DMX REFERENCE

EclFresnelFWXSVW

Prolights



Manufacturer	Prolights
GDTF file	Prolights_EclFresnelFWXSVW_169848.gdtf
GDTF revision	Rev 006 - Custom attributes alignment · 2026-11-18
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1 About this manual

This document describes the EclFresnelFWXSVW by Prolights. It was compiled from the GDTF file Prolights_EclFresnelFWXSVW_169848.gdtf from the GDTF-Share library.

File revision: “Rev 006 - Custom attributes alignment”.

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 Prolights; 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	130 W
Weight	3.8 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
UNO_1ch	1	512	1, 2, 3, 4, ...
DUO_2ch	2	256	1, 3, 5, 7, ...
Basic_6ch	6	85	1, 7, 13, 19, ...
Standard_6ch	6	85	1, 7, 13, 19, ...
Extended_9ch	9	56	1, 10, 19, 28, ...
Advanced_14ch	14	36	1, 15, 29, 43, ...

No light? Check these channels

- UNO_1ch: CH 1 Dimmer above 0
- DUO_2ch: CH 1 Dimmer above 0
- Basic_6ch: CH 1 Dimmer above 0; CH 5 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- Standard_6ch: CH 1 Dimmer above 0; CH 5 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- Extended_9ch: CH 1 Dimmer above 0; CH 6 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”
- Advanced_14ch: CH 1 Dimmer above 0; CH 11 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”


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.

4 Product description

Description in the GDTF file

“EclFresnel FWXSVW is a compact 120W LED Fresnel, engineered with a VariableWhite light source and a 130mm / 5'' Fresnel lens designed to replace the classic 500W Tungsten Fresnels. 120W VariableWhite LED Fresnel, provides 7,500 lm 10-75° Manual zoom system, 130mm/5'' lens CRI: 95,1 @3.200K; 95,5 @5.600K High quality CCT reproduction”

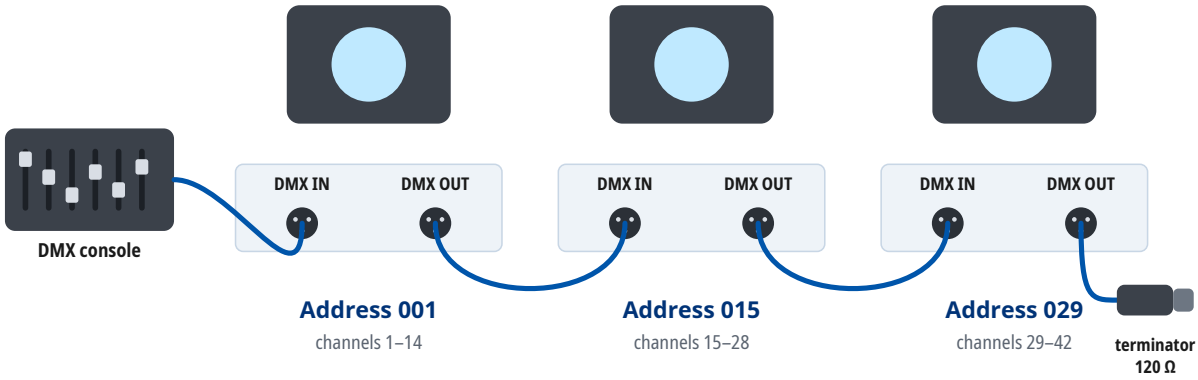
5 Installation

> ⚠ **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: 3.8 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.

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 Advanced_14ch: every unit occupies 14 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

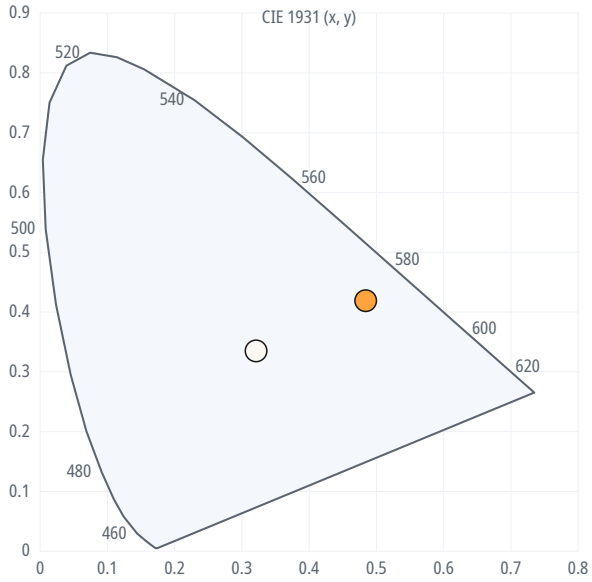
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Advanced_14ch”: 14.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 “Advanced_14ch”, you can use, for example, the start addresses 1, 15, 29, 43.
- 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

