DMX REFERENCE

RB 90 wW RGB

BeamZ



Manufacturer	BeamZ
GDTF file	BeamZ_RB_90_wW_RGB_141346.gdtf
GDTF revision	rev100 RELEASE · 2026-05-04
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1 About this manual

This document describes the RB90 wWRGB by BeamZ. It was compiled from the GDTF file BeamZ_RB_90_wW_RGB_141346.gdtf from the GDTF-Share library.

File revision: “rev100 RELEASE”.

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 BeamZ; 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
Weight	1.6 kg
Ingress protection	IP20

DMX modes

Mode	Channels	Units in one universe	First start addresses
34 Ch Pixel Control Basic	34	15	1, 35, 69, 103, ...
34 Ch Pixel Control Standard	34	15	1, 35, 69, 103, ...
34 Ch Pixel Control + Virtual Dimmer	34	15	1, 35, 69, 103, ...
16 Ch Pixel Control Standard	16	32	1, 17, 33, 49, ...

No light? Check these channels

- 34 Ch Pixel Control Basic: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”
- 34 Ch Pixel Control Standard: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”
- 34 Ch Pixel Control + Virtual Dimmer: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”
- 16 Ch Pixel Control Standard: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”



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.
- Ingress protection rating: IP20.
- 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 Product description

Description in the GDTF file

“Retro Blinder / Pixel Effect :: IP20 / 3 x 30 W 2200 K / 6 x 12 x 0.5 W RGB / single pixel control”

5 Installation

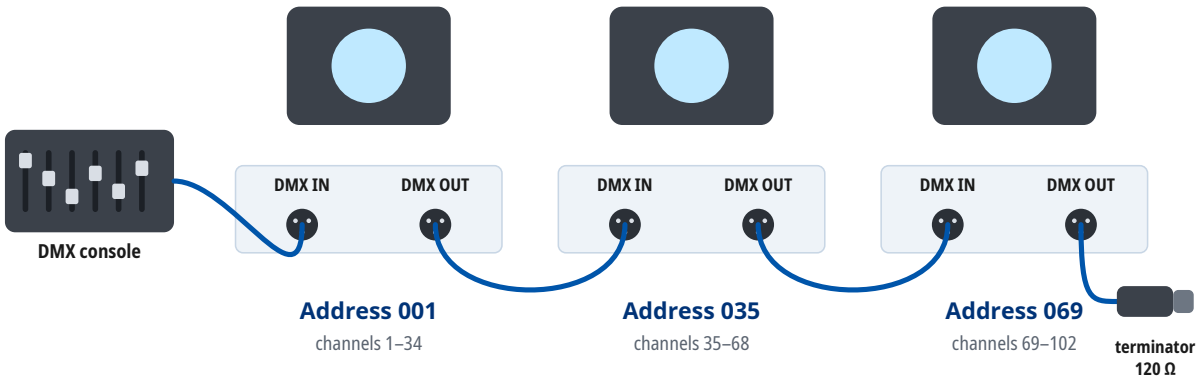
⚠ WARNING

- 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: 1.65 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 34 Ch Pixel Control Basic: every unit occupies 34 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

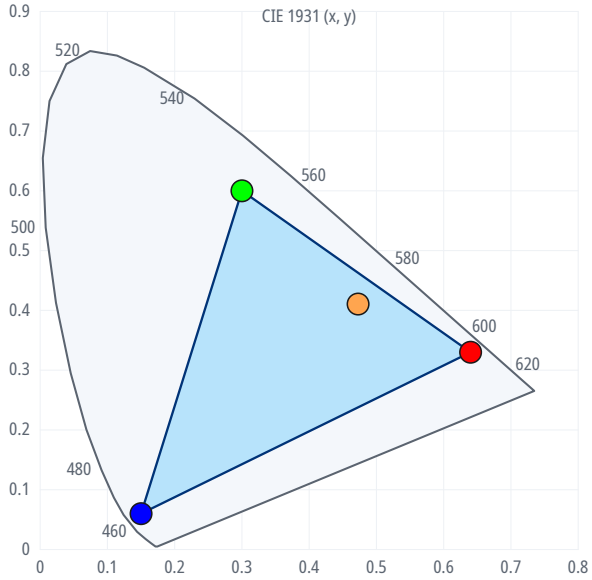
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “34 Ch Pixel Control Basic”: 34.
- Choose start addresses so that the channels of individual devices do not overlap and 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 “34 Ch Pixel Control Basic”, you can use, for example, the start addresses 1, 35, 69, 103.
- 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

	34 Ch Pixel Control Basic 34 channels	34 Ch Pixel Control Standard 34 channels	34 Ch Pixel Control + Virtual Dimmer 34 channels	16 Ch Pixel Control Standard 16 channels
Dimmer	1, 3–5	1, 3–5	1, 3–5	1, 3–5
Shutter / strobe	2, 8	2, 8	2, 8	2, 8
Color mixing	9–26, 28–33	9–26, 28–33	9–26, 28–33	10–15
Effects / macros	6, 7, 27, 34	6, 7, 27, 34	6, 7, 27, 34	6, 7, 9, 16
Pixel control	✓	✓	✓	✓

