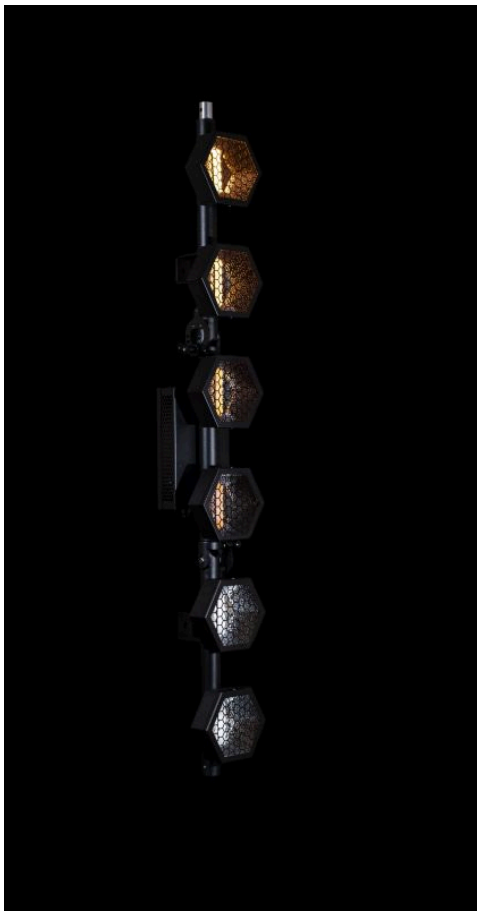
DMX REFERENCE

P2 EVO

Portman Lights



Manufacturer	Portman Lights
GDTF file	Portman_Lights_P2_EVO_45366.gdtf
GDTF revision	0.92 · 2023-08-09
Generated	2026-11-24

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1 About this manual

This document describes the P2 EVO by Portman Lights. It was compiled from the GDTF file Portman_Lights_P2_EVO_45366.gdtf from the GDTF-Share library.

File revision: “0.92”.

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 Portman Lights; 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

DMX modes

Mode	Channels	Units in one universe	First start addresses
Super Simple	12	42	1, 13, 25, 37, ...
Simple	18	28	1, 19, 37, 55, ...
Standard	38	13	1, 39, 77, 115, ...
Standard Fine	69	7	1, 70, 139, 208, ...
Pixel	37	13	1, 38, 75, 112, ...
Pixel Fine	67	7	1, 68, 135, 202, ...

No light? Check these channels

- Super Simple: CH 1 Dimmer 1 above 0; CH 2 Dimmer 2 above 0; CH 3 Dimmer 3 above 0; CH 4 Dimmer 4 above 0; CH 5 Dimmer 5 above 0; CH 6 Dimmer 6 above 0; CH 11 Shutter 1 at 0–9 “Shutter Open”; CH 12 Shutter 2 at 0–9 or 246–255 “Shutter Open”
- Simple: CH 1 Dimmer 1 above 0; CH 2 Dimmer 2 above 0; CH 3 Dimmer 3 above 0; CH 4 Dimmer 4 above 0; CH 5 Dimmer 5 above 0; CH 6 Dimmer 6 above 0; CH 7 Dimmer 7 above 0; CH 12 Shutter 1 at 0–9, 122–129 or 246–255 “Shutter Open”; CH 13 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 15 Intensity Macro above 0
- Standard: CH 1 Dimmer 1 above 0; CH 2 Dimmer 2 above 0; CH 3 Dimmer 3 above 0; CH 4 Dimmer 4 above 0; CH 5 Dimmer 5 above 0; CH 6 Dimmer 6 above 0; CH 7 Dimmer 7 above 0; CH 32 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 33 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 35 Intensity Macro above 0
- Standard Fine: CH 1 Dimmer 1 above 0; CH 3 Dimmer 2 above 0; CH 5 Dimmer 3 above 0; CH 7 Dimmer 4 above 0; CH 9 Dimmer 5 above 0; CH 11 Dimmer 6 above 0; CH 13 Dimmer 7 above 0; CH 63 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 64 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 66 Intensity Macro above 0
- Pixel: CH 1 Dimmer 1 above 0; CH 6 Dimmer 2 above 0; CH 11 Dimmer 3 above 0; CH 16 Dimmer 4 above 0; CH 21 Dimmer 5 above 0; CH 26 Dimmer 6 above 0; CH 31 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 32 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 34 Intensity Macro above 0
- Pixel Fine: CH 1 Dimmer 1 above 0; CH 11 Dimmer 2 above 0; CH 21 Dimmer 3 above 0; CH 31 Dimmer 4 above 0; CH 41 Dimmer 5 above 0; CH 51 Dimmer 6 above 0; CH 61 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 62 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 64 Intensity Macro above 0



Read the manual before use



Do not stare into the light



Indoor use only

3 Safety instructions



Read the manual before use



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

- 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.

4 Installation

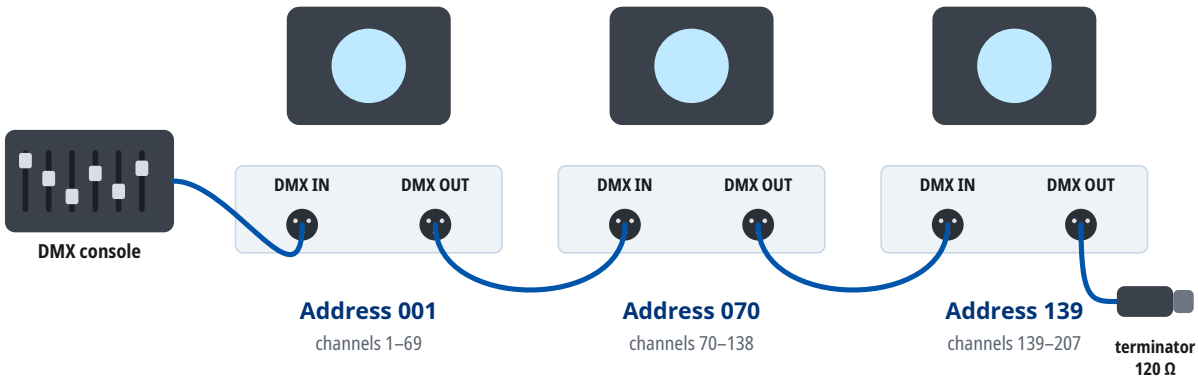
⚠ WARNING

- 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.
- 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.

5 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 Standard Fine: every unit occupies 69 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.

