DMX REFERENCE

PL-PAINTE600

Polarlights



Manufacturer	Polarlights
GDTF file	Polarlights_PL-PAINTE600_160404.gdtf
GDTF revision	PL-PAINTE600 · 2026-09-15
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1 About this manual

This document describes the PL-PAINTE600 by Polarlights. It was compiled from the GDTF file Polarlights_PL-PAINTE600_160404.gdtf from the GDTF-Share library.

File revision: “PL-PAINTE600”.

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 Polarlights; 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	440 W
Weight	19.6 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
44Channel	44	11	1, 45, 89, 133, ...
45Channel	45	11	1, 46, 91, 136, ...

No light? Check these channels

- 44Channel: CH 42 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 43 Dimmer above 0
- 45Channel: CH 43 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 44 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.

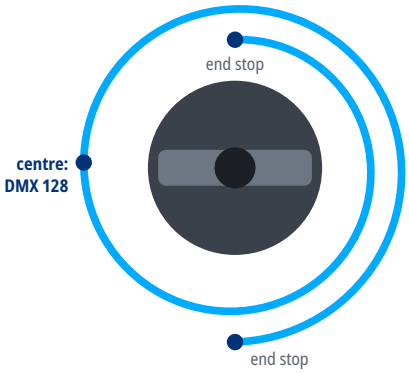
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

Range of movement

Pan 540°

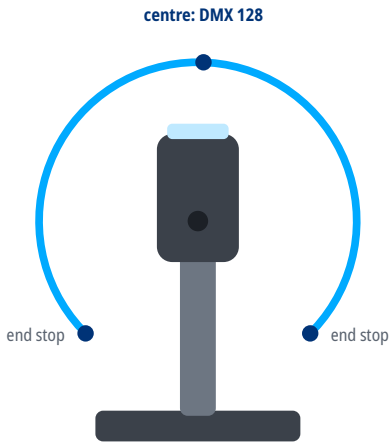
top view



full travel in 3.4 s

Tilt 270°

side view



full travel in 2.2 s

Full-travel times as stated in the GDTF file.

5 Installation

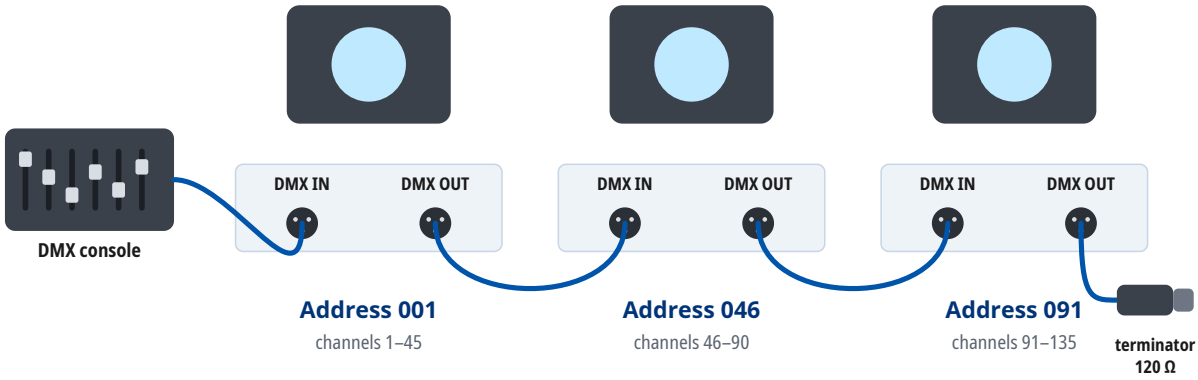
⚠ WARNING

- 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: 19.6 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 45Channel: every unit occupies 45 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 “45Channel”: 45.
- 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 “45Channel”, you can use, for example, the start addresses 1, 46, 91, 136.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

