DMX REFERENCE

2Inspire 300

Chroma-Q



Manufacturer	Chroma-Q
GDTF file	Chroma-Q_2Inspire_300_132473.gdtf
GDTF revision	Release 1, Uploaded to GDTF Share. · 2026-03-08
Generated	2026-11-23

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 4
5 Installation 5
6 Connections 5
7 Operation 6
8 Functions at a glance 6
9 DMX channels 7
Mode I 8-bit 8
Mode I 16-bit 9
Mode IK 8-bit 9
Mode IK 16-bit 9
Mode IKT 8-bit 10
Mode IKT 16-bit 10
Mode RGB 8-bit 11
Mode RGB 16-bit 11
Mode IRGB 8-bit 12
Mode IRGB 16-bit 12
Mode IHS 8-bit 13
Mode IHS 16-bit 13
Mode IKTRGB 8-bit 14
Mode IKTRGB 16-bit 14
Mode IKTHS 8-bit 15
Mode IKTHS 16-bit 15
Mode Control 16
10 Technical specifications 17
11 Maintenance and cleaning 18
12 Troubleshooting 18
13 Disposal 19

1 About this manual

This document describes the 2inspire 300 by Chroma-Q. It was compiled from the GDTF file Chroma-Q_2Inspire_300_132473.gdtf from the GDTF-Share library.

File revision: “Release 1, Uploaded to GDTF Share.”.

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 Chroma-Q; 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	2.5 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
I 8-bit	1	512	1, 2, 3, 4, ...
I 16-bit	2	256	1, 3, 5, 7, ...
IK 8-bit	2	256	1, 3, 5, 7, ...
IK 16-bit	4	128	1, 5, 9, 13, ...
IKT 8-bit	3	170	1, 4, 7, 10, ...
IKT 16-bit	6	85	1, 7, 13, 19, ...
RGB 8-bit	3	170	1, 4, 7, 10, ...
RGB 16-bit	6	85	1, 7, 13, 19, ...
IRGB 8-bit	4	128	1, 5, 9, 13, ...
IRGB 16-bit	8	64	1, 9, 17, 25, ...
IHS 8-bit	3	170	1, 4, 7, 10, ...
IHS 16-bit	6	85	1, 7, 13, 19, ...
IKTRGB 8-bit	6	85	1, 7, 13, 19, ...
IKTRGB 16-bit	12	42	1, 13, 25, 37, ...
IKTHS 8-bit	5	102	1, 6, 11, 16, ...
IKTHS 16-bit	10	51	1, 11, 21, 31, ...
Control	1	512	1, 2, 3, 4, ...



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.

4 Product description

Description in the GDTF file

“2inspire 300 delivers truly flexible lighting into any space, quickly and efficiently. 2inspire is a compact, silent, bright fixture in 3 sizes. These installation luminaires deliver studio-grade tuneable white light and pure theatrical quality colours. A holistically designed accessory collection easily mounts each fixture - on a wall, as a pendant, in a ceiling, or from a yoke. Innovative technology minimizes deployment costs and maximizes efficiency, making every 2inspire flexible, sustainable, and durable. This fixture features easy connection using power over ethernet.”

