DMX REFERENCE

Versapix RS

Ayrton



Manufacturer	Ayrton
GDTF file	Ayrton_Versapix_RS_133741.gdtf
GDTF revision	V2.41 New_SVG · 2026-03-17
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1 About this manual

This document describes the Versapix RS by Ayrton. It was compiled from the GDTF file Ayrton_Versapix_RS_133741.gdtf from the GDTF-Share library.

File revision: “V2.41 New_SVG”.

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 Ayrton; 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	8.8 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Extended	29	17	1, 30, 59, 88, ...
Standard	13	39	1, 14, 27, 40, ...
Basic	6	85	1, 7, 13, 19, ...

No light? Check these channels

- Extended: CH 1 Shutter at 32–63; CH 2 Dimmer above 0; CH 5 color Dimmer above 0
- Standard: CH 5 Shutter at 32–63; CH 6 Dimmer above 0; CH 9 color Dimmer above 0
- Basic: CH 5 Shutter at 32–63; CH 6 Dimmer 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

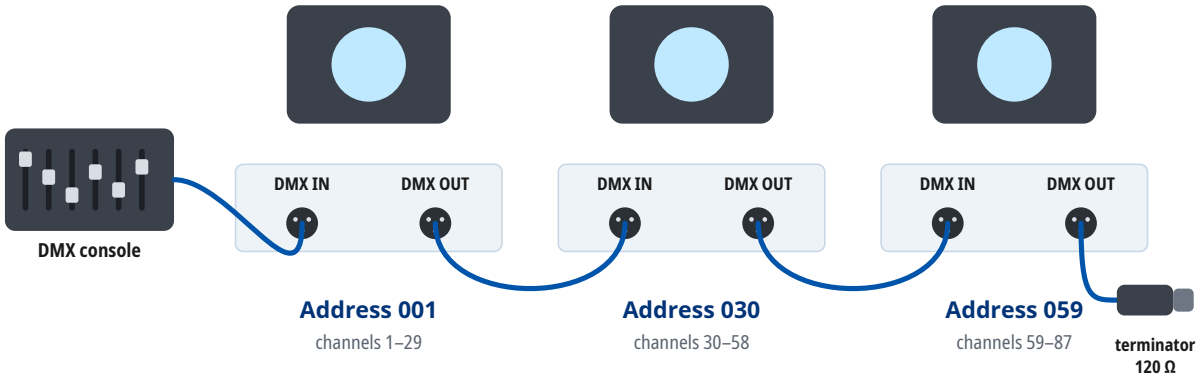
⚠ **WARNING**

- 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.
- Weight of the device: 8.8 kg.
- Use suitable mounting hardware (for example truss clamps) and tighten all screw connections properly.
- Always secure the suspended device against falling with a safety cable of adequate load capacity, routed through a fixed point of the device and around the supporting structure.
- During installation and removal, keep people out of the area below the work position.
- Regularly inspect the fixings and the safety cable for damage, corrosion and loosening.

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 Extended: every unit occupies 29 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 “Extended”: 29.
- 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 “Extended”, you can use, for example, the start addresses 1, 30, 59, 88.
- 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.

7 Functions at a glance

Functions in each DMX mode

	Extended 29 channels	Standard 13 channels	Basic 6 channels
Dimmer	2	6	6
Shutter / strobe	1	5	5
Color mixing	10–29	1–4	1–4
Color wheel	4	8	
Effects / macros	3	7	

