DMX REFERENCE

wash

dkdkd

User Test



Manufacturer	User Test
GDTF file	User_Test_wash_57538.gdtf
GDTF revision	test · 2024-02-13
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 7
9 DMX channels 11
Mode Extended 1 12
Mode Standard 22
Mode Extended 2 25
Mode Extended 1 + Liquid 29
Mode Extended 2 + Liquid 34
10 Technical specifications 39
11 Maintenance and cleaning 40
12 Troubleshooting 40
13 Disposal 40

1 About this manual

This document describes the dkdkd by User Test. It was compiled from the GDTF file User_Test_wash_57538.gdtf from the GDTF-Share library.

File revision: “test”.

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 User Test; 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	350 W
Weight	11.1 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Extended 1	79	6	1, 80, 159, 238, ...
Standard	50	10	1, 51, 101, 151, ...
Extended 2	79	6	1, 80, 159, 238, ...
Extended 1 + Liquid	493	1	1
Extended 2 + Liquid	493	1	1

No light? Check these channels

- Extended 1: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0
- Standard: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0
- Extended 2: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0
- Extended 1 + Liquid: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0
- Extended 2 + Liquid: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 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.

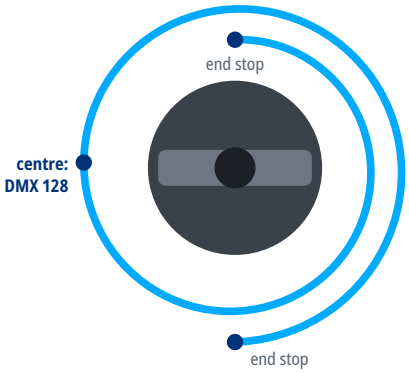
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

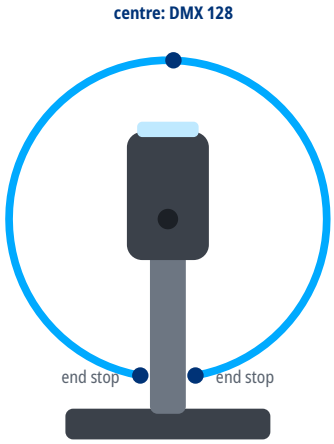
top view



full travel in 1.7 s

Tilt 540°

side view



full travel in 1.4 s

Full-travel times as stated in the GDTF file.

5 Installation

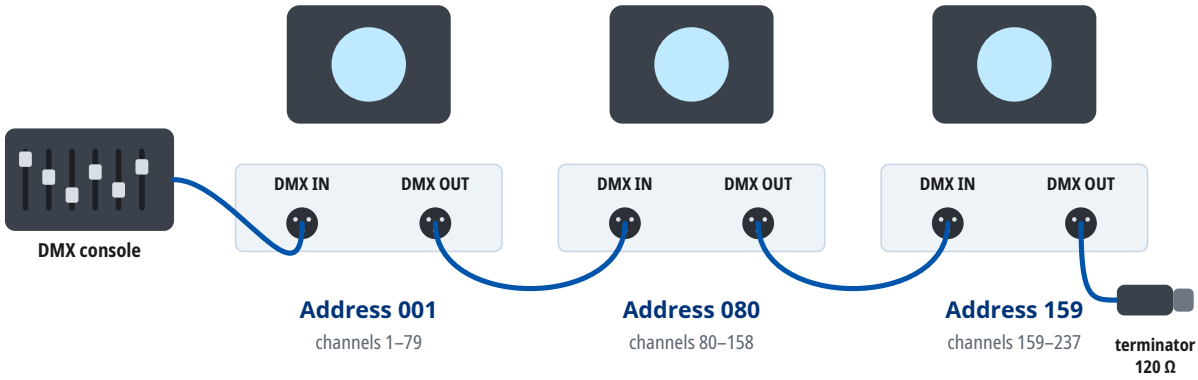
⚠ WARNING

- 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: 11.1 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 Extended 1: every unit occupies 79 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 “Extended 1 + Liquid”: 493.
- 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.
- 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

	Extended 1 79 channels	Standard 50 channels	Extended 2 79 channels	Extended 1 + Liquid 493 channels	Extended 2 + Liquid 493 channels
Pan / Tilt	1, 3, 6, 7	1, 3, 6, 7	1, 3, 6, 7	1, 3, 6, 7	1, 3, 6, 7
Dimmer	4 channels (17–47)	4 channels (17–47)	4 channels (17–47)	4 channels (17–47)	4 channels (17–47)
Shutter / strobe	16, 37	16, 37	16, 37	16, 37	16, 37
Color mixing	42 channels (8–79)	14 channels (8–50)	38 channels (1–50)	1–414	1–414
Color temperature	19	19	19	19	19
Color wheel	20	20	20	20	20
Zoom	23	23	23	23	23
Pixel control	✓	✓	✓	138 cells	138 cells

Color wheel

1. Open — DMX 0
2. LAVENDER TINT — DMX 3
3. MEDIUM BASTARD AMBER — DMX 4
4. PALE YELLOW — DMX 7
5. DARK SALMON — DMX 8
6. PALE AMBER GOLD — DMX 9
7. MEDIUM YELLOW — DMX 10
8. STRAW TINT — DMX 13
9. DEEP STRAW — DMX 15
10. SURPRISE PEACH — DMX 17
11. MEDIUM AMBER — DMX 20
12. GOLD AMBER — DMX 21
13. DARK AMBER — DMX 22
14. SCARLET — DMX 24
15. SUNSET RED — DMX 25
16. BRIGHT RED — DMX 26
17. PALSA RED — DMX 29
18. LIGHT PINK — DMX 35
19. MEDIUM PINK — DMX 36
20. DARK MAGENTA — DMX 46
21. DARK PURPLE — DMX 48
22. LIGHT LAVENDER — DMX 52
23. PALE LAVENDER — DMX 53
24. LAVENDER — DMX 58
25. PALE BLUE — DMX 63
26. SKY BLUE — DMX 68
27. TOKIO BLUE — DMX 71
28. EVENING BLUE — DMX 75
29. JUST BLUE — DMX 79
30. DEEPER BLUE — DMX 85
31. LIME GREEN — DMX 88
32. MOSS GREEN — DMX 89
33. DARKYELLOW GREEN — DMX 90
34. SPRING YELLOW — DMX 100
35. YELLOW — DMX 101
36. LIGHT AMBER — DMX 102
37. STRAW — DMX 103
38. DEEP AMBER — DMX 104
39. ORANGE — DMX 105
40. PRIMAY RED — DMX 106
41. LIGHT ROSE — DMX 107
42. ENGLISH ROSE — DMX 108
43. LIGHT SALMON — DMX 109
44. MIDDLE ROSE — DMX 110
45. DARK PINK — DMX 111
46. MAGENTA — DMX 113
47. MEDIUM BLUE GREEN — DMX 116
48. LIGHT BLUE — DMX 118