5 Installation

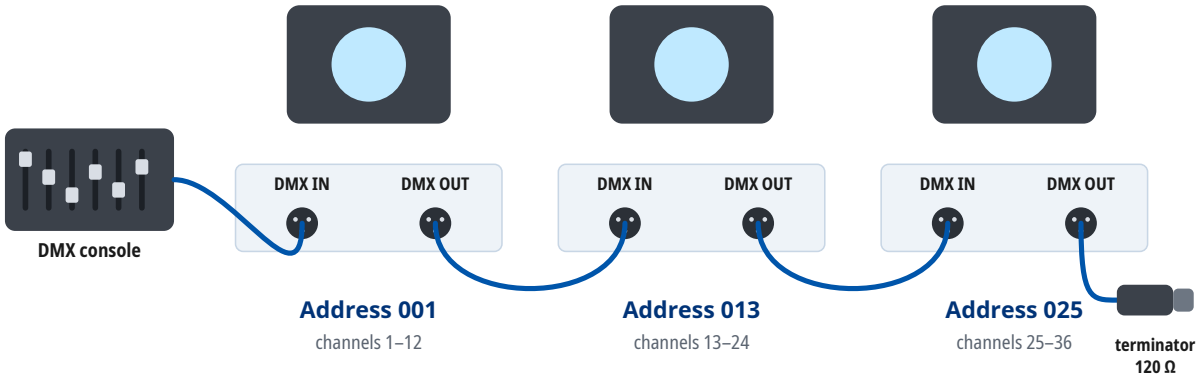
⚠ **WARNING**

- 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: 2.5 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 IKTRGB 16-bit: every unit occupies 12 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 “IKTRGB 16-bit”: 12.
- 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 “IKTRGB 16-bit”, you can use, for example, the start addresses 1, 13, 25, 37.
- 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.