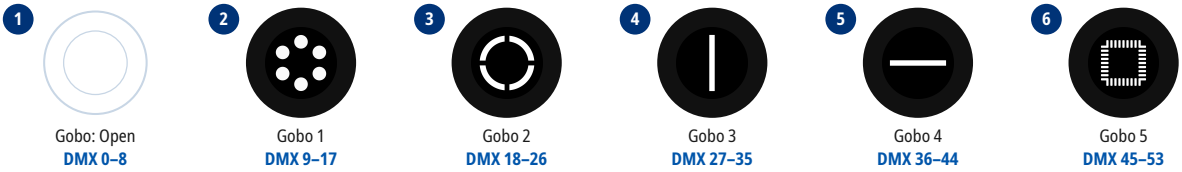
8 Functions at a glance

Functions in each DMX mode

	44Channel 44 channels	45Channel 45 channels
Pan / Tilt	1, 3	1, 3
Dimmer	43	44
Shutter / strobe	42	43
Color mixing	12–14	12–14
Color temperature	15	15
Color wheel	10, 17	10, 17
Gobo wheel	20, 21	20, 21
Gobo rotation	22 *	23 *
Prism	24, 25	25, 26
Frost	26	27
Zoom	29	30
Focus	31	32
Iris	27	28

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

Gobo wheel 1



1 Gobo: Open
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 G9
DMX 81–92

Prism



1 Closed
DMX 0–19

2 5 facets
Prism Index
DMX 20–73

Color wheel 1

1. Line Color — DMX 0–129
2. C1 — DMX 130–136
3. C2 — DMX 137–142
4. C3 — DMX 143–149
5. C4 — DMX 150–155
6. C5 — DMX 156–162
7. QiCai — DMX 163–168
8. CTB — DMX 169–175
9. CTO — DMX 176–182
10. CRI — DMX 183–188

Gobo wheel 2

1. Gobo 2 Index: Open — DMX 0–9
2. Gobo 1 — DMX 10–13
3. Gobo 2 — DMX 14–17
4. Gobo 3 — DMX 18–21
5. Gobo 4 — DMX 22–25
6. Gobo 5 — DMX 26–29
7. Gobo 6 — DMX 30–33
8. Gobo 7 — DMX 34–37
9. G8 — DMX 38–42

Color wheel 2

1. Color Macro: Closed — DMX 0
2. Medium Bastard Amber — DMX 1–2
3. Medium Yellow — DMX 3–4
4. Fire — DMX 5–6
5. Bright Red — DMX 7–8
6. Lavender — DMX 9–10
7. Sky Blue — DMX 11–12
8. Tokyo Blue — DMX 13–14
9. Just Blue — DMX 15–16
10. Lime Green — DMX 17–18
11. Dark Yellow Green — DMX 19–20
12. Spring Yellow — DMX 21–22
13. Yellow — DMX 23–24
14. Light Amber — DMX 25–26
15. Straw — DMX 27–28
16. Deep Amber — DMX 29–30
17. Orange — DMX 31–32
18. Primary Red — DMX 33–34
19. Dark Pink — DMX 35–36
20. Peacock Blue — DMX 37–38
21. Medium Blue - Green — DMX 39–40
22. Steel Blue — DMX 41–42
23. Light Blue — DMX 43–44
24. Dark Blue — DMX 45–46