6 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 “Standard Fine”: 69.
- 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 “Standard Fine”, you can use, for example, the start addresses 1, 70, 139, 208.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

7 Functions at a glance

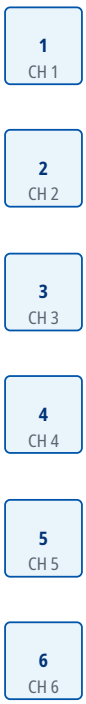
Functions in each DMX mode

	Super Simple 12 channels	Simple 18 channels	Standard 38 channels	Standard Fine 69 channels	Pixel 37 channels	Pixel Fine 67 channels
Dimmer	1–6	1–7	1–7	7× (1–13)	6× (1–26)	6× (1–51)
Dimmer resolution	8 bit	8 bit	8 bit	16 bit	8 bit	16 bit
Shutter / strobe	11, 12	12, 13	32, 33	63, 64	31, 32	61, 62
Color mixing	7–10	8–11	8–31	24× (15–61)	24 channels (2–30)	24 channels (3–59)
Color wheel		14	34	65	33	63
Effects / macros		15, 16	35, 36	66, 67	34, 35	64, 65
Pixel control	✓	✓	✓	✓	✓	✓

Color wheel

1. Open — DMX 0–9
2. White — DMX 10–39
3. Red — DMX 40–41
4. Orange — DMX 55–56
5. Yellow — DMX 72–73
6. Spring Green — DMX 88–89
7. Green — DMX 104–105
8. Sea Green — DMX 122–123
9. Cyan — DMX 141–142
10. Azzure — DMX 157–158
11. Blue — DMX 173–174
12. Violet — DMX 189–190
13. Magenta — DMX 205–206
14. Pink — DMX 221–222
15. Red 1 — DMX 237
16. Color Spin — DMX 238–254
17. Open 1 — DMX 255

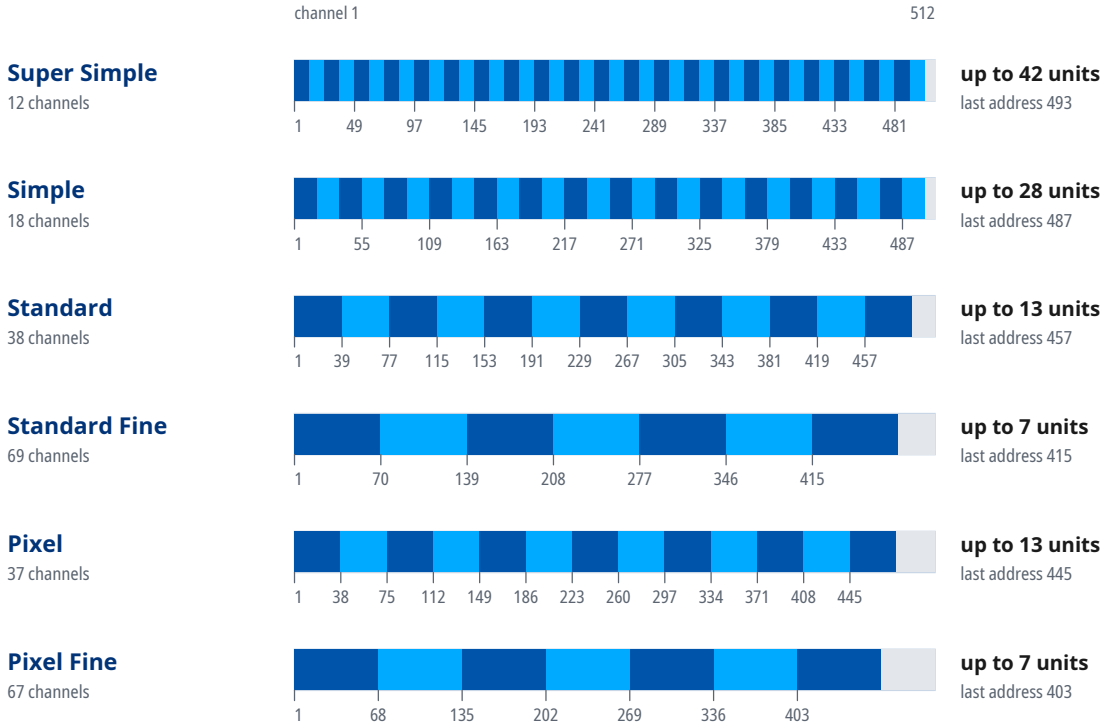
Cells (pixels)



6 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “Standard”.

8 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Standard Fine”

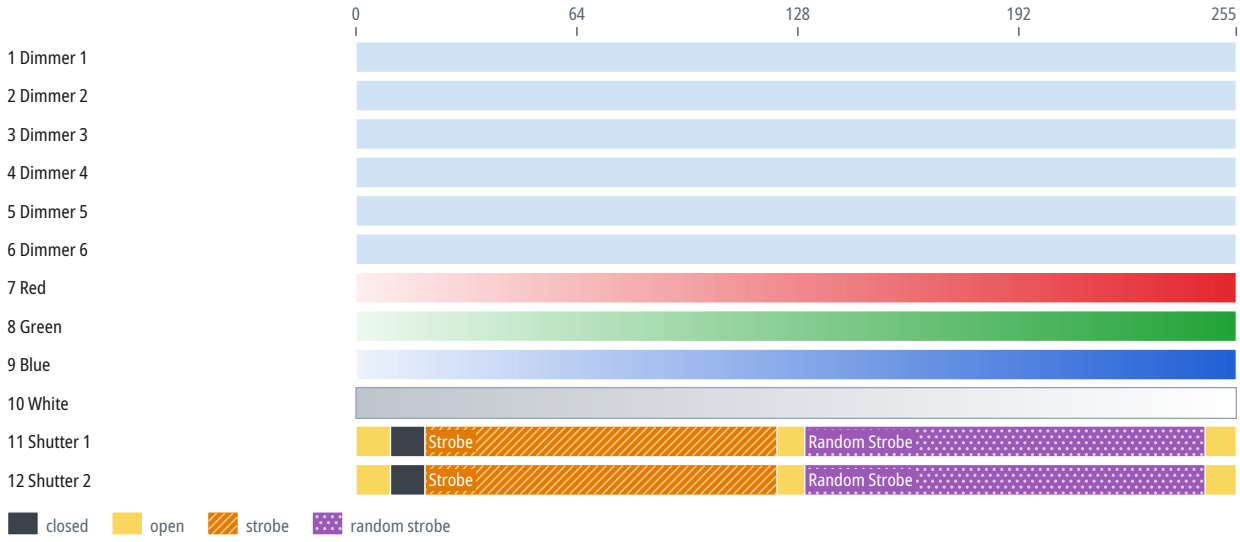
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	346	11	U2 · 208	16	U3 · 70
2	70	7	415	12	U2 · 277	17	U3 · 139
3	139	8	U2 · 1	13	U2 · 346	18	U3 · 208
4	208	9	U2 · 70	14	U2 · 415	19	U3 · 277
5	277	10	U2 · 139	15	U3 · 1	20	U3 · 346

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 Super Simple

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 2 Dimmer 2 above 0; CH 3 Dimmer 3 above 0; CH 4 Dimmer 4 above 0; CH 5 Dimmer 5 above 0; CH 6 Dimmer 6 above 0; CH 11 Shutter 1 at 0–9 “Shutter Open”; CH 12 Shutter 2 at 0–9 or 246–255 “Shutter Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 100, CH 2 Dimmer 2 100, CH 3 Dimmer 3 100, CH 4 Dimmer 4 100, CH 5 Dimmer 5 100, CH 6 Dimmer 6 100, CH 10 White 100.

