DMX REFERENCE

ZENIT W600

ZENIT W600 (CLZW600)

Cameo



Manufacturer	Cameo
GDTF file	Cameo_ZENIT_W600_115891.gdtf
GDTF revision	V2_HVT Edit-added virtual zoom · 2025-10-31
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1 About this manual

This document describes the ZENIT W600 (CLZW600) by Cameo. It was compiled from the GDTF file Cameo_ZENIT_W600_115891.gdtf from the GDTF-Share library.

File revision: “V2_HVT Edit-added virtual zoom”.

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 Cameo; 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	4.6 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
2 CH CCT Factory- Calibrated	2	256	1, 3, 5, 7, ...
3 CH Color Presets	3	170	1, 4, 7, 10, ...
3 CH Factory- Calibrated 8 Bit	3	170	1, 4, 7, 10, ...
4 CH User- Calibrated 8 Bit	4	128	1, 5, 9, 13, ...
6 CH Factory- Calibrated 16 Bit	6	85	1, 7, 13, 19, ...
8 CH User- Calibrated 16 Bit	8	64	1, 9, 17, 25, ...
10 CH Full Area- Access 8 Bit	10	51	1, 11, 21, 31, ...
15 CH Full Area- Access 16 Bit	15	34	1, 16, 31, 46, ...

No light? Check these channels

- 2 CH CCT Factory- Calibrated: CH 1 Dimmer above 0
- 3 CH Color Presets: CH 1 Dimmer above 0; CH 2 Shutter at 0–5 or 251–255 “Open”
- 10 CH Full Area- Access 8 Bit: CH 1 Dimmer above 0; CH 2 Shutter at 0–5 or 251–255 “Open”; CH 9 Dimmer Curve above 5
- 15 CH Full Area- Access 16 Bit: CH 1 Dimmer above 0; CH 3 Shutter at 0–5 or 251–255 “Open”; CH 14 Dimmer Curve above 5



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

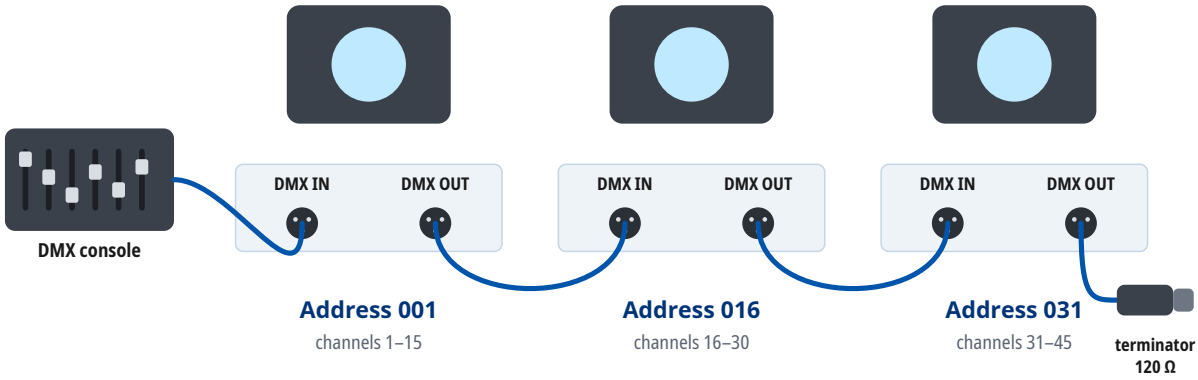
⚠ **WARNING**

- 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: 4.6 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 15 CH Full Area- Access 16 Bit: every unit occupies 15 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