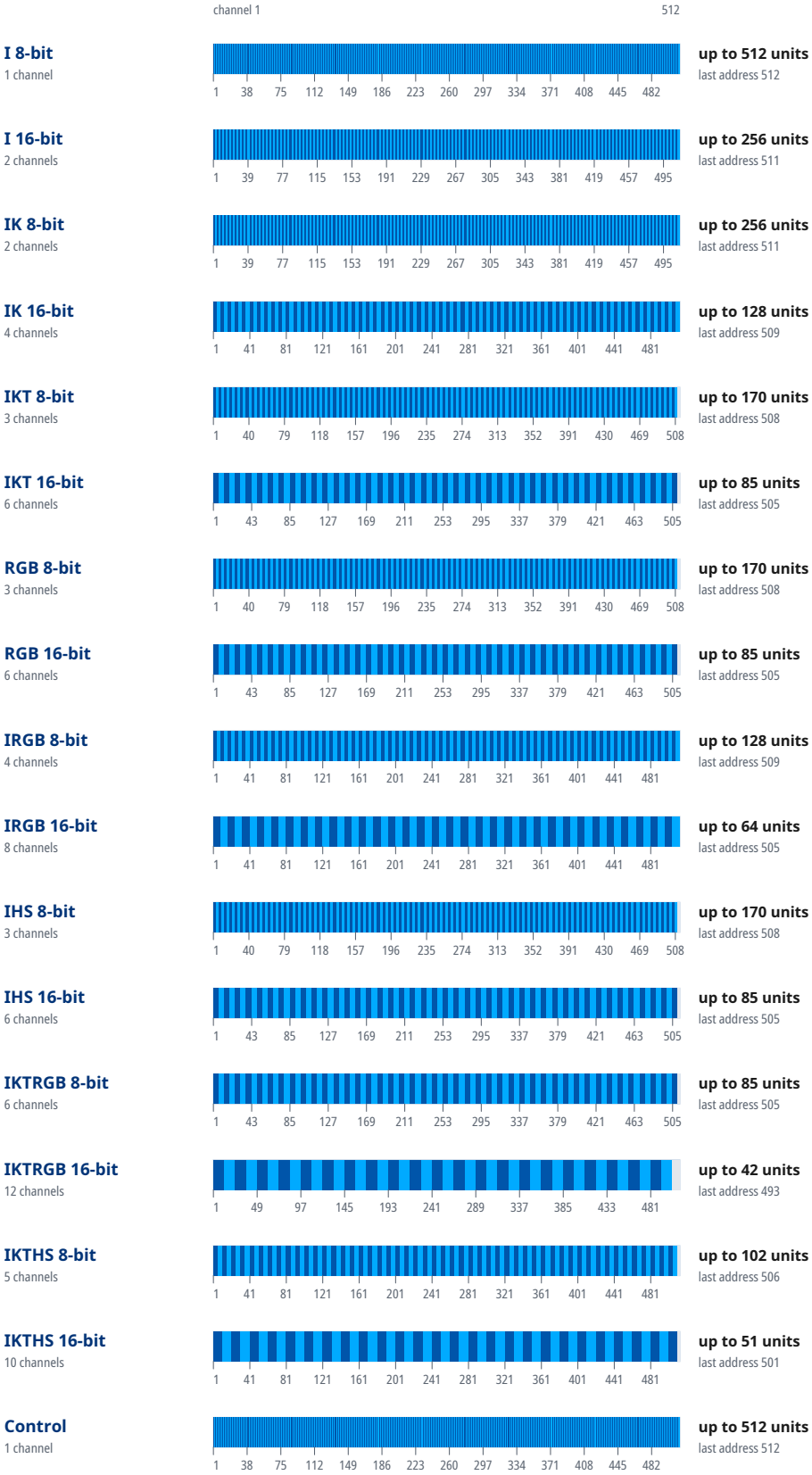
8 Functions at a glance

Functions in each DMX mode

	I 8-bit 1 channel	I 16-bit 2 channels	IK 8-bit 2 channels	IK 16-bit 4 channels	IKT 8-bit 3 channels	IKT 16-bit 6 channels	RGB 8-bit 3 channels	RGB 16-bit 6 channels
Dimmer	1	1	1	1	1	1	✓	✓
Dimmer resolution	8 bit	16 bit	8 bit	16 bit	8 bit	16 bit		
Color mixing							1–3	1, 3, 5
Color temperature			2	3	2	3		

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “IKTRGB 16-bit”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	61	11	121	16	181
2	13	7	73	12	133	17	193
3	25	8	85	13	145	18	205
4	37	9	97	14	157	19	217
5	49	10	109	15	169	20	229

RDM personalities

Mode	Channels	RDM personality
I 8-bit	1	1
I 16-bit	2	2
IK 8-bit	2	3
IK 16-bit	4	4
IKT 8-bit	3	5
IKT 16-bit	6	6
RGB 8-bit	3	7
RGB 16-bit	6	8
IRGB 8-bit	4	9
IRGB 16-bit	8	10
IHS 8-bit	3	11
IHS 16-bit	6	12
IKTRGB 8-bit	6	13
IKTRGB 16-bit	12	14
IKTHS 8-bit	5	15
IKTHS 16-bit	10	16
Control	1	–

Mode I 8-bit

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	Min
		1–254	Min > Max
		255	Max

Mode I 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 Dimmer 255.

Channel functions at a glance

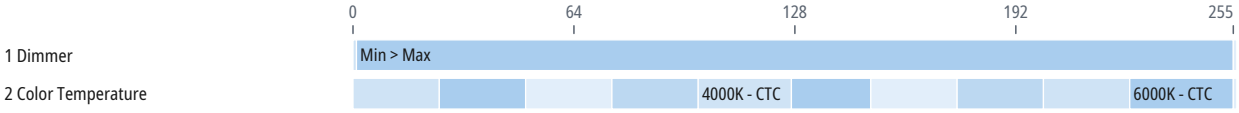


CH	Function	DMX	Description
1	Dimmer	0	Min
		0–255	Min > Max
		255	Max
2	Dimmer Fine	0–255	Fine adjustment of CH 1

Mode IK 8-bit

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

Channel functions at a glance



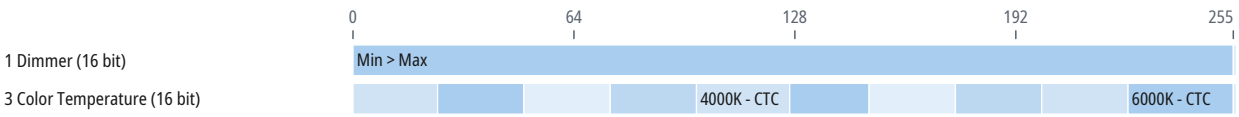
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 8-bit” (p. 8)
2	Color Temperature	0–24	2400K - CTC
		25–49	2800K - CTC
		50–74	3200K - CTC
		75–99	3600K - CTC
		100–126	4000K - CTC
		127–149	4440K - CTC
		150–174	4800K - CTC
		175–199	5200K - CTC
		200–224	5600K - CTC
		225–254	6000K - CTC
		255	6500K - CTC

Mode IK 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 Dimmer 255.