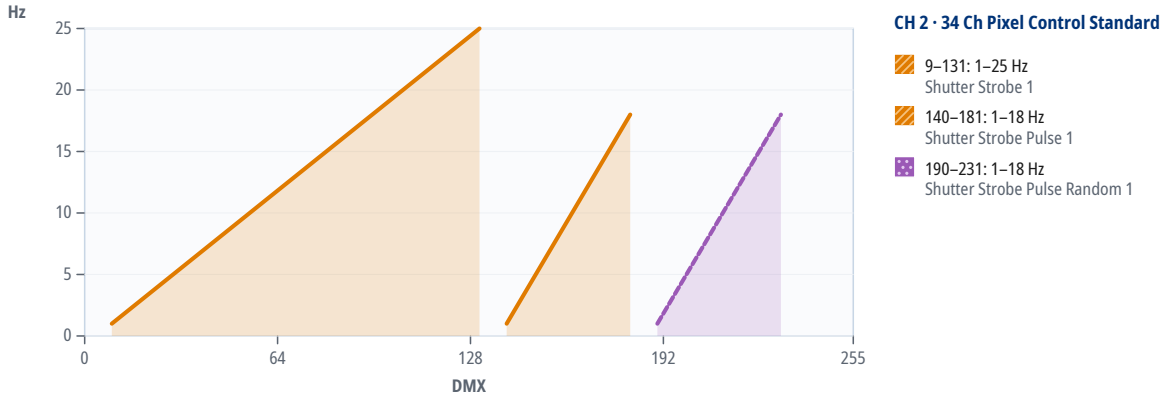
LED colors and the colors they mix



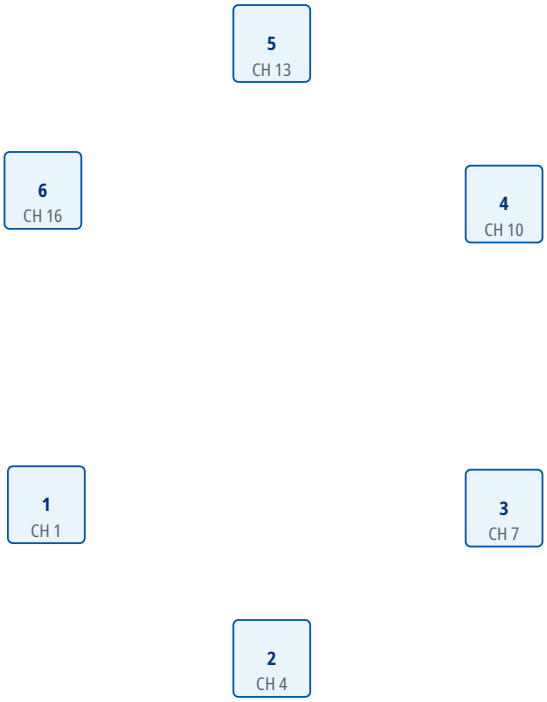
LED	x	y
cW_01 1	0.473	0.411
RGB_01 Red 1	0.640	0.330
RGB_02 Green 1	0.300	0.600
RGB_01 Blue 1	0.150	0.060

The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Strobe rate



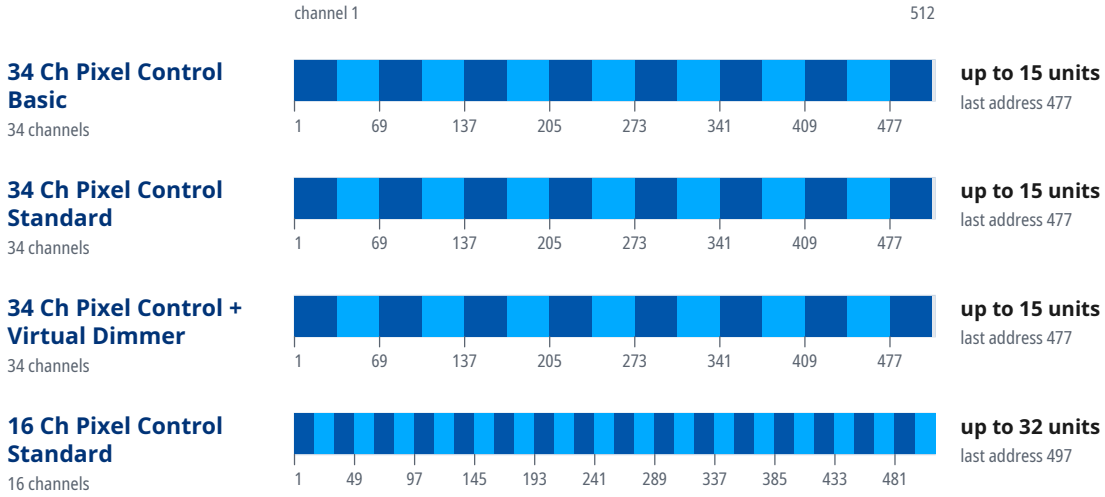
Cells (pixels)



6 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “34 Ch Pixel Control Standard”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “34 Ch Pixel Control Basic”