	UNO_1ch 1 channel	DUO_2ch 2 channels	Basic_6ch 6 channels	Standard_6ch 6 channels	Extended_9ch 9 channels	Advanced_14ch 14 channels
Dimmer	1	1	1	1	1	1
Dimmer resolution	8 bit	16 bit	16 bit	16 bit	16 bit	16 bit
Shutter / strobe			5	5	6	11
Color mixing			3, 4			6, 8
Color temperature				3	3	3

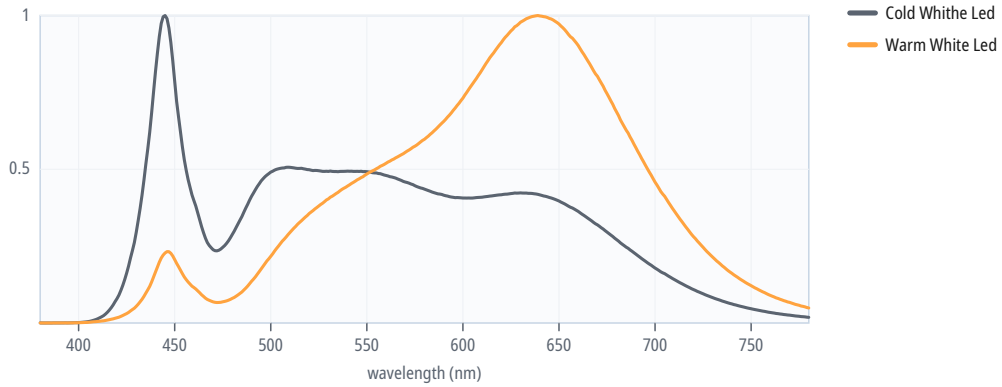
LED colors



LED	x	y
Cold Whithe Led	0.321	0.335
Warm White Led	0.484	0.419

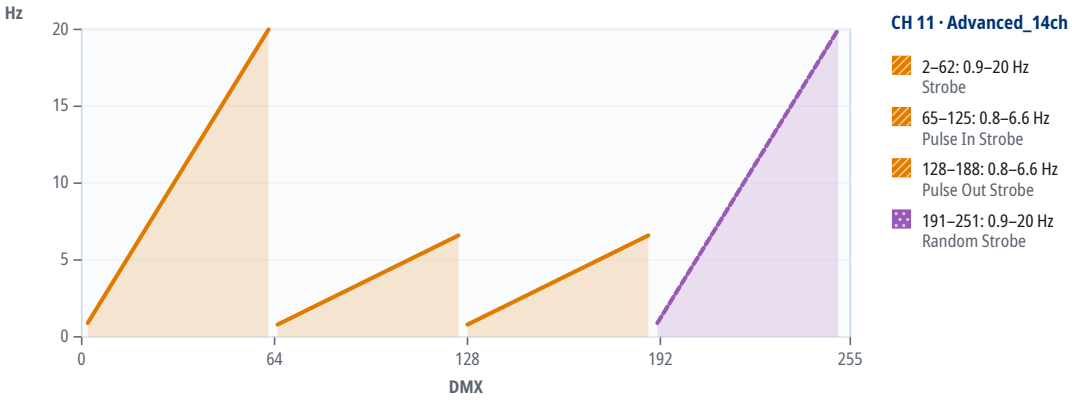
The dots are the LED colors the GDTF file states.

