DMX REFERENCE

Robin Forte HCF

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_Forte_HCF_116789.gdtf
GDTF revision	2025-11-07 Personality RDM number revision · 2025-11-10
Generated	2026-11-24

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1 About this manual

This document describes the Robin Forte HCF by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_Forte_HCF_116789.gdtf from the GDTF-Share library.

File revision: “2025-11-07 Personality RDM number 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	1,250 W
Weight	39.8 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 - Standard 16 bit	54	9	1, 55, 109, 163, ...
Mode 2 - Enhanced gobo control	56	9	1, 57, 113, 169, ...

No light? Check these channels

- Mode 1 - Standard 16 bit: CH 52 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 53 Dimmer above 0
- Mode 2 - Enhanced gobo control: CH 54 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 55 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.

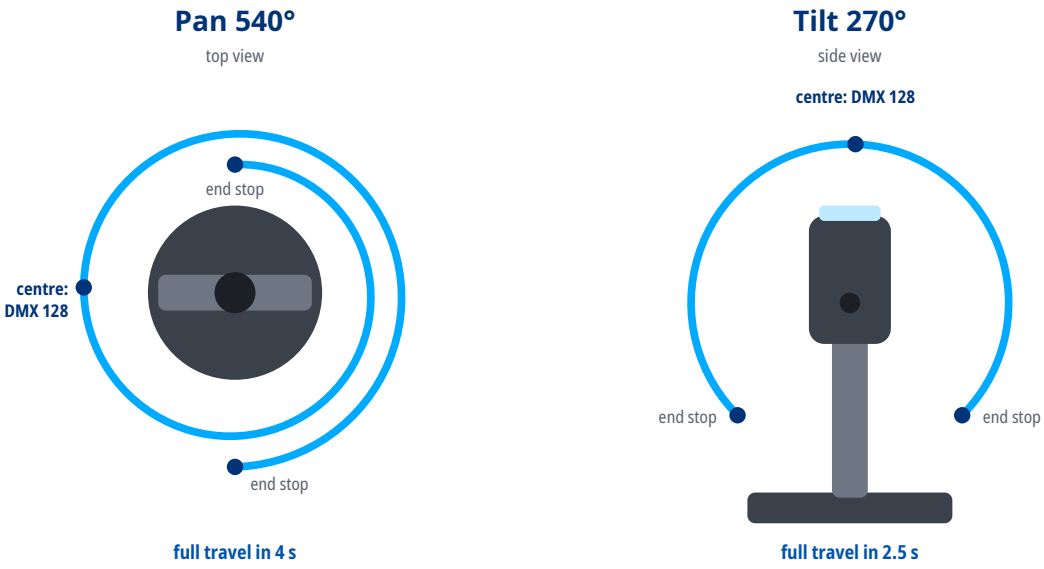
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

“FORTE with HCF engine Forte means Excellence, Speciality, Strength. Our FORTE™ certainly lives up to its name! Producing a blistering 50.000 lumens of high quality performance light, combined with the ability to maintain light quality from the revolutionary TRANSFERABLE ENGINE, and packed full of specialist innovation, you have the fixture ready to lead you into the future.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

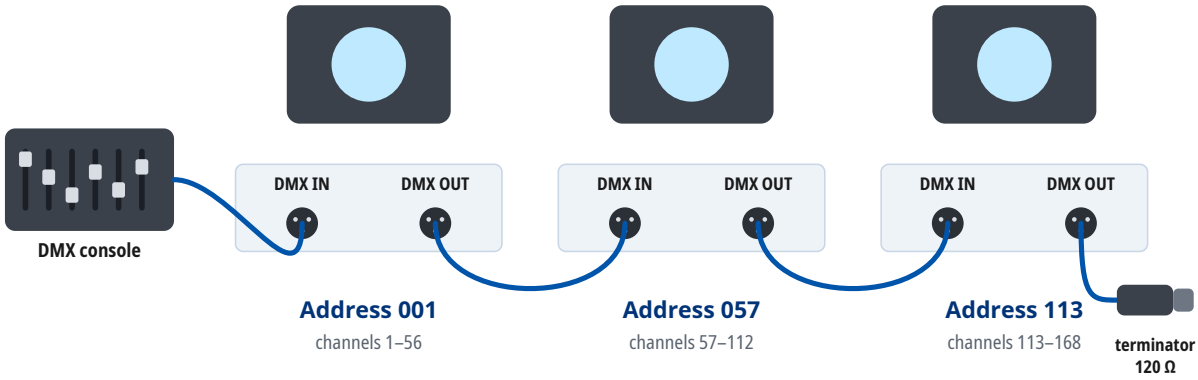
⚠ WARNING

- 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: 39.8 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 2 - Enhanced gobo control: every unit occupies 56 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 2 - Enhanced gobo control”: 56.
- 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 2 - Enhanced gobo control”, you can use, for example, the start addresses 1, 57, 113, 169.
- 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 54 channels	Mode 2 - Enhanced gobo control 56 channels
Pan / Tilt	1, 3	1, 3
Dimmer	53	55
Shutter / strobe	52	54
Color mixing	14–16	14–16
Color temperature	17	17
Color wheel	10, 12, 19	10, 12, 19
Gobo wheel	26, 29	26, 30
Gobo rotation	27, 30 *	28, 32 *
Prism	32–35	34–37
Frost	36	38
Zoom	39	41
Focus	41	43
Iris	37	39
Animation wheel	23–25	23–25
Effects / macros	32, 34	34, 36

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

Gobo wheel 1



1 Open/hole DMX 0–4
2 Gobo 1 DMX 5–8
3 Gobo 2 DMX 9–13
4 Gobo 3 DMX 14–17
5 Gobo 4 DMX 18–22
6 Gobo 5 DMX 23–26
7 G06 DMX 27–32

Animation wheel



1 Animation Wheel Index: Open DMX 0–19
2 Animation Wheel DMX 20–128

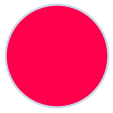
Prism 1

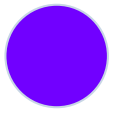
1.
Open position (hole)
DMX 0–19

2. 
6 facets
Prism 1 Indexing
DMX 20–73

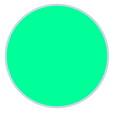
Color wheel 1

1.
Open/white - continual
DMX 0–10

2. 
Deep red - continual
DMX 11–31

3. 
Deep blue - continual
DMX 32–53

4. 
Orange - continual
DMX 54–75

5. 
Green - continual
DMX 76–96

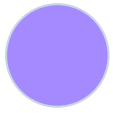
6. 
Congo Blue - continual
DMX 97–117

Gobo wheel 2

1.
Open/white - continual
DMX 0–10

2. 
Multicolor - continual
DMX 11–31

3.
Laser green - continual
DMX 32–53

4. 
Lavander - continual
DMX 54–75

5.
CRI 80 - continual
DMX 76–96

6.
CRI 90 - continual
DMX 97–117

Gobo wheel 3

1.
Open/hole
DMX 0–4

2. 
Gobo 1
DMX 5–8

3. 
Gobo 2
DMX 9–13

4. 
Gobo 3
DMX 14–17

5. 
Gobo 4
DMX 18–22

6. 
Gobo 5
DMX 23–26

7. 
G06
DMX 27–32

Prism 2

1.
Open position (hole)
DMX 0–19

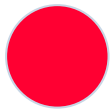
2. 
6 facets
Prism 2
DMX 20–128

Color wheel 2

1.
No function
DMX 0

2. 
Filter 4 (Medium Bastard Amber)
DMX 1–2

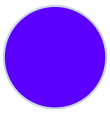
3. 
Filter 10 (Medium Yellow)
DMX 3–4

4. 
Filter 19 (Fire)
DMX 5–6

5. 
Filter 26 (Bright Red)
DMX 7–8

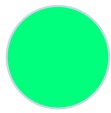
6. 
Filter 58 (Lavender)
DMX 9–10

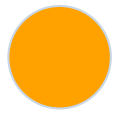
7. 
Filter 68 (Sky Blue)
DMX 11–12

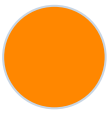
8. 
Filter 71 (Tokyo Blue)
DMX 13–14

9. 
Filter 79 (Just Blue)
DMX 15–16

10.
Filter 88 (Lime Green)
DMX 17–18

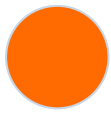
11. 
Filter 90 (Dark Yellow Green)
DMX 19–20