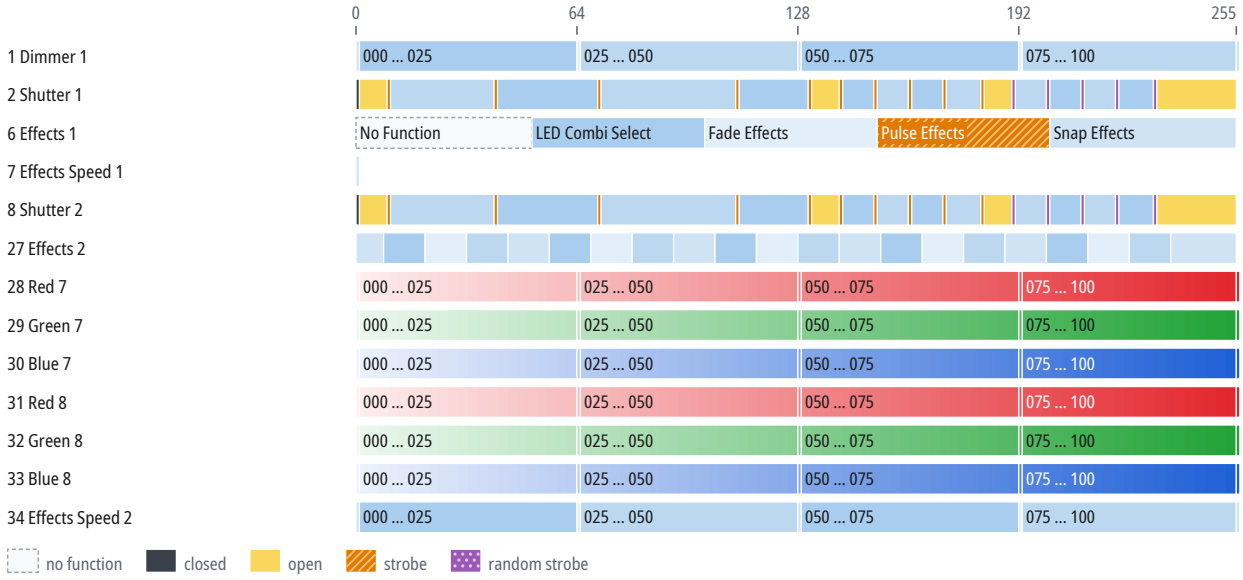
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	171	11	341	16	U2 · 1
2	35	7	205	12	375	17	U2 · 35
3	69	8	239	13	409	18	U2 · 69
4	103	9	273	14	443	19	U2 · 103
5	137	10	307	15	477	20	U2 · 137

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 34 Ch Pixel Control Basic

If the device receives DMX in this mode but gives no light, check these channels: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 255, CH 2 Shutter 1 8, CH 3 Dimmer 2 255, CH 4 Dimmer 3 255, CH 5 Dimmer 4 255, CH 8 Shutter 2 8, CH 9 Red 1 255, CH 10 Green 1 255, CH 11 Blue 1 255, CH 12 Red 2 255, CH 13 Green 2 255, CH 14 Blue 2 255, CH 15 Red 3 255, CH 16 Green 3 255, CH 17 Blue 3 255, CH 18 Red 4 255, CH 19 Green 4 255, CH 20 Blue 4 255, CH 21 Red 5 255, CH 22 Green 5 255, CH 23 Blue 5 255, CH 24 Red 6 255, CH 25 Green 6 255, CH 26 Blue 6 255, CH 28 Red 7 255, CH 29 Green 7 255, CH 30 Blue 7 255, CH 31 Red 8 255, CH 32 Green 8 255, CH 33 Blue 8 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
2	Shutter 1	0	Shutter 1 Open: Closed
		1–8	Shutter 1 Open: Open
		9	Shutter Strobe: 001
		10–39	Shutter Strobe: 001 … 025
		40	Shutter Strobe: 025
		41–69	Shutter Strobe: 025 … 050
		70	Shutter Strobe: 050
		71–109	Shutter Strobe: 050 … 075

CH	Function	DMX	Description
2	Shutter 1 (continued)	110	Shutter Strobe: 075
		111–130	Shutter Strobe: 075 … 100
		131	Shutter Strobe: 100
		132–139	Shutter 1 Open: Open
		140	Shutter Strobe Pulse: 001
		141–149	Shutter Strobe Pulse: 001 … 025
		150	Shutter Strobe Pulse: 025
		151–159	Shutter Strobe Pulse: 025 … 050
		160	Shutter Strobe Pulse: 050
		161–169	Shutter Strobe Pulse: 050 … 075
		170	Shutter Strobe Pulse: 075
		171–180	Shutter Strobe Pulse: 075 … 100
		181	Shutter Strobe Pulse: 100
		182–189	Shutter 1 Open: Open
		190	Shutter Strobe Pulse Random: 001
		191–199	Shutter Strobe Pulse Random: 001 … 025
		200	Shutter Strobe Pulse Random: 025
		201–209	Shutter Strobe Pulse Random: 025 … 050
		210	Shutter Strobe Pulse Random: 050
		211–219	Shutter Strobe Pulse Random: 050 … 075
		220	Shutter Strobe Pulse Random: 075
		221–230	Shutter Strobe Pulse Random: 075 … 100
		231	Shutter Strobe Pulse Random: 100
		232–255	Shutter 1 Open: Open
3	Dimmer 2	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
4	Dimmer 3	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100

