select Shake Index: Gobo4
		100–109	Gobo 2 Select Shake Index: Gobo5

CH	Function	DMX	Description
17	Gobo 2 (continued)	110–119	Gobo 2 Select Shake Index: Gobo6
		120–129	Gobo 2 Select Shake Index: Gobo7
		130–139	Gobo 2 Select Shake Spin: Gobo1
		140–149	Gobo 2 Select Shake Spin: Gobo2
		150–159	Gobo 2 Select Shake Spin: Gobo3
		160–169	Gobo 2 Select Shake Spin: Gobo4
		170–179	Gobo 2 Select Shake Spin: Gobo5
		180–189	Gobo 2 Select Shake Spin: Gobo6
		190–199	Gobo 2 Select Shake Spin: Gobo7
		200–201	Gobo 2 Select Shake Spin: Open/Hole
		202–205	Gobo 2 Wheel Spin: Fast to slow 1/7 (204.8–93.3 °/s)
		206–209	Gobo 2 Wheel Spin: Fast to slow 2/7 (93.3–27.2 °/s)
		210–213	Gobo 2 Wheel Spin: Fast to slow 3/7 (27.2–13.7 °/s)
		214–215	Gobo 2 Wheel Spin: Fast to slow 4/7 (10.9–6.78 °/s)
		216	Gobo 2 Wheel Spin: Fast to slow 5/7
		217	Gobo 2 Wheel Spin: Fast to slow 6/7
		218–222	Gobo 2 Wheel Spin: Fast to slow 7/7 (3.02–0.617 °/s)
		223–227	Gobo 2 Wheel Spin: Slow to fast 1/7 (0.617–3.02 °/s)
		228	Gobo 2 Wheel Spin: Slow to fast 2/7
		229	Gobo 2 Wheel Spin: Slow to fast 3/7
		230–231	Gobo 2 Wheel Spin: Slow to fast 4/7 (6.78–10.9 °/s)
		232–235	Gobo 2 Wheel Spin: Slow to fast 5/7 (13.7–27.2 °/s)
		236–239	Gobo 2 Wheel Spin: Slow to fast 6/7 (27.2–93.3 °/s)
		240–243	Gobo 2 Wheel Spin: Slow to fast 77 (93.3–204.8 °/s)
		244–249	Random gobo selection by audio control
		250–255	Auto random gobo selection from fast to slow
18	Gobo 2 Rotation		When CH 17 is 1–31:
		0–127	Min
		128	Center
		128–255	Max
			When CH 17 is 32–59:
		0	No rotation
		1–24	Fast to slow 100% (1056–432.2 °/s)
		25–49	Fast to slow 80% (432.2–88 °/s)
		50–74	Fast to slow 60% (88–21.8 °/s)
		75–99	Fast to slow 40% (21.8–5.24 °/s)
		100–119	Fast to slow 20% (5.24–1.26 °/s)
		120–123	Fast to slow 10% (1.26–0.735 °/s)
		124–127	Fast to slow 5% (0.735–0.255 °/s)
		128	No rotation middle
		129–132	Slow to fast 5% (0.255–0.735 °/s)
		133–136	Slow to fast 10% (0.735–1.26 °/s)