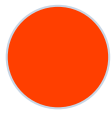
12. 
Filter 100 (Spring Yellow)
DMX 21–22

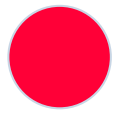
13. 
Filter 101 (Yellow)
DMX 23–24

14. 
Filter 102 (Light Amber)
DMX 25–26

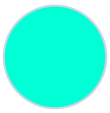
15. 
Filter 103 (Straw)
DMX 27–28

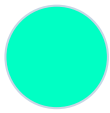
16. 
Filter 104 (Deep Amber)
DMX 29–30

17. 
Filter 105 (Orange)
DMX 31–32

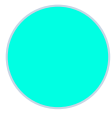
18. 
Filter 106 (Primary Red)
DMX 33–34

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

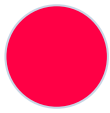
22.
Filter 117 (Steel Blue)
DMX 41–42

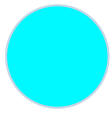
23. 
Filter 118 (Light Blue)
DMX 43–44

24. 
Filter 119 (Dark Blue)
DMX 45–46

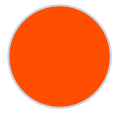
25. 
Filter 120 (Deep Blue)
DMX 47–48

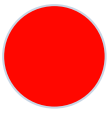
26.
Filter 121 (Filter Green)
DMX 49–50

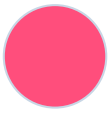
27. 
Filter 128 (Bright Pink)
DMX 51–52

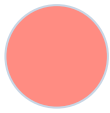
28. 
Filter 131 (Marine Blue)
DMX 53–54

29. 
Filter 132 (Medium Blue)
DMX 55–56

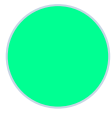
30. 
Filter 134 (Golden Amber)
DMX 57–58

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

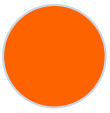
32. 
Filter 136 (Pale Lavender)
DMX 61–62

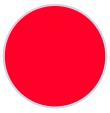
33. 
Filter 137 (Special Lavender)
DMX 63–64

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

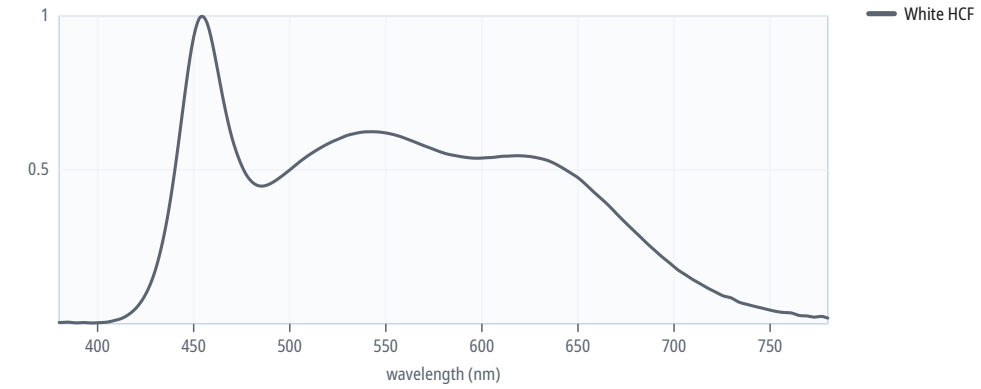
64 Filter 353 (Lighter Blue)
DMX 125–126

65 Filter 715 (Cabana Blue)
DMX 127–128

66 Filter 778 (Millennium Gold)
DMX 129–130

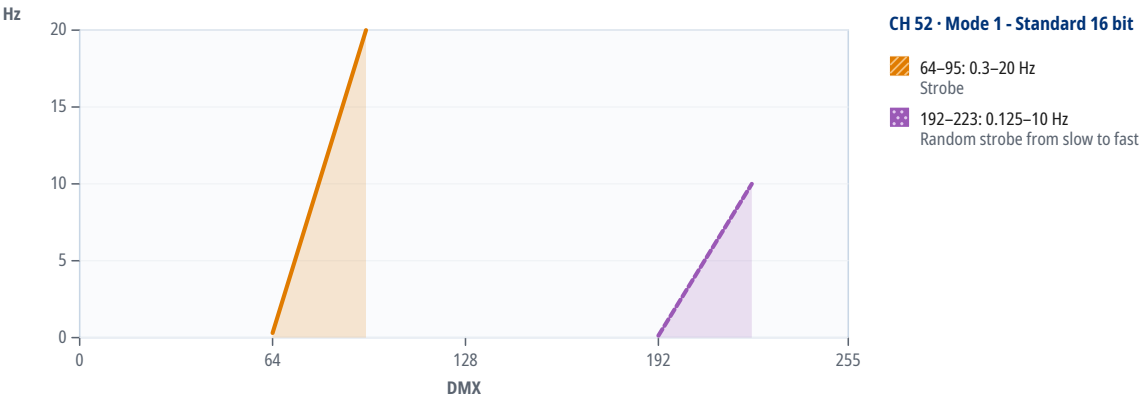
67 Vanity Fair
DMX 131–133

Spectra of the light sources



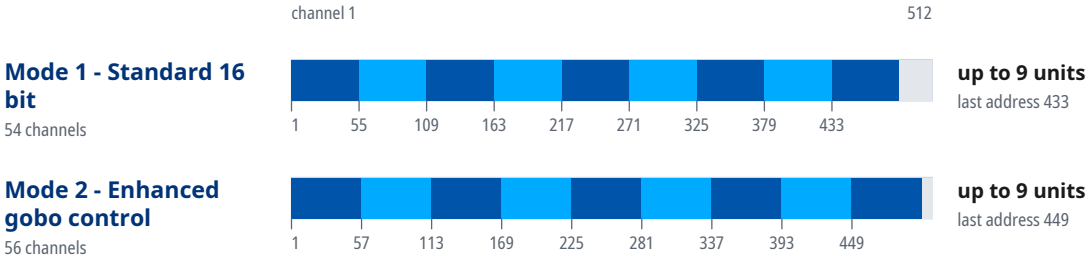
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 2 - Enhanced gobo control”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	281	11	U2 · 57	16	U2 · 337
2	57	7	337	12	U2 · 113	17	U2 · 393
3	113	8	393	13	U2 · 169	18	U2 · 449
4	169	9	449	14	U2 · 225	19	U3 · 1
5	225	10	U2 · 1	15	U2 · 281	20	U3 · 57

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	54	1
Mode 2 - Enhanced gobo control	56	2