49 DARK BLUE **DMX 119**

50 DEEP BLUE **DMX 120**

51 DARK GREEN **DMX 124**

52 MAUVE **DMX 126**

53 SMOKEY PINK **DMX 127**

54 BRIGHT PINK **DMX 128**

55 MEDIUM BLUE **DMX 132**

56 GOLDEN AMBER **DMX 134**

57 PALE LAVENDER 1 **DMX 136**

58 SPECIAL LAVENDER **DMX 137**

59 PALE GREEN **DMX 138**

60 PRIMARY GREEN **DMX 139**

61 SUMMER BLUE **DMX 140**

62 BRIGHT BLUE **DMX 141**

63 PALE VIOLET **DMX 142**

64 PALE NAVY BLUE **DMX 143**

65 APRICOT **DMX 147**

66 BRIGHT ROSE **DMX 148**

67 GOLD TINT **DMX 151**

68 PALE GOLD **DMX 152**

69 PALE SALMON **DMX 153**

70 PALE ROSE **DMX 154**

71 CHOCOLATE **DMX 156**

72 DEEP ORANGE **DMX 158**

73 NO COLOR STRAW **DMX 159**

74 SLATE BLUE **DMX 161**

75 BASTARD AMBER **DMX 162**

76 FLAME RED **DMX 164**

77 DAYLIGHT BLUE **DMX 165**

78 LILAC TINT **DMX 169**

79 DEEP LAVENDER **DMX 170**

80 LAGOON BLUE **DMX 172**

81 DARK STEEL BLUE **DMX 174**

82 LOVING AMBER **DMX 176**

83 CHROME ORANGE **DMX 179**

84 DARK LAVENDER **DMX 180**

85 CONGO BLUE **DMX 181**

86 LIGHT RED **DMX 182**

87 MOONLIGHT BLUE **DMX 183**

88 FLESH PINK **DMX 192**

89 ROSY AMBER **DMX 193**

90 SURPRISE PINK **DMX 194**

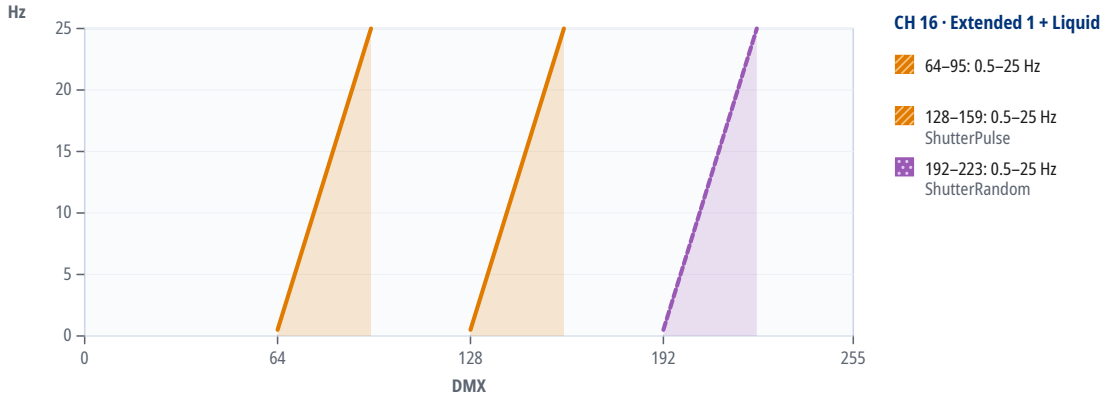
91 ZENITH BLUE **DMX 195**

92 TRUE BLUE **DMX 196**

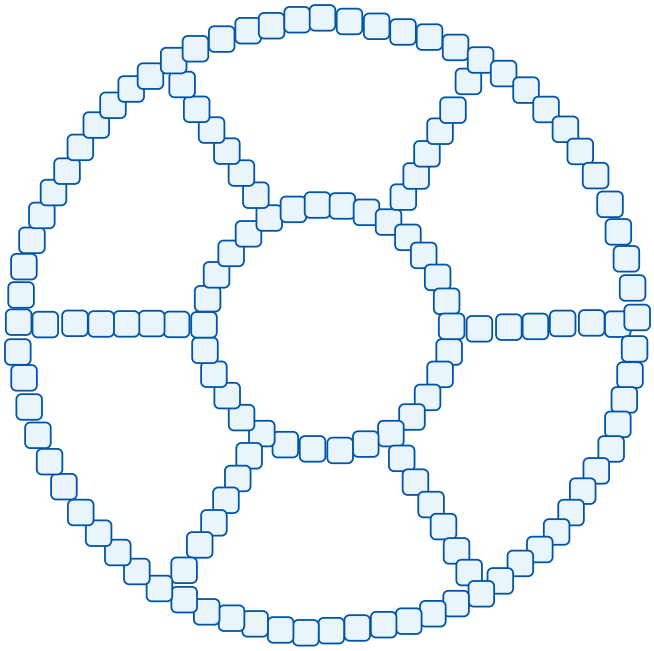
93 ALICE BLUE **DMX 197**

94 PALACE BLUE **DMX 198**

Strobe rate



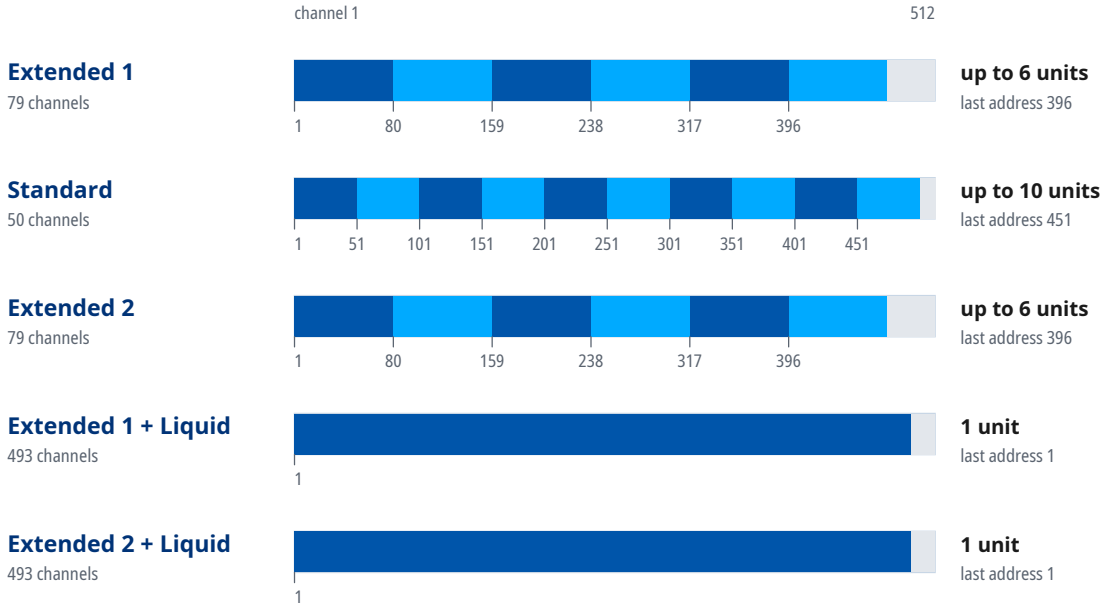
Cells (pixels)



Cells where the GDTF file places them (seen from above), 138 in all in the mode “Extended 1 + Liquid”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extended 1 + Liquid”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	U6 · 1	11	U11 · 1	16	U16 · 1
2	U2 · 1	7	U7 · 1	12	U12 · 1	17	U17 · 1
3	U3 · 1	8	U8 · 1	13	U13 · 1	18	U18 · 1
4	U4 · 1	9	U9 · 1	14	U14 · 1	19	U19 · 1
5	U5 · 1	10	U10 · 1	15	U15 · 1	20	U20 · 1