Color wheel

1 No Fonction **DMX 0–4**

2 White2700k **DMX 5**

3 White3200k **DMX 10**

4 White4200k **DMX 15**

5 White5600k **DMX 20**

6 White6500k **DMX 25**

7 White8000k **DMX 30**

8 Yellow **DMX 35**

9 Magenta **DMX 40**

10 Cyan **DMX 45**

11 Salmon **DMX 50**

12 Turquoise **DMX 55**

13 Light Green **DMX 60**

14 Steel Blue **DMX 65**

15 Orange **DMX 70**

16 Straw **DMX 75**

17 Pale Lavander **DMX 80**

18 Pink **DMX 85**

19 Red **DMX 90**

20 Green **DMX 95**

21 Blue **DMX 100**

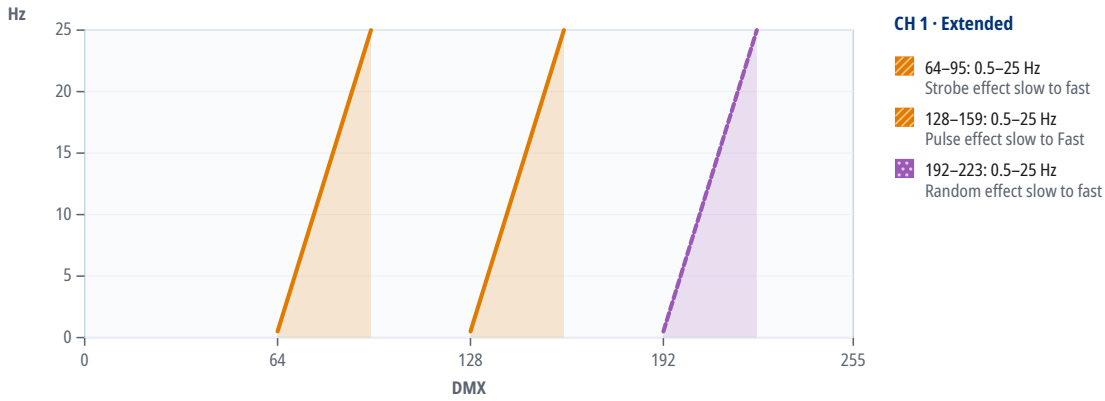
22 White **DMX 105**

23 Rainbow1 **DMX 110**

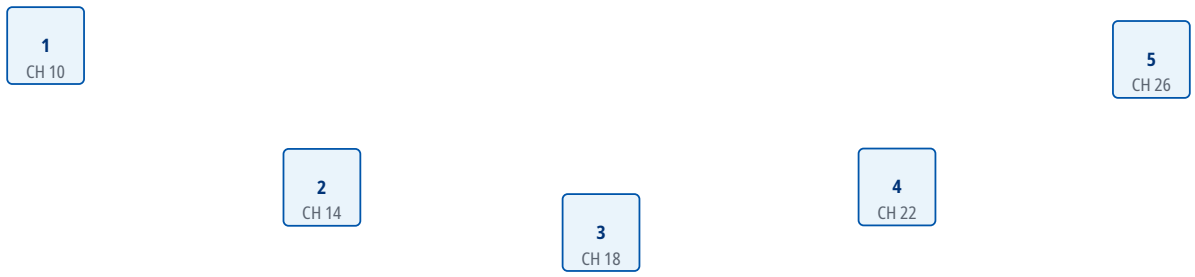
24 Rainbow 2 **DMX 115**

25 Rainbow 3 **DMX 120**

Strobe rate



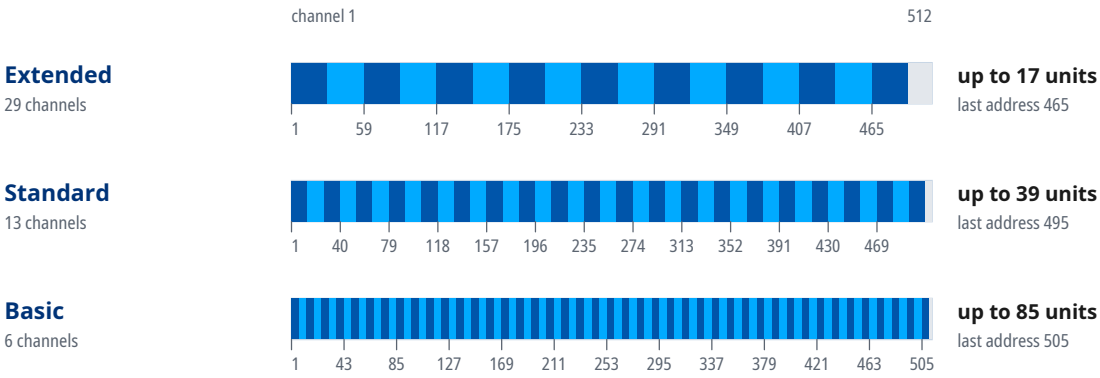
Cells (pixels)



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

8 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extended”