CH	Function	DMX	Description
18	Gobo 2 Rotation (continued)	137–156	Slow to fast 20% (1.26–5.24 °/s)
		157–181	Slow to fast 40% (5.24–21.8 °/s)
		182–206	Slow to fast 60% (21.8–88 °/s)
		207–231	Slow to fast 80% (88–432.2 °/s)
		232–255	Slow to fast 100% (432.2–1056 °/s)
			When CH 17 is 60–129:
		0–127	Min
		128	Center
		128–255	Max
19	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 18
20	Prism	0	Prism: Open
		1–19	Open ... 3-facet rotating prism
		20–127	3-facet rotating prism
		128–135	Prism Macro 1
		136–143	Prism Macro 2
		144–151	Prism Macro 3
		152–159	Prism Macro 4
		160–167	Prism Macro 5
		168–175	Prism Macro 6
		176–183	Prism Macro 7
		184–191	Prism Macro 8
		192–199	Prism Macro 9
		200–207	Prism Macro 10
		208–215	Prism Macro 11
		216–223	Prism Macro 12
		224–231	Prism Macro 13
		232–239	Prism Macro 14
		240–247	Prism Macro 15
		248–255	Prism Macro 16
21	Prism Rotation	0	No rotation
		1–24	Fast to slow 1/7 (983.6–470 °/s)
		25–49	Fast to slow 2/7 (470–181.8 °/s)
		50–74	Fast to slow 3/7 (181.8–86.7 °/s)
		75–99	Fast to slow 4/7 (86.7–35 °/s)
		100–119	Fst to slow 5/7 (35–4.39 °/s)
		120–124	Fast to slow 6/7 (4.39–1.64 °/s)
		125–127	Fast to slow 7/7 (1.64–0.362 °/s)
		128	No rotation middle
		129–131	Slow to fast 1/7 (0.362–1.64 °/s)
		132–136	Slow to fast 2/7 (1.64–4.39 °/s)
		137–156	Slow to fast 3/7 (4.39–35 °/s)
		157–181	Slow to fast 4/7 (35–86.7 °/s)

CH	Function	DMX	Description
21	Prism Rotation (continued)	182–206	Slow to fast 5/7 (86.7–181.8 °/s)
		207–232	Slow to fast 6/7 (181.8–470 °/s)
		233–255	Slow to fast 7/7 (470–983.6 °/s)
22	Frost	0	Open
		1–179	Frost from 0% to 100%
		180–189	Frost 100%
		190–211	Pulse closing from slow to fast
		212–233	Pulse opening from fast to slow
		234–255	Ramping from fast to slow
23	Iris	0–180	Iris: Open ... Closed
		180–191	Iris: Closed
		192–194	Iris Pulse Open: Slow to fast 1/13 (0.011–0.033 Hz)
		195–196	Iris Pulse Open: Slow to fast 2/13 (0.033–0.054 Hz)
		197–198	Iris Pulse Open: Slow to fast 3/13 (0.054–0.076 Hz)
		199–200	Iris Pulse Open: Slow to fast 4/13
		201–202	Iris Pulse Open: Slow to fast 5/13 (0.076–0.098 Hz)
		203–204	Iris Pulse Open: Slow to fast 6/13
		205–206	Iris Pulse Open: Slow to fast 7/13
		207–208	Iris Pulse Open: Slow to fast 8/13 (0.098–0.119 Hz)
		209–210	Iris Pulse Open: Slow to fast 9/13 (0.119–0.14 Hz)
		211–212	Iris Pulse Open: Slow to fast 10/13 (0.14–0.161 Hz)
		213–214	Iris Pulse Open: Slow to fast 11/13 (0.161–0.263 Hz)
		215–216	Slow t ofast 12/13 (0.263–1 Hz)
		217–219	Iris Pulse Open: Slow to fast 13/13 (1–2.94 Hz)
		220–221	Iris Pulse Close: Fast to slow 1/13 (2.94–1 Hz)
		222–223	Iris Pulse Close: Fast to slow 2/13 (1–0.263 Hz)
		224–225	Iris Pulse Close: Fast to slow 3/13 (0.263–0.161 Hz)
		226–227	Iris Pulse Close: Fast to slow 4/13 (0.161–0.119 Hz)
		228–229	Iris Pulse Close: Fast to slow 5/13
		230–231	Iris Pulse Close: Fast to slow 6/13 (0.119–0.098 Hz)
		232–233	Iris Pulse Close: Fast to slow 7/13
		234–235	Iris Pulse Close: Fast to slow 8/13
		236–237	Iris Pulse Close: Fast to slow 9/13 (0.098–0.076 Hz)
		238–239	Iris Pulse Close: Fast to slow 10/13
		240–241	Iris Pulse Close: Fast to slow 11/13 (0.076–0.054 Hz)
		242–243	Iris Pulse Close: Fast to slow 12/13 (0.054–0.033 Hz)
		244–247	Iris Pulse Close: Fast to slow 13/13 (0.033–0.011 Hz)
		248–249	Random pulse opening fast
		250–251	Random pulse opening slow
		252–253	Random pulse closing fast
		254–255	Random pulse closing slow
24	Iris Fine	0–255	Fine adjustment of CH 23