Mode 1 - Standard 16 bit

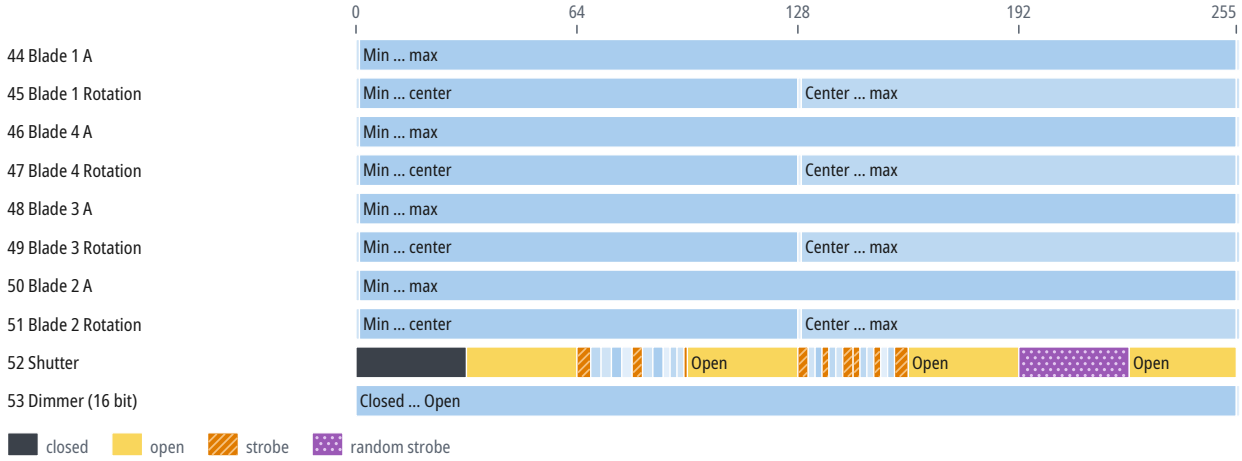
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 52 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 53 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 12 Colors 2 0, CH 14 Cyan 0, CH 15 Magenta 0, CH 16 Yellow 0, CH 17 CTO 0, CH 19 Colors 3 0, CH 52 Shutter 32, CH 53 Dimmer 255.

Channel functions at a glance



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
		2–254	Max ... min
		255	Min
6	Control	0	No function
		1–9	No function
		10–14	Wired DMX
		15–19	Wireless DMX
		20–24	Display On
		25–29	Display Off
		30–31	Fans ON at blackout
		32–33	Fans OFF at blackout
		34–39	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
		60–64	BO while Gobo moving: ON
		65–69	BO while Gobo moving: OFF
		70–74	BO while color wheels moving: ON

CH	Function	DMX	Description
6	Control (continued)	75–79	BO while color wheels moving: OFF
		80–84	Fan mode Auto
		85–89	Fan mode High
		90–92	Fan mode Super Quiet
		93–94	No function
		95–99	Dimmer curve: Super Square Law
		100–104	Focus Tracking ON
		105–109	Focus Tracking OFF
		110–114	Dimmer curve: Square law
		115–119	Dimmer curve: Linear
		120–124	Parking position ON
		125–129	Parking position OFF
		130–139	Fixture reset (except pan/tilt)
		140–149	Position Reset
		150–159	Color system reset
		160–169	Gobo and Effect wheel reset
		170–174	Pan Reset
		175–179	Tilt Reset
		180–189	Zoom/focus/frost/prism reset
		190–199	Iris /framing shutters/effect wheel reset
		200–209	Total fixture reset
		210–218	No function
		219–220	Gobo indexing: Maximum speed and shortcut
		221–222	Gobo indexing: Follow speed and follow direction
		223–224	Gobo indexing: Maximum speed and follow direction
		225–229	RoboSpot enabled
		230–234	RoboSpot disabled except faders and PT
		235–239	RoboSpot fully disabled
		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
		2–127	LED Frequency (step -126...-1)
		128	Selected LED Frequency
		129–254	LED Frequency (step 1...126)
		255	Selected LED Frequency
9	Intensity Indication	0–10	No function

CH	Function	DMX	Description
9	Intensity Indication (continued)	11–20	Indication of drop of max light intensity
		21–30	Set drop by 6-10% (RED)
		31–40	Set drop by 11-15% (GREEN)
		41–50	Set drop by 16-20% (BLUE)
		51–60	Set drop by 21-25% (CYAN)
		61–70	Set drop by 26-30% (MAGENTA)
		71–80	Set drop by 31-35% (YELLOW)
		81–90	Set drop by 36-40% (ORANGE)
		91–100	Original intensity (WHITE)
		101–255	No function
10	Colors	0–10	Open/white - continual
		11–31	Deep red - continual
		32–53	Deep blue - continual
		54–75	Orange - continual
		76–96	Green - continual
		97–117	Congo Blue - continual
		118–127	Open/white - continual
		128–129	Open/white - step
		130–141	Deep red - step
		142–153	Deep blue - step
		154–165	Orange - step
		166–177	Green - step
		178–189	Congo blue - step
		190–191	Color 1 Wheel Spin: Fast to slow 1/9 (576–402.2 °/s)
		192–194	Color 1 Wheel Spin: Fast to slow 2/9 (402.2–249.8 °/s)
		195–197	Color 1 Wheel Spin: Fast to slow 3/9 (249.8–166 °/s)
		198–201	Color 1 Wheel Spin: Fast to slow 4/9 (166–102.9 °/s)
		202–204	Color 1 Wheel Spin: Fast to slow 5/9 (102.9–78.1 °/s)
		205–206	Color 1 Wheel Spin: Fast to slow 6/9 (78.1–56.2 °/s)
		207–209	Color 1 Wheel Spin: Fast to slow 7/9 (56.2–31.6 °/s)
		210–211	Color 1 Wheel Spin: Fast to slow 8/9 (31.6–15.5 °/s)
		212–215	Color 1 Wheel Spin: Fast to slow 9/9 (15.5–2.48 °/s)
		216–217	No Rotation middle
		218–220	Color 1 Wheel Spin: Slow to fast 1/9 (2.48–15.5 °/s)
		221–222	Color 1 Wheel Spin: Slow to fast 2/9 (15.5–31.6 °/s)
		223–225	Color 1 Wheel Spin: Slow to fast 3/9 (31.6–56.2 °/s)
		226–227	Color 1 Wheel Spin: Slow to fast 4/9 (56.2–78.1 °/s)
		228–230	Color 1 Wheel Spin: Slow to fast 5/9 (78.1–102.9 °/s)
		231–234	Color 1 Wheel Spin: Slow to fast 6/9 (102.9–166 °/s)
		235–237	Color 1 Wheel Spin: Slow to fast 7/9 (166–249.8 °/s)
		238–240	Color 1 Wheel Spin: Slow to fast 8/9 (249.8–402.2 °/s)
		241–243	Color 1 Wheel Spin: Slow to fast 9/9 (402.2–576 °/s)