Spectra of the light sources



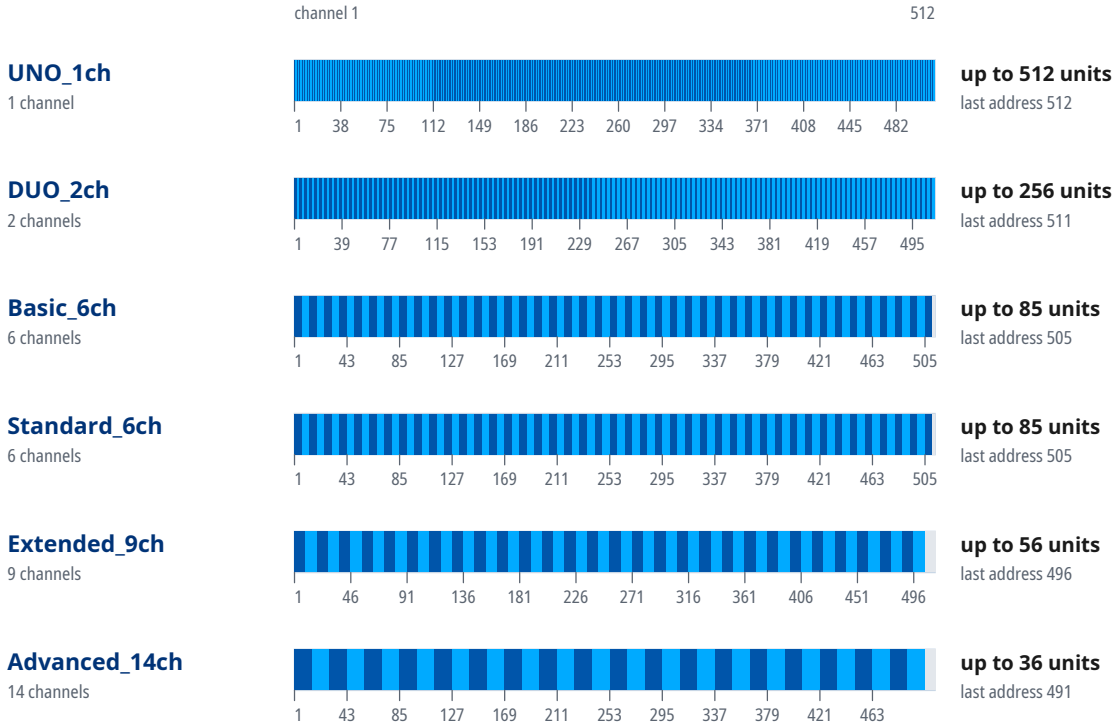
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Advanced_14ch”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	71	11	141	16	211
2	15	7	85	12	155	17	225
3	29	8	99	13	169	18	239
4	43	9	113	14	183	19	253
5	57	10	127	15	197	20	267

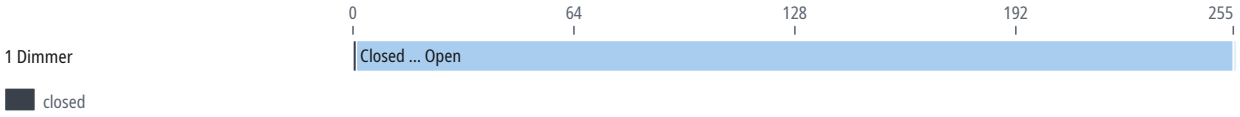
RDM personalities

Mode	Channels	RDM personality
UNO_1ch	1	1
DUO_2ch	2	2
Basic_6ch	6	3
Standard_6ch	6	4
Extended_9ch	9	5
Advanced_14ch	14	6

Mode UNO_1ch

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance



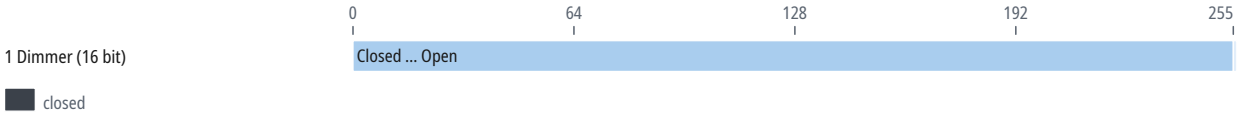
CH	Function	DMX	Description
1	Dimmer	0	Closed
		1–254	Closed ... Open
		255	Open

Mode DUO_2ch

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 above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255.