CH	Function	DMX	Description
5	Dimmer 4	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
6	Effects 1	0–50	No Function
		51–100	LED Combi Select
		101–150	Fade Effects
		151–200	Pulse Effects
		201–255	Snap Effects
7	Effects Speed 1		When CH 6 is 0:
		0–255	No Function 1
8	Shutter 2	0	Shutter 1 Open: Closed
		1–8	Shutter 1 Open: Open
		9	Shutter Strobe: 001
		10–39	Shutter Strobe: 001 … 025
		40	Shutter Strobe: 025
		41–69	Shutter Strobe: 025 … 050
		70	Shutter Strobe: 050
		71–109	Shutter Strobe: 050 … 075
		110	Shutter Strobe: 075
		111–130	Shutter Strobe: 075 … 100
		131	Shutter Strobe: 100
		132–139	Shutter 1 Open: Open
		140	Shutter Strobe Pulse: 001
		141–149	Shutter Strobe Pulse: 001 … 025
		150	Shutter Strobe Pulse: 025
		151–159	Shutter Strobe Pulse: 025 … 050
		160	Shutter Strobe Pulse: 050
		161–169	Shutter Strobe Pulse: 050 … 075
		170	Shutter Strobe Pulse: 075
		171–180	Shutter Strobe Pulse: 075 … 100
		181	Shutter Strobe Pulse: 100
		182–189	Shutter 1 Open: Open
		190	Shutter Strobe Pulse Random: 001
		191–199	Shutter Strobe Pulse Random: 001 … 025
		200	Shutter Strobe Pulse Random: 025
		201–209	Shutter Strobe Pulse Random: 025 … 050

CH	Function	DMX	Description
8	Shutter 2 (continued)	210	Shutter Strobe Pulse Random: 050
		211–219	Shutter Strobe Pulse Random: 050 ... 075
		220	Shutter Strobe Pulse Random: 075
		221–230	Shutter Strobe Pulse Random: 075 ... 100
		231	Shutter Strobe Pulse Random: 100
		232–255	Shutter 1 Open: Open
9	Red 1	0	000
		1–63	000 ... 025
		64	025
		65–127	025 ... 050
		128	050
		129–191	050 ... 075
		192	075
		193–254	075 ... 100
		255	100
10	Green 1	0	000
		1–63	000 ... 025
		64	025
		65–127	025 ... 050
		128	050
		129–191	050 ... 075
		192	075
		193–254	075 ... 100
		255	100
11	Blue 1	0	000
		1–63	000 ... 025
		64	025
		65–127	025 ... 050
		128	050
		129–191	050 ... 075
		192	075
		193–254	075 ... 100
		255	100
12	Red 2	0	000
		1–63	000 ... 025
		64	025
		65–127	025 ... 050
		128	050
		129–191	050 ... 075
		192	075
		193–254	075 ... 100
		255	100

CH	Function	DMX	Description
13	Green 2	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
14	Blue 2	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
15	Red 3	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
16	Green 3	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
17	Blue 3	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075

CH	Function	DMX	Description
17	Blue 3 (continued)	192	075
		193–254	075 … 100
		255	100
18	Red 4	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
19	Green 4	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
20	Blue 4	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
21	Red 5	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
22	Green 5	0	000
		1–63	000 … 025
		64	025

CH	Function	DMX	Description
22	Green 5 (continued)	65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
23	Blue 5	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
24	Red 6	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
25	Green 6	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
26	Blue 6	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100

CH	Function	DMX	Description
27	Effects 2	0–7	Wheel Slot 0 Open
		8–19	Wheel Slot 1
		20–31	Wheel Slot 2
		32–43	Wheel Slot 3
		44–55	Wheel Slot 4
		56–67	Wheel Slot 5
		68–79	Wheel Slot 6
		80–91	Wheel Slot 7
		92–103	Wheel Slot 8
		104–115	Wheel Slot 9
		116–127	Wheel Slot 10
		128–139	Wheel Slot 11
		140–151	Wheel Slot 12
		152–163	Wheel Slot 13
		164–175	Wheel Slot 14
		176–187	Wheel Slot 15
		188–199	Wheel Slot 16
		200–211	Wheel Slot 17
		212–223	Wheel Slot 18
		224–235	Wheel Slot 19
		236–255	Wheel Slot 20
28	Red 7	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
29	Green 7	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
30	Blue 7	0	000
		1–63	000 … 025
		64	025