CH	Function	DMX	Description
10	Colors (continued)	244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
11	Colors Fine	0–255	Fine adjustment of CH 10
12	Colors 2	0–10	Open/white - continual
		11–31	Multicolor - continual
		32–53	Laser green - continual
		54–75	Lavander - continual
		76–96	CRI 80 - continual
		97–117	CRI 90 - continual
		118–127	Open/white - continual
		128–129	Open/white - step
		130–141	Multicolor - step
		142–153	Laser green - step
		154–165	Lavander - step
		166–177	CRI 80 - step
		178–189	CRI 90 - step
		190–191	Color 2 Wheel Spin: Fast to slow 1/9 (576–402.2 °/s)
		192–194	Color 2 Wheel Spin: Fast to slow 2/9 (402.2–249.8 °/s)
		195–197	Color 2 Wheel Spin: Fast to slow 3/9 (249.8–166 °/s)
		198–201	Color 2 Wheel Spin: Fast to slow 4/9 (166–102.9 °/s)
		202–204	Color 2 Wheel Spin: Fast to slow 5/9 (102.9–78.1 °/s)
		205–206	Color 2 Wheel Spin: Fast to slow 6/9 (78.1–56.2 °/s)
		207–209	Color 2 Wheel Spin: Fast to slow 7/9 (56.2–31.6 °/s)
		210–211	Color 2 Wheel Spin: Fast to slow 8/9 (31.6–15.5 °/s)
		212–215	Color 2 Wheel Spin: Fast to slow 9/9 (15.5–2.48 °/s)
		216–217	No Rotation middle
		218–220	Color 2 Wheel Spin: Slow to fast 1/9 (2.48–15.5 °/s)
		221–222	Color 2 Wheel Spin: Slow to fast 2/9 (15.5–31.6 °/s)
		223–225	Color 2 Wheel Spin: Slow to fast 3/9 (31.6–56.2 °/s)
		226–227	Color 2 Wheel Spin: Slow to fast 4/9 (56.2–78.1 °/s)
		228–230	Color 2 Wheel Spin: Slow to fast 5/9 (78.1–102.9 °/s)
		231–234	Color 2 Wheel Spin: Slow to fast 6/9 (102.9–166 °/s)
		235–237	Color 2 Wheel Spin: Slow to fast 7/9 (166–249.8 °/s)
		238–240	Color 2 Wheel Spin: Slow to fast 8/9 (249.8–402.2 °/s)
		241–243	Color 2 Wheel Spin: Slow to fast 9/9 (402.2–576 °/s)
		244–249	Random color selection by audio control
		250–255	Auto random color selection from fast to slow
13	Colors 2 Fine	0–255	Fine adjustment of CH 12
14	Cyan	0	Min
		1–254	Min ... Max
		255	Max
15	Magenta	0	Min

CH	Function	DMX	Description
15	Magenta (continued)	1–254	Min ... Max
		255	Max
16	Yellow	0	Min
		1–254	Min ... Max
		255	Max
17	CTO	0–255	CTO from 6000K --> 2400K (6000–2400 K)
18	Tint	0	Uncorrected white
		1–127	Minus green - > Uncorrected white
		128	Uncorrected white
		129–255	Uncorrected white - > Plus green
19	Colors 3	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)

CH	Function	DMX	Description
19	Colors 3 (continued)	63–64	Filter 137 (Special Lavender)
		65–66	Filter 138 (Pale Green)
		67–68	Filter 139 (Primary Green)
		69–70	Filter 141 (Bright Blue)
		71–72	Filter 147 (Apricot)
		73–74	Filter 148 (Bright Rose)
		75–76	Filter 152 (Pale Gold)
		77–78	Filter 154 (Pale Rose)
		79–80	Filter 157 (Pink)
		81–82	Filter 158 (Deep Orange)
		83–84	Filter 162 (Bastard Amber)
		85–86	Filter 164 (Flame Red)
		87–88	Filter 165 (Daylight Blue)
		89–90	Filter 169 (Lilac Tint)
		91–92	Filter 170 (Deep Lavender)
		93–94	Filter 172 (Lagoon Blue)
		95–96	Filter 179 (Chrome Orange)
		97–98	Filter 180 (Dark Lavender)
		99–100	Filter 181 (Congo Blue)
		101–102	Filter 197 (Alice Blue)
		103–104	Filter 201 (Full CT Blue)
		105–106	Filter 202 (Half CT Blue)
		107–108	Filter 203 (Quarter CT Blue)
		109–110	Filter 204 (Full CT Orange)
		111–112	Filter 205 (Half CT Orange)
		113–114	Filter 206 (Quarter CT Orange)
		115–116	Filter 247 (Filter Minus Green)
		117–118	Filter 248 (Half Minus Green)
		119–120	Filter 281 (Three Quarter CT Blue)
		121–122	Filter 285 (Three Quarter CT Orange)
		123–124	Filter 352 (Glacier Blue)
		125–126	Filter 353 (Lighter Blue)
		127–128	Filter 715 (Cabana Blue)
		129–130	Filter 778 (Millennium Gold)
		131–132	Filter 793 (Vanity Fair)
		133–255	No function
20	Color Wheel Speed		CMY and CTO movement + Rot gobos selection
		0	Max
		1–254	Max ... min
		255	Min
21	Color Mix Speed	0	Function is OFF
		1	Max

CH	Function	DMX	Description
21	Color Mix Speed (continued)	2–254	Max ... min
		255	Min
22	Focus Speed	0	Function is OFF
		1	Max
		2–254	Max ... min
		255	Min
23	Animation Wheel	0–19	Animation Wheel Index: Open
		20–127	Proportional indexing
		128	Ramping from open to full position max
		129–169	Ramping from open to full position max ... Ramping from open to full position min
		170	Ramping from open to full position min
		171	Ramping from open to half position max
		172–212	Ramping from open to half position max ... Ramping from open to half position min
		213	Ramping from open to half position min
		214	Ramp from half position to full position max
		215–254	Ramp from half position to full position max ... Ramp from half position to full position min
		255	Ramp from half position to full position min
24	Animation Wheel Rotation	0	No rotation
		1–24	Fast to slow 1/7 (202.8–104.3 °/s)
		25–49	Fast to slow 2/7 (104.3–40.5 °/s)
		50–74	Fast to slow 3/7 (40.5–19.3 °/s)
		75–99	Fast to slow 4/7 (19.3–7.91 °/s)
		100–119	Fast to slow 5/7 (7.91–1.82 °/s)
		120–124	Fast to slow 6/7 (1.82–0.8 °/s)
		125–127	Fast to slow 7/7 (0.8–0.415 °/s)
		128	No rotation middle
		129–131	Slow to fast 1/7 (0.415–0.8 °/s)
		132–136	Slow to fast 2/7 (0.8–1.82 °/s)
		137–156	Slow to fast 3/7 (1.82–7.91 °/s)
		157–181	Slow to fast 4/7 (7.91–19.3 °/s)
		182–206	Slow to fast 5/7 (19.3–40.5 °/s)
		207–232	Slow to fast 6/7 (40.5–104.3 °/s)
		233–255	Slow to fast 7/7 (104.3–202.8 °/s)
25	Animation Wheel Effects	0–7	No animation
		8–9	Macro 1 (Focus=159)
		10–11	Macro 2 (Focus=144)
		12–13	Macro 3 (Focus=146)
		14–15	Macro 4 (Focus=160)
		16–17	Macro 5 (Focus=181)
		18–19	Macro 6 (Focus=181)