Channel functions at a glance



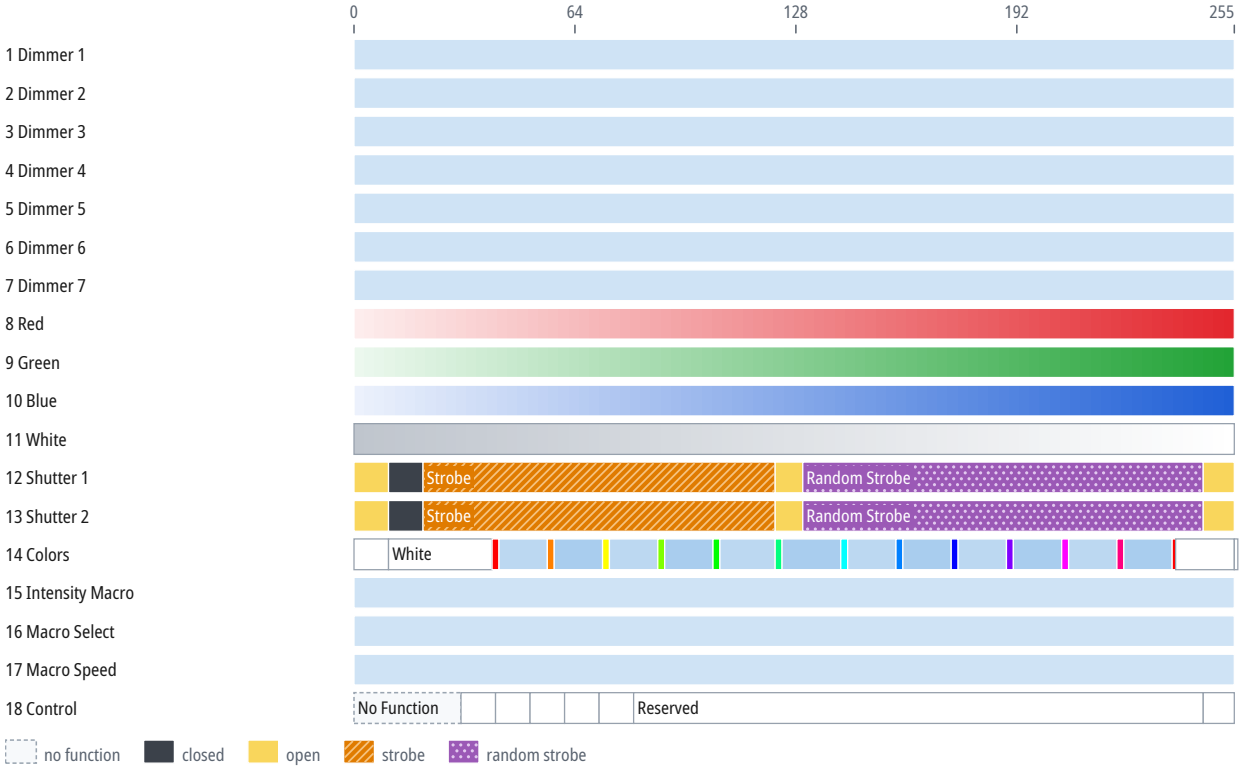
CH	Function	DMX	Description
1	Dimmer 1	0–255	
2	Dimmer 2	0–255	
3	Dimmer 3	0–255	
4	Dimmer 4	0–255	
5	Dimmer 5	0–255	
6	Dimmer 6	0–255	
7	Red	0–255	
8	Green	0–255	
9	Blue	0–255	
10	White	0–255	
11	Shutter 1		Halo LED Shutter
		0–9	Shutter Open
		10–19	Shutter Closed
		20–121	Strobe
		122–129	Strobe Open
		130–245	Random Strobe
		246–255	Strobe Open
12	Shutter 2		Glow Shutter
		0–9	Shutter Open
		10–19	Shutter Closed

CH	Function	DMX	Description
12	Shutter 2 (continued)	20–121	Strobe
		122–129	Shautter Open
		130–245	Random Strobe
		246–255	Shutter open

Mode Simple

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 2 Dimmer 2 above 0; CH 3 Dimmer 3 above 0; CH 4 Dimmer 4 above 0; CH 5 Dimmer 5 above 0; CH 6 Dimmer 6 above 0; CH 7 Dimmer 7 above 0; CH 12 Shutter 1 at 0–9, 122–129 or 246–255 “Shutter Open”; CH 13 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 15 Intensity Macro above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 100, CH 2 Dimmer 2 100, CH 3 Dimmer 3 100, CH 4 Dimmer 4 100, CH 5 Dimmer 5 100, CH 6 Dimmer 6 100, CH 7 Dimmer 7 100, CH 11 White 100.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1	0–255	
2	Dimmer 2	0–255	
3	Dimmer 3	0–255	
4	Dimmer 4	0–255	
5	Dimmer 5	0–255	
6	Dimmer 6	0–255	
7	Dimmer 7	0–255	
8	Red	0–255	
9	Green	0–255	