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 Extended 1

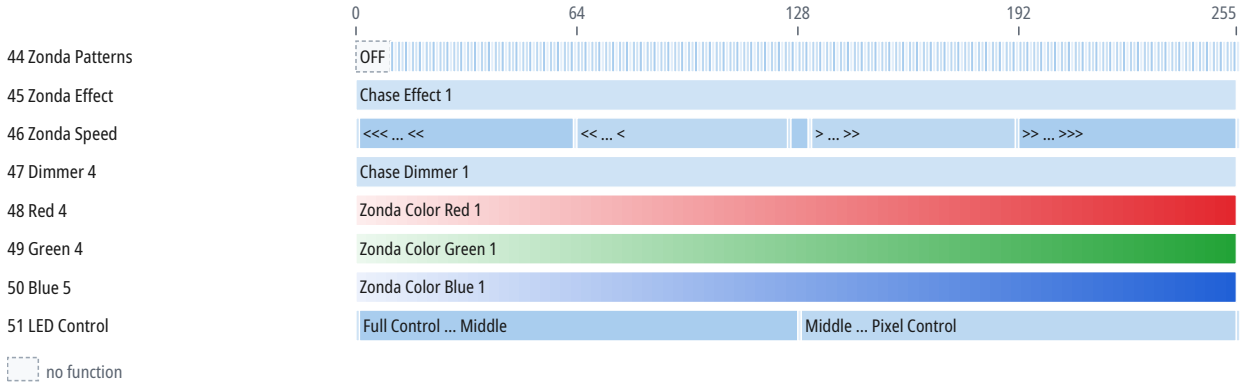
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 2 255, CH 14 White 1 255, CH 16 Shutter 32, CH 17 Dimmer 1 255, CH 19 CTO 0, CH 20 Colors 0, CH 35 Dimmer 2 255, CH 37 Shutter 2 32, CH 39 Dimmer 3 255, CH 41 Red 3 255, CH 42 Green 3 255, CH 43 Blue 4 255, CH 52 Red 5 255, CH 53 Green 5 255, CH 54 Blue 6 255, CH 55 White 3 255, CH 56 Red 6 255, CH 57 Green 6 255, CH 58 Blue 7 255, CH 59 White 4 255, CH 60 Red 7 255, CH 61 Green 7 255, CH 62 Blue 8 255, CH 63 White 5 255, CH 64 Red 8 255, CH 65 Green 8 255, CH 66 Blue 9 255, CH 67 White 6 255, CH 68 Red 9 255, CH 69 Green 9 255, CH 70 Blue 10 255, CH 71 White 7 255, CH 72 Red 10 255, CH 73 Green 10 255, CH 74 Blue 11 255, CH 75 White 8 255, CH 76 Red 11 255, CH 77 Green 11 255, CH 78 Blue 12 255, CH 79 White 9 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Blue 1	0–255	540°
2	Blue 1 Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–255	540°
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Pan Rotation	0–63	Stop by SpinOut
		64–127	Stop by ShortCut
		128	CW max
		129–188	CW max ... CW min
		189	CW min
		190–193	Pause
		194	CCW min
		195–254	CCW min ... CCW max
		255	CCW max
7	Tilt Rotation	0–63	Stop by SpinOut
		64–127	Stop by ShortCut
		128	CW max
		129–188	CW max ... CW min
		189	CW min
		190–193	Pause
		194	CCW min
		195–254	CCW min ... CCW max
		255	CCW max
8	Red 1		When CH 51 is 0–128:
		0–255	
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		When CH 51 is 0–128:
		0–255	
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 2		When CH 51 is 0–128:
		0–255	

CH	Function	DMX	Description
13	Blue 2 Fine	0–255	Fine adjustment of CH 12
14	White 1		When CH 51 is 0–128:
		0–255	
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	Shutter	0	LED OFF: Closed
		1–31	LED OFF
		32	LED ON: open
		33–63	LED ON
		64	Shutter Strobe: min
		65–94	Shutter Strobe: min ... max
		95	Shutter Strobe: max
		96–117	LED ON 1
		118–126	LED ON: open
		127	LED ON 1
		128	Shutter Pulse: min
		129–158	Shutter Pulse: min ... max
		159	Shutter Pulse: max
		160–180	LED ON 2
		181–191	LED ON: open
		192	Shutter Random: min
		193–222	Shutter Random: min ... max
		223	Shutter Random: max
		224–245	LED ON 3
		246–255	LED ON: open
17	Dimmer 1	0–255	
18	Dimmer 1 Fine	0–255	Fine adjustment of CH 17
19	CTO	0–21	No Fonction
		22–42	8000K
		43–63	7500K
		64–84	7000K
		85–105	6500K
		106–126	6000K
		127–147	5500K
		148–168	5000K
		169–189	4500K
		190–210	4000K
		211–231	3500K
		232–255	2700K
20	Colors		Color Macro 1 1
		0	Open
		1–2	Open ... LAVENDER TINT
		3	LAVENDER TINT

CH	Function	DMX	Description
20	Colors (continued)	4	MEDIUM BASTARD AMBER
		5–6	MEDIUM BASTARD AMBER ... PALE YELLOW
		7	PALE YELLOW
		8	DARK SALMON
		9	PALE AMBER GOLD
		10	MEDIUM YELLOW
		11–12	MEDIUM YELLOW ... STRAW TINT
		13	STRAW TINT
		14	STRAW TINT ... DEEP STRAW
		15	DEEP STRAW
		16	DEEP STRAW ... SURPRISE PEACH
		17	SURPRISE PEACH
		18–19	SURPRISE PEACH ... MEDIUM AMBER
		20	MEDIUM AMBER
		21	GOLD AMBER
		22	DARK AMBER
		23	DARK AMBER ... SCARLET
		24	SCARLET
		25	SUNSET RED
		26	BRIGHT RED
		27–28	BRIGHT RED ... PALSA RED
		29	PALSA RED
		30–34	PALSA RED ... LIGHT PINK
		35	LIGHT PINK
		36	MEDIUM PINK
		37–45	MEDIUM PINK ... DARK MAGENTA
		46	DARK MAGENTA
		47	DARK MAGENTA ... DARK PURPLE
		48	DARK PURPLE
		49–51	DARK PURPLE ... LIGHT LAVENDER
		52	LIGHT LAVENDER
		53	PALE LAVENDER
		54–57	PALE LAVENDER ... LAVENDER
		58	LAVENDER
		59–62	LAVENDER ... PALE BLUE
		63	PALE BLUE
		64–67	PALE BLUE ... SKY BLUE
		68	SKY BLUE
		69–70	SKY BLUE ... TOKIO BLUE
		71	TOKIO BLUE
		72–74	TOKIO BLUE ... EVENING BLUE
		75	EVENING BLUE

CH	Function	DMX	Description
20	Colors (continued)	76–78	EVENING BLUE ... JUST BLUE
		79	JUST BLUE
		80–84	JUST BLUE ... DEEPER BLUE
		85	DEEPER BLUE
		86–87	DEEPER BLUE ... LIME GREEN
		88	LIME GREEN
		89	MOSS GREEN
		90	DARKYELLOW GREEN
		91–99	DARKYELLOW GREEN ... SPRING YELLOW
		100	SPRING YELLOW
		101	YELLOW
		102	LIGHT AMBER
		103	STRAW
		104	DEEP AMBER
		105	ORANGE
		106	PRIMAY RED
		107	LIGHT ROSE
		108	ENGLISH ROSE
		109	LIGHT SALMON
		110	MIDDLE ROSE
		111	DARK PINK
		112	DARK PINK ... MAGENTA
		113	MAGENTA
		114–115	MAGENTA ... MEDIUM BLUE GREEN
		116	MEDIUM BLUE GREEN
		117	MEDIUM BLUE GREEN ... LIGHT BLUE
		118	LIGHT BLUE
		119	DARK BLUE
		120	DEEP BLUE
		121–123	DEEP BLUE ... DARK GREEN
		124	DARK GREEN
		125	DARK GREEN ... MAUVE
		126	MAUVE
		127	SMOKEY PINK
		128	BRIGHT PINK
		129–131	BRIGHT PINK ... MEDIUM BLUE
		132	MEDIUM BLUE
		133	MEDIUM BLUE ... GOLDEN AMBER
		134	GOLDEN AMBER
		135	GOLDEN AMBER ... PALE LAVENDER 1
		136	PALE LAVENDER 1
		137	SPECIAL LAVENDER