25 Deep Blue
DMX 47–48

26 Filter Green
DMX 49–50

27 Bright Pink
DMX 51–52

28 Marine Blue
DMX 53–54

29 Medium Blue
DMX 55–56

30 Golden Amber
DMX 57–58

31 Deep Golden Amber
DMX 59–60

32 Pale Lavender
DMX 61–62

33 Special Lavender
DMX 63–64

34 Pale Green
DMX 65–66

35 Primary Green
DMX 67–68

36 Bright Blue
DMX 69–70

37 Apricot
DMX 71–72

38 Bright Rose
DMX 73–74

39 Pale Gold
DMX 75–76

40 Pale Rose
DMX 77–78

41 Pink
DMX 79–80

42 Deep Orange
DMX 81–82

43 Bastard Amber
DMX 83–84

44 Flame Red
DMX 85–86

45 Daylight Blue
DMX 87–88

46 Lilac Tint
DMX 89–90

47 Deep Lavender
DMX 91–92

48 Lagoon Blue
DMX 93–94

49 Chrome Orange
DMX 95–96

50 Dark Lavender
DMX 97–98

51 Congo Blue
DMX 99–100

52 Alice Blue
DMX 101–102

53 Full CT Blue
DMX 103–104

54 Half CT Blue
DMX 105–106

55 Quarter CT Blue
DMX 107–108

56 Full CT Orange
DMX 109–110

57 Half CT Orange
DMX 111–112

58 Quarter CT Orange
DMX 113–114

59 Filter Minus Green
DMX 115–116

60 Half Minus Green
DMX 117–118

61 Three Quarter CT Blue
DMX 119–120

62 Three Quarter CT Orange
DMX 121–122

63 Glacier Blue
DMX 123–124

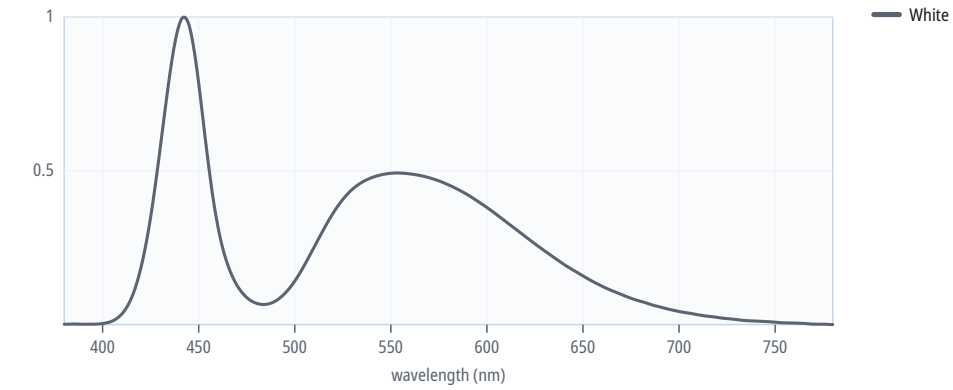
64 Lighter Blue
DMX 125–126

65 Cabana Blue
DMX 127–128

66 Millennium Gold
DMX 129–130

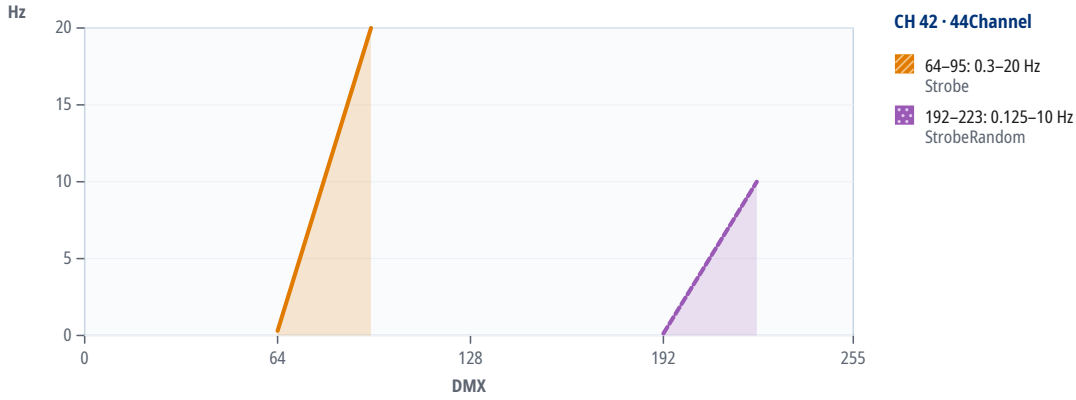
67 Vanity Fair
DMX 131–133

Spectra of the light sources



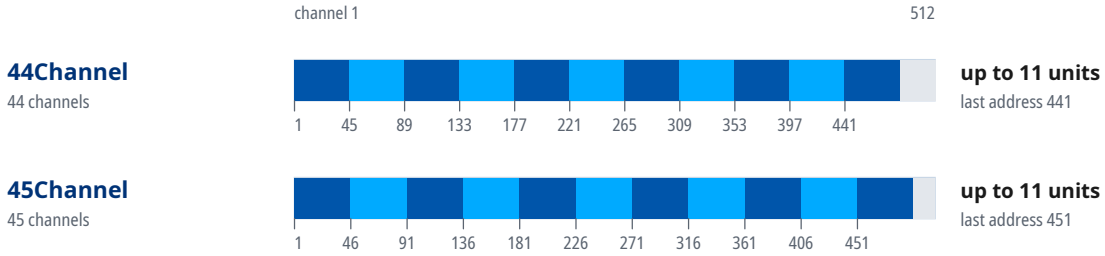
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “45Channel”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	226	11	451	16	U2 · 181
2	46	7	271	12	U2 · 1	17	U2 · 226
3	91	8	316	13	U2 · 46	18	U2 · 271
4	136	9	361	14	U2 · 91	19	U2 · 316
5	181	10	406	15	U2 · 136	20	U2 · 361

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

Mode 44Channel

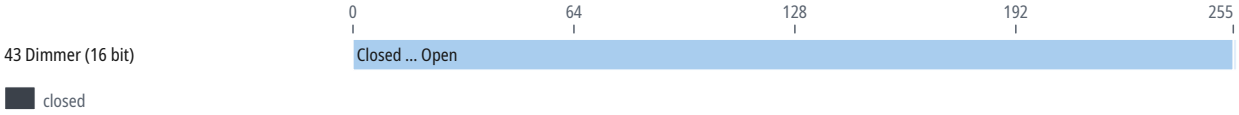