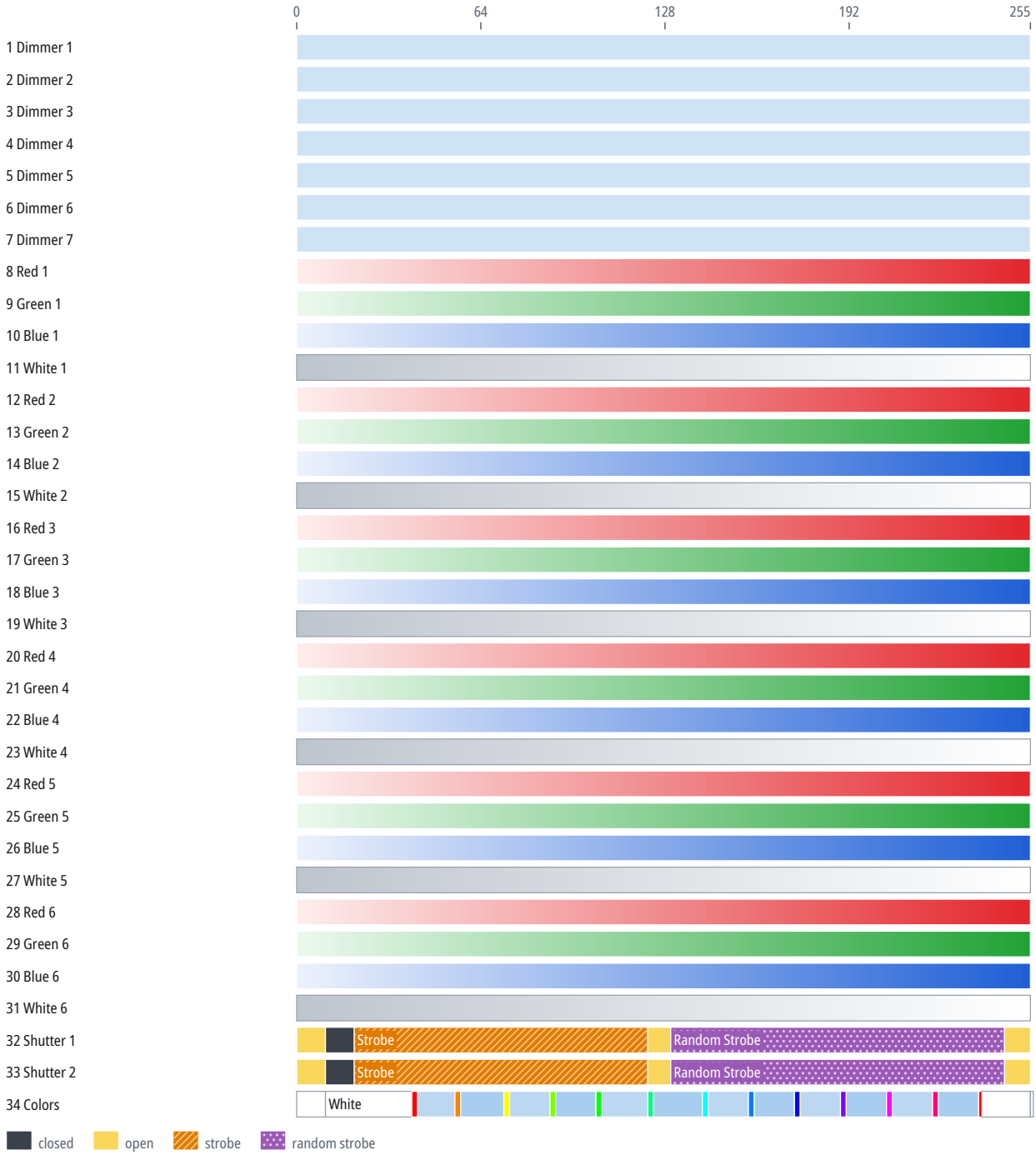
CH	Function	DMX	Description
10	Blue	0–255	
11	White	0–255	
12	Shutter 1	0–9	Shutter Open
		10–19	Shutter Closed
		20–121	Strobe
		122–129	Shutter Open
		130–245	Random Strobe
		246–255	Shutter Open
13	Shutter 2	0–9	Shutter Open
		10–19	Shutter Closed
		20–121	Strobe
		122–129	Shutter Open 1
		130–245	Random Strobe
		246–255	Shutter Open 2
14	Colors	0–9	Open
		10–39	White
		40–41	Red
		42–55	Red ... Orange
		56–57	Orange
		58–71	Orange ... Yellow
		72–73	Yellow
		74–87	Yellow ... Spring Green
		88–89	Spring Green
		90–103	Spring Green ... Green
		104–105	Green
		106–121	Green ... Sea Green
		122–123	Sea Green
		124–140	Sea Green ... Cyan
		141–142	Cyan
		143–156	Cyan ... Azzure
		157–158	Azzure
		159–172	Azzure ... Blue
		173–174	Blue
		175–188	Blue ... Violet
		189–190	Violet
		191–204	Violet ... Magenta
		205–206	Magenta
		207–220	Magenta ... Pink
		221–222	Pink
		223–236	Pink ... Red 1
		237	Red 1
		238–254	Color Spin

CH	Function	DMX	Description
14	Colors (continued)	255	Open 1
15	Intensity Macro	0–255	
16	Macro Select	0–255	
17	Macro Speed	0–255	
18	Control	0–30	No Function
		31–40	Flicker Mode 1
		41–50	Flicker Mode 2
		51–60	Flicker Mode 3
		61–70	Dimming Curve Linear
		71–80	Dimming Curve Logarithmic
		81–245	Reserved
		246–255	Default Values

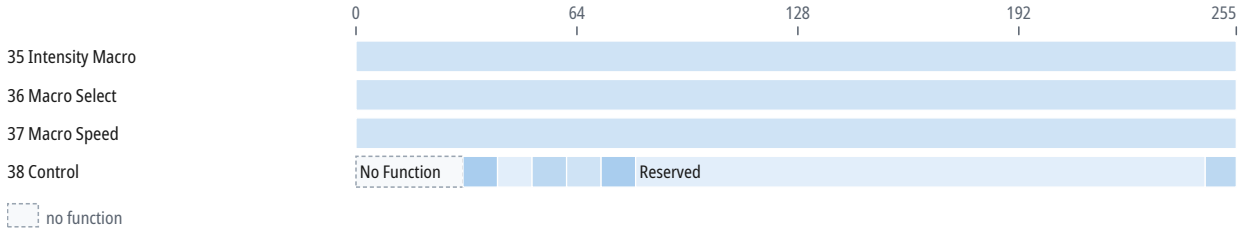
Mode Standard

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 2 Dimmer 2 above 0; CH 3 Dimmer 3 above 0; CH 4 Dimmer 4 above 0; CH 5 Dimmer 5 above 0; CH 6 Dimmer 6 above 0; CH 7 Dimmer 7 above 0; CH 32 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 33 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 35 Intensity Macro above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 100, CH 2 Dimmer 2 100, CH 3 Dimmer 3 100, CH 4 Dimmer 4 100, CH 5 Dimmer 5 100, CH 6 Dimmer 6 100, CH 7 Dimmer 7 100, CH 11 White 1 100, CH 15 White 2 100, CH 19 White 3 100, CH 23 White 4 100, CH 27 White 5 100, CH 31 White 6 100.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1	0–255	
2	Dimmer 2	0–255	
3	Dimmer 3	0–255	
4	Dimmer 4	0–255	
5	Dimmer 5	0–255	
6	Dimmer 6	0–255	
7	Dimmer 7	0–255	
8	Red 1	0–255	
9	Green 1	0–255	
10	Blue 1	0–255	
11	White 1	0–255	
12	Red 2	0–255	
13	Green 2	0–255	
14	Blue 2	0–255	
15	White 2	0–255	
16	Red 3	0–255	
17	Green 3	0–255	
18	Blue 3	0–255	
19	White 3	0–255	
20	Red 4	0–255	
21	Green 4	0–255	
22	Blue 4	0–255	
23	White 4	0–255	
24	Red 5	0–255	
25	Green 5	0–255	
26	Blue 5	0–255	
27	White 5	0–255	
28	Red 6	0–255	
29	Green 6	0–255	
30	Blue 6	0–255	
31	White 6	0–255	
32	Shutter 1	0–9	Shutter Open
		10–19	Shutter Closed
		20–121	Strobe