CH	Function	DMX	Description
20	Colors (continued)	138	PALE GREEN
		139	PRIMARY GREEN
		140	SUMMER BLUE
		141	BRIGHT BLUE
		142	PALE VIOLET
		143	PALE NAVY BLUE
		144–146	PALE NAVY BLUE ... APRICOT
		147	APRICOT
		148	BRIGHT ROSE
		149–150	BRIGHT ROSE ... GOLD TINT
		151	GOLD TINT
		152	PALE GOLD
		153	PALE SALMON
		154	PALE ROSE
		155	PALE ROSE ... CHOCOLATE
		156	CHOCOLATE
		157	CHOCOLATE ... DEEP ORANGE
		158	DEEP ORANGE
		159	NO COLOR STRAW
		160	NO COLOR STRAW ... SLATE BLUE
		161	SLATE BLUE
		162	BASTARD AMBER
		163	BASTARD AMBER ... FLAME RED
		164	FLAME RED
		165	DAYLIGHT BLUE
		166–168	DAYLIGHT BLUE ... LILAC TINT
		169	LILAC TINT
		170	DEEP LAVENDER
		171	DEEP LAVENDER ... LAGOON BLUE
		172	LAGOON BLUE
		173	LAGOON BLUE ... DARK STEEL BLUE
		174	DARK STEEL BLUE
		175	DARK STEEL BLUE ... LOVING AMBER
		176	LOVING AMBER
		177–178	LOVING AMBER ... CHROME ORANGE
		179	CHROME ORANGE
		180	DARK LAVENDER
		181	CONGO BLUE
		182	LIGHT RED
		183	MOONLIGHT BLUE
		184–191	MOONLIGHT BLUE ... FLESH PINK
		192	FLESH PINK

CH	Function	DMX	Description
20	Colors (continued)	193	ROSY AMBER
		194	SURPRISE PINK
		195	ZENITH BLUE
		196	TRUE BLUE
		197	ALICE BLUE
		198	PALACE BLUE
		199–255	Color Macro 1 1
21	Color Preset Crossfade	0–255	
22	Color Preset Crossfade Speed	0–255	
23	Zoom	0–255	50–3°
24	Zoom Fine	0–255	Fine adjustment of CH 23
26	Control	0–4	Unused
		5–9	Display Off
		10–14	Display On
		15–19	Display Inv Off
		20–24	Display Inv On
		25–26	Auto Fan
		27–28	Stage Fan
		29–30	Silence Fan
		31–32	Super Silence Fan
		33–34	Constant Fan OFF
		35–36	Constant Fan ON
		37–44	Fan Control Mode: unused
		45–49	Square Law
		50–54	Linear
		55–57	1200 Hz
		58–60	2400 Hz
		61–63	16000 Hz
		64–69	25000 Hz
		70–74	Gobo Correction Off
		75–79	Gobo Correction On
		80–84	All Motor Reset
		85–87	P/T Motor Reset
		88–90	ZoomMotor Reset
		91–255	Unused
27	Chase Patterns	0–9	Chse OFF
		10–14	Chase 1
		15–19	Chase 2
		20–24	Chase 3
		25–29	Chase 4
		30–34	Chase 5
		35–39	Chase 6

CH	Function	DMX	Description
27	Chase Patterns (continued)	40–44	Chase Fix
		45–255	No function
28	Chase Speed	0–125	Fast to Slow Backward
		126–130	Empty Channel Set
		131–255	Slow to Fast Forward
29	Chase Fade	0–255	
30	Chase Size	0–255	
31	Red 2		Chase Color Red 1
		0–255	Chase Color Red 1
32	Green 2		Chase Color Green 1
		0–255	Chase Color Green 1
33	Blue 3		Chase Color Blue 1
		0–255	Chase Color Blue 1
34	White 2		Chase Color White 1
		0–255	Chase Color White 1
35	Dimmer 2		Chase Dimmer 1
		0–255	Chase Dimmer 1
36	Back Chase Dimmer		Dimmer Background Chase 1
		0–255	Dimmer Background Chase 1
37	Shutter 2	0	Chase dimmer OFF
		1–31	Chase OFF
		32	Chase Dimmer ON
		33–63	Chase ON
		64–95	Shutter 1 Strobe 3
		96–127	No function
		128–159	Shutter 1 Strobe Pulse 5
		160–191	No function
		192–223	Shutter 1 Strobe Random 7
		224–255	No function
38	Zonda Control	0–9	React to Zonda effect Chase
		10–19	React to Main LED
		20–29	React to ARTNET OR SACN
		30–255	Control 1
39	Dimmer 3	0–255	
40	Dimmer 3 Fine	0–255	Fine adjustment of CH 39
41	Red 3	0–255	
42	Green 3	0–255	
43	Blue 4	0–255	
44	Zonda Patterns	0–9	OFF
		10–119	Effect
		120	Effect Channel Set
		121–255	Effect

CH	Function	DMX	Description
45	Zonda Effect		Chase Effect 1
		0–255	Chase Effect 1
46	Zonda Speed	0	<<<
		1–62	<<< ... <<
		63	<<
		64–124	<< ... <
		125	<
		126–130	Stop (Speed=0)
		131	>
		132–190	> ... >>
		191	>>
		192–254	>> ... >>>
		255	>>>
47	Dimmer 4		Chase Dimmer 1
		0–255	Chase Dimmer 1
48	Red 4		Zonda Color Red 1
		0–255	Zonda Color Red 1
49	Green 4		Zonda Color Green 1
		0–255	Zonda Color Green 1
50	Blue 5		Zonda Color Blue 1
		0–255	Zonda Color Blue 1
51	LED Control		Pixel mode
		0	Full Control
		1–127	Full Control ... Middle
		128	Middle
		129–254	Middle ... Pixel Control
		255	Pixel Control
52	Red 5	0–255	
53	Green 5	0–255	
54	Blue 6	0–255	
55	White 3	0–255	
56	Red 6	0–255	
57	Green 6	0–255	
58	Blue 7	0–255	
59	White 4	0–255	
60	Red 7	0–255	
61	Green 7	0–255	
62	Blue 8	0–255	
63	White 5	0–255	
64	Red 8	0–255	
65	Green 8	0–255	
66	Blue 9	0–255	

CH	Function	DMX	Description
67	White 6	0–255	
68	Red 9	0–255	
69	Green 9	0–255	
70	Blue 10	0–255	
71	White 7	0–255	
72	Red 10	0–255	
73	Green 10	0–255	
74	Blue 11	0–255	
75	White 8	0–255	
76	Red 11	0–255	
77	Green 11	0–255	
78	Blue 12	0–255	
79	White 9	0–255	