CH	Function	DMX	Description
25	Animation Wheel Effects (continued)	20–21	Macro 7 (Focus=166)
		22–23	Macro 8 (Focus=142)
		24–25	Macro 9 (Focus=151)
		26–27	Macro 10 (Focus=152)
		28–255	No function
26	Gobo	0–4	Open/hole
		5–8	Gobo 1
		9–13	Gobo 2
		14–17	Gobo 3
		18–22	Gobo 4
		23–26	Gobo 5
		27–31	Gobo 6
		32–35	Gobo 1 - Rotation
		36–40	Gobo 2 - Rotation
		41–44	Gobo 3 - Rotation
		45–49	Gobo 4 - Rotation
		50–54	Gobo 5 - Rotation
		55–59	Gobo 6 - Rotation
		60–71	Gobo 1 - Shaking Index (0.498–3.44 Hz)
		72–83	Gobo 2 - Shaking Index (0.498–3.44 Hz)
		84–95	Gobo 3 - Shaking Index (0.498–3.44 Hz)
		96–106	Gobo 4 - Shaking Index (0.498–3.44 Hz)
		107–118	Gobo 5 - Shaking Index (0.498–3.44 Hz)
		119–129	Gobo 6 - Shaking Index (0.498–3.44 Hz)
		130–141	Gobo 1 - Shaking Rotation (0.498–3.44 Hz)
		142–153	Gobo 2 - Shaking Rotation (0.498–3.44 Hz)
		154–165	Gobo 3 - Shaking Rotation (0.498–3.44 Hz)
		166–176	Gobo 4 - Shaking Rotation (0.498–3.44 Hz)
		177–188	Gobo 5 - Shaking Rotation (0.498–3.44 Hz)
		189–199	Gobo 6 - Shaking Rotation (0.498–3.44 Hz)
		200–201	Open/Hole
		202	Gobo 1 Wheel Spin: Fast to slow - Fast
		203–220	Gobo 1 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (97.8–11.6 °/s)
		221–222	Gobo 1 Wheel Spin: Fast to slow - Slow (11.6–1.75 °/s)
		223–224	Gobo 1 Wheel Spin: Slow to Fast - Slow (1.75–11.6 °/s)
		225–242	Gobo 1 Wheel Spin: Slow to Fast - Slow ... Slow to fast - Fast (11.6–97.8 °/s)
		243	Gobo 1 Wheel Spin: Slow to fast - Fast
		244–249	Random gobo selection by audio control
		250–255	Auto random gobo selection from fast to slow
27	Gobo Rotation		When CH 26 is 0–31:
		0–127	Gobo indexing min

CH	Function	DMX	Description
27	Gobo Rotation (continued)	128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 26 is 32–59:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.964 °/s)
		124–127	Fast to slow - Slow (0.964–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.964 °/s)
		133–231	Slow to fast - Slow ... Slow to fast - Fast (0.964–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
			When CH 26 is 60–129:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 26 is 130–201:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.959 °/s)
		124–127	Fast to slow - Slow (0.959–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.959 °/s)
		133–231	Slow to fast - Slow ... Slow to fast - Fast (0.959–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
28	Gobo Rotation Fine	0–255	Fine adjustment of CH 27
29	Gobo 2	0–4	Open/hole
		5–8	Gobo 1
		9–13	Gobo 2
		14–17	Gobo 3
		18–22	Gobo 4
		23–26	Gobo 5
		27–31	Gobo 6
		32–35	Gobo 1 - Rotation
		36–40	Gobo 2 - Rotation
		41–44	Gobo 3 - Rotation
		45–49	Gobo 4 - Rotation
		50–54	Gobo 5 - Rotation
		55–59	Gobo 6 - Rotation
		60–71	Gobo 1 - Shaking Index (0.498–3.44 Hz)
		72–83	Gobo 2 - Shaking Index (0.498–3.44 Hz)
		84–95	Gobo 3 - Shaking Index (0.498–3.44 Hz)
		96–106	Gobo 4 - Shaking Index (0.498–3.44 Hz)

CH	Function	DMX	Description
29	Gobo 2 (continued)	107–118	Gobo 5 - Shaking Index (0.498–3.44 Hz)
		119–129	Gobo 6 - Shaking Index (0.498–3.44 Hz)
		130–141	Gobo 1 - Shaking Rotation (0.498–3.44 Hz)
		142–153	Gobo 2 - Shaking Rotation (0.498–3.44 Hz)
		154–165	Gobo 3 - Shaking Rotation (0.498–3.44 Hz)
		166–176	Gobo 4 - Shaking Rotation (0.498–3.44 Hz)
		177–188	Gobo 5 - Shaking Rotation (0.498–3.44 Hz)
		189–199	Gobo 6 - Shaking Rotation (0.498–3.44 Hz)
		200–201	Open/Hole
		202	Gobo 2 Wheel Spin: Fast to slow - Fast
		203–220	Gobo 2 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (97.8–11.6 °/s)
		221–222	Gobo 2 Wheel Spin: Fast to slow - Slow (11.6–1.75 °/s)
		223–224	Gobo 2 Wheel Spin: Slow to fast - Slow (1.75–11.6 °/s)
		225–242	Gobo 2 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast (11.6–97.8 °/s)
		243	Gobo 2 Wheel Spin: Slow to fast - Fast
		244–249	Random gobo selection by audio control
		250–255	Auto random gobo selection from fast to slow
30	Gobo 2 Rotation		When CH 29 is 0–31:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 29 is 32–59:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.959 °/s)
		124–127	Fast to slow - Slow (0.959–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.959 °/s)
		133–231	Slow to fast - Slow ... slow to fast - Fast (0.959–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
			When CH 29 is 60–129:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 29 is 130–201:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.959 °/s)
		124–127	Fast to slow - Slow (0.959–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.959 °/s)

CH	Function	DMX	Description
30	Gobo 2 Rotation (continued)	133–231	Slow to fast - Slow ... Slow to fast - Fast (0.959–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
31	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 30
32	Prism	0–19	Open position (hole)
		20–73	Prism 1 Indexing
		74–127	Prism 1 Rotation
		128–135	Macro 1
		136–143	Macro 2
		144–151	Macro 3
		152–159	Macro 4
		160–167	Macro 5
		168–175	Macro 6
		176–183	Macro 7
		184–191	Macro 8
		192–199	Macro 9
		200–207	Macro 10
		208–215	Macro 11
		216–223	Macro 12
		224–231	Macro 13
		232–239	Macro 14
		240–247	Macro 15
		248–255	Macro 16
33	Prism Rotation		When CH 32 is 20–73:
		0–255	Prism 1 Indexing (360°)
			When CH 32 is 74–127:
		0	No rotation
		1–24	Fast to slow - Fast (685.7–324.9 °/s)
		25–124	Fast to slow - Fast ... Fast to slow - Slow (324.9–0.947 °/s)
		125–127	Fast to slow - Slow (0.947–0.509 °/s)
		128	No rotation middle
		129–131	Slow to fast - Slow (0.509–0.947 °/s)
		132–232	Slow to fast - Slow ... Slow to fast - Fast (0.947–324.9 °/s)
		233–255	Slow to fast - Fast (324.9–685.7 °/s)
			When CH 32 is 128–255:
		0–255	
			When CH 32 is 0–19:
		0–255	
34	Prism 2	0–19	Open position (hole)
		20–127	Prism 2 Rotation
		128–135	Macro 1
		136–143	Macro 2
		144–151	Macro 3

CH	Function	DMX	Description
34	Prism 2 (continued)	152–159	Macro 4
		160–167	Macro 5
		168–175	Macro 6
		176–183	Macro 7
		184–191	Macro 8
		192–199	Macro 9
		200–207	Macro 10
		208–215	Macro 11
		216–223	Macro 12
		224–231	Macro 13
		232–239	Macro 14
		240–247	Macro 15
		248–255	Macro 16
35	Prism 2 Rotation		When CH 34 is 20–127:
		0	No rotation
		1–24	Fast to slow - Fast (685.7–324.9 °/s)
		25–124	Fast to slow - Fast ... Fast to slow - Slow (324.9–0.947 °/s)
		125–127	Fast to slow - Slow (0.947–0.509 °/s)
		128	No rotation middle
		129–131	Slow to fast - Slow (0.509–0.947 °/s)
		132–232	Slow to fast - Slow ... Slow to fast - Fast (0.947–324.9 °/s)
		233–255	Slow to fast - Fast (324.9–685.7 °/s)
			When CH 34 is 128–255:
		0–255	
			When CH 34 is 0–19:
		0–255	
36	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
37	Iris	0–179	Iris: Open ... Closed
		180–191	Iris: Closed
		192–194	Iris Pulse Open: Slow to fast 1/13 (0.362–0.403 Hz)