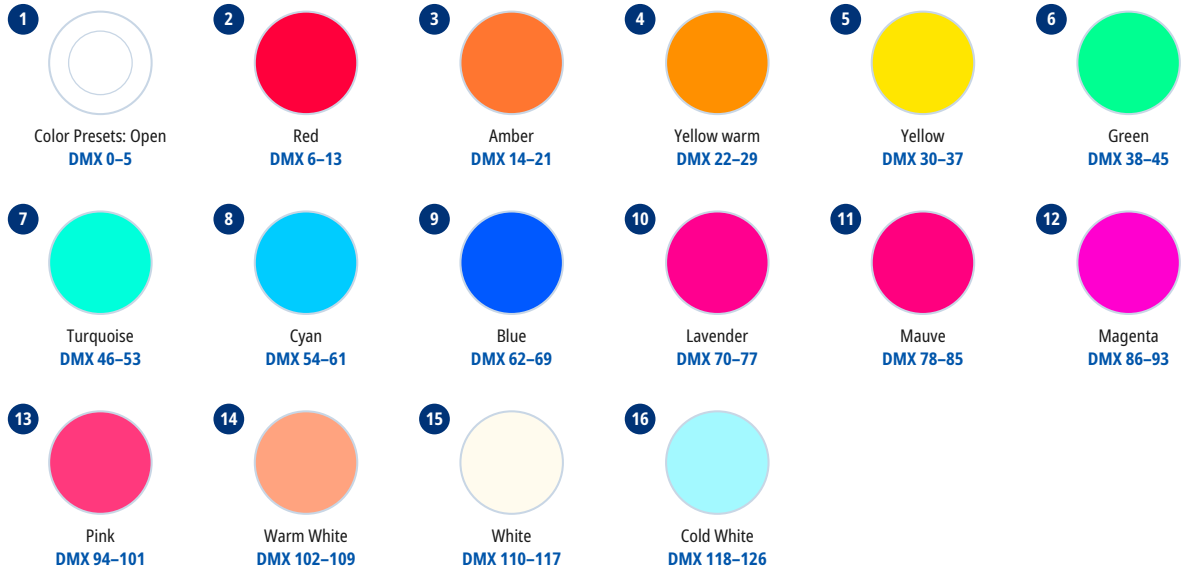
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “15 CH Full Area- Access 16 Bit”: 15.
- Choose start addresses so that the channels of individual devices do not overlap 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 “15 CH Full Area- Access 16 Bit”, you can use, for example, the start addresses 1, 16, 31, 46.
- 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

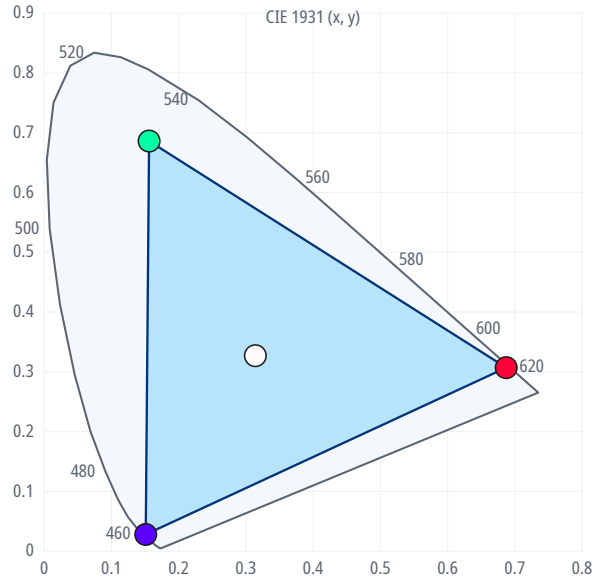
Functions in each DMX mode

	2 CH CCT Factory-Calibrated 2 channels	3 CH Color Presets 3 channels	3 CH Factory-Calibrated 8 Bit 3 channels	4 CH User-Calibrated 8 Bit 4 channels	6 CH Factory-Calibrated 16 Bit 6 channels	8 CH User-Calibrated 16 Bit 8 channels	10 CH Full Area-Access 8 Bit 10 channels	15 CH Full Area-Access 16 Bit 15 channels
Pan / Tilt	✓	✓	✓	✓	✓	✓	✓	✓
Dimmer	1	1	✓	✓	✓	✓	1	1
Dimmer resolution	8 bit	8 bit					8 bit	16 bit
Shutter / strobe		2					2	3
Color mixing			1–3	1–4	1, 3, 5	4× (1–7)	3–6	4× (4–10)
Color temperature	2						8	13
Color wheel		3					7	12
Zoom	✓	✓	✓	✓	✓	✓	✓	✓