Channel functions at a glance

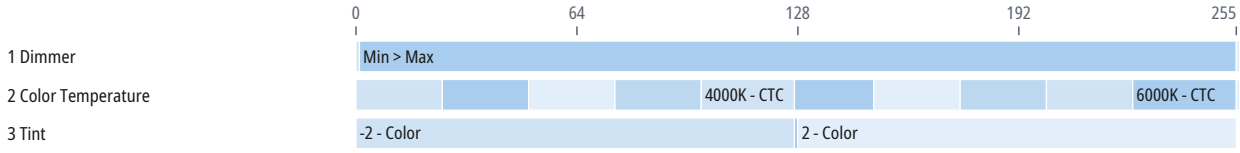


CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 16-bit” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature	0–24	2400K - CTC
		24–49	2800K - CTC
		49–74	3200K - CTC
		74–99	3600K - CTC
		99–126	4000K - CTC
		126–150	4440K - CTC
		150–175	4800K - CTC
		175–200	5200K - CTC
		200–225	5600K - CTC
		225–255	6000K - CTC
		255	6500K - CTC
4	Color Temperature Fine	0–255	Fine adjustment of CH 3

Mode IKT 8-bit

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

Channel functions at a glance



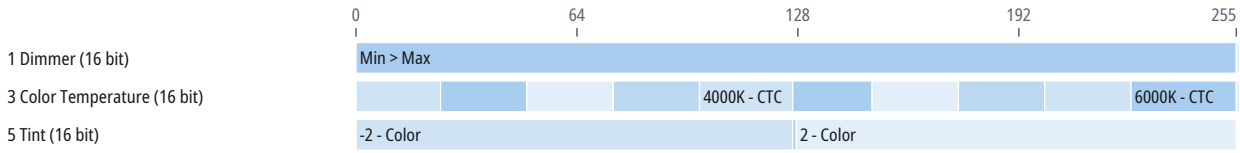
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 8-bit” (p. 8)
2	Color Temperature		Same as CH 2 in the mode “IK 8-bit” (p. 9)
3	Tint	0–126	-2 - Color
		127	0 - Color
		128–255	2 - Color

Mode IKT 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 Dimmer 255.

Channel functions at a glance

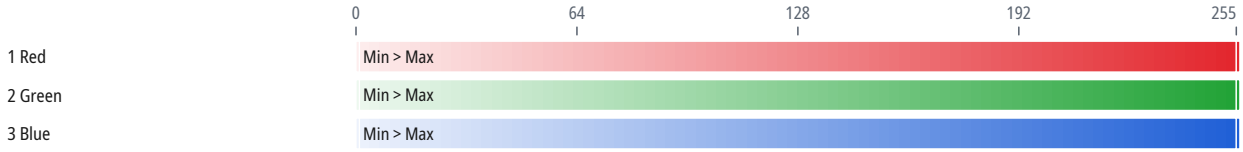


CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 16-bit” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature		Same as CH 3 in the mode “IK 16-bit” (p. 10)
4	Color Temperature Fine	0–255	Fine adjustment of CH 3
5	Tint	0–126	-2 - Color
		126–127	0 - Color
		128–255	2 - Color
6	Tint Fine	0–255	Fine adjustment of CH 5