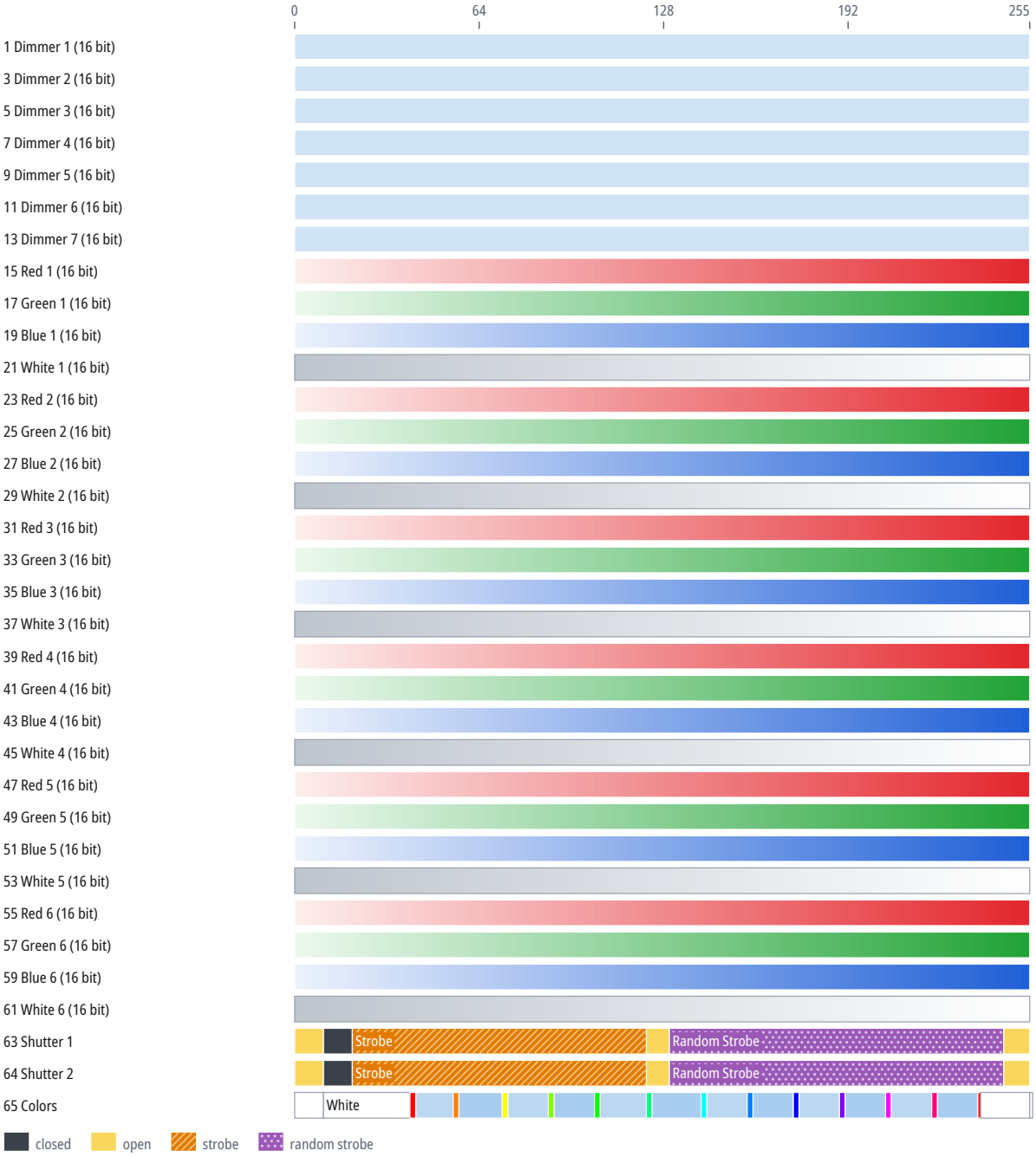
CH	Function	DMX	Description
32	Shutter 1 (continued)	122–129	Shutter Open 1
		130–245	Random Strobe
		246–255	Shutter Open 2
33	Shutter 2		Same as CH 13 in the mode “Simple” (p. 11)
34	Colors	0–9	Open
		10–39	White
		40–41	Red
		42–54	Red ... Orange
		55–56	Orange
		57–71	Orange ... Yellow
		72–73	Yellow
		74–87	Yellow ... Spring Green
		88–89	Spring Green
		90–103	Spring Green ... Green
		104–105	Green
		106–121	Green ... Sea Green
		122–123	Sea Green
		124–140	Sea Green ... Cyan
		141–142	Cyan
		143–156	Cyan ... Azzure
		157–158	Azzure
		159–172	Azzure ... Blue
		173–174	Blue
		175–188	Blue ... Violet
		189–190	Violet
		191–204	Violet ... Magenta
		205–206	Magenta
		207–220	Magenta ... Pink
		221–222	Pink
		223–236	Pink ... Red 1
		237	Red 1
		238–254	Color Spin
		255	Open 1
35	Intensity Macro	0–255	
36	Macro Select	0–255	
37	Macro Speed	0–255	
38	Control		Same as CH 18 in the mode “Simple” (p. 12)

Mode Standard Fine

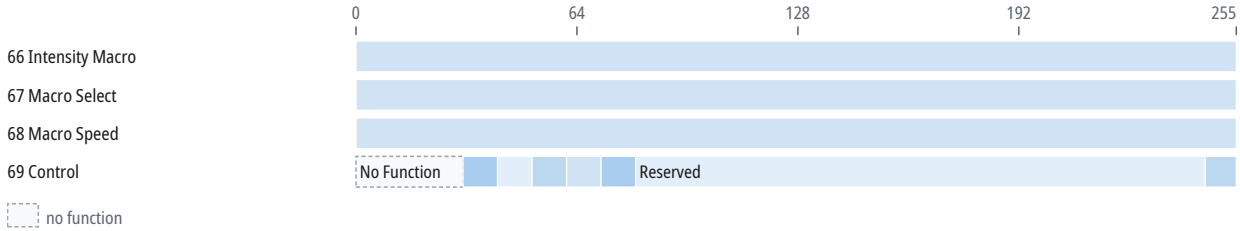
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 3 Dimmer 2 above 0; CH 5 Dimmer 3 above 0; CH 7 Dimmer 4 above 0; CH 9 Dimmer 5 above 0; CH 11 Dimmer 6 above 0; CH 13 Dimmer 7 above 0; CH 63 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 64 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 66 Intensity Macro above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 100, CH 3 Dimmer 2 100, CH 5 Dimmer 3 100, CH 7 Dimmer 4 100, CH 9 Dimmer 5 100, CH 11 Dimmer 6 100, CH 13 Dimmer 7 100, CH 21 White 1 100, CH 29 White 2 100, CH 37 White 3 100, CH 45 White 4 100, CH 53 White 5 100, CH 61 White 6 100.