Color wheel



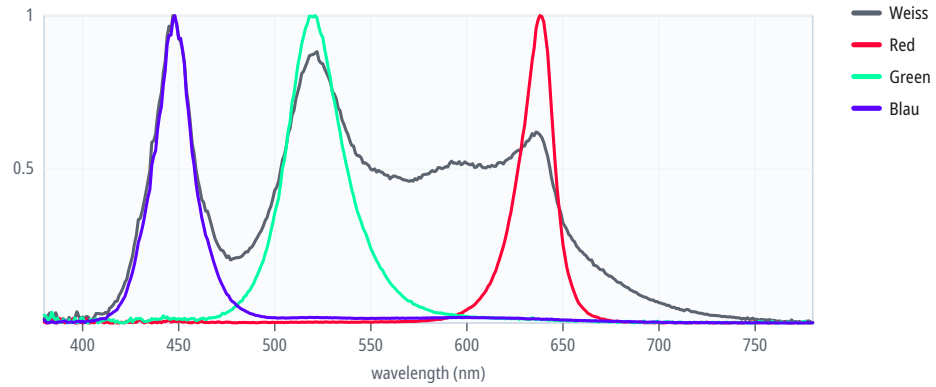
LED colors and the colors they mix



LED	x	y	nm
Weiss	0.314	0.327	
Red	0.687	0.307	638
Green	0.156	0.686	521
Blau	0.151	0.028	448

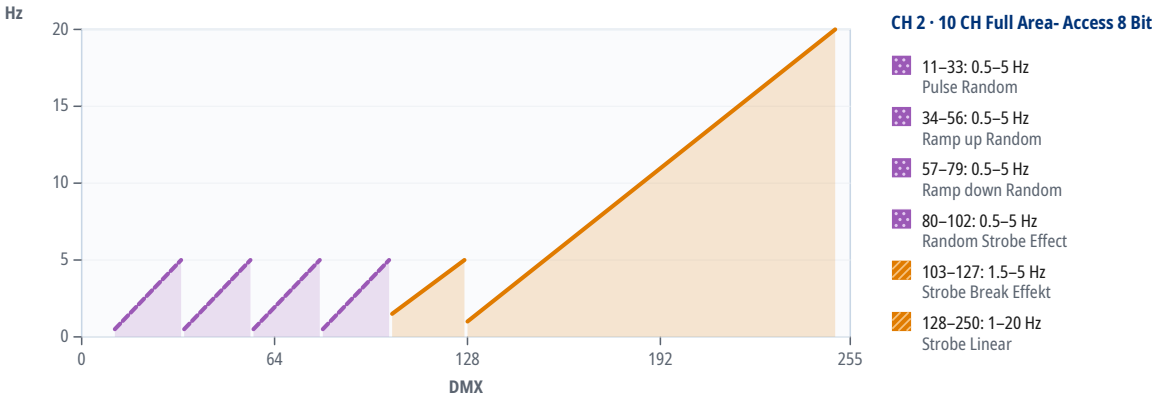
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Spectra of the light sources