Mode RGB 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



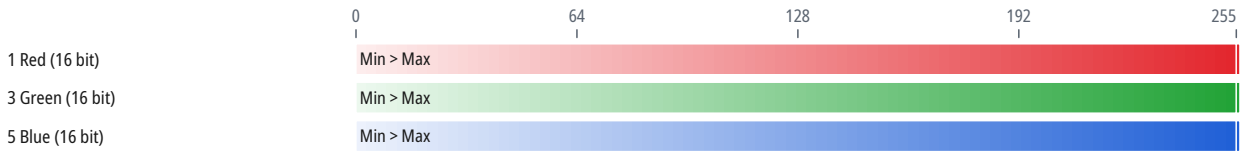
CH	Function	DMX	Description
1	Red	0	Min
		1–254	Min > Max
		255	Max
2	Green	0	Min
		1–254	Min > Max
		255	Max
3	Blue	0	Min
		1–254	Min > Max
		255	Max

Mode RGB 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

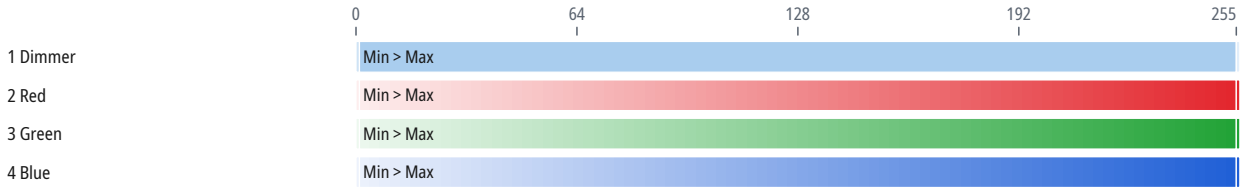


CH	Function	DMX	Description
1	Red	0	Min
		0–255	Min > Max
		255	Max
2	Red Fine	0–255	Fine adjustment of CH 1
3	Green	0	Min
		0–255	Min > Max
		255	Max
4	Green Fine	0–255	Fine adjustment of CH 3
5	Blue	0	Min
		0–255	Min > Max
		255	Max
6	Blue Fine	0–255	Fine adjustment of CH 5

Mode IRGB 8-bit

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 2 Red 255, CH 3 Green 255, CH 4 Blue 255.

Channel functions at a glance



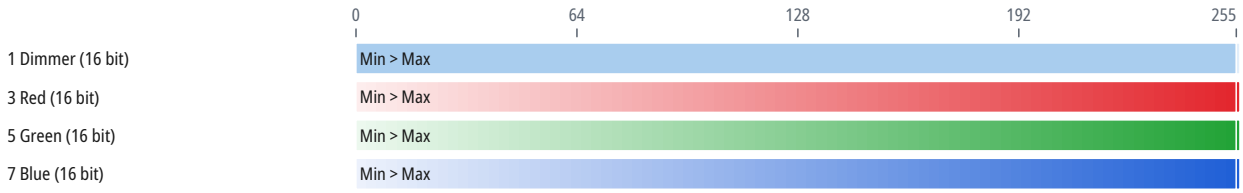
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 8-bit” (p. 8)
2	Red		Same as CH 1 in the mode “RGB 8-bit” (p. 11)
3	Green		Same as CH 2 in the mode “RGB 8-bit” (p. 11)
4	Blue		Same as CH 3 in the mode “RGB 8-bit” (p. 11)

Mode IRGB 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 Dimmer 255, CH 3 Red 255, CH 5 Green 255, CH 7 Blue 255.

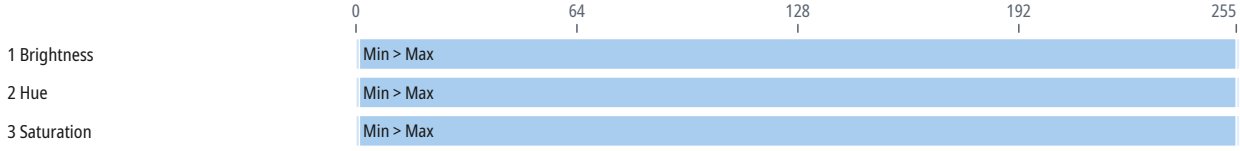
Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 16-bit” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Red		Same as CH 1 in the mode “RGB 16-bit” (p. 12)
4	Red Fine	0–255	Fine adjustment of CH 3
5	Green		Same as CH 3 in the mode “RGB 16-bit” (p. 12)
6	Green Fine	0–255	Fine adjustment of CH 5
7	Blue		Same as CH 5 in the mode “RGB 16-bit” (p. 12)
8	Blue Fine	0–255	Fine adjustment of CH 7