Mode Standard

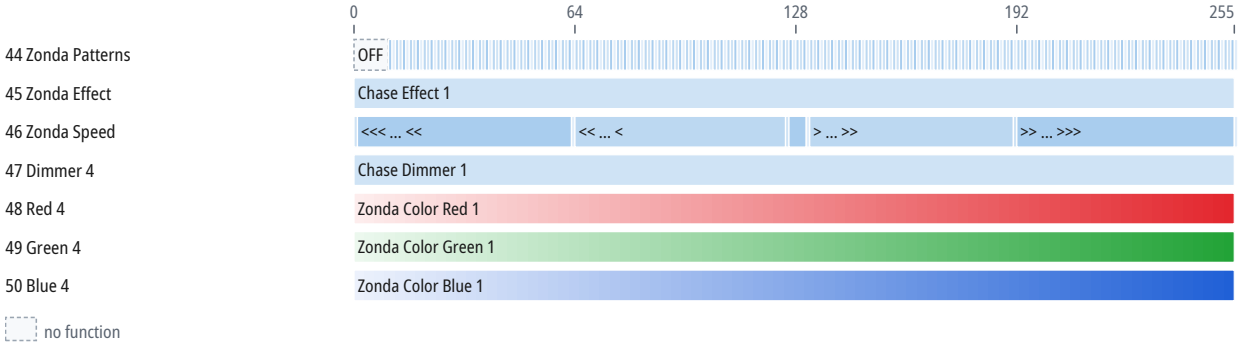
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255, CH 16 Shutter 32, CH 17 Dimmer 1 255, CH 19 CTO 0, CH 20 Colors 0, CH 35 Dimmer 2 255, CH 37 Shutter 2 32, CH 39 Dimmer 3 255, CH 41 Red 3 255, CH 42 Green 3 255, CH 43 Blue 3 255, CH 47 Dimmer 4 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–255	540°
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–255	540°
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Pan Rotation		Same as CH 6 in the mode “Extended 1” (p. 13)
7	Tilt Rotation		Same as CH 7 in the mode “Extended 1” (p. 13)
8	Red 1	0–255	
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1	0–255	
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1	0–255	
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1	0–255	
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	Shutter		Same as CH 16 in the mode “Extended 1” (p. 14)
17	Dimmer 1	0–255	
18	Dimmer 1 Fine	0–255	Fine adjustment of CH 17
19	CTO		Same as CH 19 in the mode “Extended 1” (p. 14)
20	Colors		Same as CH 20 in the mode “Extended 1” (p. 14)
21	Color Preset Crossfade	0–255	
22	Color Preset Crossfade Speed	0–255	
23	Zoom	0–255	50–3°
24	Zoom Fine	0–255	Fine adjustment of CH 23
26	Control		Same as CH 26 in the mode “Extended 1” (p. 18)
27	Chase Patterns		Same as CH 27 in the mode “Extended 1” (p. 18)
28	Chase Speed		Same as CH 28 in the mode “Extended 1” (p. 19)
29	Chase Fade	0–255	
30	Chase Size	0–255	
31	Red 2		Same as CH 31 in the mode “Extended 1” (p. 19)
32	Green 2		Same as CH 32 in the mode “Extended 1” (p. 19)

CH	Function	DMX	Description
33	Blue 2		Chase Color Blue 1
		0–255	Chase Color Blue 1
34	White 2		Same as CH 34 in the mode “Extended 1” (p. 19)
35	Dimmer 2		Same as CH 35 in the mode “Extended 1” (p. 19)
36	Back Chase Dimmer		Same as CH 36 in the mode “Extended 1” (p. 19)
37	Shutter 2		Same as CH 37 in the mode “Extended 1” (p. 19)
38	Zonda Control	0–9	React to Zonda effect Chase
		10–19	React to Main LED
		20–29	React to ARTNET OR SACN
		30–255	Control 1 1
39	Dimmer 3	0–255	
40	Dimmer 3 Fine	0–255	Fine adjustment of CH 39
41	Red 3	0–255	
42	Green 3	0–255	
43	Blue 3	0–255	
44	Zonda Patterns		Same as CH 44 in the mode “Extended 1” (p. 19)
45	Zonda Effect		Same as CH 45 in the mode “Extended 1” (p. 20)
46	Zonda Speed		Same as CH 46 in the mode “Extended 1” (p. 20)
47	Dimmer 4		Same as CH 47 in the mode “Extended 1” (p. 20)
48	Red 4		Same as CH 48 in the mode “Extended 1” (p. 20)
49	Green 4		Same as CH 49 in the mode “Extended 1” (p. 20)
50	Blue 4		Zonda Color Blue 1
		0–255	Zonda Color Blue 1

Mode Extended 2

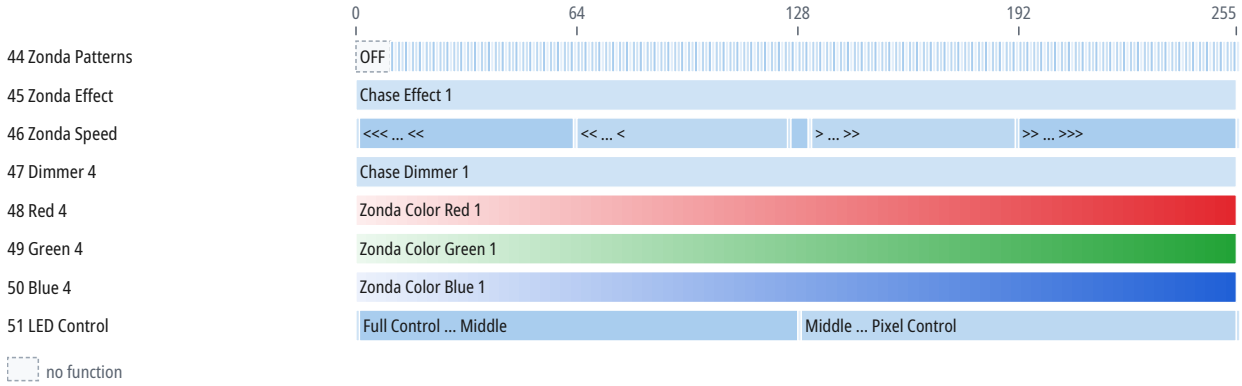
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255, CH 16 Shutter 32, CH 17 Dimmer 1 255, CH 19 CTO 0, CH 20 Colors 0, CH 35 Dimmer 2 255, CH 37 Shutter 2 32, CH 39 Dimmer 3 255, CH 41 Red 3 255, CH 42 Green 3 255, CH 43 Blue 3 255, CH 52 Red 5 255, CH 53 Green 5 255, CH 54 Blue 5 255, CH 55 White 3 255, CH 56 Red 6 255, CH 57 Green 6 255, CH 58 Blue 6 255, CH 59 White 4 255, CH 60 Red 7 255, CH 61 Green 7 255, CH 62 Blue 7 255, CH 63 White 5 255, CH 64 Red 8 255, CH 65 Green 8 255, CH 66 Blue 8 255, CH 67 White 6 255, CH 68 Red 9 255, CH 69 Green 9 255, CH 70 Blue 9 255, CH 71 White 7 255, CH 72 Red 10 255, CH 73 Green 10 255, CH 74 Blue 10 255, CH 75 White 8 255, CH 76 Red 11 255, CH 77 Green 11 255, CH 78 Blue 11 255, CH 79 White 9 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–255	540°
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–255	540°
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Pan Rotation		Same as CH 6 in the mode “Extended 1” (p. 13)
7	Tilt Rotation		Same as CH 7 in the mode “Extended 1” (p. 13)
8	Red 1		Same as CH 8 in the mode “Extended 1” (p. 13)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Extended 1” (p. 13)
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		When CH 51 is 0–128:
		0–255	
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Extended 1” (p. 14)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	Shutter		Same as CH 16 in the mode “Extended 1” (p. 14)
17	Dimmer 1	0–255	
18	Dimmer 1 Fine	0–255	Fine adjustment of CH 17
19	CTO		Same as CH 19 in the mode “Extended 1” (p. 14)
20	Colors		Same as CH 20 in the mode “Extended 1” (p. 14)
21	Color Preset Crossfade	0–255	
22	Color Preset Crossfade Speed	0–255	
23	Zoom	0–255	50–3°
24	Zoom Fine	0–255	Fine adjustment of CH 23
26	Control		Same as CH 26 in the mode “Extended 1” (p. 18)
27	Chase Patterns		Same as CH 27 in the mode “Extended 1” (p. 18)
28	Chase Speed		Same as CH 28 in the mode “Extended 1” (p. 19)
29	Chase Fade	0–255	
30	Chase Size	0–255	
31	Red 2		Same as CH 31 in the mode “Extended 1” (p. 19)