Channel functions at a glance



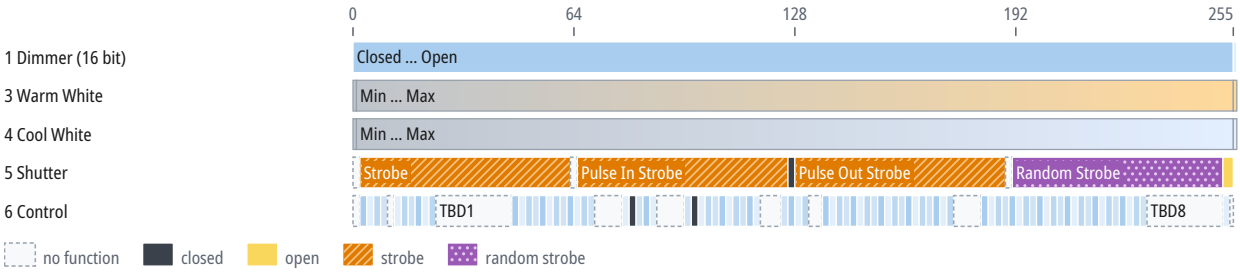
CH	Function	DMX	Description
1	Dimmer	0–255	Closed ... Open
		255	Open
2	Dimmer Fine	0–255	Fine adjustment of CH 1

Mode Basic_6ch

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 above 0; CH 5 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Warm White 255, CH 4 Cool White 255, CH 5 Shutter 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “DUO_2ch” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Warm White	0	Min
		1–254	Min ... Max
		255	Max
4	Cool White	0	Min
		1–254	Min ... Max
		255	Max
5	Shutter	0–1	Open_Nofeature: Open
		2–62	Strobe (0.9–20 Hz)
		63–64	Open_Nofeature: Open
		65–125	Pulse In Strobe (0.8–6.6 Hz)
		126–127	Closed
		128–188	Pulse Out Strobe (0.8–6.6 Hz)
		189–190	Open_Nofeature: Open
		191–251	Random Strobe (0.9–20 Hz)
		252–255	Open
6	Control	0–1	No function
		2–3	Dimmer Speed: Auto
		4–5	Dimmer Speed: Fast
		6–7	Medium
		8–9	Dimmer Speed: Slow
		10–11	Dimmer Speed: Off
		12–13	Linear
		14–15	S-Curve
		16–17	Square Law
		18–19	Inverse Square Law
		20–21	High Res @ Low
		22–23	Tungsten
		24–45	TBD1
		46–47	Fan Mode: Auto
		48–49	Turbo
		50–51	Manual
		52–53	Quiet 1 Dynamic Output
		54–55	Quiet 2 Dynamic Output
		56–57	OFF Dynamic Output
		58–59	Quiet 1 Constant Output
		60–61	Quiet 2 Constant Output
		62–63	Off Constant Output
		64–65	Hold

CH	Function	DMX	Description
6	Control (continued)	66–67	Signal Fault: On Enc Touch - CCT
		68–69	Signal Fault: On Enc Touch - WW/CW
		70–77	TBD2
		78–79	StandAlone
		80–81	Signal Fault: Blackout
		82–83	Signal Fault: Emergency
		84–85	Start Up On Encoder Touch: On Enc Touch - CCT
		86–87	Start Up On Encoder Touch: On Enc Touch - WW/CW
		88–95	TBD3
		96–97	Standalone
		98–99	Start Up Behaviour: Blackout
		100–101	Start Up Behaviour: Emergency
		102–103	1282 Hz
		104–105	2 kHz
		106–107	4 kHz
		108–109	6 kHz
		110–111	10 kHz
		112–113	12 kHz
		114–115	15 kHz
		116–117	20 kHz
		118–123	TBD4
		124–125	Power Limit 100%
		126–127	Power Limit 75%
		128–129	Power Limit 50%
		130–131	Power Limit 25%
		132–135	TBD5
		136–137	Always On
		138–139	Backlight 10s
		140–141	Backlight 30s
		142–143	Backlight 60s
		144–145	Backlight 25%
		146–147	Backlight 50%
		148–149	Backlight 75%
		150–151	Backlight 100%
		152–153	Backlight Enc Off
		154–155	Backlight Enc On
		156–157	Flip Display On
		158–159	Flip Display Off
		160–161	Keylock On
		162–163	Keylock Off
		164–165	Master DMX