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 42 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 43 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 42 Shutter 32, CH 43 Dimmer 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Control	0–49	No function
		50–54	XY Black ON
		55–59	XY Black OFF
		60–64	Gobo Black ON
		65–69	Gobo Black OFF
		70–74	Color Black ON
		75–79	Color Black OFF
		80–139	Color Black OFF ... Reset XY
		140–149	Reset XY
		150–159	Reset Color
		160–169	Reset Gobo
		170–179	Reset Gobo ... Reset Focus
		180–189	Reset Focus
		190–199	Reset Blade
		200–209	Reset ALL
		210–255	No function
7	LED Frequency	0–255	
8	LED Frequency Fine	0–255	Fine adjustment of CH 7
9	Empty	0–255	
10	Colors	0–129	Line Color
		130–136	C1
		137–142	C2
		143–149	C3
		150–155	C4
		156–162	C5
		163–168	QiCai
		169–175	CTB

CH	Function	DMX	Description
10	Colors (continued)	176–182	CTO
		183–189	CRI
		189–190	Color 1
		190–215	>>> (0–0.38 °/s)
		216–217	Color 1 Wheel Spin: Stop (0.4–0.42 °/s)
		218–243	<<< (0.43–0.82 °/s)
		244–255	Color (0.83–1 °/s)
11	Colors Fine	0–255	Fine adjustment of CH 10
12	Cyan	0	Closed
		1–254	Closed ... Open
		255	Open
13	Magenta	0	Closed
		1–254	Closed ... Open
		255	Open
14	Yellow	0	Closed
		1–254	Closed ... Open
		255	Open
15	CTO	0	Closed
		1–254	Closed ... Open
		255	Open
16	CRI	0	Closed
		1–254	Closed ... Open
		255	Open
17	Color Macro	0	Color Macro: Closed
		1–2	Medium Bastard Amber
		3–4	Medium Yellow
		5–6	Fire
		7–8	Bright Red
		9–10	Lavender
		11–12	Sky Blue
		13–14	Tokyo Blue
		15–16	Just Blue
		17–18	Lime Green
		19–20	Dark Yellow Green
		21–22	Spring Yellow
		23–24	Yellow
		25–26	Light Amber
		27–28	Straw
		29–30	Deep Amber
		31–32	Orange
		33–34	Primary Red
		35–36	Dark Pink