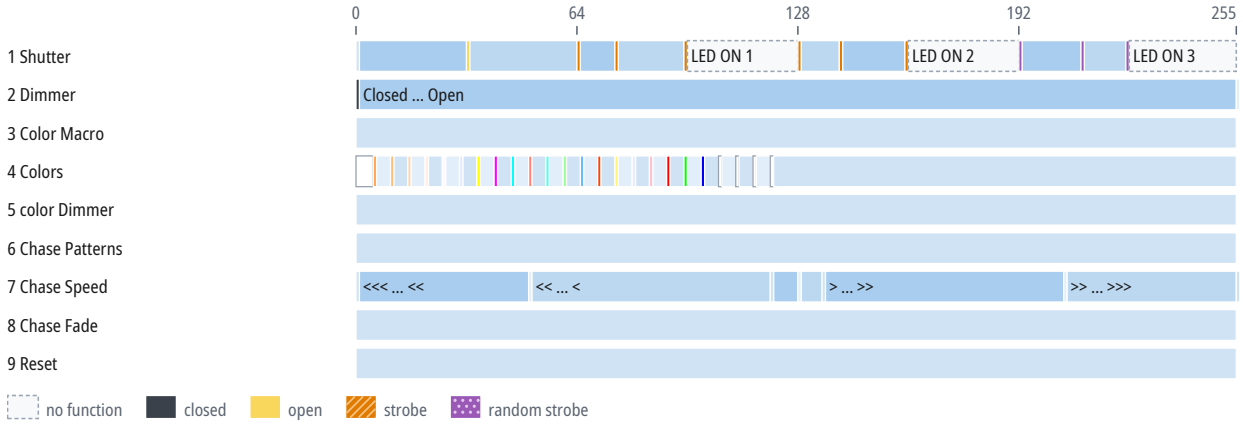
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	146	11	291	16	436
2	30	7	175	12	320	17	465
3	59	8	204	13	349	18	U2 · 1
4	88	9	233	14	378	19	U2 · 30
5	117	10	262	15	407	20	U2 · 59

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

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Shutter at 32–63; CH 2 Dimmer above 0; CH 5 color Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Shutter 32, CH 2 Dimmer 255, CH 4 Colors 0, CH 5 color Dimmer 0, CH 10 Red 1 255, CH 11 Green 1 255, CH 12 Blue 1 255, CH 13 White 1 255, CH 14 Red 2 255, CH 15 Green 2 255, CH 16 Blue 2 255, CH 17 White 2 255, CH 18 Red 3 255, CH 19 Green 3 255, CH 20 Blue 3 255, CH 21 White 3 255, CH 22 Red 4 255, CH 23 Green 4 255, CH 24 Blue 4 255, CH 25 White 4 255, CH 26 Red 5 255, CH 27 Green 5 255, CH 28 Blue 5 255, CH 29 White 5 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Shutter	0–31	LED OFF
		32–63	LED ON
		64	Strobe effect slow to fast: Min
		65–74	Strobe effect slow to fast: Min ... Mid
		75	Strobe effect slow to fast: Mid
		76–94	Strobe effect slow to fast: Mid ... Max
		95	Strobe effect slow to fast: Max
		96–127	LED ON 1
		128	Pulse effect slow to Fast: Min
		129–139	Pulse effect slow to Fast: Min ... Mid
		140	Pulse effect slow to Fast: Mid
		141–158	Pulse effect slow to Fast: Mid ... Max
		159	Pulse effect slow to Fast: Max
		160–191	LED ON 2
		192	Random effect slow to fast: Min
		193–209	Random effect slow to fast: Min ... Mid
		210	Random effect slow to fast: Mid
		211–222	Random effect slow to fast: Mid ... Max
		223	Random effect slow to fast: Max
		224–255	LED ON 3
2	Dimmer	0	Closed
		1–254	Closed ... Open

CH	Function	DMX	Description
2	Dimmer (continued)	255	Open
3	Color Macro	0–255	
4	Colors	0–4	No Fonction
		5	White2700k
		6–9	White2700k ... White3200k
		10	White3200k
		11–14	White3200k ... White4200k
		15	White4200k
		16–19	White4200k ... White5600k
		20	White5600k
		21–24	White5600k ... White6500k
		25	White6500k
		26–29	White6500k ... White8000k
		30	White8000k
		31–34	White8000k ... Yellow
		35	Yellow
		36–39	Yellow ... Magenta
		40	Magenta
		41–44	Magenta ... Cyan
		45	Cyan
		46–49	Cyan ... Salmon
		50	Salmon
		51–54	Salmon ... Turquoise
		55	Turquoise
		56–59	Turquoise ... Light Green
		60	Light Green
		61–64	Light Green ... Steel Blue
		65	Steel Blue
		66–69	Steel Blue ... Orange
		70	Orange
		71–74	Orange ... Straw
		75	Straw
		76–79	Straw ... Pale Lavander
		80	Pale Lavander
		81–84	Pale Lavander ... Pink
		85	Pink
		86–89	Pink ... Red
		90	Red
		91–94	Red ... Green
		95	Green
		96–99	Green ... Blue
		100	Blue