Mode IHS 8-bit

Channel functions at a glance

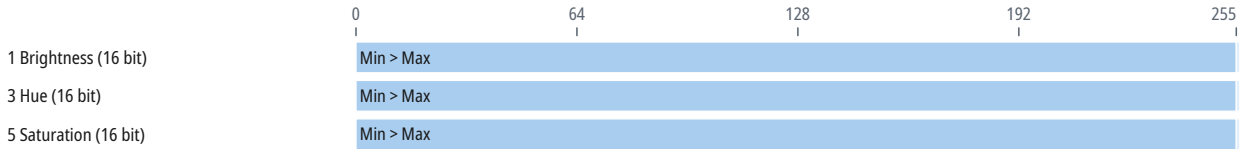


CH	Function	DMX	Description
1	Brightness	0	Min
		1–254	Min > Max
		255	Max
2	Hue	0	Min
		1–254	Min > Max
		255	Max
3	Saturation	0	Min
		1–254	Min > Max
		255	Max

Mode IHS 16-bit

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

Channel functions at a glance



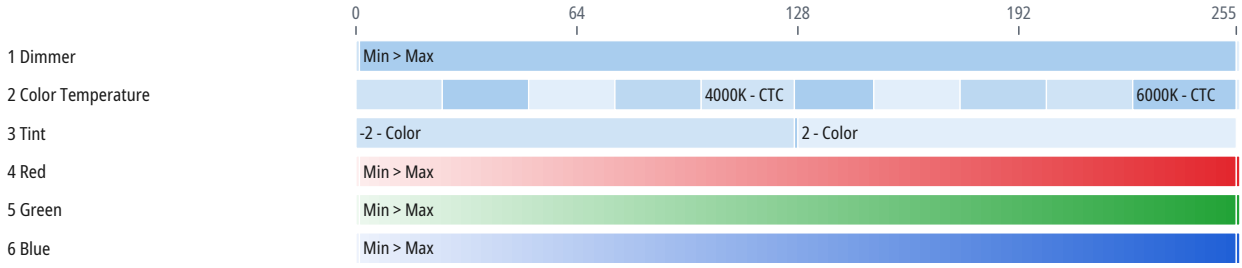
CH	Function	DMX	Description
1	Brightness	0	Min
		0–255	Min > Max
		255	Max
2	Brightness Fine	0–255	Fine adjustment of CH 1
3	Hue	0	Min
		0–255	Min > Max

CH	Function	DMX	Description
3	Hue (continued)	255	Max
4	Hue Fine	0–255	Fine adjustment of CH 3
5	Saturation	0	Min
		0–255	Min > Max
		255	Max
6	Saturation Fine	0–255	Fine adjustment of CH 5

Mode IKTRGB 8-bit

The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 4 Red 255, CH 5 Green 255, CH 6 Blue 255.