Channel functions at a glance



Channel functions at a glance



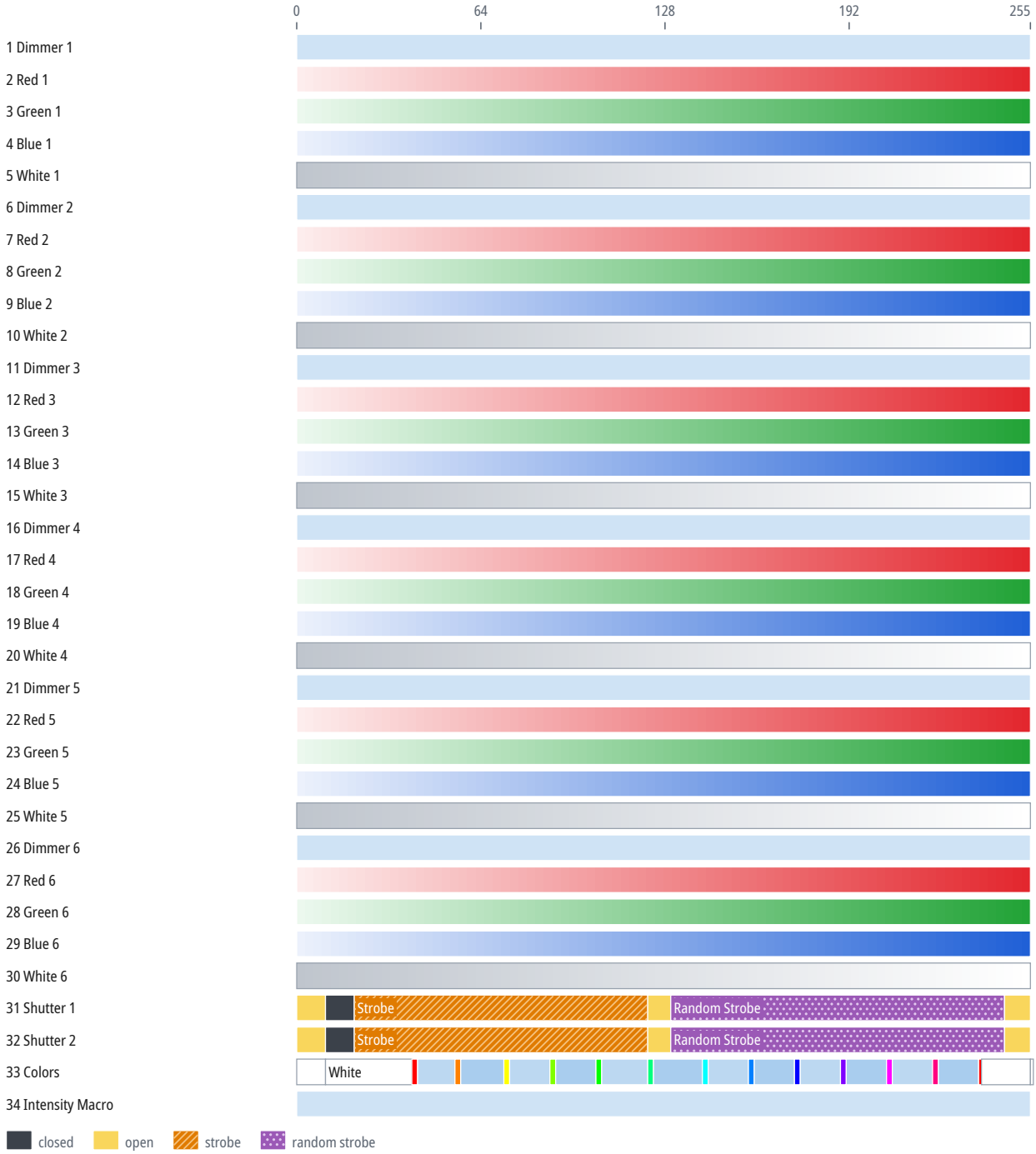
CH	Function	DMX	Description
1	Dimmer 1	0–255	
2	Dimmer 1 Fine	0–255	Fine adjustment of CH 1
3	Dimmer 2	0–255	
4	Dimmer 2 Fine	0–255	Fine adjustment of CH 3
5	Dimmer 3	0–255	
6	Dimmer 3 Fine	0–255	Fine adjustment of CH 5
7	Dimmer 4	0–255	
8	Dimmer 4 Fine	0–255	Fine adjustment of CH 7
9	Dimmer 5	0–255	
10	Dimmer 5 Fine	0–255	Fine adjustment of CH 9
11	Dimmer 6	0–255	
12	Dimmer 6 Fine	0–255	Fine adjustment of CH 11
13	Dimmer 7	0–255	
14	Dimmer 7 Fine	0–255	Fine adjustment of CH 13
15	Red 1	0–255	
16	Red 1 Fine	0–255	Fine adjustment of CH 15
17	Green 1	0–255	
18	Green 1 Fine	0–255	Fine adjustment of CH 17
19	Blue 1	0–255	
20	Blue 1 Fine	0–255	Fine adjustment of CH 19
21	White 1	0–255	
22	White 1 Fine	0–255	Fine adjustment of CH 21
23	Red 2	0–255	
24	Red 2 Fine	0–255	Fine adjustment of CH 23
25	Green 2	0–255	
26	Green 2 Fine	0–255	Fine adjustment of CH 25
27	Blue 2	0–255	
28	Blue 2 Fine	0–255	Fine adjustment of CH 27
29	White 2	0–255	
30	White 2 Fine	0–255	Fine adjustment of CH 29
31	Red 3	0–255	
32	Red 3 Fine	0–255	Fine adjustment of CH 31
33	Green 3	0–255	
34	Green 3 Fine	0–255	Fine adjustment of CH 33

CH	Function	DMX	Description
35	Blue 3	0–255	
36	Blue 3 Fine	0–255	Fine adjustment of CH 35
37	White 3	0–255	
38	White 3 Fine	0–255	Fine adjustment of CH 37
39	Red 4	0–255	
40	Red 4 Fine	0–255	Fine adjustment of CH 39
41	Green 4	0–255	
42	Green 4 Fine	0–255	Fine adjustment of CH 41
43	Blue 4	0–255	
44	Blue 4 Fine	0–255	Fine adjustment of CH 43
45	White 4	0–255	
46	White 4 Fine	0–255	Fine adjustment of CH 45
47	Red 5	0–255	
48	Red 5 Fine	0–255	Fine adjustment of CH 47
49	Green 5	0–255	
50	Green 5 Fine	0–255	Fine adjustment of CH 49
51	Blue 5	0–255	
52	Blue 5 Fine	0–255	Fine adjustment of CH 51
53	White 5	0–255	
54	White 5 Fine	0–255	Fine adjustment of CH 53
55	Red 6	0–255	
56	Red 6 Fine	0–255	Fine adjustment of CH 55
57	Green 6	0–255	
58	Green 6 Fine	0–255	Fine adjustment of CH 57
59	Blue 6	0–255	
60	Blue 6 Fine	0–255	Fine adjustment of CH 59
61	White 6	0–255	
62	White 6 Fine	0–255	Fine adjustment of CH 61
63	Shutter 1		Same as CH 32 in the mode “Standard” (p. 14)
64	Shutter 2		Same as CH 13 in the mode “Simple” (p. 11)
65	Colors		Same as CH 34 in the mode “Standard” (p. 15)
66	Intensity Macro	0–255	
67	Macro Select	0–255	
68	Macro Speed	0–255	
69	Control		Same as CH 18 in the mode “Simple” (p. 12)