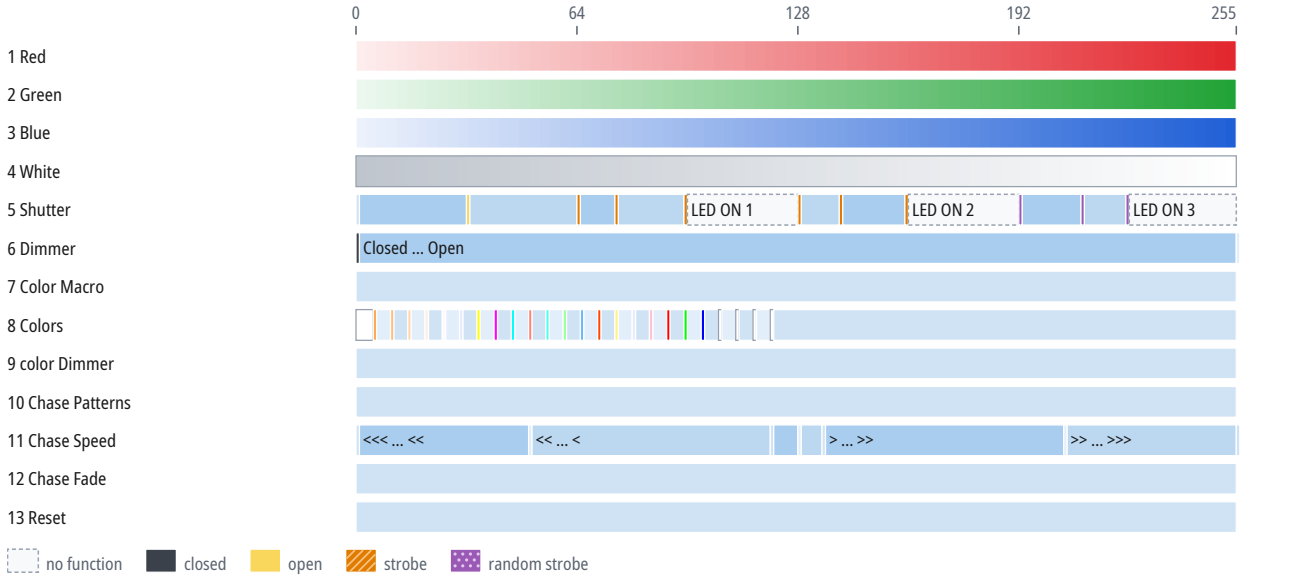
CH	Function	DMX	Description
4	Colors (continued)	101–104	Blue ... White
		105	White
		106–109	White ... Rainbow1
		110	Rainbow1
		111–114	Rainbow1 ... Rainbow 2
		115	Rainbow 2
		116–119	Rainbow 2 ... Rainbow 3
		120	Rainbow 3
		121–255	Color 1 1
5	color Dimmer	0–255	
6	Chase Patterns	0–255	
7	Chase Speed		Backward Fast to Slow
		0	<<<
		1–49	<<< ... <<
		50	<<
		51–119	<< ... <
		120	<
		121–127	< ... Stop(=0)
		128	Stop(=0)
		129–134	Stop(=0) ... >
		135	>
		136–204	> ... >>
		205	>>
		206–254	>> ... >>>
		255	>>>
8	Chase Fade	0–255	
9	Reset	0–255	
10	Red 1	0–255	
11	Green 1	0–255	
12	Blue 1	0–255	
13	White 1	0–255	
14	Red 2	0–255	
15	Green 2	0–255	
16	Blue 2	0–255	
17	White 2	0–255	
18	Red 3	0–255	
19	Green 3	0–255	
20	Blue 3	0–255	
21	White 3	0–255	
22	Red 4	0–255	
23	Green 4	0–255	
24	Blue 4	0–255	