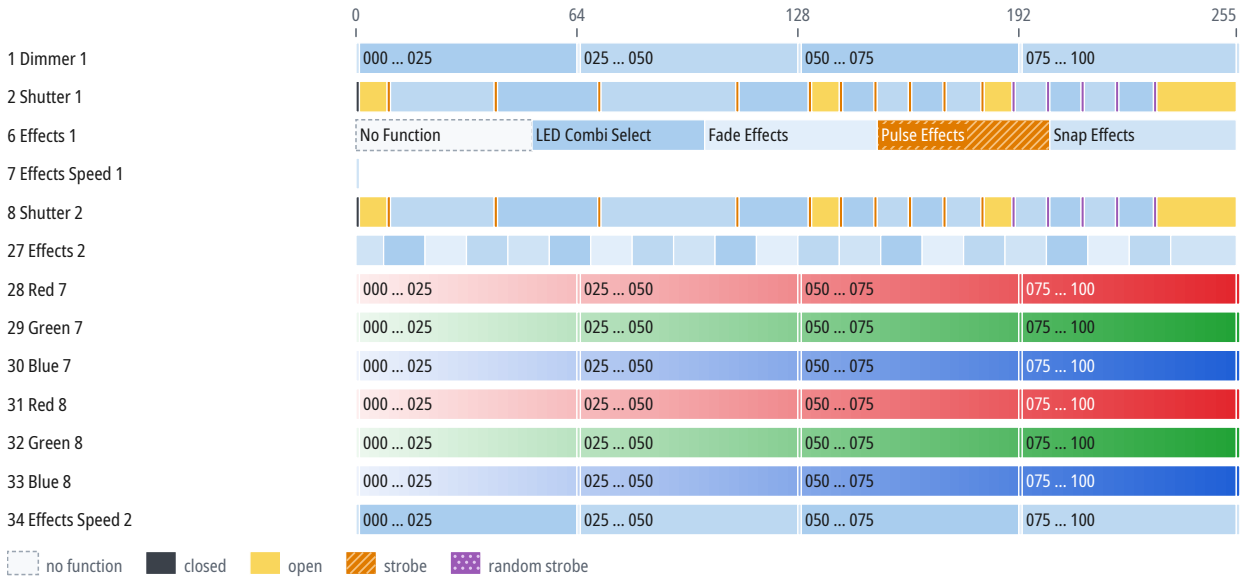
CH	Function	DMX	Description
30	Blue 7 (continued)	65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
31	Red 8	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
32	Green 8	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100
33	Blue 8	0	000
		1–63	000 … 025
		64	025
		65–127	025 … 050
		128	050
		129–191	050 … 075
		192	075
		193–254	075 … 100
		255	100

CH	Function	DMX	Description
34	Effects Speed 2		Effects Rate 1
		0	000
		1–63	000 ... 025
		64	025
		65–127	025 ... 050
		128	050
		129–191	050 ... 075
		192	075
		193–254	075 ... 100
		255	100

Mode 34 Ch Pixel Control Standard

If the device receives DMX in this mode but gives no light, check these channels: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 255, CH 2 Shutter 1 8, CH 3 Dimmer 2 255, CH 4 Dimmer 3 255, CH 5 Dimmer 4 255, CH 8 Shutter 2 8, CH 9 Red 1 255, CH 10 Green 1 255, CH 11 Blue 1 255, CH 12 Red 2 255, CH 13 Green 2 255, CH 14 Blue 2 255, CH 15 Red 3 255, CH 16 Green 3 255, CH 17 Blue 3 255, CH 18 Red 4 255, CH 19 Green 4 255, CH 20 Blue 4 255, CH 21 Red 5 255, CH 22 Green 5 255, CH 23 Blue 5 255, CH 24 Red 6 255, CH 25 Green 6 255, CH 26 Blue 6 255, CH 28 Red 7 255, CH 29 Green 7 255, CH 30 Blue 7 255, CH 31 Red 8 255, CH 32 Green 8 255, CH 33 Blue 8 255.

Channel functions at a glance



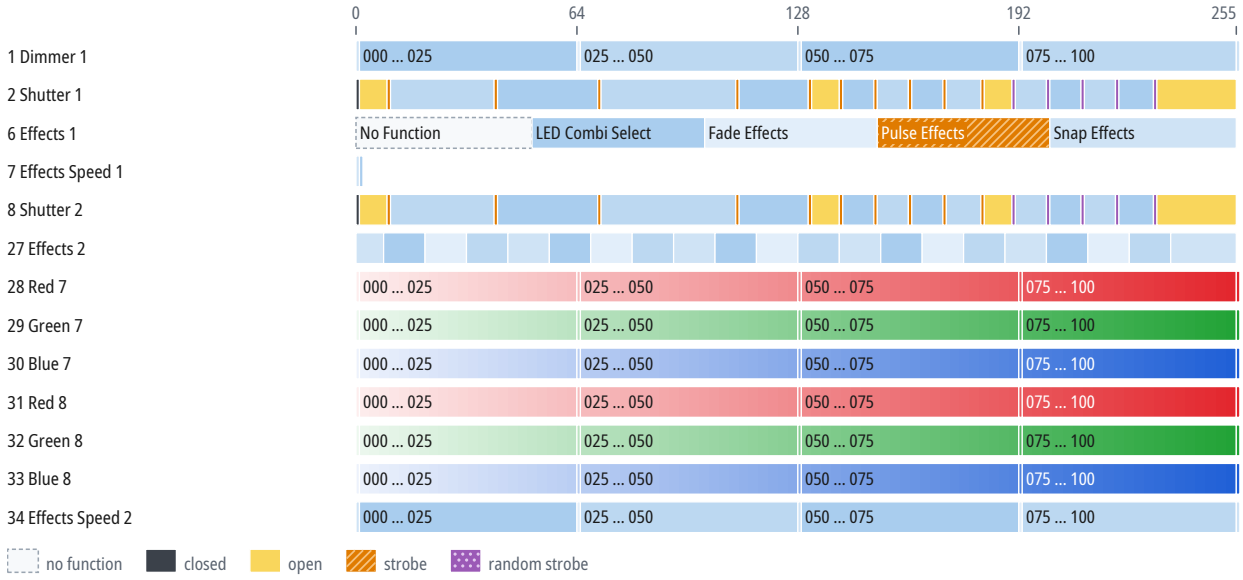
CH	Function	DMX	Description
1	Dimmer 1		Same as CH 1 in the mode “34 Ch Pixel Control Basic” (p. 9)
2	Shutter 1		Same as CH 2 in the mode “34 Ch Pixel Control Basic” (p. 9)
3	Dimmer 2		Same as CH 3 in the mode “34 Ch Pixel Control Basic” (p. 10)
4	Dimmer 3		Same as CH 4 in the mode “34 Ch Pixel Control Basic” (p. 10)