CH	Function	DMX	Description
17	Color Macro (continued)	37–38	Peacock Blue
		39–40	Medium Blue - Green
		41–42	Steel Blue
		43–44	Light Blue
		45–46	Dark Blue
		47–48	Deep Blue
		49–50	Filter Green
		51–52	Bright Pink
		53–54	Marine Blue
		55–56	Medium Blue
		57–58	Golden Amber
		59–60	Deep Golden Amber
		61–62	Pale Lavender
		63–64	Special Lavender
		65–66	Pale Green
		67–68	Primary Green
		69–70	Bright Blue
		71–72	Apricot
		73–74	Bright Rose
		75–76	Pale Gold
		77–78	Pale Rose
		79–80	Pink
		81–82	Deep Orange
		83–84	Bastard Amber
		85–86	Flame Red
		87–88	Daylight Blue
		89–90	Lilac Tint
		91–92	Deep Lavender
		93–94	Lagoon Blue
		95–96	Chrome Orange
		97–98	Dark Lavender
		99–100	Congo Blue
		101–102	Alice Blue
		103–104	Full CT Blue
		105–106	Half CT Blue
		107–108	Quarter CT Blue
		109–110	Full CT Orange
		111–112	Half CT Orange
		113–114	Quarter CT Orange
		115–116	Filter Minus Green
		117–118	Half Minus Green
		119–120	Three Quarter CT Blue

CH	Function	DMX	Description
17	Color Macro (continued)	121–122	Three Quarter CT Orange
		123–124	Glacier Blue
		125–126	Lighter Blue
		127–128	Cabana Blue
		129–130	Millennium Gold
		131–132	Vanity Fair
		133–255	No function
18	Color Mix Speed		CMY and Color wheel time
		0	Fast
		1–254	Fast ... Slow
		255	Slow
19	Focus Speed		Framing shutters/Zoom/Focus/Iris/Frost/Prism time
		0	Fast
		1–254	Fast ... Slow
		255	Slow
20	Gobo	0–8	Gobo: Open
		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	Gobo 1 - Shaking (0.495–3.53 Hz)
		104–115	Gobo 2 - Shaking (0.495–3.53 Hz)
		116–127	Gobo 3 - Shaking (0.495–3.53 Hz)
		128–139	Gobo 4 - Shaking (0.495–3.53 Hz)
		140–151	Gobo 5 - Shaking (0.495–3.53 Hz)
		152–163	Gobo 6 - Shaking (0.495–3.53 Hz)
		164–175	Gobo 7 - Shaking (0.495–3.53 Hz)
		176–187	Gobo 8 - Shaking (0.495–3.53 Hz)
		188–199	Gobo 9 - Shaking (0.495–3.53 Hz)
		200–201	White
		202–222	>>> (180–1 °/s)
		223–243	<<< (1–180 °/s)
		244–255	Gobo Cut (up to 180 °/s (30 rpm))
21	Gobo 2	0–9	Gobo 2 Index: Open
		10–13	Gobo 1
		14–17	Gobo 2
		18–21	Gobo 3

CH	Function	DMX	Description
21	Gobo 2 (continued)	22–25	Gobo 4
		26–29	Gobo 5
		30–33	Gobo 6
		34–37	Gobo 7
		38–41	Gobo 8
		42–45	Gobo 1 - Rotation
		46–49	Gobo 2 - Rotation
		50–53	Gobo 3 - Rotation
		54–57	Gobo 4 - Rotation
		58–61	Gobo 5 - Rotation
		62–65	Gobo 6 - Rotation
		66–69	Gobo 7 - Rotation
		70–73	Gobo 8 - Rotation
		74–81	G1 Shake
		82–89	G2 Shake
		90–97	G3 Shake
		98–105	G4 Shake
		106–113	G5 Shake
		114–121	G6 Shake
		122–129	G7 Shake
		130–137	G8 Shake
		138–145	G1 Shake1
		146–153	G2 Shake1
		154–161	G3 Shake1
		162–169	G4 Shake1
		170–177	G5 Shake1
		178–185	G6 Shake1
		186–192	G7 Shake1
		193–199	G8 Shake1
		200–201	White
		202–243	>>> (180–0 °/s)
		244–255	Gobo Cut (up to 180 °/s (30 rpm))
22	Gobo 2 Rotation		When CH 21 is 0–42:
		0–127	Index Min
		128	Index Center
		128–255	Index Max
			When CH 21 is 42–74:
		0	No Rot
		1–127	>>> (360–1 °/s)
		128	Stop
		129–255	<<< (1–360 °/s)
			When CH 21 is 74–137:

CH	Function	DMX	Description
22	Gobo 2 Rotation (continued)	0–127	Shake Index Min
		128	Shake Index Center
		128–255	Shake Index Man
			When CH 21 is 137–201:
		0	No Rot
		1–127	Shake >>> (360–1 °/s)
		128	Stop
		129–255	Shake <<< (1–360 °/s)
23	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 22
24	Prism	0–19	Closed
		20–73	Prism Index
		74–255	Prism 1 Rot
25	Prism Rotation		When CH 24 is 20–73:
		0–255	Prism Index (360°)
			When CH 24 is 74–127:
		0	No Rot
		1–127	>>> (360–1 °/s)
		128	Stop
		129–255	<<< (1–360 °/s)
26	Frost	0	Closed
		1–127	Frost 1
		128–189	Frpst 2
		190–255	Frost 1+2
27	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)
		195–216	Iris Pulse Open: Slow to fast 1/13 ... Slow to fast 13/13 (0.403–2.16 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)
		222–243	Iris Pulse Close: Fast to slow 1/13 ... Fast to slow 13/13 (2.16–0.403 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
28	Iris Fine	0–255	Fine adjustment of CH 27
29	Zoom	0–127	Max ... Centen
		128–255	Centen ... Min
		255	Min
30	Zoom Fine	0–255	Fine adjustment of CH 29
31	Focus	0–127	Min ... Centen

CH	Function	DMX	Description
31	Focus (continued)	128–255	Centen … Max
		255	Max
32	Focus Fine	0–255	Fine adjustment of CH 31
33	Shaper Rotation	0	Min
		1–127	Min … center
		128	Center
		129–254	Center … Max
		255	Max
34	Blade 1 A	0	Min
		1–127	Min … Centen
		128	Centen
		129–254	Centen … Max
		255	Max
35	Blade 1 Rotation	0	Min
		1–127	Min … Centen
		128	Centen
		129–254	Centen … Max
		255	Max
36	Blade 4 A	0	Min
		1–127	Min … Centen
		128	Centen
		129–254	Centen … Max
		255	Max
37	Blade 4 Rotation	0	Min
		1–127	Min … Center
		128	Center
		129–254	Center … Max
		255	Max
38	Blade 3 A	0	Min
		1–127	Min … Centen
		128	Centen
		129–254	Centen … Max
		255	Max
39	Blade 3 Rotation	0	Min
		1–127	Min … Center
		128	Center
		129–254	Center … Max
		255	Max
40	Blade 2 A	0	Min
		1–127	Min … Centen
		128	Centen
		129–254	Centen … Max

CH	Function	DMX	Description
40	Blade 2 A (continued)	255	Max
41	Blade 2 Rotation	0	Min
		1–127	Min … Center
		128	Center
		129–254	Center … Max
		255	Max
42	Shutter	0–31	Open/Closed: Closed
		32–63	Open/Closed: Open
		64	Strobe: Slow (0.303–0.458 Hz)
		65–94	Strobe: Slow … Fast
		95	Strobe: Fast
		96–127	Open
		128	Strobe Pulse: Slow (0.119–0.209 Hz)
		129–140	Strobe Pulse: Slow … Fast
		141–143	Strobe Pulse: Fast (0.536–0.656 Hz)
		144	Strobe Pulse Close: Slow (0.656–0.536 Hz)
		145–158	Strobe Pulse Close: Slow … Fast
		159	Strobe Pulse Close: Fast (0.209–0.119 Hz)
		160–191	Open
		192	Strobe Random: Slow
		193–222	Strobe Random: Slow … Fast
		223	Strobe Random: Fast
		224–255	Open
43	Dimmer	0–255	Closed … Open
		255	Open
44	Dimmer Fine	0–255	Fine adjustment of CH 43