CH	Function	DMX	Description
25	Zoom	0–255	Max ... min
		255	Min
26	Zoom Fine	0–255	Fine adjustment of CH 25
27	Focus	0–254	Min ... Max
		255	Max
28	Focus Fine	0–255	Fine adjustment of CH 27
29	Undefined	0–255	Reserved
30	Shutter	0–31	Open/Closed: Closed
		32–63	Open/Closed: Open
		64–66	Strobe: Slow to fast 1/12 (0.3–0.353 Hz)
		67–78	Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.353–2.86 Hz)
		79–82	Strobe: Slow to fast 6/12 (2.86–5.01 Hz)
		83–94	Strobe: Slow to fast 6/12 ... Slow to fast 11/12 (5.01–17.7 Hz)
		95	Strobe: Slow to fast 11/12
		96–127	Open
		128–130	Strobe Pulse Open: Slow to fast 1/7 (0.125–0.139 Hz)
		131–134	Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.147–0.179 Hz)
		135–136	Strobe Pulse Open: Slow to fast 4/7 (0.192–0.208 Hz)
		137–140	Strobe Pulse Open: Slow to fast 4/7 ... Slow to fast 7/7 (0.227–0.312 Hz)
		141–143	Strobe Pulse Open: Slow to fast 7/7 (0.357–0.5 Hz)
		144–145	Strobe Pulse Close: Fast to slow 1/7 (0.5–0.417 Hz)
		146–149	Strobe Pulse Close: Fast to slow 1/7 ... Fast to slow 4/7 (0.357–0.25 Hz)
		150–151	Strobe Pulse Close: Fast to slow 4/7 (0.227–0.208 Hz)
		152–155	Strobe Pulse Close: Fast to slow 4/7 ... Fast to slow 7/7 (0.192–0.156 Hz)
		156–159	Strobe Pulse Close: Fast to slow 7/7 (0.147–0.125 Hz)
		160–191	Open
		192–223	Random strobe from slow to fast (0.125–10 Hz)
		224–255	Open
31	Dimmer	0–254	Closed ... Open
		255	Open
32	Dimmer Fine	0–255	Fine adjustment of CH 31

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 25 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 26 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 8 Cyan 0, CH 9 Magenta 0, CH 10 Yellow 0, CH 11 Color Macro 0, CH 25 Shutter 32, CH 26 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. 13)
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. 13)
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. 13)
6	Control		Same as CH 6 in the mode “Mode 1 - Standard 16 bit” (p. 14)
7	Colors	0–8	Open/white
		9–27	Deep red
		28–45	Green
		46–63	2700K

CH	Function	DMX	Description
7	Colors (continued)	64–81	Orange
		82–99	Lavander
		100–118	Congo Blue
		119–127	Open/White
		128–129	Open/White step
		130–139	Deep red step
		140–149	Green step
		150–159	2700K step
		160–169	Orange step0
		170–179	Lavender step
		180–189	Congo Blue step
		190–191	Color 1 Wheel Spin: Fast to slow - Fast (474.9–432.2 °/s)
		192–211	Color 1 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (432.2–72.6 °/s)
		212–215	Color 1 Wheel Spin: Fast to slow - Slow (72.6–16.5 °/s)
		216–217	No rotation middle
		218–220	Color 1 Wheel Spin: Slow to fast - Slow (16.5–72.6 °/s)
		221–240	Color 1 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast (72.6–432.2 °/s)
		241–243	Color 1 Wheel Spin: Slow to fast - Fast (432.2–474.9 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
8	Cyan		When CH 11 is 0:
		0	Min
		1–254	Min ... max
		255	Max
			When CH 11 is 1–255:
		0–255	
9	Magenta		When CH 11 is 0:
		0	Min
		1–254	Min ... max
		255	Max
			When CH 11 is 1–255:
		0–255	
10	Yellow		When CH 11 is 0:
		0	Min
		1–254	Min ... max
		255	Max
			When CH 11 is 1–255:
		0–255	
11	Color Macro		Same as CH 12 in the mode “Mode 1 - Standard 16 bit” (p. 15)
12	Color Mix Speed	0–255	Effect speed max to min
13	Color Wheel Speed		Same as CH 14 in the mode “Mode 1 - Standard 16 bit” (p. 17)