CH	Function	DMX	Description
37	Iris (continued)	195–196	Iris Pulse Open: Slow to fast 2/13 (0.403–0.435 Hz)
		197–198	Iris Pulse Open: Slow to fast 3/13 (0.435–0.473 Hz)
		199–200	Iris Pulse Open: Slow to fast 4/13 (0.473–0.519 Hz)
		201–202	Iris Pulse Open: Slow to fast 5/13 (0.519–0.574 Hz)
		203–204	Iris Pulse Open: Slow to fast 6/13 (0.574–0.642 Hz)
		205–206	Iris Pulse Open: Slow to fast 7/13 (0.642–0.729 Hz)
		207–208	Iris Pulse Open: Slow to fast 8/13 (0.729–0.842 Hz)
		209–210	Iris Pulse Open: Slow to fast 9/13 (0.842–0.997 Hz)
		211–212	Iris Pulse Open: Slow to fast 10/13 (0.997–1.22 Hz)
		213–214	Iris Pulse Open: Slow to fast 11/13 (1.22–1.57 Hz)
		215–216	Slow t ofast 12/13 (1.57–2.16 Hz)
		217–219	Iris Pulse Open: Slow to fast 13/13 (2.16–3.11 Hz)
		220–221	Iris Pulse Close: Fast to slow 1/13 (3.11–2.16 Hz)
		222–223	Iris Pulse Close: Fast to slow 2/13 (2.16–1.57 Hz)
		224–225	Iris Pulse Close: Fast to slow 3/13 (1.57–1.22 Hz)
		226–227	Iris Pulse Close: Fast to slow 4/13 (1.22–0.997 Hz)
		228–229	Iris Pulse Close: Fast to slow 5/13 (0.997–0.842 Hz)
		230–231	Iris Pulse Close: Fast to slow 6/13 (0.842–0.729 Hz)
		232–233	Iris Pulse Close: Fast to slow 7/13 (0.729–0.642 Hz)
		234–235	Iris Pulse Close: Fast to slow 8/13 (0.642–0.574 Hz)
		236–237	Iris Pulse Close: Fast to slow 9/13 (0.574–0.519 Hz)
		238–239	Iris Pulse Close: Fast to slow 10/13 (0.519–0.473 Hz)
		240–241	Iris Pulse Close: Fast to slow 11/13 (0.473–0.435 Hz)
		242–243	Iris Pulse Close: Fast to slow 12/13 (0.435–0.403 Hz)
		244–247	Iris Pulse Close: Fast to slow 13/13 (0.403–0.362 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
38	Iris Fine	0–255	Fine adjustment of CH 37
39	Zoom	0–255	Max ... min
		255	Min
40	Zoom Fine	0–255	Fine adjustment of CH 39
41	Focus	0–255	Min ... max
		255	Max
42	Focus Fine	0–255	Fine adjustment of CH 41
43	Shaper Rotation	0	Min
		1–127	Min ... center
		128	Center
		129–254	Center ... max
		255	Max
44	Blade 1 A	0	Min

CH	Function	DMX	Description
44	Blade 1 A (continued)	1–254	Min ... max
		255	Max
45	Blade 1 Rotation	0	Min
		1–127	Min ... center
		128	Center
		129–254	Center ... max
		255	Max
46	Blade 4 A	0	Min
		1–254	Min ... max
		255	Max
47	Blade 4 Rotation	0	Min
		1–127	Min ... center
		128	Center
		129–254	Center ... max
		255	Max
48	Blade 3 A	0	Min
		1–254	Min ... max
		255	Max
49	Blade 3 Rotation	0	Min
		1–127	Min ... center
		128	Center
		129–254	Center ... max
		255	Max
50	Blade 2 A	0	Min
		1–254	Min ... max
		255	Max
51	Blade 2 Rotation	0	Min
		1–127	Min ... center
		128	Center
		129–254	Center ... max
		255	Max
52	Shutter	0–31	Open/Closed: Closed
		32–63	Open/Closed: Open
		64–67	Strobe: Slow to fast 1/12 (0.304–0.51 Hz)
		68–79	Strobe: Slow to fast 1/12 ... Slow to fast 6/12 (0.51–9.83 Hz)
		80–82	Strobe: Slow to fast 6/12 (10.5–11.7 Hz)
		83–94	Strobe: Slow to fast 6/12 ... Slow to fast 12/12 (12.4–19.4 Hz)
		95	Strobe: Slow to fast 12/12
		96–127	Open
		128–130	Strobe Pulse Open: Slow to fast 1/7 (0.119–0.209 Hz)
		131–134	Strobe Pulse Open: Slow to fast 1/7 ... Slow to fast 4/7 (0.209–0.328 Hz)

CH	Function	DMX	Description
52	Shutter (continued)	135–136	Strobe Pulse Open: Slow to fast 4/7 (0.328–0.387 Hz)
		137–140	Strobe Pulse Open: Slow to fast 4/7 … Slow to fast 7/7 (0.387–0.536 Hz)
		141–143	Strobe Pulse Open: Slow to fast 7/7 (0.536–0.656 Hz)
		144–145	Strobe Pulse Close: Fast to slow 1/7 (0.656–0.536 Hz)
		146–149	Strobe Pulse Close: Fast to slow 1/7 … Fast to slow 4/7 (0.536–0.387 Hz)
		150–151	Strobe Pulse Close: Fast to slow 4/7 (0.387–0.328 Hz)
		152–155	Strobe Pulse Close: Fast to slow 4/7 … Fast to slow 7/7 (0.328–0.209 Hz)
		156–159	Strobe Pulse Close: Fast to slow 7/7 (0.209–0.119 Hz)
		160–191	Open
		192–223	Random strobe from slow to fast (0.125–10 Hz)
		224–255	Open
53	Dimmer	0–255	Closed … Open
		255	Open
54	Dimmer Fine	0–255	Fine adjustment of CH 53