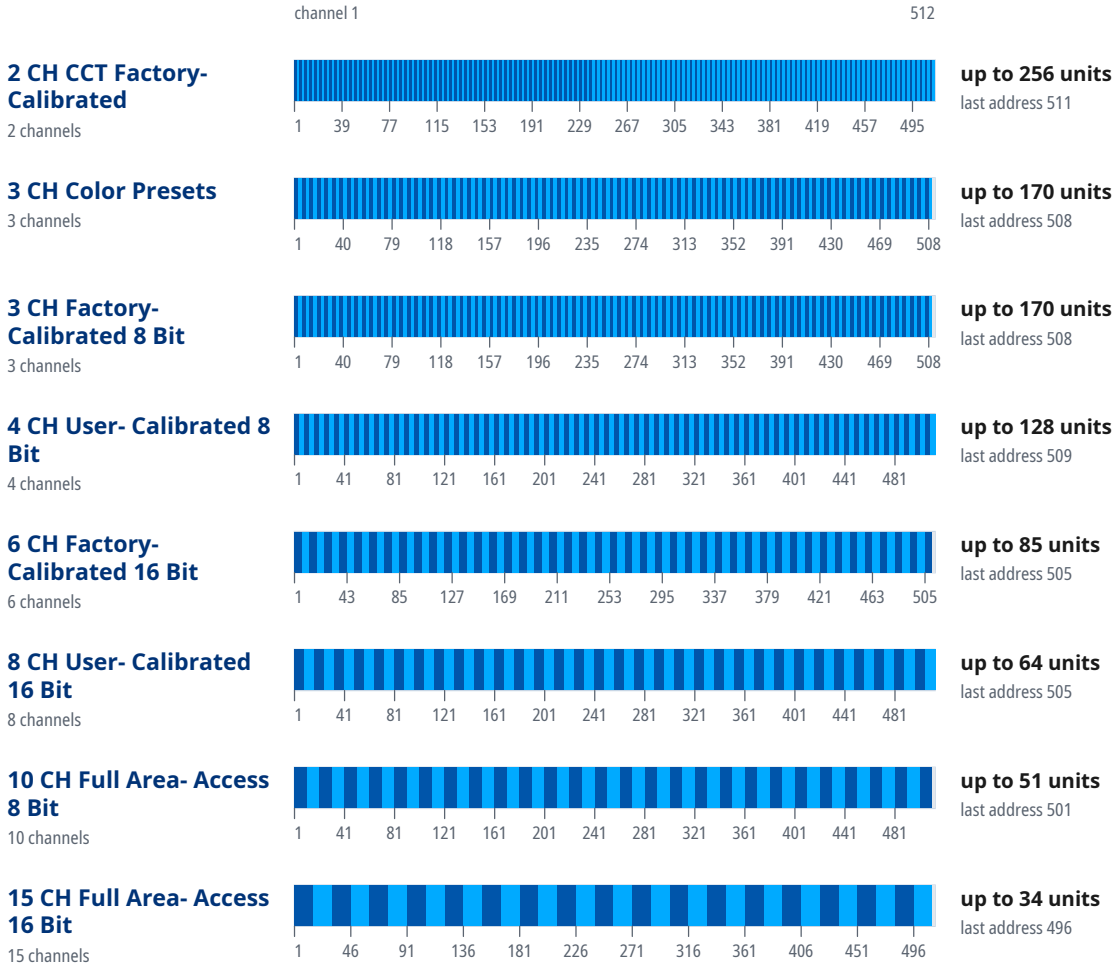
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



8 DMX channels

Units in one DMX universe



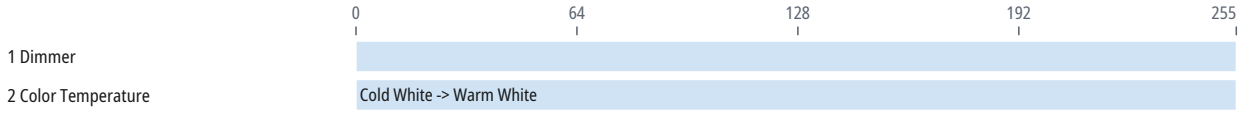
Start addresses of 20 units in the mode “15 CH Full Area- Access 16 Bit”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	76	11	151	16	226
2	16	7	91	12	166	17	241
3	31	8	106	13	181	18	256
4	46	9	121	14	196	19	271
5	61	10	136	15	211	20	286

Mode 2 CH CCT Factory- Calibrated

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

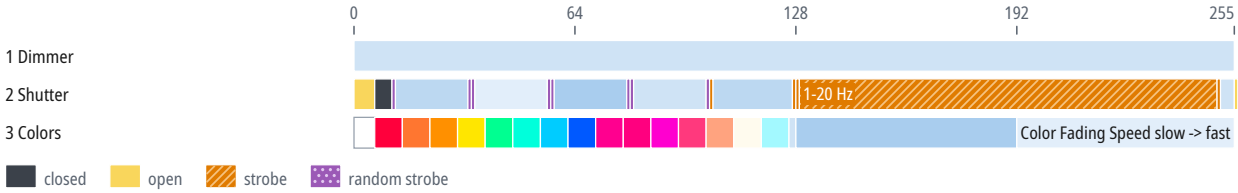


CH	Function	DMX	Description
1	Dimmer	0–255	
2	Color Temperature	0–255	Cold White -> Warm White (6500–2000 K)

Mode 3 CH Color Presets

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 2 Shutter at 0–5 or 251–255 “Open”. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Colors 110.