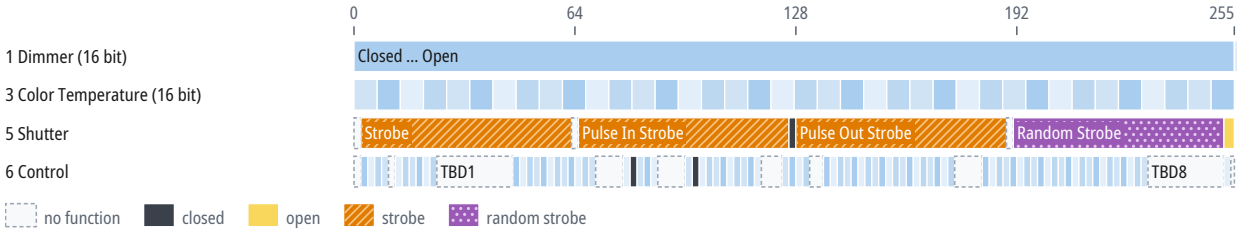
CH	Function	DMX	Description
6	Control (continued)	166–167	Master NO DMX
		168–169	Slave
		170–171	CCT
		172–173	WW/CW
		174–181	TBD7
		182–183	Stand Alone Presets: Preset_1
		184–185	Stand Alone Presets: Preset_2
		186–187	Stand Alone Presets: Preset_3
		188–189	Stand Alone Presets: Preset_4
		190–191	Preset_5
		192–193	Preset_6
		194–195	Preset_7
		196–197	Preset_8
		198–199	Preset_9
		200–201	Preset_10
		202–203	Preset_11
		204–205	Preset_12
		206–207	Preset_13
		208–209	Preset_14
		210–211	Preset_15
		212–213	Preset_16
		214–215	Preset_17
		216–217	Preset_18
		218–219	Preset_19
		220–221	Preset_20
		222–223	Configuration Presets: Preset_1
		224–225	Configuration Presets: Preset_2
		226–227	Configuration Presets: Preset_3
		228–229	Configuration Presets: Preset_4
		230–251	TBD8
		252–253	FactoryDefault of ControlFunction
		254–255	TBD9

Mode Standard_6ch

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 above 0; CH 5 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 5 Shutter 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “DUO_2ch” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature	0–6	2700K-2800K (2700–2800 K)
		6–13	2800K-2900K (2800–2900 K)
		13–20	2900K-3000K (2900–3000 K)
		20–26	3000K-3100K (3000–3100 K)
		26–33	3100K-3200K (3100–3200 K)
		33–40	3200K-3300K (3200–3300 K)
		40–47	3300K-3400K (3300–3400 K)
		47–53	3400K-3500K (3400–3500 K)
		53–60	3500K-3600K (3500–3600 K)
		60–67	3600K-3700K (3600–3700 K)
		67–74	3700K-3800K (3700–3800 K)
		74–80	3800K-3900K (3800–3900 K)
		80–87	3900K-4000K (3900–4000 K)
		87–94	4000K-4100K (4000–4100 K)
		94–101	4100K-4200K (4100–4200 K)
		101–107	4200K-4300K (4200–4300 K)
		107–114	4300K-4400K (4300–4400 K)
		114–121	4400K-4500K (4400–4500 K)
		121–127	4500K-4600K (4500–4600 K)
		128–134	4600K-4700K (4600–4700 K)
		134–141	4700K-4800K (4700–4800 K)
		141–148	4800K-4900K (4800–4900 K)
		148–154	4900K-5000K (4900–5000 K)
		154–161	5000K-5100K (5000–5100 K)
		161–168	5100K-5200K (5100–5200 K)
		168–175	5200K-5300K (5200–5300 K)
		175–181	5300K-5400K (5300–5400 K)