CH	Function	DMX	Description
32	Green 2		Same as CH 32 in the mode “Extended 1” (p. 19)
33	Blue 2		Same as CH 33 in the mode “Standard” (p. 24)
34	White 2		Same as CH 34 in the mode “Extended 1” (p. 19)
35	Dimmer 2		Same as CH 35 in the mode “Extended 1” (p. 19)
36	Back Chase Dimmer		Same as CH 36 in the mode “Extended 1” (p. 19)
37	Shutter 2		Same as CH 37 in the mode “Extended 1” (p. 19)
38	Zonda Control		Same as CH 38 in the mode “Standard” (p. 24)
39	Dimmer 3	0–255	
40	Dimmer 3 Fine	0–255	Fine adjustment of CH 39
41	Red 3	0–255	
42	Green 3	0–255	
43	Blue 3	0–255	
44	Zonda Patterns		Same as CH 44 in the mode “Extended 1” (p. 19)
45	Zonda Effect		Same as CH 45 in the mode “Extended 1” (p. 20)
46	Zonda Speed		Same as CH 46 in the mode “Extended 1” (p. 20)
47	Dimmer 4		Same as CH 47 in the mode “Extended 1” (p. 20)
48	Red 4		Same as CH 48 in the mode “Extended 1” (p. 20)
49	Green 4		Same as CH 49 in the mode “Extended 1” (p. 20)
50	Blue 4		Same as CH 50 in the mode “Standard” (p. 24)
51	LED Control		Same as CH 51 in the mode “Extended 1” (p. 20)
52	Red 5	0–255	
53	Green 5	0–255	
54	Blue 5	0–255	
55	White 3	0–255	
56	Red 6	0–255	
57	Green 6	0–255	
58	Blue 6	0–255	
59	White 4	0–255	
60	Red 7	0–255	
61	Green 7	0–255	
62	Blue 7	0–255	
63	White 5	0–255	
64	Red 8	0–255	
65	Green 8	0–255	
66	Blue 8	0–255	
67	White 6	0–255	
68	Red 9	0–255	
69	Green 9	0–255	
70	Blue 9	0–255	
71	White 7	0–255	
72	Red 10	0–255	
73	Green 10	0–255	

CH	Function	DMX	Description
74	Blue 10	0–255	
75	White 8	0–255	
76	Red 11	0–255	
77	Green 11	0–255	
78	Blue 11	0–255	
79	White 9	0–255	

Mode Extended 1 + Liquid

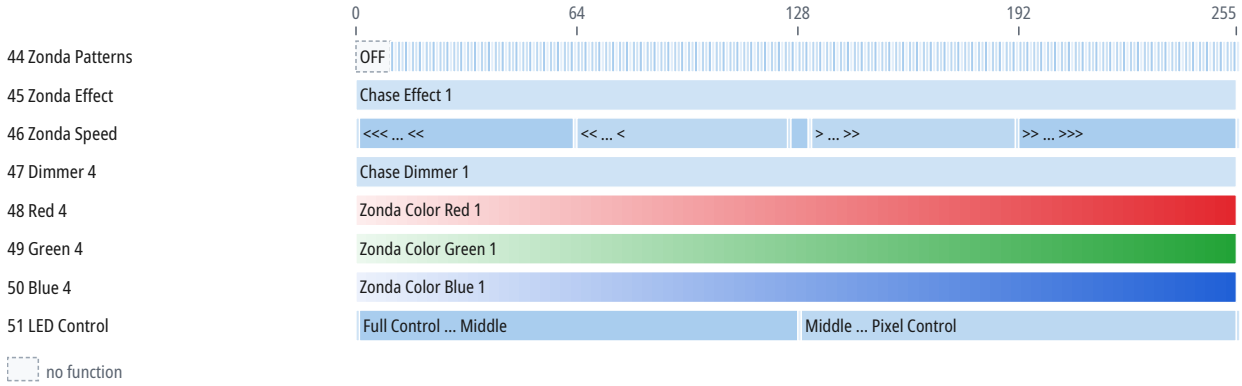
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255, CH 16 Shutter 32, CH 17 Dimmer 1 255, CH 19 CTO 0, CH 20 Colors 0, CH 35 Dimmer 2 255, CH 37 Shutter 2 32, CH 39 Dimmer 3 255, CH 41 Red 3 255, CH 42 Green 3 255, CH 43 Blue 3 255, CH 52 Red 5 255, CH 53 Green 5 255, CH 54 Blue 5 255, CH 55 White 3 255, CH 56 Red 6 255, CH 57 Green 6 255, CH 58 Blue 6 255, CH 59 White 4 255, CH 60 Red 7 255, CH 61 Green 7 255, CH 62 Blue 7 255, CH 63 White 5 255, CH 64 Red 8 255, CH 65 Green 8 255, CH 66 Blue 8 255, CH 67 White 6 255, CH 68 Red 9 255, CH 69 Green 9 255, CH 70 Blue 9 255, CH 71 White 7 255, CH 72 Red 10 255, CH 73 Green 10 255, CH 74 Blue 10 255, CH 75 White 8 255, CH 76 Red 11 255, CH 77 Green 11 255, CH 78 Blue 11 255, CH 79 White 9 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–255	540°
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–255	540°
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Pan Rotation		Same as CH 6 in the mode “Extended 1” (p. 13)
7	Tilt Rotation		Same as CH 7 in the mode “Extended 1” (p. 13)
8	Red 1		Same as CH 8 in the mode “Extended 1” (p. 13)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Extended 1” (p. 13)
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		Same as CH 12 in the mode “Extended 2” (p. 26)
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Extended 1” (p. 14)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	Shutter		Same as CH 16 in the mode “Extended 1” (p. 14)
17	Dimmer 1	0–255	
18	Dimmer 1 Fine	0–255	Fine adjustment of CH 17
19	CTO		Same as CH 19 in the mode “Extended 1” (p. 14)
20	Colors		Same as CH 20 in the mode “Extended 1” (p. 14)
21	Color Preset Crossfade	0–255	
22	Color Preset Crossfade Speed	0–255	
23	Zoom	0–255	50–3°
24	Zoom Fine	0–255	Fine adjustment of CH 23
26	Control		Same as CH 26 in the mode “Extended 1” (p. 18)
27	Chase Patterns		Same as CH 27 in the mode “Extended 1” (p. 18)
28	Chase Speed		Same as CH 28 in the mode “Extended 1” (p. 19)
29	Chase Fade	0–255	
30	Chase Size	0–255	
31	Red 2		Same as CH 31 in the mode “Extended 1” (p. 19)
32	Green 2		Same as CH 32 in the mode “Extended 1” (p. 19)

CH	Function	DMX	Description
33	Blue 2		Same as CH 33 in the mode “Standard” (p. 24)
34	White 2		Same as CH 34 in the mode “Extended 1” (p. 19)
35	Dimmer 2		Same as CH 35 in the mode “Extended 1” (p. 19)
36	Back Chase Dimmer		Same as CH 36 in the mode “Extended 1” (p. 19)
37	Shutter 2		Same as CH 37 in the mode “Extended 1” (p. 19)
38	Zonda Control		Same as CH 38 in the mode “Extended 1” (p. 19)
39	Dimmer 3	0–255	
40	Dimmer 3 Fine	0–255	Fine adjustment of CH 39
41	Red 3	0–255	
42	Green 3	0–255	
43	Blue 3	0–255	
44	Zonda Patterns		Same as CH 44 in the mode “Extended 1” (p. 19)
45	Zonda Effect		Same as CH 45 in the mode “Extended 1” (p. 20)
46	Zonda Speed		Same as CH 46 in the mode “Extended 1” (p. 20)
47	Dimmer 4		Same as CH 47 in the mode “Extended 1” (p. 20)
48	Red 4		Same as CH 48 in the mode “Extended 1” (p. 20)
49	Green 4		Same as CH 49 in the mode “Extended 1” (p. 20)
50	Blue 4		Same as CH 50 in the mode “Standard” (p. 24)
51	LED Control		Same as CH 51 in the mode “Extended 1” (p. 20)
52	Red 5	0–255	
53	Green 5	0–255	
54	Blue 5	0–255	
55	White 3	0–255	
56	Red 6	0–255	
57	Green 6	0–255	
58	Blue 6	0–255	
59	White 4	0–255	
60	Red 7	0–255	
61	Green 7	0–255	
62	Blue 7	0–255	
63	White 5	0–255	
64	Red 8	0–255	
65	Green 8	0–255	
66	Blue 8	0–255	
67	White 6	0–255	
68	Red 9	0–255	
69	Green 9	0–255	
70	Blue 9	0–255	
71	White 7	0–255	
72	Red 10	0–255	
73	Green 10	0–255	
74	Blue 10	0–255	