CH	Function	DMX	Description
14	Effects Speed		Same as CH 15 in the mode “Mode 1 - Standard 16 bit” (p. 17)
15	Gobo		Same as CH 16 in the mode “Mode 1 - Standard 16 bit” (p. 17)
16	Gobo 2		Same as CH 17 in the mode “Mode 1 - Standard 16 bit” (p. 18)
17	Gobo 2 Rotation		When CH 16 is 1–31:
		0–127	Min
		128	Center
		129–255	Max
			When CH 16 is 32–59:
		0	No rotation
		1–24	Fast to slow 100% (1056–432.2 °/s)
		25–49	Fast to slow 80% (432.2–88 °/s)
		50–74	Fast to slow 60% (88–21.8 °/s)
		75–99	Fast to slow 40% (21.8–5.24 °/s)
		100–119	Fast to slow 20% (5.24–1.26 °/s)
		120–123	Fast to slow 10% (1.26–0.735 °/s)
		124–127	Fast to slow 5% (0.735–0.255 °/s)
		128	No rotation middle
		129–132	Slow to fast 5% (0.255–0.735 °/s)
		133–136	Slow to fast 10% (0.735–1.26 °/s)
		137–156	Slow to fast 20% (1.26–5.24 °/s)
		157–181	Slow to fast 40% (5.24–21.8 °/s)
		182–206	Slow to fast 60% (21.8–88 °/s)
		207–231	Slow to fast 80% (88–432.2 °/s)
		232–255	Slow to fast 100% (432.2–1056 °/s)
			When CH 16 is 60–129:
		0–127	Min
		128	Center
		129–255	Max
18	Prism		Same as CH 20 in the mode “Mode 1 - Standard 16 bit” (p. 20)
19	Prism Rotation		Same as CH 21 in the mode “Mode 1 - Standard 16 bit” (p. 20)
20	Frost		Same as CH 22 in the mode “Mode 1 - Standard 16 bit” (p. 21)
21	Iris	0	Iris: Open
		1–179	Iris: Open ... Closed
		180–191	Iris: Closed
		192–194	Iris Pulse Open: Slow to fast 1/13 (0.011–0.033 Hz)
		195–196	Iris Pulse Open: Slow to fast 2/13 (0.033–0.054 Hz)
		197–198	Iris Pulse Open: Slow to fast 3/13 (0.054–0.076 Hz)
		199–200	Iris Pulse Open: Slow to fast 4/13
		201–202	Iris Pulse Open: Slow to fast 5/13 (0.076–0.098 Hz)
		203–204	Iris Pulse Open: Slow to fast 6/13
		205–206	Iris Pulse Open: Slow to fast 7/13
		207–208	Iris Pulse Open: Slow to fast 8/13 (0.098–0.119 Hz)