Channel functions at a glance



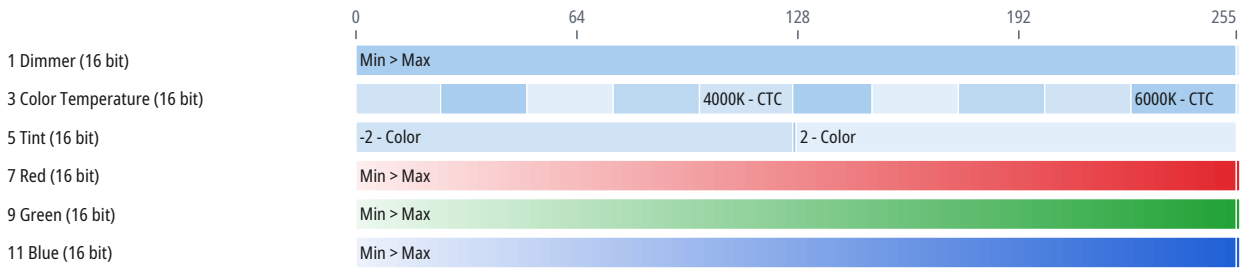
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 8-bit” (p. 8)
2	Color Temperature		Same as CH 2 in the mode “IK 8-bit” (p. 9)
3	Tint		Same as CH 3 in the mode “IKT 8-bit” (p. 10)
4	Red		Same as CH 1 in the mode “RGB 8-bit” (p. 11)
5	Green		Same as CH 2 in the mode “RGB 8-bit” (p. 11)
6	Blue		Same as CH 3 in the mode “RGB 8-bit” (p. 11)

Mode IKTRGB 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 Dimmer 255, CH 7 Red 255, CH 9 Green 255, CH 11 Blue 255.

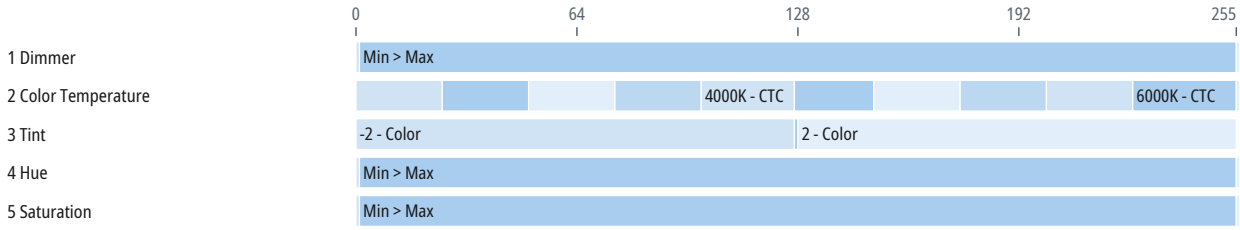
Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 16-bit” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature		Same as CH 3 in the mode “IK 16-bit” (p. 10)
4	Color Temperature Fine	0–255	Fine adjustment of CH 3
5	Tint		Same as CH 5 in the mode “IKT 16-bit” (p. 11)
6	Tint Fine	0–255	Fine adjustment of CH 5
7	Red		Same as CH 1 in the mode “RGB 16-bit” (p. 12)
8	Red Fine	0–255	Fine adjustment of CH 7
9	Green		Same as CH 3 in the mode “RGB 16-bit” (p. 12)
10	Green Fine	0–255	Fine adjustment of CH 9
11	Blue		Same as CH 5 in the mode “RGB 16-bit” (p. 12)
12	Blue Fine	0–255	Fine adjustment of CH 11

Mode IKTHS 8-bit

Channel functions at a glance



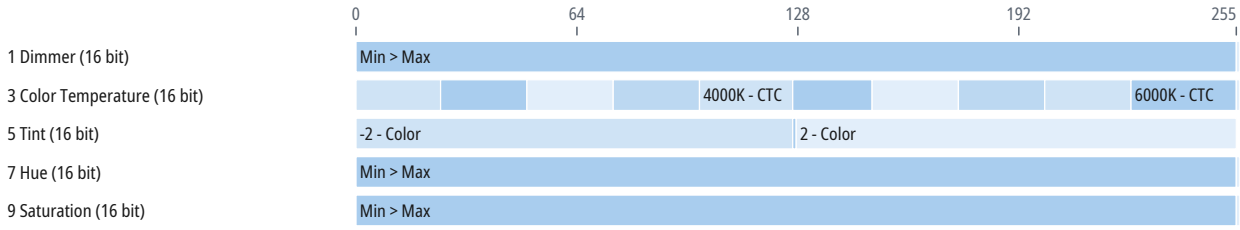
CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 8-bit” (p. 8)
2	Color Temperature		Same as CH 2 in the mode “IK 8-bit” (p. 9)
3	Tint		Same as CH 3 in the mode “IKT 8-bit” (p. 10)
4	Hue		Same as CH 2 in the mode “IHS 8-bit” (p. 13)
5	Saturation		Same as CH 3 in the mode “IHS 8-bit” (p. 13)