Channel functions at a glance



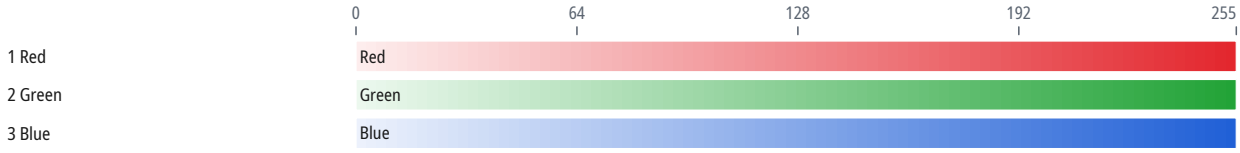
CH	Function	DMX	Description
1	Dimmer	0–255	
2	Shutter	0–5	Strobe open close: Open
		6–10	Strobe open close: Close
		11	Pulse Random: Slow
		12–32	Pulse Random: Slow ... Fast
		33	Pulse Random: Fast
		34	Ramp up Random: Slow
		35–55	Ramp up Random: Slow ... Fast
		56	Ramp up Random: Fast
		57	Ramp down Random: Slow
		58–78	Ramp down Random: Slow ... Fast
		79	Ramp down Random: Fast
		80	Random Strobe Effect: Slow
		81–101	Random Strobe Effect: Slow ... Fast
		102	Random Strobe Effect: Fast
		103	5s Short burst with break
		104–126	5s Short burst with break ... 1s Short burst with break
		127	1s Short burst with break
		128	Slow 1Hz
		129–249	1-20 Hz (1.1–19.9 Hz)
		250	Fast 20Hz
		251–255	Open
3	Colors	0–5	Color Presets: Open
		6–13	Red
		14–21	Amber
		22–29	Yellow warm
		30–37	Yellow

CH	Function	DMX	Description
3	Colors (continued)	38–45	Green
		46–53	Turquoise
		54–61	Cyan
		62–69	Blue
		70–77	Lavender
		78–85	Mauve
		86–93	Magenta
		94–101	Pink
		102–109	Warm White
		110–117	White
		118–125	Cold White
		126–127	Color Jumping Stop
		128–191	Color Jumping Speed slow -> fast (1–400 °/s)
		192–255	Color Fading Speed slow -> fast (1–400 °/s)

Mode 3 CH Factory- Calibrated 8 Bit

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 2 Green 255, CH 3 Blue 255.

Channel functions at a glance

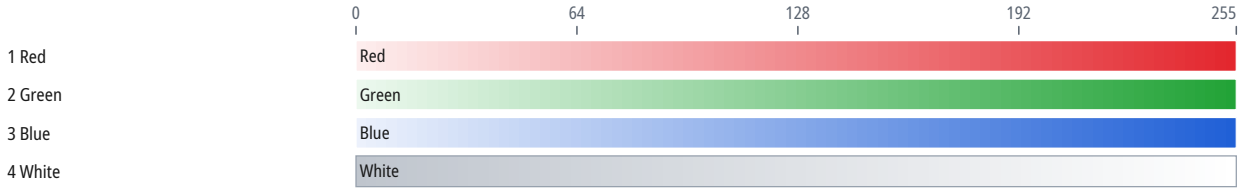


CH	Function	DMX	Description
1	Red	0–255	Red
2	Green	0–255	Green
3	Blue	0–255	Blue

Mode 4 CH User- Calibrated 8 Bit

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.