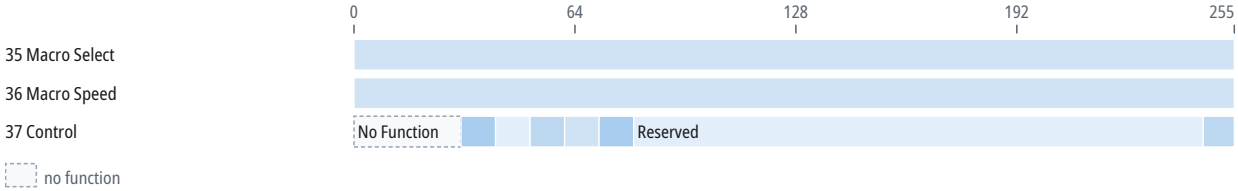
Mode Pixel

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 6 Dimmer 2 above 0; CH 11 Dimmer 3 above 0; CH 16 Dimmer 4 above 0; CH 21 Dimmer 5 above 0; CH 26 Dimmer 6 above 0; CH 31 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 32 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 34 Intensity Macro above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 100, CH 5 White 1 100, CH 6 Dimmer 2 100, CH 10 White 2 100, CH 11 Dimmer 3 100, CH 15 White 3 100, CH 16 Dimmer 4 100, CH 20 White 4 100, CH 21 Dimmer 5 100, CH 25 White 5 100, CH 26 Dimmer 6 100, CH 30 White 6 100.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1	0–255	
2	Red 1	0–255	
3	Green 1	0–255	
4	Blue 1	0–255	
5	White 1	0–255	
6	Dimmer 2	0–255	
7	Red 2	0–255	
8	Green 2	0–255	
9	Blue 2	0–255	
10	White 2	0–255	
11	Dimmer 3	0–255	
12	Red 3	0–255	
13	Green 3	0–255	
14	Blue 3	0–255	
15	White 3	0–255	
16	Dimmer 4	0–255	
17	Red 4	0–255	
18	Green 4	0–255	
19	Blue 4	0–255	
20	White 4	0–255	
21	Dimmer 5	0–255	
22	Red 5	0–255	
23	Green 5	0–255	
24	Blue 5	0–255	
25	White 5	0–255	
26	Dimmer 6	0–255	
27	Red 6	0–255	
28	Green 6	0–255	
29	Blue 6	0–255	
30	White 6	0–255	
31	Shutter 1		Same as CH 32 in the mode “Standard” (p. 14)
32	Shutter 2		Same as CH 13 in the mode “Simple” (p. 11)
33	Colors		Same as CH 34 in the mode “Standard” (p. 15)
34	Intensity Macro	0–255	

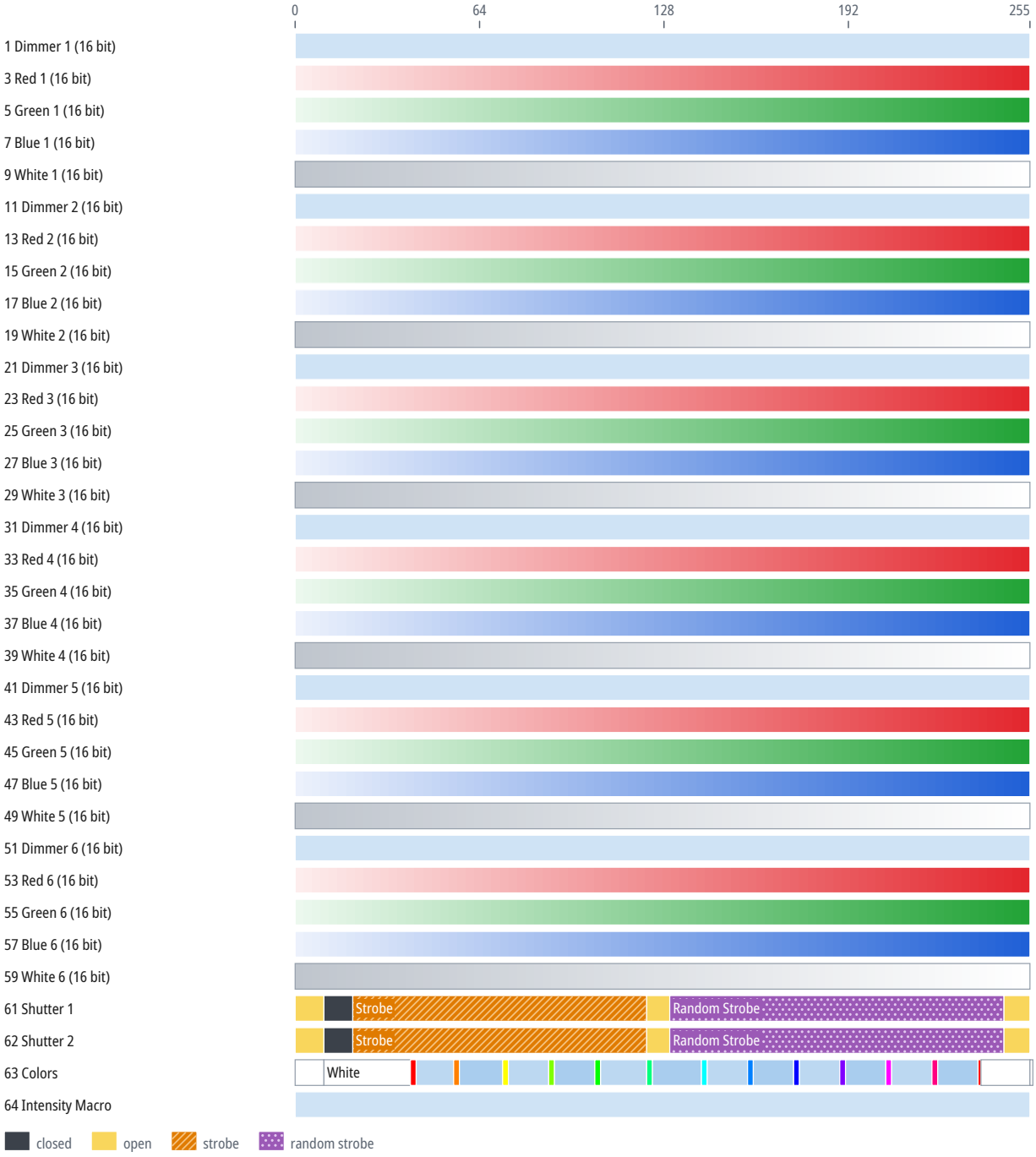
CH	Function	DMX	Description
35	Macro Select	0–255	
36	Macro Speed	0–255	
37	Control		Same as CH 18 in the mode “Simple” (p. 12)