CH	Function	DMX	Description
21	Iris (continued)	209–210	Iris Pulse Open: Slow to fast 9/13 (0.119–0.14 Hz)
		211–212	Iris Pulse Open: Slow to fast 10/13 (0.14–0.161 Hz)
		213–214	Iris Pulse Open: Slow to fast 11/13 (0.161–0.263 Hz)
		215–216	Slow t ofast 12/13 (0.263–1 Hz)
		217–219	Iris Pulse Open: Slow to fast 13/13 (1–2.94 Hz)
		220–221	Iris Pulse Close: Fast to slow 1/13 (2.94–1 Hz)
		222–223	Iris Pulse Close: Fast to slow 2/13 (1–0.263 Hz)
		224–225	Iris Pulse Close: Fast to slow 3/13 (0.263–0.161 Hz)
		226–227	Iris Pulse Close: Fast to slow 4/13 (0.161–0.119 Hz)
		228–229	Iris Pulse Close: Fast to slow 5/13
		230–231	Iris Pulse Close: Fast to slow 6/13 (0.119–0.098 Hz)
		232–233	Iris Pulse Close: Fast to slow 7/13
		234–235	Iris Pulse Close: Fast to slow 8/13
		236–237	Iris Pulse Close: Fast to slow 9/13 (0.098–0.076 Hz)
		238–239	Iris Pulse Close: Fast to slow 10/13
		240–241	Iris Pulse Close: Fast to slow 11/13 (0.076–0.054 Hz)
		242–243	Iris Pulse Close: Fast to slow 12/13 (0.054–0.033 Hz)
		244–247	Iris Pulse Close: Fast to slow 13/13 (0.033–0.011 Hz)
		248–249	Random pulse opening fast
		250–251	Random pulse opening slow
		252–253	Random pulse closing fast
		254–255	Random pulse closing slow
22	Zoom	0	Max
		1–254	Max … min
		255	Min
23	Focus	0	Min
		1–254	Min … Max
		255	Max
24	Undefined	0–255	Reserved
25	Shutter		Same as CH 30 in the mode “Mode 1 - Standard 16 bit” (p. 22)
26	Dimmer	0	Closed
		1–254	Closed … Open
		255	Open

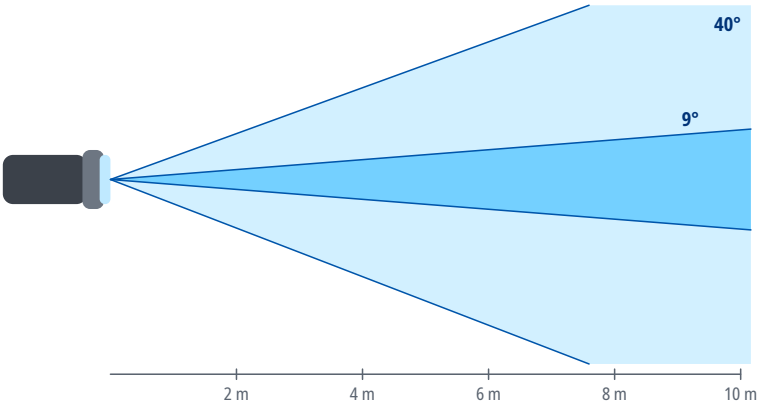
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	350 W
Luminous flux	12,040 lm
Color temperature	6,500 K
Color rendering index (CRI)	75
Optics	
Zoom	9–40°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45
RDM	yes (manufacturer ID 0x5253, device model ID 0x00CB)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	500 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	19 kg
Operating environment	
Operating temperature	-5 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0.3–20 Hz
Color wheel 1 rotation	up to 470.3 °/s (78 rpm)
Gobo wheel 1 rotation	up to 485.8 °/s (81 rpm)
Gobo wheel 2 rotation	up to 56.6 °/s (9.4 rpm)
Gobo 2 rotation	up to 56.6 °/s (9.4 rpm)
Prism rotation	up to 30 °/s (5 rpm)

Spot diameter



Distance	Ø 9°	Ø 40°
2 m	0.31 m	1.5 m
4 m	0.63 m	2.9 m
6 m	0.94 m	4.4 m
8 m	1.3 m	5.8 m
10 m	1.6 m	7.3 m
15 m	2.4 m	10.9 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.