Channel functions at a glance



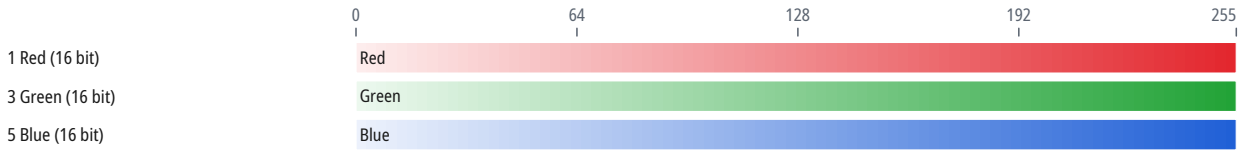
CH	Function	DMX	Description
1	Red	0–255	Red
2	Green	0–255	Green
3	Blue	0–255	Blue
4	White	0–255	White

Mode 6 CH Factory- Calibrated 16 Bit

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

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 3 Green 255, CH 5 Blue 255.

Channel functions at a glance



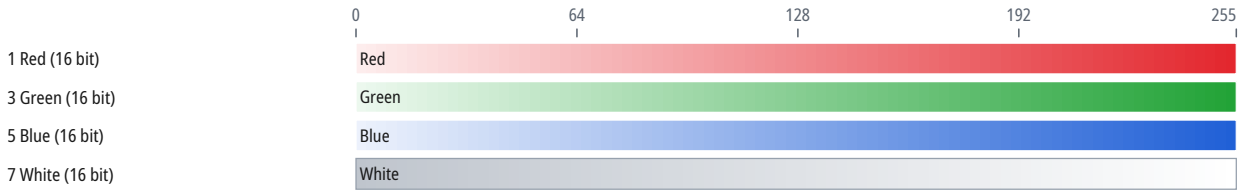
CH	Function	DMX	Description
1	Red	0–255	Red
2	Red Fine	0–255	Fine adjustment of CH 1
3	Green	0–255	Green
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue	0–255	Blue
6	Blue Fine	0–255	Fine adjustment of CH 5

Mode 8 CH User- Calibrated 16 Bit

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

The GDTF file gives these values for a console's Highlight function: CH 1 Red 255, CH 3 Green 255, CH 5 Blue 255, CH 7 White 255.

Channel functions at a glance

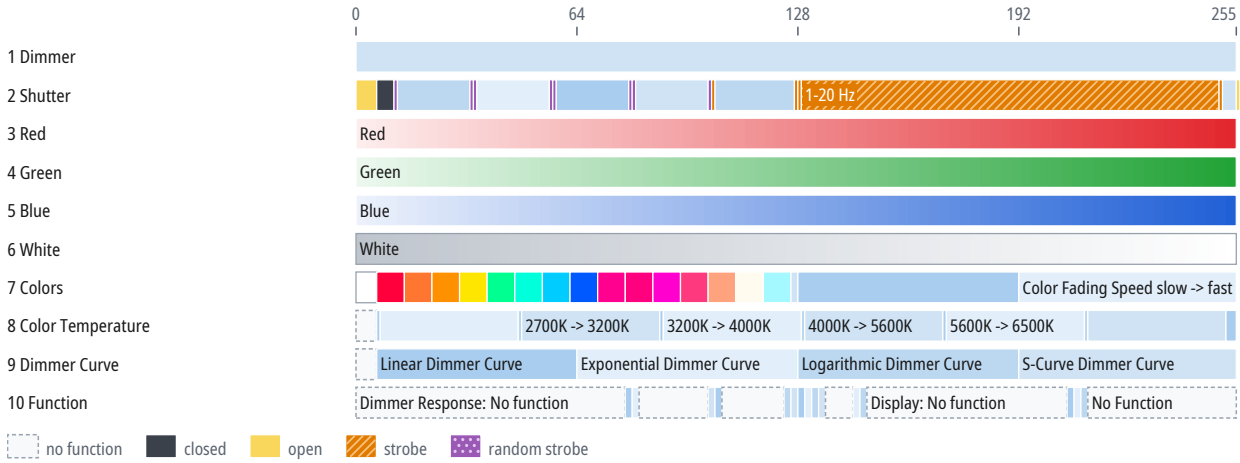


CH	Function	DMX	Description
1	Red	0–255	Red
2	Red Fine	0–255	Fine adjustment of CH 1
3	Green	0–255	Green
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue	0–255	Blue
6	Blue Fine	0–255	Fine adjustment of CH 5
7	White	0–255	White
8	White Fine	0–255	Fine adjustment of CH 7