CH	Function	DMX	Description
75	White 8	0–255	
76	Red 11	0–255	
77	Green 11	0–255	
78	Blue 11	0–255	
79	White 9	0–255	
80	Red 12	0–255	
81	Green 12	0–255	
82	Blue 12	0–255	

CH 80–493: 138 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 80–82); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	80	81	82	2	83	84	85	3	86	87	88
4	89	90	91	5	92	93	94	6	95	96	97
7	98	99	100	8	101	102	103	9	104	105	106
10	107	108	109	11	110	111	112	12	113	114	115
13	116	117	118	14	119	120	121	15	122	123	124
16	125	126	127	17	128	129	130	18	131	132	133
19	134	135	136	20	137	138	139	21	140	141	142
22	143	144	145	23	146	147	148	24	149	150	151
25	152	153	154	26	155	156	157	27	158	159	160
28	161	162	163	29	164	165	166	30	167	168	169
31	170	171	172	32	173	174	175	33	176	177	178
34	179	180	181	35	182	183	184	36	185	186	187
37	188	189	190	38	191	192	193	39	194	195	196
40	197	198	199	41	200	201	202	42	203	204	205
43	206	207	208	44	209	210	211	45	212	213	214
46	215	216	217	47	218	219	220	48	221	222	223
49	224	225	226	50	227	228	229	51	230	231	232
52	233	234	235	53	236	237	238	54	239	240	241
55	242	243	244	56	245	246	247	57	248	249	250
58	251	252	253	59	254	255	256	60	257	258	259
61	260	261	262	62	263	264	265	63	266	267	268
64	269	270	271	65	272	273	274	66	275	276	277
67	278	279	280	68	281	282	283	69	284	285	286
70	287	288	289	71	290	291	292	72	293	294	295
73	296	297	298	74	299	300	301	75	302	303	304
76	305	306	307	77	308	309	310	78	311	312	313
79	314	315	316	80	317	318	319	81	320	321	322
82	323	324	325	83	326	327	328	84	329	330	331
85	332	333	334	86	335	336	337	87	338	339	340
88	341	342	343	89	344	345	346	90	347	348	349
91	350	351	352	92	353	354	355	93	356	357	358

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
94	359	360	361	95	362	363	364	96	365	366	367
97	368	369	370	98	371	372	373	99	374	375	376
100	377	378	379	101	380	381	382	102	383	384	385
103	386	387	388	104	389	390	391	105	392	393	394
106	395	396	397	107	398	399	400	108	401	402	403
109	404	405	406	110	407	408	409	111	410	411	412
112	413	414	415	113	416	417	418	114	419	420	421
115	422	423	424	116	425	426	427	117	428	429	430
118	431	432	433	119	434	435	436	120	437	438	439
121	440	441	442	122	443	444	445	123	446	447	448
124	449	450	451	125	452	453	454	126	455	456	457
127	458	459	460	128	461	462	463	129	464	465	466
130	467	468	469	131	470	471	472	132	473	474	475
133	476	477	478	134	479	480	481	135	482	483	484
136	485	486	487	137	488	489	490	138	491	492	493

Mode Extended 2 + Liquid

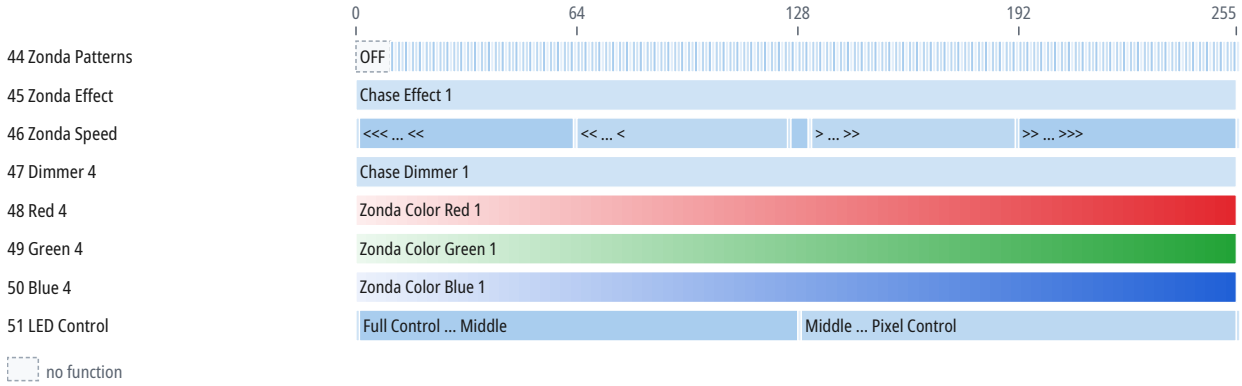
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 16 Shutter at 32, 118–126, 181–191, 246–255 “open” or 33–63; CH 17 Dimmer 1 above 0; CH 35 Dimmer 2 above 0; CH 36 Back Chase Dimmer above 0; CH 39 Dimmer 3 above 0; CH 47 Dimmer 4 above 0. The GDTF file gives these values for a console's Highlight function: CH 8 Red 1 255, CH 10 Green 1 255, CH 12 Blue 1 255, CH 14 White 1 255, CH 16 Shutter 32, CH 17 Dimmer 1 255, CH 19 CTO 0, CH 20 Colors 0, CH 35 Dimmer 2 255, CH 37 Shutter 2 32, CH 39 Dimmer 3 255, CH 41 Red 3 255, CH 42 Green 3 255, CH 43 Blue 3 255, CH 52 Red 5 255, CH 53 Green 5 255, CH 54 Blue 5 255, CH 55 White 3 255, CH 56 Red 6 255, CH 57 Green 6 255, CH 58 Blue 6 255, CH 59 White 4 255, CH 60 Red 7 255, CH 61 Green 7 255, CH 62 Blue 7 255, CH 63 White 5 255, CH 64 Red 8 255, CH 65 Green 8 255, CH 66 Blue 8 255, CH 67 White 6 255, CH 68 Red 9 255, CH 69 Green 9 255, CH 70 Blue 9 255, CH 71 White 7 255, CH 72 Red 10 255, CH 73 Green 10 255, CH 74 Blue 10 255, CH 75 White 8 255, CH 76 Red 11 255, CH 77 Green 11 255, CH 78 Blue 11 255, CH 79 White 9 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–255	540°
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–255	540°
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0–255	
6	Pan Rotation		Same as CH 6 in the mode “Extended 1” (p. 13)
7	Tilt Rotation		Same as CH 7 in the mode “Extended 1” (p. 13)
8	Red 1		Same as CH 8 in the mode “Extended 1” (p. 13)
9	Red 1 Fine	0–255	Fine adjustment of CH 8
10	Green 1		Same as CH 10 in the mode “Extended 1” (p. 13)
11	Green 1 Fine	0–255	Fine adjustment of CH 10
12	Blue 1		Same as CH 12 in the mode “Extended 2” (p. 26)
13	Blue 1 Fine	0–255	Fine adjustment of CH 12
14	White 1		Same as CH 14 in the mode “Extended 1” (p. 14)
15	White 1 Fine	0–255	Fine adjustment of CH 14
16	Shutter		Same as CH 16 in the mode “Extended 1” (p. 14)
17	Dimmer 1	0–255	
18	Dimmer 1 Fine	0–255	Fine adjustment of CH 17
19	CTO		Same as CH 19 in the mode “Extended 1” (p. 14)
20	Colors		Same as CH 20 in the mode “Extended 1” (p. 14)
21	Color Preset Crossfade	0–255	
22	Color Preset Crossfade Speed	0–255	
23	Zoom	0–255	50–3°
24	Zoom Fine	0–255	Fine adjustment of CH 23
26	Control		Same as CH 26 in the mode “Extended 1” (p. 18)
27	Chase Patterns		Same as CH 27 in the mode “Extended 1” (p. 18)
28	Chase Speed		Same as CH 28 in the mode “Extended 1” (p. 19)
29	Chase Fade	0–255	
30	Chase Size	0–255	
31	Red 2		Same as CH 31 in the mode “Extended 1” (p. 19)
32	Green 2		Same as CH 32 in the mode “Extended 1” (p. 19)