Mode 2 - Enhanced gobo control

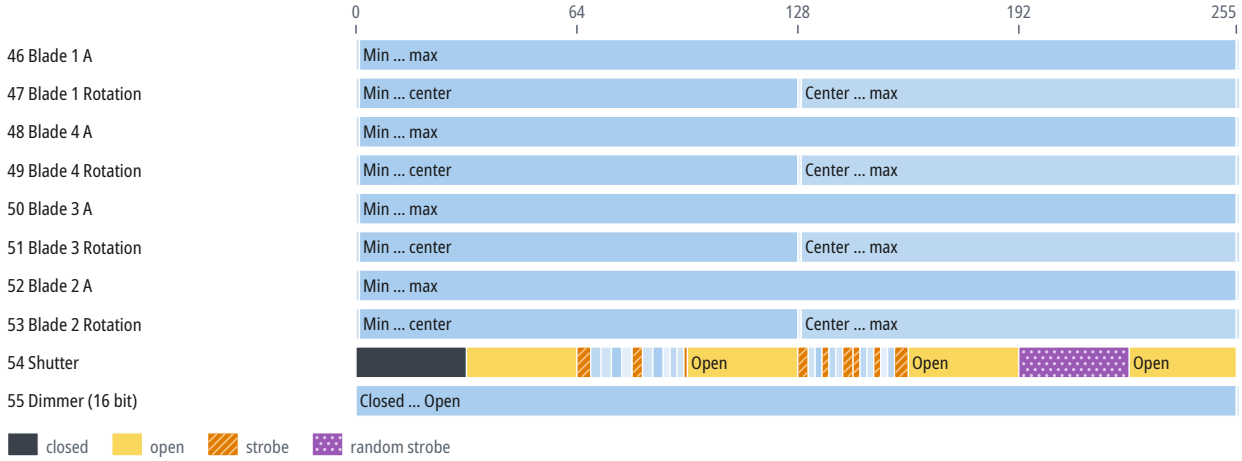
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 54 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 55 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 12 Colors 2 0, CH 14 Cyan 0, CH 15 Magenta 0, CH 16 Yellow 0, CH 17 CTO 0, CH 19 Colors 3 0, CH 54 Shutter 32, CH 55 Dimmer 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 - Standard 16 bit” (p. 14)
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. 14)
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. 14)
6	Control		Same as CH 6 in the mode “Mode 1 - Standard 16 bit” (p. 14)
7	LED Frequency		Same as CH 7 in the mode “Mode 1 - Standard 16 bit” (p. 15)
8	LED Frequency Adjust		Same as CH 8 in the mode “Mode 1 - Standard 16 bit” (p. 15)
9	Intensity Indication		Same as CH 9 in the mode “Mode 1 - Standard 16 bit” (p. 15)
10	Colors		Same as CH 10 in the mode “Mode 1 - Standard 16 bit” (p. 16)
11	Colors Fine	0–255	Fine adjustment of CH 10
12	Colors 2		Same as CH 12 in the mode “Mode 1 - Standard 16 bit” (p. 17)
13	Colors 2 Fine	0–255	Fine adjustment of CH 12
14	Cyan		Same as CH 14 in the mode “Mode 1 - Standard 16 bit” (p. 17)
15	Magenta		Same as CH 15 in the mode “Mode 1 - Standard 16 bit” (p. 17)
16	Yellow		Same as CH 16 in the mode “Mode 1 - Standard 16 bit” (p. 18)
17	CTO	0–255	CTO from 6000K --> 2400K (6000–2400 K)
18	Tint		Same as CH 18 in the mode “Mode 1 - Standard 16 bit” (p. 18)
19	Colors 3		Same as CH 19 in the mode “Mode 1 - Standard 16 bit” (p. 18)
20	Color Wheel Speed		Same as CH 20 in the mode “Mode 1 - Standard 16 bit” (p. 19)
21	Color Mix Speed		Same as CH 21 in the mode “Mode 1 - Standard 16 bit” (p. 19)
22	Focus Speed		Same as CH 22 in the mode “Mode 1 - Standard 16 bit” (p. 20)
23	Animation Wheel		Same as CH 23 in the mode “Mode 1 - Standard 16 bit” (p. 20)
24	Animation Wheel Rotation		Same as CH 24 in the mode “Mode 1 - Standard 16 bit” (p. 20)
25	Animation Wheel Effects		Same as CH 25 in the mode “Mode 1 - Standard 16 bit” (p. 20)
26	Gobo	0–4	Open/hole
		5–8	Gobo 1
		9–13	Gobo 2

CH	Function	DMX	Description
26	Gobo (continued)	14–17	Gobo 3
		18–22	Gobo 4
		23–26	Gobo 5
		27–31	Gobo 6
		32–35	Gobo 1 - Rotation
		36–40	Gobo 2 - Rotation
		41–44	Gobo 3 - Rotation
		45–49	Gobo 4 - Rotation
		50–54	Gobo 5 - Rotation
		55–59	Gobo 6 - Rotation
		60–69	Open Start Prop Index ... G01 Prop Index
		70–79	G01 Prop Index ... G02 Prop Index
		80–89	G02 Prop Index ... G03 Prop Index
		90–99	G03 Prop Index ... G04 Prop Index
		100–109	G04 Prop Index ... G05 Prop Index
		110–119	G05 Prop Index ... G06 Prop Index
		120–129	G06 Prop Index ... Open End Prop Index
		130	Open End Prop Index
		131–140	Open Prop Rot ... G01 Prop Rot
		141–150	G01 Prop Rot ... G02 Prop Rot
		151–160	G02 Prop Rot ... G03 Prop Rot
		161–170	G03 Prop Rot ... G04 Prop Rot
		171–180	G04 Prop Rot ... G05 Prop Rot
		181–190	G05 Prop Rot ... G06 Prop Rot
		191–200	G06 Prop Rot ... Open
		201	Gobo 1 Proportional Rotation: Open
		202	Gobo 1 Wheel Spin: Fast to slow - Fast
		203–220	Gobo 1 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (97.8–11.6 °/s)
		221–222	Gobo 1 Wheel Spin: Fast to slow - Slow (11.6–1.75 °/s)
		223–224	Gobo 1 Wheel Spin: Slow to fast - Slow (1.75–11.6 °/s)
		225–242	Gobo 1 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast (11.6–97.8 °/s)
		243	Gobo 1 Wheel Spin: Slow to fast - Fast
		244–249	Random gobo selection by audio control
		250–255	Auto random gobo selection from fast to slow
27	Gobo Fine	0–255	Fine adjustment of CH 26
28	Gobo Rotation		When CH 26 is 0–31:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 26 is 32–59:
		0	No rotation

CH	Function	DMX	Description
28	Gobo Rotation (continued)	1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.964 °/s)
		124–127	Fast to slow - Slow (0.964–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.964 °/s)
		133–231	Slow to fast - Slow ... Slow to fast - Fast (0.964–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
			When CH 26 is 60–130:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 26 is 131–201:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.959 °/s)
		124–127	Fast to slow - Slow (0.959–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.959 °/s)
		133–231	Slow to fast - Slow ... Slow to fast - Fast (0.959–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
29	Gobo Rotation Fine	0–255	Fine adjustment of CH 28
30	Gobo 2	0–4	Open/hole
		5–8	Gobo 1
		9–13	Gobo 2
		14–17	Gobo 3
		18–22	Gobo 4
		23–26	Gobo 5
		27–31	Gobo 6
		32–35	Gobo 1 - Rotation
		36–40	Gobo 2 - Rotation
		41–44	Gobo 3 - Rotation
		45–49	Gobo 4 - Rotation
		50–54	Gobo 5 - Rotation
		55–59	Gobo 6 - Rotation
		60–69	Open Prop Index ... G01 Prop Index
		70–79	G01 Prop Index ... G02 Prop Index
		80–89	G02 Prop Index ... G03 Prop Index
		90–99	G03 Prop Index ... G04 Prop Index
		100–109	G04 Prop Index ... G05 Prop Index
		110–119	G05 Prop Index ... G06 Prop Index
		120–129	G06 Prop Index ... Open End Prop Index
		130	Open End Prop Index