CH	Function	DMX	Description
5	Dimmer 4		Same as CH 5 in the mode “34 Ch Pixel Control Basic” (p. 11)
6	Effects 1		Same as CH 6 in the mode “34 Ch Pixel Control Basic” (p. 11)
7	Effects Speed 1		Same as CH 7 in the mode “34 Ch Pixel Control Basic” (p. 11)
8	Shutter 2		Same as CH 8 in the mode “34 Ch Pixel Control Basic” (p. 11)
9	Red 1		Same as CH 9 in the mode “34 Ch Pixel Control Basic” (p. 12)
10	Green 1		Same as CH 10 in the mode “34 Ch Pixel Control Basic” (p. 12)
11	Blue 1		Same as CH 11 in the mode “34 Ch Pixel Control Basic” (p. 12)
12	Red 2		Same as CH 12 in the mode “34 Ch Pixel Control Basic” (p. 12)
13	Green 2		Same as CH 13 in the mode “34 Ch Pixel Control Basic” (p. 13)
14	Blue 2		Same as CH 14 in the mode “34 Ch Pixel Control Basic” (p. 13)
15	Red 3		Same as CH 15 in the mode “34 Ch Pixel Control Basic” (p. 13)
16	Green 3		Same as CH 16 in the mode “34 Ch Pixel Control Basic” (p. 13)
17	Blue 3		Same as CH 17 in the mode “34 Ch Pixel Control Basic” (p. 13)
18	Red 4		Same as CH 18 in the mode “34 Ch Pixel Control Basic” (p. 14)
19	Green 4		Same as CH 19 in the mode “34 Ch Pixel Control Basic” (p. 14)
20	Blue 4		Same as CH 20 in the mode “34 Ch Pixel Control Basic” (p. 14)
21	Red 5		Same as CH 21 in the mode “34 Ch Pixel Control Basic” (p. 14)
22	Green 5		Same as CH 22 in the mode “34 Ch Pixel Control Basic” (p. 14)
23	Blue 5		Same as CH 23 in the mode “34 Ch Pixel Control Basic” (p. 15)
24	Red 6		Same as CH 24 in the mode “34 Ch Pixel Control Basic” (p. 15)
25	Green 6		Same as CH 25 in the mode “34 Ch Pixel Control Basic” (p. 15)
26	Blue 6		Same as CH 26 in the mode “34 Ch Pixel Control Basic” (p. 15)
27	Effects 2		Same as CH 27 in the mode “34 Ch Pixel Control Basic” (p. 16)
28	Red 7		Same as CH 28 in the mode “34 Ch Pixel Control Basic” (p. 16)
29	Green 7		Same as CH 29 in the mode “34 Ch Pixel Control Basic” (p. 16)
30	Blue 7		Same as CH 30 in the mode “34 Ch Pixel Control Basic” (p. 16)
31	Red 8		Same as CH 31 in the mode “34 Ch Pixel Control Basic” (p. 17)
32	Green 8		Same as CH 32 in the mode “34 Ch Pixel Control Basic” (p. 17)
33	Blue 8		Same as CH 33 in the mode “34 Ch Pixel Control Basic” (p. 17)
34	Effects Speed 2		Same as CH 34 in the mode “34 Ch Pixel Control Basic” (p. 18)

Mode 34 Ch Pixel Control + Virtual Dimmer

If the device receives DMX in this mode but gives no light, check these channels: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 255, CH 2 Shutter 1 8, CH 3 Dimmer 2 255, CH 4 Dimmer 3 255, CH 5 Dimmer 4 255, CH 8 Shutter 2 8, CH 9 Red 1 255, CH 10 Green 1 255, CH 11 Blue 1 255, CH 12 Red 2 255, CH 13 Green 2 255, CH 14 Blue 2 255, CH 15 Red 3 255, CH 16 Green 3 255, CH 17 Blue 3 255, CH 18 Red 4 255, CH 19 Green 4 255, CH 20 Blue 4 255, CH 21 Red 5 255, CH 22 Green 5 255, CH 23 Blue 5 255, CH 24 Red 6 255, CH 25 Green 6 255, CH 26 Blue 6 255, CH 28 Red 7 255, CH 29 Green 7 255, CH 30 Blue 7 255, CH 31 Red 8 255, CH 32 Green 8 255, CH 33 Blue 8 255.