Mode 10 CH Full Area- Access 8 Bit

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer above 0; CH 2 Shutter at 0–5 or 251–255 “Open”; CH 9 Dimmer Curve above 5. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 3 Red 255, CH 4 Green 255, CH 5 Blue 255, CH 6 White 255, CH 7 Colors 110.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–255	
2	Shutter		Same as CH 2 in the mode “3 CH Color Presets” (p. 10)
3	Red	0–255	Red
4	Green	0–255	Green
5	Blue	0–255	Blue
6	White	0–255	White
7	Colors		Same as CH 3 in the mode “3 CH Color Presets” (p. 10)
8	Color Temperature		CTC Steps
		0–5	Off
		6	Warm white
		7–46	Warm white - 2700K (1601–2699 K)
		47	Bulb White (2700K)
		48–87	2700K -> 3200K (2701–3199 K)

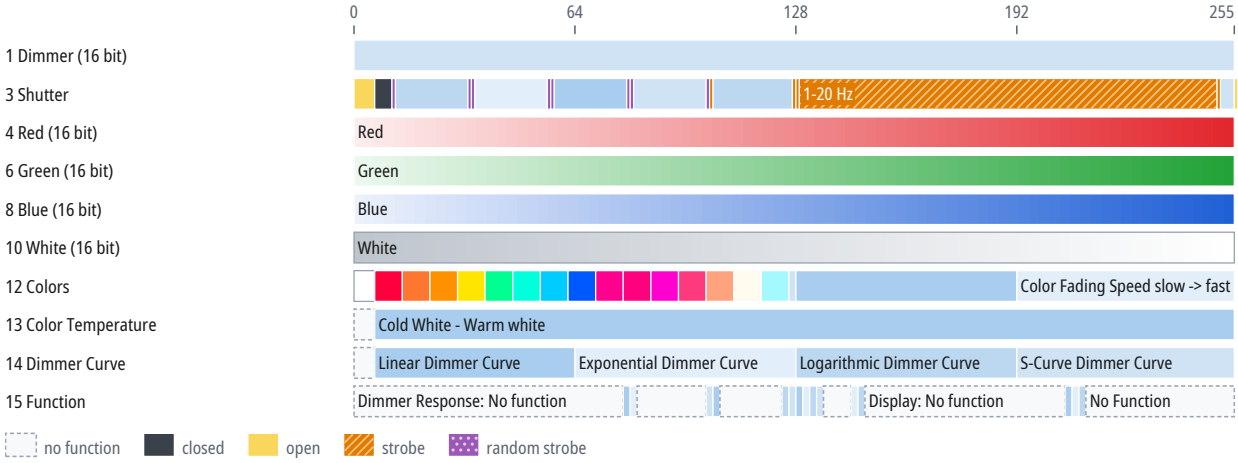
CH	Function	DMX	Description
8	Color Temperature (continued)	88	Halogen White (3200K)
		89–128	3200K -> 4000K (3201–3999 K)
		129	Neutral White (4000K)
		130–169	4000K -> 5600K (4001–5599 K)
		170	Studio-White (5600K)
		171–210	5600K -> 6500K (5601–6499 K)
		211	Daylight White (6500K)
		212–251	6500K -> cold Daylight (6501–6999 K)
		252–255	Cold Daylight
9	Dimmer Curve	0–5	Off
		6–63	Linear Dimmer Curve
		64–127	Exponential Dimmer Curve
		128–191	Logarithmic Dimmer Curve
		192–255	S-Curve Dimmer Curve
10	Function	0–77	Dimmer Response: No function
		78–79	Dimmer Response LED (hold 1.5s)
		80–81	Dimmer Response Halogen (hold 1.5s)
		82–101	Fan: No function
		102–103	Fan Silent (hold 3s)
		104–105	Auto Fan (Hold 3s)
		106–123	LED Frequency: No function
		124–125	LED Frequency 800Hz (hold 3s)
		126–127	LED Frequency 1200Hz (hold 3s)
		128–129	LED Frequency 2000Hz (hold 3s)
		130–131	LED Frequency 3600Hz (hold 3s)
		132–133	LED Frequency 12kHz (hold 3s)
		134–135	LED Frequency 25kHz (hold 3s)
		136–143	LED Frequency: No function
		144–145	Display on (hold 3s)
		146–147	Display off (hold 3s)
		148–205	Display: No function
		206–207	RAW-Mode (Hold 3s)
		208–209	Factory Calibration (hold 3s)
		210–211	User Calibration (hold 3s)
		212–255	No Function