Mode 45Channel

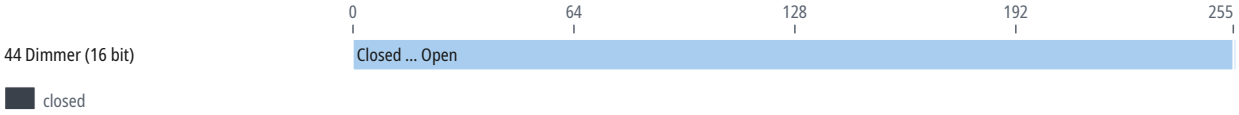
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 43 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 44 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 10 Colors 0, CH 43 Shutter 32, CH 44 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 “44Channel” (p. 14)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “44Channel” (p. 14)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Control		Same as CH 6 in the mode “44Channel” (p. 14)
7	LED Frequency	0–255	
8	LED Frequency Fine	0–255	Fine adjustment of CH 7
9	Empty	0–255	
10	Colors		Same as CH 10 in the mode “44Channel” (p. 14)
11	Colors Fine	0–255	Fine adjustment of CH 10
12	Cyan		Same as CH 12 in the mode “44Channel” (p. 15)
13	Magenta		Same as CH 13 in the mode “44Channel” (p. 15)
14	Yellow		Same as CH 14 in the mode “44Channel” (p. 15)
15	CTO		Same as CH 15 in the mode “44Channel” (p. 15)
16	CRI		Same as CH 16 in the mode “44Channel” (p. 15)
17	Color Macro		Same as CH 17 in the mode “44Channel” (p. 15)
18	Color Mix Speed		Same as CH 18 in the mode “44Channel” (p. 17)
19	Focus Speed		Same as CH 19 in the mode “44Channel” (p. 17)
20	Gobo		Same as CH 20 in the mode “44Channel” (p. 17)
21	Gobo 2	0–10	Gobo 2 Index: Open
		10–14	Gobo 1
		14–18	Gobo 2
		18–22	Gobo 3
		22–26	Gobo 4
		26–30	Gobo 5
		30–34	Gobo 6
		34–38	Gobo 7
		38–42	Gobo 8
		42–46	Gobo 1 - Rotation
		46–50	Gobo 2 - Rotation
		50–54	Gobo 3 - Rotation
		54–58	Gobo 4 - Rotation
		58–62	Gobo 5 - Rotation
		62–66	Gobo 6 - Rotation
		66–70	Gobo 7 - Rotation

CH	Function	DMX	Description
21	Gobo 2 (continued)	70–74	Gobo 8 - Rotation
		74–82	G1 Shake
		82–90	G2 Shake
		90–98	G3 Shake
		98–106	G4 Shake
		106–114	G5 Shake
		114–122	G6 Shake
		122–130	G7 Shake
		130–138	G8 Shake
		138–146	G1 Shake1
		146–154	G2 Shake1
		154–162	G3 Shake1
		162–170	G4 Shake1
		170–178	G5 Shake1
		178–186	G6 Shake1
		186–193	G7 Shake1
		193–200	G8 Shake1
		200–202	White
		202–244	>>> (180–0 °/s)
		244–255	Gobo Cut (up to 180 °/s (30 rpm))
22	Gobo 2 Fine	0–255	Fine adjustment of CH 21
23	Gobo 2 Rotation		When CH 21 is 0–41:
		0–127	Index Min
		128	Index Center
		128–255	Index Max
			When CH 21 is 42–73:
		0	No Rot
		1–127	>>> (360–1 °/s)
		128	Stop
		129–255	<<< (1–360 °/s)
			When CH 21 is 74–137:
		0–127	Shake Index Min
		128	Shake Index Center
		128–255	Shake Index Man
			When CH 21 is 138–201:
		0	No Rot
		1–127	Shake >>> (360–1 °/s)
		128	Stop
		129–255	Shake <<< (1–360 °/s)
24	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 23
25	Prism		Same as CH 24 in the mode “44Channel” (p. 19)
26	Prism Rotation		When CH 25 is 20–73:

CH	Function	DMX	Description
26	Prism Rotation (continued)	0–255	Prism Index (360°)
			When CH 25 is 74–127:
		0	No Rot
		1–127	>>> (360–1 °/s)
		128	Stop
		129–255	<<< (1–360 °/s)
27	Frost		Same as CH 26 in the mode “44Channel” (p. 19)
28	Iris		Same as CH 27 in the mode “44Channel” (p. 19)
29	Iris Fine	0–255	Fine adjustment of CH 28
30	Zoom		Same as CH 29 in the mode “44Channel” (p. 19)
31	Zoom Fine	0–255	Fine adjustment of CH 30
32	Focus		Same as CH 31 in the mode “44Channel” (p. 19)
33	Focus Fine	0–255	Fine adjustment of CH 32
34	Shaper Rotation		Same as CH 33 in the mode “44Channel” (p. 20)
35	Blade 1 A		Same as CH 34 in the mode “44Channel” (p. 20)
36	Blade 1 Rotation		Same as CH 35 in the mode “44Channel” (p. 20)
37	Blade 4 A		Same as CH 36 in the mode “44Channel” (p. 20)
38	Blade 4 Rotation		Same as CH 37 in the mode “44Channel” (p. 20)
39	Blade 3 A		Same as CH 38 in the mode “44Channel” (p. 20)
40	Blade 3 Rotation		Same as CH 39 in the mode “44Channel” (p. 20)
41	Blade 2 A		Same as CH 40 in the mode “44Channel” (p. 20)
42	Blade 2 Rotation		Same as CH 41 in the mode “44Channel” (p. 21)
43	Shutter		Same as CH 42 in the mode “44Channel” (p. 21)
44	Dimmer		Same as CH 43 in the mode “44Channel” (p. 21)
45	Dimmer Fine	0–255	Fine adjustment of CH 44

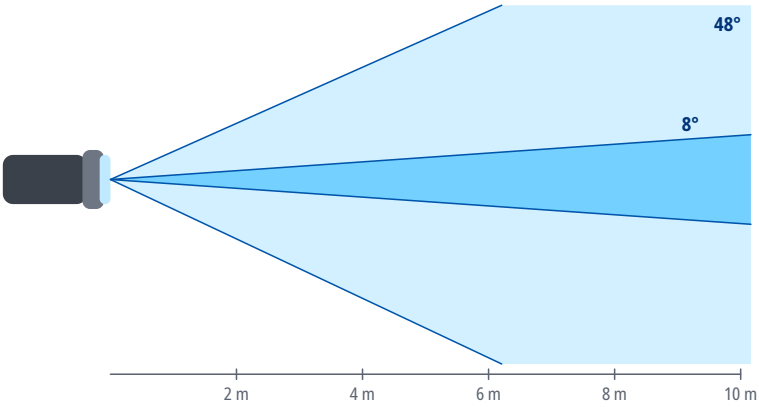
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	310 W
Luminous flux	12,000 lm
Color temperature	6,700 K
Color rendering index (CRI)	90
Optics	
Zoom	8–48°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT
RJ45 connectors	RJ45 IN, RJ45 OUT (EP version)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	440 W
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	19.6 kg
Operating environment	
Operating temperature	-5 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–6700 K
Strobe frequency	0.3–20 Hz
Color wheel 1 rotation	up to 1 °/s (0.2 rpm)
Gobo wheel 1 rotation	up to 180 °/s (30 rpm)
Gobo wheel 2 rotation	up to 180 °/s (30 rpm)
Gobo 2 rotation	up to 360 °/s (60 rpm)
Prism rotation	up to 360 °/s (60 rpm)

Spot diameter



Distance	Ø 8°	Ø 48°
2 m	0.28 m	1.8 m
4 m	0.56 m	3.6 m
6 m	0.84 m	5.3 m
8 m	1.1 m	7.1 m
10 m	1.4 m	8.9 m
15 m	2.1 m	13.4 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.