Channel functions at a glance



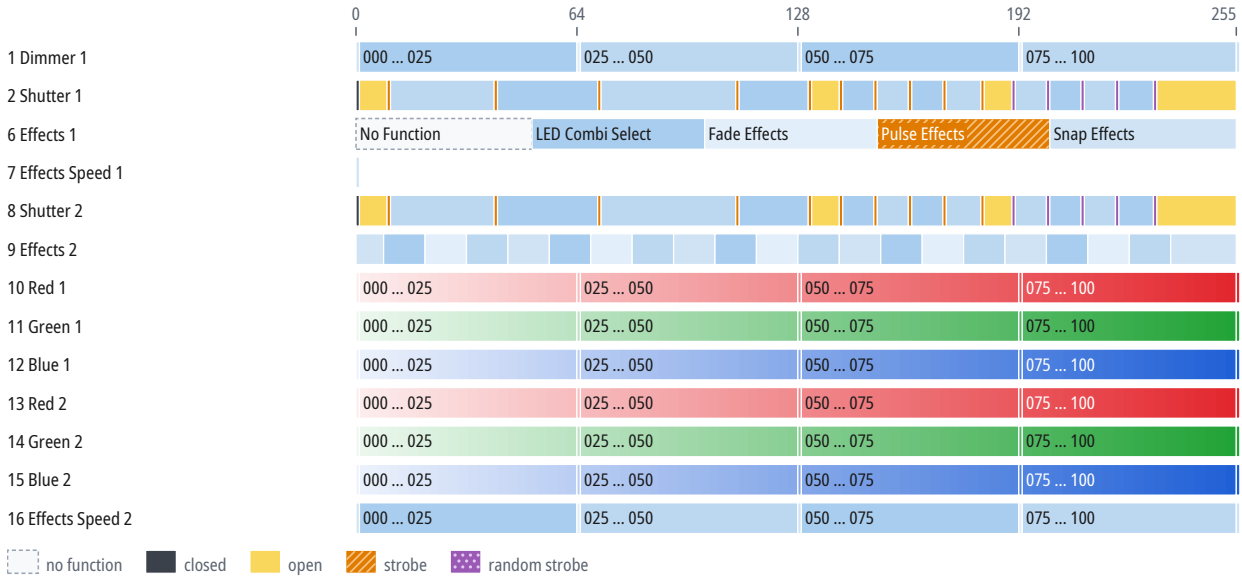
CH	Function	DMX	Description
1	Dimmer 1		Same as CH 1 in the mode “34 Ch Pixel Control Basic” (p. 9)
2	Shutter 1		Same as CH 2 in the mode “34 Ch Pixel Control Basic” (p. 9)
3	Dimmer 2		Same as CH 3 in the mode “34 Ch Pixel Control Basic” (p. 10)
4	Dimmer 3		Same as CH 4 in the mode “34 Ch Pixel Control Basic” (p. 10)
5	Dimmer 4		Same as CH 5 in the mode “34 Ch Pixel Control Basic” (p. 11)
6	Effects 1		Same as CH 6 in the mode “34 Ch Pixel Control Basic” (p. 11)
7	Effects Speed 1		When CH 6 is 0–50:
		0	No Function 1
		1–255	Effects Rate 1
8	Shutter 2		Same as CH 8 in the mode “34 Ch Pixel Control Basic” (p. 11)
9	Red 1		Same as CH 9 in the mode “34 Ch Pixel Control Basic” (p. 12)
10	Green 1		Same as CH 10 in the mode “34 Ch Pixel Control Basic” (p. 12)
11	Blue 1		Same as CH 11 in the mode “34 Ch Pixel Control Basic” (p. 12)
12	Red 2		Same as CH 12 in the mode “34 Ch Pixel Control Basic” (p. 12)
13	Green 2		Same as CH 13 in the mode “34 Ch Pixel Control Basic” (p. 13)
14	Blue 2		Same as CH 14 in the mode “34 Ch Pixel Control Basic” (p. 13)
15	Red 3		Same as CH 15 in the mode “34 Ch Pixel Control Basic” (p. 13)