CH	Function	DMX	Description
30	Gobo 2 (continued)	131–140	Open Prop Rot ... G01 Prop Rot
		141–150	G01 Prop Rot ... G02 Prop Rot
		151–160	G02 Prop Rot ... G03 Prop Rot
		161–170	G03 Prop Rot ... G04 Prop Rot
		171–180	G04 Prop Rot ... G05 Prop Rot
		181–190	G05 Prop Rot ... G06 Prop Rot
		191–200	G06 Prop Rot ... Open Prop Rot
		201	Open Prop Rot
		202	Gobo 2 Wheel Spin: Fast to slow - Fast
		203–220	Gobo 2 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (97.8–11.6 °/s)
		221–222	Gobo 2 Wheel Spin: Fast to slow - Slow (11.6–1.75 °/s)
		223–224	Gobo 2 Wheel Spin: Slow to fast - Slow (1.75–11.6 °/s)
		225–242	Gobo 2 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast (11.6–97.8 °/s)
		243	Gobo 2 Wheel Spin: Slow to fast - Fast
		244–249	Random gobo selection by audio control
		250–255	Auto random gobo selection from fast to slow
31	Gobo 2 Fine	0–255	Fine adjustment of CH 30
32	Gobo 2 Rotation		When CH 30 is 0–31:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 30 is 32–59:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.959 °/s)
		124–127	Fast to slow - Slow (0.959–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.959 °/s)
		133–231	Slow to fast - Slow ... Slow to fast - Fast (0.959–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
			When CH 30 is 60–130:
		0–127	Gobo indexing min
		128	Gobo indexing center
		128–255	Gobo indexing max
			When CH 30 is 131–201:
		0	No rotation
		1–24	Fast to slow - Fast (1056–508.5 °/s)
		25–123	Fast to slow - Fast ... Fast to slow - Slow (508.5–0.959 °/s)
		124–127	Fast to slow - Slow (0.959–0.193 °/s)
		128	No rotation middle
		129–132	Slow to fast - Slow (0.193–0.959 °/s)

CH	Function	DMX	Description
32	Gobo 2 Rotation (continued)	133–231	Slow to fast - Slow ... Slow to fast - Fast (0.959–508.5 °/s)
		232–255	Slow to fast - Fast (508.5–1056 °/s)
33	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 32
34	Prism		Same as CH 32 in the mode “Mode 1 - Standard 16 bit” (p. 24)
35	Prism Rotation		When CH 34 is 20–73:
		0–255	Prism 1 Indexing (360°)
			When CH 34 is 74–127:
		0	No rotation
		1–24	Fast to slow - Fast (685.7–324.9 °/s)
		25–124	Fast to slow - Fast ... Fast to slow - Slow (324.9–0.947 °/s)
		125–127	Fast to slow - Slow (0.947–0.509 °/s)
		128	No rotation middle
		129–131	Slow to fast - Slow (0.509–0.947 °/s)
		132–232	Slow to fast - Slow ... Slow to fast - Fast (0.947–324.9 °/s)
		233–255	Slow to fast - Fast (324.9–685.7 °/s)
			When CH 34 is 128–255:
		0–255	
			When CH 34 is 0–19:
		0–255	
36	Prism 2		Same as CH 34 in the mode “Mode 1 - Standard 16 bit” (p. 24)
37	Prism 2 Rotation		When CH 36 is 20–127:
		0	No rotation
		1–24	Fast to slow - Fast (685.7–324.9 °/s)
		25–124	Fast to slow - Fast ... Fast to slow - Slow (324.9–0.947 °/s)
		125–127	Fast to slow - Slow (0.947–0.509 °/s)
		128	No rotation middle
		129–131	Slow to fast - Slow (0.509–0.947 °/s)
		132–232	Slow to fast - Slow ... Slow to fast - Fast (0.947–324.9 °/s)
		233–255	Slow to fast - Fast (324.9–685.7 °/s)
			When CH 36 is 128–255:
		0–255	
			When CH 36 is 0–19:
		0–255	
38	Frost		Same as CH 36 in the mode “Mode 1 - Standard 16 bit” (p. 25)
39	Iris		Same as CH 37 in the mode “Mode 1 - Standard 16 bit” (p. 25)
40	Iris Fine	0–255	Fine adjustment of CH 39
41	Zoom		Same as CH 39 in the mode “Mode 1 - Standard 16 bit” (p. 26)
42	Zoom Fine	0–255	Fine adjustment of CH 41
43	Focus		Same as CH 41 in the mode “Mode 1 - Standard 16 bit” (p. 26)
44	Focus Fine	0–255	Fine adjustment of CH 43
45	Shaper Rotation		Same as CH 43 in the mode “Mode 1 - Standard 16 bit” (p. 26)
46	Blade 1 A		Same as CH 44 in the mode “Mode 1 - Standard 16 bit” (p. 26)

CH	Function	DMX	Description
47	Blade 1 Rotation		Same as CH 45 in the mode “Mode 1 - Standard 16 bit” (p. 27)
48	Blade 4 A		Same as CH 46 in the mode “Mode 1 - Standard 16 bit” (p. 27)
49	Blade 4 Rotation		Same as CH 47 in the mode “Mode 1 - Standard 16 bit” (p. 27)
50	Blade 3 A		Same as CH 48 in the mode “Mode 1 - Standard 16 bit” (p. 27)
51	Blade 3 Rotation		Same as CH 49 in the mode “Mode 1 - Standard 16 bit” (p. 27)
52	Blade 2 A		Same as CH 50 in the mode “Mode 1 - Standard 16 bit” (p. 27)
53	Blade 2 Rotation		Same as CH 51 in the mode “Mode 1 - Standard 16 bit” (p. 27)
54	Shutter		Same as CH 52 in the mode “Mode 1 - Standard 16 bit” (p. 27)
55	Dimmer		Same as CH 53 in the mode “Mode 1 - Standard 16 bit” (p. 28)
56	Dimmer Fine	0–255	Fine adjustment of CH 55

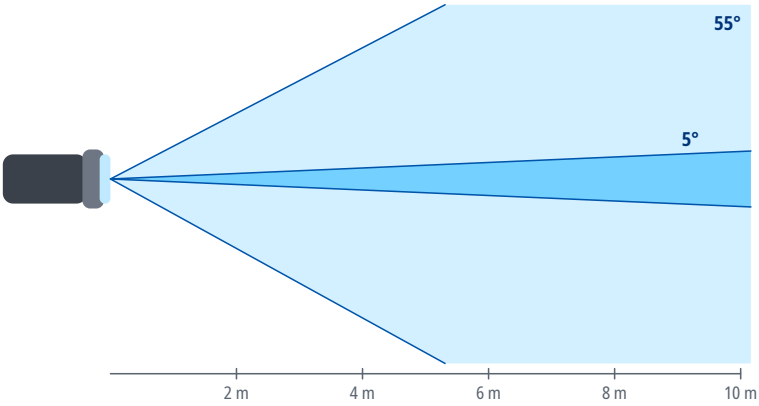
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	1,000 W
Luminous flux	27,613 lm
Color temperature	6,700 K
Color rendering index (CRI)	90
Optics	
Zoom	5–55°
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 0x0111)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	1,250 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	39.8 kg
Operating environment	
Operating temperature	-5 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2400–6000 K
Strobe frequency	0.3–20 Hz
Color wheel 1 rotation	up to 576 °/s (96 rpm)
Color wheel 2 rotation	up to 576 °/s (96 rpm)
Gobo wheel 1 rotation	up to 97.8 °/s (16 rpm)
Gobo wheel 3 rotation	up to 97.8 °/s (16 rpm)
Gobo 1 rotation	up to 1212 °/s (202 rpm)
Gobo 3 rotation	up to 1056 °/s (176 rpm)
Prism 1 rotation	up to 685.7 °/s (114 rpm)
Prism 2 rotation	up to 685.7 °/s (114 rpm)
Animation wheel rotation	up to 202.8 °/s (34 rpm)

Spot diameter



Distance	Ø 5°	Ø 55°
2 m	0.17 m	2.1 m
4 m	0.35 m	4.2 m
6 m	0.52 m	6.2 m
8 m	0.7 m	8.3 m
10 m	0.87 m	10.4 m
15 m	1.3 m	15.6 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.