CH	Function	DMX	Description
25	White 4	0–255	
26	Red 5	0–255	
27	Green 5	0–255	
28	Blue 5	0–255	
29	White 5	0–255	

Mode Standard

If the device receives DMX in this mode but gives no light, check these channels: CH 5 Shutter at 32–63; CH 6 Dimmer above 0; CH 9 color Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 2 Green 255, CH 3 Blue 255, CH 4 White 255, CH 5 Shutter 32, CH 6 Dimmer 255, CH 8 Colors 0, CH 9 color Dimmer 0.

Channel functions at a glance

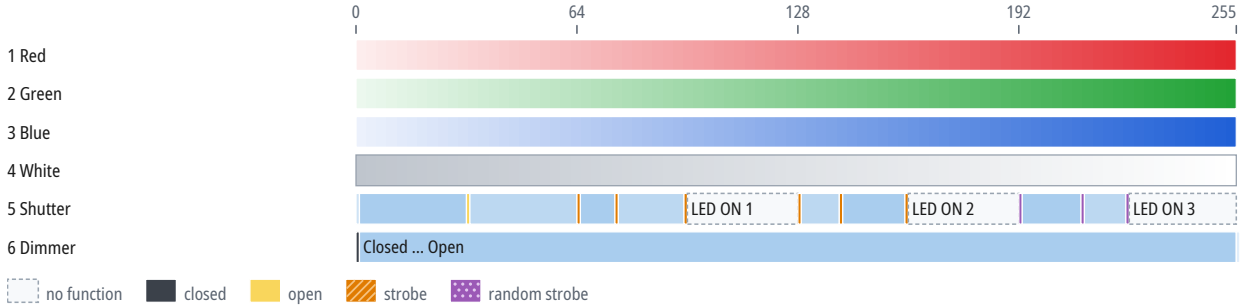


CH	Function	DMX	Description
1	Red	0–255	
2	Green	0–255	
3	Blue	0–255	
4	White	0–255	
5	Shutter		Same as CH 1 in the mode “Extended” (p. 9)
6	Dimmer		Same as CH 2 in the mode “Extended” (p. 9)
7	Color Macro	0–255	
8	Colors		Same as CH 4 in the mode “Extended” (p. 10)
9	color Dimmer	0–255	
10	Chase Patterns	0–255	
11	Chase Speed		Same as CH 7 in the mode “Extended” (p. 11)
12	Chase Fade	0–255	
13	Reset	0–255	

Mode Basic

If the device receives DMX in this mode but gives no light, check these channels: CH 5 Shutter at 32–63; CH 6 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 2 Green 255, CH 3 Blue 255, CH 4 White 255, CH 5 Shutter 32, CH 6 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Red	0–255	
2	Green	0–255	
3	Blue	0–255	
4	White	0–255	
5	Shutter		Same as CH 1 in the mode “Extended” (p. 9)
6	Dimmer		Same as CH 2 in the mode “Extended” (p. 9)

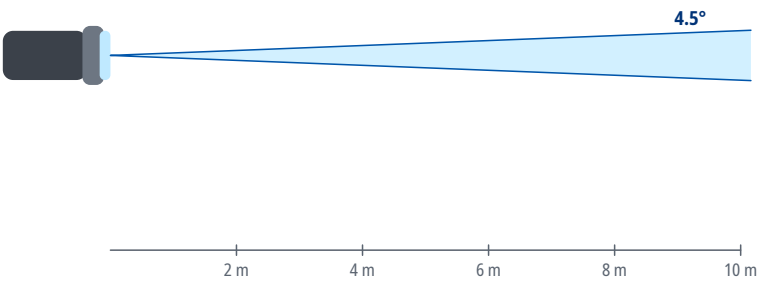
9 Technical specifications

Parameter	Value
Light source	LED
RDM	yes (manufacturer ID 0x4179, device model ID 0x0A68)
Weight	8.8 kg
Operating temperature	-10 to 45 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0.5–25 Hz

Spot diameter



Distance	Ø 4.5°
2 m	0.16 m
4 m	0.31 m
6 m	0.47 m
8 m	0.63 m
10 m	0.79 m
15 m	1.2 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.