CH	Function	DMX	Description
16	Green 3		Same as CH 16 in the mode “34 Ch Pixel Control Basic” (p. 13)
17	Blue 3		Same as CH 17 in the mode “34 Ch Pixel Control Basic” (p. 13)
18	Red 4		Same as CH 18 in the mode “34 Ch Pixel Control Basic” (p. 14)
19	Green 4		Same as CH 19 in the mode “34 Ch Pixel Control Basic” (p. 14)
20	Blue 4		Same as CH 20 in the mode “34 Ch Pixel Control Basic” (p. 14)
21	Red 5		Same as CH 21 in the mode “34 Ch Pixel Control Basic” (p. 14)
22	Green 5		Same as CH 22 in the mode “34 Ch Pixel Control Basic” (p. 14)
23	Blue 5		Same as CH 23 in the mode “34 Ch Pixel Control Basic” (p. 15)
24	Red 6		Same as CH 24 in the mode “34 Ch Pixel Control Basic” (p. 15)
25	Green 6		Same as CH 25 in the mode “34 Ch Pixel Control Basic” (p. 15)
26	Blue 6		Same as CH 26 in the mode “34 Ch Pixel Control Basic” (p. 15)
27	Effects 2		Same as CH 27 in the mode “34 Ch Pixel Control Basic” (p. 16)
28	Red 7		Same as CH 28 in the mode “34 Ch Pixel Control Basic” (p. 16)
29	Green 7		Same as CH 29 in the mode “34 Ch Pixel Control Basic” (p. 16)
30	Blue 7		Same as CH 30 in the mode “34 Ch Pixel Control Basic” (p. 16)
31	Red 8		Same as CH 31 in the mode “34 Ch Pixel Control Basic” (p. 17)
32	Green 8		Same as CH 32 in the mode “34 Ch Pixel Control Basic” (p. 17)
33	Blue 8		Same as CH 33 in the mode “34 Ch Pixel Control Basic” (p. 17)
34	Effects Speed 2		Same as CH 34 in the mode “34 Ch Pixel Control Basic” (p. 18)

Mode 16 Ch Pixel Control Standard

If the device receives DMX in this mode but gives no light, check these channels: CH 2 Shutter 1 at 1–8, 132–139, 182–189 or 232–255 “Open”; CH 8 Shutter 2 at 1–8, 132–139, 182–189 or 232–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 255, CH 2 Shutter 1 8, CH 3 Dimmer 2 255, CH 4 Dimmer 3 255, CH 5 Dimmer 4 255, CH 8 Shutter 2 8, CH 10 Red 1 255, CH 11 Green 1 255, CH 12 Blue 1 255, CH 13 Red 2 255, CH 14 Green 2 255, CH 15 Blue 2 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1		Same as CH 1 in the mode “34 Ch Pixel Control Basic” (p. 9)
2	Shutter 1		Same as CH 2 in the mode “34 Ch Pixel Control Basic” (p. 9)
3	Dimmer 2		Same as CH 3 in the mode “34 Ch Pixel Control Basic” (p. 10)
4	Dimmer 3		Same as CH 4 in the mode “34 Ch Pixel Control Basic” (p. 10)
5	Dimmer 4		Same as CH 5 in the mode “34 Ch Pixel Control Basic” (p. 11)
6	Effects 1		Same as CH 6 in the mode “34 Ch Pixel Control Basic” (p. 11)
7	Effects Speed 1		When CH 6 is 0–50:
		0–255	No Function 1
8	Shutter 2		Same as CH 8 in the mode “34 Ch Pixel Control Basic” (p. 11)
9	Effects 2		Same as CH 27 in the mode “34 Ch Pixel Control Basic” (p. 16)
10	Red 1		Same as CH 9 in the mode “34 Ch Pixel Control Basic” (p. 12)
11	Green 1		Same as CH 10 in the mode “34 Ch Pixel Control Basic” (p. 12)
12	Blue 1		Same as CH 11 in the mode “34 Ch Pixel Control Basic” (p. 12)
13	Red 2		Same as CH 12 in the mode “34 Ch Pixel Control Basic” (p. 12)
14	Green 2		Same as CH 13 in the mode “34 Ch Pixel Control Basic” (p. 13)
15	Blue 2		Same as CH 14 in the mode “34 Ch Pixel Control Basic” (p. 13)
16	Effects Speed 2		Same as CH 34 in the mode “34 Ch Pixel Control Basic” (p. 18)

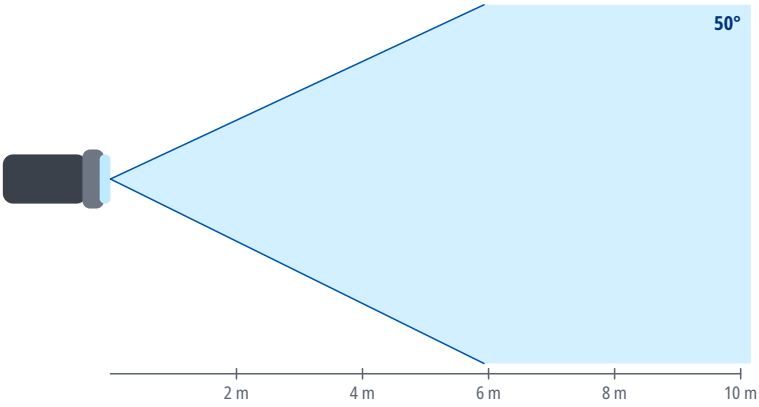
10 Technical specifications

Parameter	Value
Light source	LED
Weight	1.6 kg
Ingress protection	IP20
Meaning of the IP code (IEC 60529)	Protected against contact with a finger and solid objects of 12.5 mm diameter and larger; no protection against water
Operating temperature	-5 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	1–25 Hz

Spot diameter



Distance	Ø 50°
2 m	1.9 m
4 m	3.7 m
6 m	5.6 m
8 m	7.5 m
10 m	9.3 m
15 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.

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.