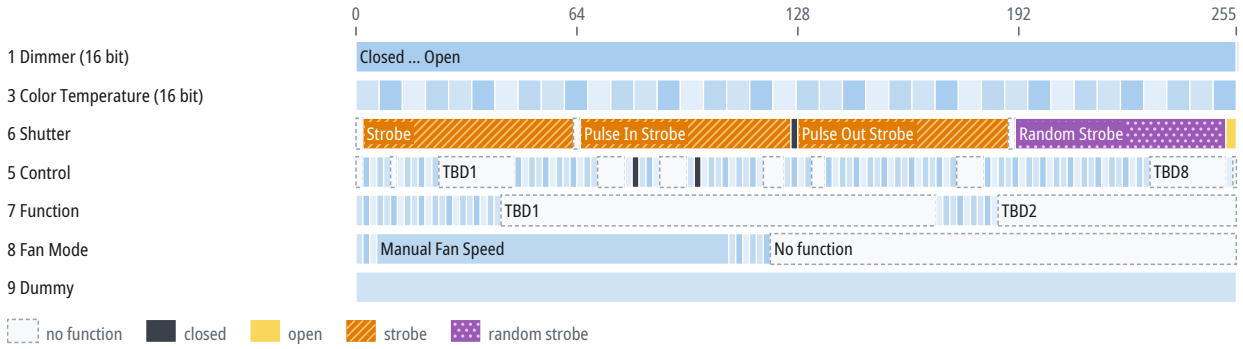
CH	Function	DMX	Description
3	Color Temperature (continued)	181–188	5400K-5500K (5400–5500 K)
		188–195	5500K-5600K (5500–5600 K)
		195–202	5600K-5700K (5600–5700 K)
		202–208	5700K-5800K (5700–5800 K)
		208–215	5800K-5900K (5800–5900 K)
		215–222	5900K-6000K (5900–6000 K)
		222–229	6000K-6100K (6000–6100 K)
		229–235	6100K-6200K (6100–6200 K)
		235–242	6200K-6300K (6200–6300 K)
		242–249	6300K-6400K (6300–6400 K)
		249–255	6400K-6500K (6400–6500 K)
4	Color Temperature Fine	0–255	Fine adjustment of CH 3
5	Shutter		Same as CH 5 in the mode “Basic_6ch” (p. 10)
6	Control		Same as CH 6 in the mode “Basic_6ch” (p. 10)

Mode Extended_9ch

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 above 0; CH 6 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 6 Shutter 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “DUO_2ch” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature		Same as CH 3 in the mode “Standard_6ch” (p. 13)
4	Color Temperature Fine	0–255	Fine adjustment of CH 3
5	Control		Same as CH 6 in the mode “Basic_6ch” (p. 10)
6	Shutter		Same as CH 5 in the mode “Basic_6ch” (p. 10)
7	Function	0–1	Safe
		2–3	Preset 01
		4–5	Preset 02
		6–7	Preset 03

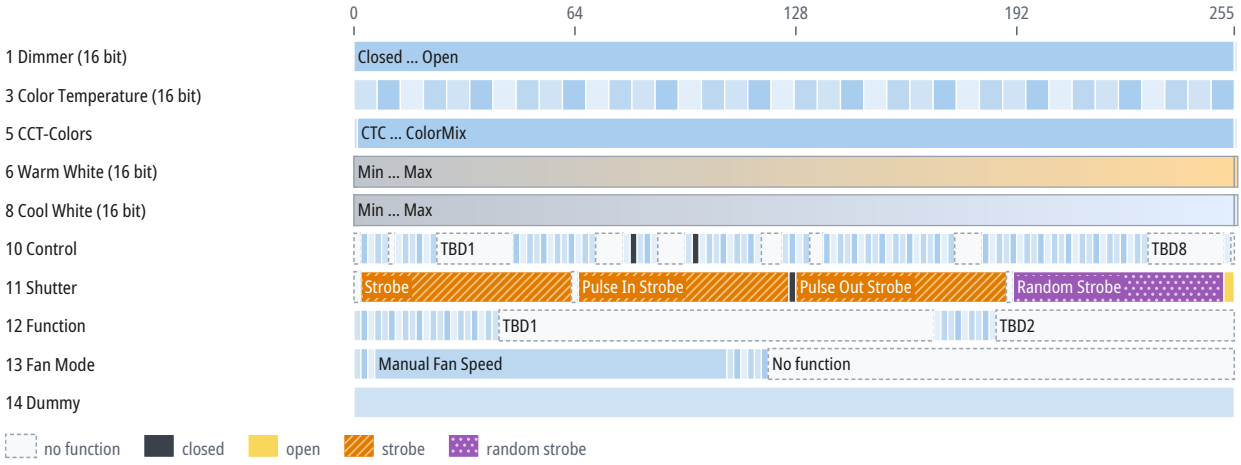
CH	Function	DMX	Description
7	Function (continued)	8–9	Preset 04
		10–11	Preset 05
		12–13	Preset 06
		14–15	Preset 07
		16–17	Preset 08
		18–19	Preset 09
		20–21	Preset 10
		22–23	Preset 11
		24–25	Preset 12
		26–27	Preset 13
		28–29	Preset 14
		30–31	Preset 15
		32–33	Preset 16
		34–35	Preset 17
		36–37	Preset 18
		38–39	Preset 19
		40–41	Preset 20
		42–167	TBD1
		168–169	CCT - 2700K
		170–171	CCT - 3000K
		172–173	CCT - 3200K
		174–175	CCT - 3600K
		176–177	CCT - 4000K
		178–179	CCT - 5000K
		180–181	CCT - 5600K
		182–183	CCT - 6000K
		184–185	CCT - 6500K
		186–255	TBD2
8	Fan Mode	0–1	AsFormMenu
		2–3	Auto
		4–5	Turbo
		6–107	Manual Fan Speed
		108–109	Quiet 1 Dynamic Output
		110–111	Quiet 2 Dynamic Output
		112–113	Off Dynamic Output
		114–115	Quiet 1 Contant Output
		116–117	Quiet 2 Contant Output
		118–119	OFF Contant Output
		120–255	No function
9	Dummy	0–255	