CH	Function	DMX	Description
33	Blue 2		Same as CH 33 in the mode “Standard” (p. 24)
34	White 2		Same as CH 34 in the mode “Extended 1” (p. 19)
35	Dimmer 2		Same as CH 35 in the mode “Extended 1” (p. 19)
36	Back Chase Dimmer		Same as CH 36 in the mode “Extended 1” (p. 19)
37	Shutter 2		Same as CH 37 in the mode “Extended 1” (p. 19)
38	Zonda Control		Same as CH 38 in the mode “Extended 1” (p. 19)
39	Dimmer 3	0–255	
40	Dimmer 3 Fine	0–255	Fine adjustment of CH 39
41	Red 3	0–255	
42	Green 3	0–255	
43	Blue 3	0–255	
44	Zonda Patterns		Same as CH 44 in the mode “Extended 1” (p. 19)
45	Zonda Effect		Same as CH 45 in the mode “Extended 1” (p. 20)
46	Zonda Speed		Same as CH 46 in the mode “Extended 1” (p. 20)
47	Dimmer 4		Same as CH 47 in the mode “Extended 1” (p. 20)
48	Red 4		Same as CH 48 in the mode “Extended 1” (p. 20)
49	Green 4		Same as CH 49 in the mode “Extended 1” (p. 20)
50	Blue 4		Same as CH 50 in the mode “Standard” (p. 24)
51	LED Control		Same as CH 51 in the mode “Extended 1” (p. 20)
52	Red 5	0–255	
53	Green 5	0–255	
54	Blue 5	0–255	
55	White 3	0–255	
56	Red 6	0–255	
57	Green 6	0–255	
58	Blue 6	0–255	
59	White 4	0–255	
60	Red 7	0–255	
61	Green 7	0–255	
62	Blue 7	0–255	
63	White 5	0–255	
64	Red 8	0–255	
65	Green 8	0–255	
66	Blue 8	0–255	
67	White 6	0–255	
68	Red 9	0–255	
69	Green 9	0–255	
70	Blue 9	0–255	
71	White 7	0–255	
72	Red 10	0–255	
73	Green 10	0–255	
74	Blue 10	0–255	

CH	Function	DMX	Description
75	White 8	0–255	
76	Red 11	0–255	
77	Green 11	0–255	
78	Blue 11	0–255	
79	White 9	0–255	
80	Red 12	0–255	
81	Green 12	0–255	
82	Blue 12	0–255	

CH 80–493: 138 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 80–82); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	80	81	82	2	83	84	85	3	86	87	88
4	89	90	91	5	92	93	94	6	95	96	97
7	98	99	100	8	101	102	103	9	104	105	106
10	107	108	109	11	110	111	112	12	113	114	115
13	116	117	118	14	119	120	121	15	122	123	124
16	125	126	127	17	128	129	130	18	131	132	133
19	134	135	136	20	137	138	139	21	140	141	142
22	143	144	145	23	146	147	148	24	149	150	151
25	152	153	154	26	155	156	157	27	158	159	160
28	161	162	163	29	164	165	166	30	167	168	169
31	170	171	172	32	173	174	175	33	176	177	178
34	179	180	181	35	182	183	184	36	185	186	187
37	188	189	190	38	191	192	193	39	194	195	196
40	197	198	199	41	200	201	202	42	203	204	205
43	206	207	208	44	209	210	211	45	212	213	214
46	215	216	217	47	218	219	220	48	221	222	223
49	224	225	226	50	227	228	229	51	230	231	232
52	233	234	235	53	236	237	238	54	239	240	241
55	242	243	244	56	245	246	247	57	248	249	250
58	251	252	253	59	254	255	256	60	257	258	259
61	260	261	262	62	263	264	265	63	266	267	268
64	269	270	271	65	272	273	274	66	275	276	277
67	278	279	280	68	281	282	283	69	284	285	286
70	287	288	289	71	290	291	292	72	293	294	295
73	296	297	298	74	299	300	301	75	302	303	304
76	305	306	307	77	308	309	310	78	311	312	313
79	314	315	316	80	317	318	319	81	320	321	322
82	323	324	325	83	326	327	328	84	329	330	331
85	332	333	334	86	335	336	337	87	338	339	340
88	341	342	343	89	344	345	346	90	347	348	349
91	350	351	352	92	353	354	355	93	356	357	358

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
94	359	360	361	95	362	363	364	96	365	366	367
97	368	369	370	98	371	372	373	99	374	375	376
100	377	378	379	101	380	381	382	102	383	384	385
103	386	387	388	104	389	390	391	105	392	393	394
106	395	396	397	107	398	399	400	108	401	402	403
109	404	405	406	110	407	408	409	111	410	411	412
112	413	414	415	113	416	417	418	114	419	420	421
115	422	423	424	116	425	426	427	117	428	429	430
118	431	432	433	119	434	435	436	120	437	438	439
121	440	441	442	122	443	444	445	123	446	447	448
124	449	450	451	125	452	453	454	126	455	456	457
127	458	459	460	128	461	462	463	129	464	465	466
130	467	468	469	131	470	471	472	132	473	474	475
133	476	477	478	134	479	480	481	135	482	483	484
136	485	486	487	137	488	489	490	138	491	492	493

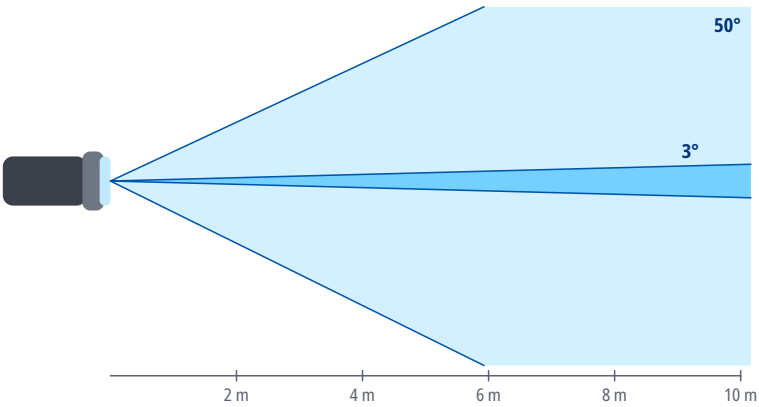
10 Technical specifications

Parameter	Value
Light	
Light source	LED
Optics	
Zoom	3–50°
Movement	
Pan	540°
Tilt	540°
Control	
DMX connection	5-pin XLR IN/OUT
RJ45 connectors	RJ45 IN/OUT
RDM	yes (manufacturer ID 0x4174, device model ID 0xAA17)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	350 W
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	11.1 kg
Operating environment	
Operating temperature	-10 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–8000 K
Strobe frequency	0.5–25 Hz
LED frequency	1200–16000 Hz

Spot diameter



Distance	Ø 3°	Ø 50°
2 m	0.1 m	1.9 m
4 m	0.21 m	3.7 m
6 m	0.31 m	5.6 m
8 m	0.42 m	7.5 m
10 m	0.52 m	9.3 m
15 m	0.79 m	14 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.