Mode Pixel Fine

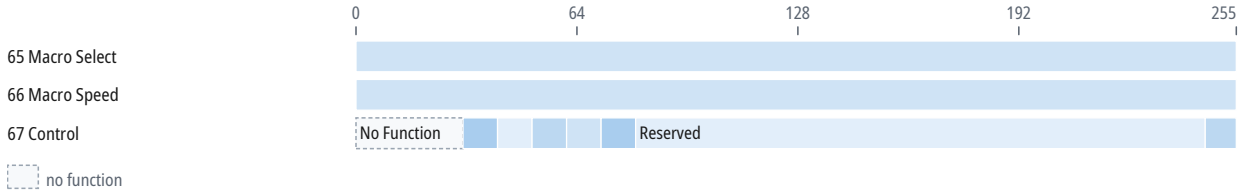
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 11 Dimmer 2 above 0; CH 21 Dimmer 3 above 0; CH 31 Dimmer 4 above 0; CH 41 Dimmer 5 above 0; CH 51 Dimmer 6 above 0; CH 61 Shutter 1 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 62 Shutter 2 at 0–9 “Shutter Open” or 122–129 or 246–255; CH 64 Intensity Macro above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 100, CH 9 White 1 100, CH 11 Dimmer 2 100, CH 19 White 2 100, CH 21 Dimmer 3 100, CH 29 White 3 100, CH 31 Dimmer 4 100, CH 39 White 4 100, CH 41 Dimmer 5 100, CH 49 White 5 100, CH 51 Dimmer 6 100, CH 59 White 6 100.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1	0–255	
2	Dimmer 1 Fine	0–255	Fine adjustment of CH 1
3	Red 1	0–255	
4	Red 1 Fine	0–255	Fine adjustment of CH 3
5	Green 1	0–255	
6	Green 1 Fine	0–255	Fine adjustment of CH 5
7	Blue 1	0–255	
8	Blue 1 Fine	0–255	Fine adjustment of CH 7
9	White 1	0–255	
10	White 1 Fine	0–255	Fine adjustment of CH 9
11	Dimmer 2	0–255	
12	Dimmer 2 Fine	0–255	Fine adjustment of CH 11
13	Red 2	0–255	
14	Red 2 Fine	0–255	Fine adjustment of CH 13
15	Green 2	0–255	
16	Green 2 Fine	0–255	Fine adjustment of CH 15
17	Blue 2	0–255	
18	Blue 2 Fine	0–255	Fine adjustment of CH 17
19	White 2	0–255	
20	White 2 Fine	0–255	Fine adjustment of CH 19
21	Dimmer 3	0–255	
22	Dimmer 3 Fine	0–255	Fine adjustment of CH 21
23	Red 3	0–255	
24	Red 3 Fine	0–255	Fine adjustment of CH 23
25	Green 3	0–255	
26	Green 3 Fine	0–255	Fine adjustment of CH 25
27	Blue 3	0–255	
28	Blue 3 Fine	0–255	Fine adjustment of CH 27
29	White 3	0–255	
30	White 3 Fine	0–255	Fine adjustment of CH 29
31	Dimmer 4	0–255	
32	Dimmer 4 Fine	0–255	Fine adjustment of CH 31
33	Red 4	0–255	
34	Red 4 Fine	0–255	Fine adjustment of CH 33
35	Green 4	0–255	

CH	Function	DMX	Description
36	Green 4 Fine	0–255	Fine adjustment of CH 35
37	Blue 4	0–255	
38	Blue 4 Fine	0–255	Fine adjustment of CH 37
39	White 4	0–255	
40	White 4 Fine	0–255	Fine adjustment of CH 39
41	Dimmer 5	0–255	
42	Dimmer 5 Fine	0–255	Fine adjustment of CH 41
43	Red 5	0–255	
44	Red 5 Fine	0–255	Fine adjustment of CH 43
45	Green 5	0–255	
46	Green 5 Fine	0–255	Fine adjustment of CH 45
47	Blue 5	0–255	
48	Blue 5 Fine	0–255	Fine adjustment of CH 47
49	White 5	0–255	
50	White 5 Fine	0–255	Fine adjustment of CH 49
51	Dimmer 6	0–255	
52	Dimmer 6 Fine	0–255	Fine adjustment of CH 51
53	Red 6	0–255	
54	Red 6 Fine	0–255	Fine adjustment of CH 53
55	Green 6	0–255	
56	Green 6 Fine	0–255	Fine adjustment of CH 55
57	Blue 6	0–255	
58	Blue 6 Fine	0–255	Fine adjustment of CH 57
59	White 6	0–255	
60	White 6 Fine	0–255	Fine adjustment of CH 59
61	Shutter 1		Same as CH 32 in the mode “Standard” (p. 14)
62	Shutter 2		Same as CH 13 in the mode “Simple” (p. 11)
63	Colors		Same as CH 34 in the mode “Standard” (p. 15)
64	Intensity Macro	0–255	
65	Macro Select	0–255	
66	Macro Speed	0–255	
67	Control		Same as CH 18 in the mode “Simple” (p. 12)

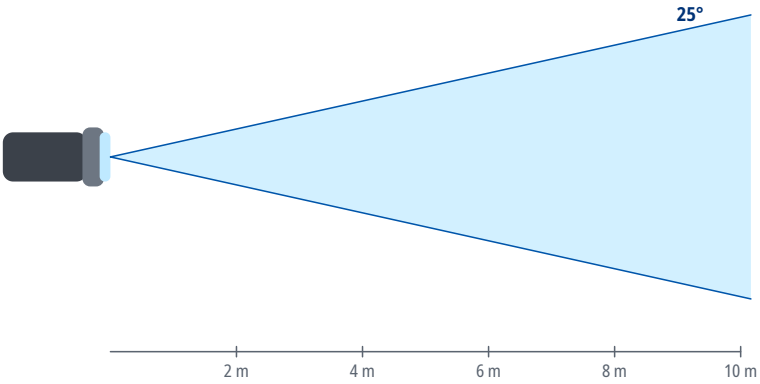
9 Technical specifications

Parameter	Value
Operating temperature	0 to 40 °C

Dimensions



Spot diameter



Distance	Ø 25°
2 m	0.89 m
4 m	1.8 m
6 m	2.7 m
8 m	3.5 m
10 m	4.4 m
15 m	6.7 m

Spot diameter square to the beam axis, calculated from the beam angle.

10 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.

11 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.

12 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.