Mode Advanced_14ch

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 above 0; CH 11 Shutter at 0–1, 63–64, 189–190 or 252–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 11 Shutter 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “DUO_2ch” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature		Same as CH 3 in the mode “Standard_6ch” (p. 13)
4	Color Temperature Fine	0–255	Fine adjustment of CH 3
5	CCT-Colors	0	CTC
		1–254	CTC ... ColorMix
		255	ColorMix
6	Warm White	0–255	Min ... Max
		255	Max
7	Warm White Fine	0–255	Fine adjustment of CH 6
8	Cool White	0–255	Min ... Max
		255	Max
9	Cool White Fine	0–255	Fine adjustment of CH 8
10	Control		Same as CH 6 in the mode “Basic_6ch” (p. 10)
11	Shutter		Same as CH 5 in the mode “Basic_6ch” (p. 10)
12	Function		Same as CH 7 in the mode “Extended_9ch” (p. 14)
13	Fan Mode		Same as CH 8 in the mode “Extended_9ch” (p. 15)
14	Dummy	0–255	

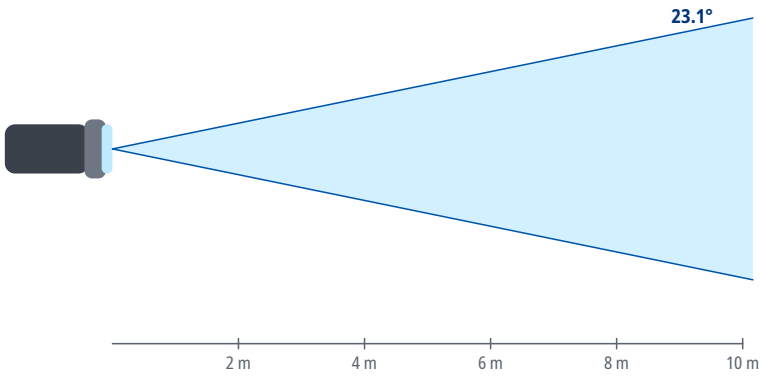
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	120 W
Luminous flux	5,073 lm
Color temperature	4,000 K
Color rendering index (CRI)	95
Optics	
Beam angle	23.1°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN
RDM	yes (manufacturer ID 0x15D0, device model ID 0xA047)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	130 W
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	3.8 kg
Operating environment	
Operating temperature	-10 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–6500 K
Strobe frequency	0.9–20 Hz

Spot diameter



Distance	Ø 23.1°
2 m	0.82 m
4 m	1.6 m
6 m	2.5 m
8 m	3.3 m
10 m	4.1 m
15 m	6.1 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.