Mode 15 CH Full Area- Access 16 Bit

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 3 Shutter at 0–5 or 251–255 “Open”; CH 14 Dimmer Curve above 5. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 White 255, CH 12 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0–255	
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Shutter		Same as CH 2 in the mode “3 CH Color Presets” (p. 10)
4	Red	0–255	Red
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green	0–255	Green
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue	0–255	Blue
9	Blue Fine	0–255	Fine adjustment of CH 8
10	White	0–255	White
11	White Fine	0–255	Fine adjustment of CH 10
12	Colors		Same as CH 3 in the mode “3 CH Color Presets” (p. 10)
13	Color Temperature	0–5	Off
		6–255	Cold White - Warm white (6500–2000 K)
14	Dimmer Curve		Same as CH 9 in the mode “10 CH Full Area- Access 8 Bit” (p. 14)
15	Function		Same as CH 10 in the mode “10 CH Full Area- Access 8 Bit” (p. 14)

9 Technical specifications

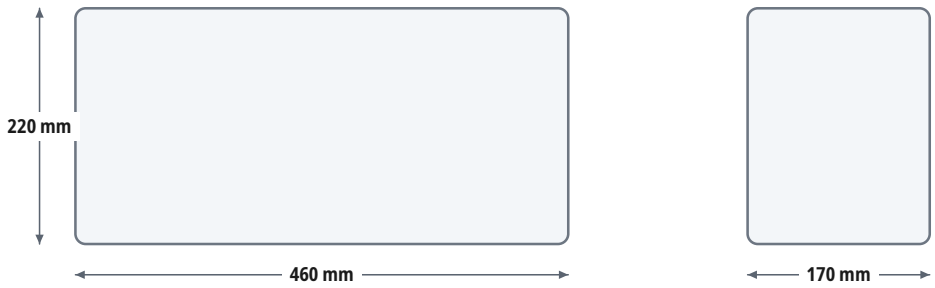
Parameter	Value
Light	
Light source	LED
LED power	600 W
Luminous flux	24,000 lm
Color temperature	6,000 K
Color rendering index (CRI)	85
Optics	
Beam angle	18°
Control	
DMX connection	5-pin XLR IN/OUT
RDM	yes (manufacturer ID 0x08A4, device model ID 0x0103)
Electrical	
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	4.6 kg
Operating environment	
Operating temperature	-10 to 40 °C

Speeds and ranges

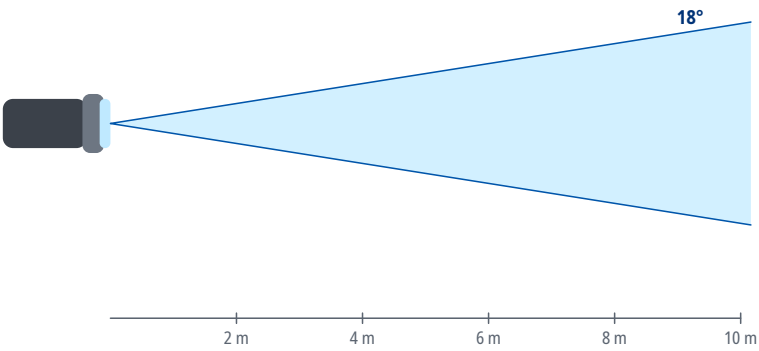
Parameter	Value
Color temperature range	2000–7000 K
Strobe frequency	1–20 Hz
LED frequency	800–25000 Hz
Color wheel rotation	up to 400 °/s (67 rpm)

Dimensions

weight 4.6 kg



Spot diameter



Distance	Ø 18°
2 m	0.63 m
4 m	1.3 m
6 m	1.9 m
8 m	2.5 m
10 m	3.2 m
15 m	4.8 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.