Mode IKTHS 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 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer		Same as CH 1 in the mode “I 16-bit” (p. 9)
2	Dimmer Fine	0–255	Fine adjustment of CH 1
3	Color Temperature		Same as CH 3 in the mode “IK 16-bit” (p. 10)
4	Color Temperature Fine	0–255	Fine adjustment of CH 3
5	Tint		Same as CH 5 in the mode “IKT 16-bit” (p. 11)
6	Tint Fine	0–255	Fine adjustment of CH 5
7	Hue		Same as CH 3 in the mode “IHS 16-bit” (p. 13)
8	Hue Fine	0–255	Fine adjustment of CH 7
9	Saturation		Same as CH 5 in the mode “IHS 16-bit” (p. 14)
10	Saturation Fine	0–255	Fine adjustment of CH 9

Mode Control

Channel functions at a glance



CH	Function	DMX	Description
1	Control	0–2	No Function - Custom
		3	Dimmer Curve Linear - Custom
		4	Dimmer Curve Square Law - Custom
		5	Dimmer Curve Inv Square Law - Custom
		6	Dimmer Curve S-Curve - Custom
		7–10	No Function - Custom
		11–12	DMX Smoothing Off - Custom
		13–14	DMX Smoothing Normal - Custom
		15–16	No Function - Custom
		17–18	CCT Tint On Saturated Color-Disabled - Custom
		19–20	CCT Tint On Saturated Color-Enabled - Custom
		21–70	No Function - Custom
		71–72	PWM 1500 - Custom
		73–74	PWM 3000 - Custom
		75–76	PWM 6000 - Custom
		77–78	PWM 12000 - Custom
		79–80	PWM 24000 - Custom
		81–82	PWM 48000 - Custom
		83–84	PWM 96000 - Custom
		85–86	PWM 192000 - Custom
		87–150	No Function - Custom
		151–152	DMX Lost Default Fixture Stay To The Last State - Custom
		153–154	DMX Lost Default Fixture Goes Black - Custom

CH	Function	DMX	Description
1	Control (continued)	155–156	DMX Lost Default Fixture Goes To Full - Custom
		157–158	DMX Lost Default Fixture To Save Look - Custom
		159–235	No Function - Custom
		236–237	Store Failesafe Scene - Custom
		238–239	No Function - Custom
		240–242	Reset - Reset
		243	No Function - Custom
		244–245	Save As User Defaults - Custom
		246–247	Restore User Defaults - Custom
		248–249	Restore Factory Default - Custom
		250–255	No Function - Custom

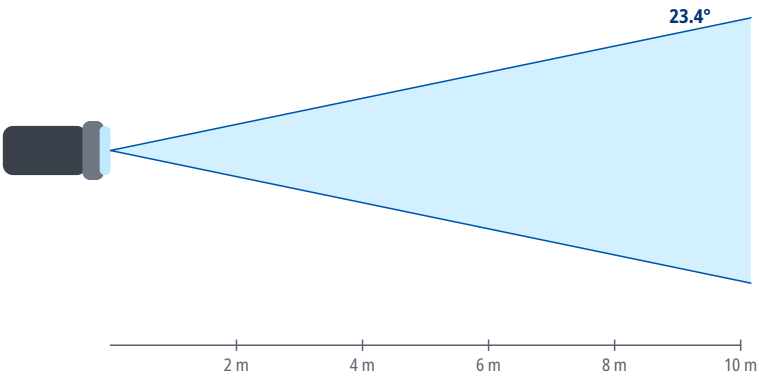
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	50 W
Luminous flux	3,100 lm
Color temperature	6,000 K
Color rendering index (CRI)	90
Optics	
Beam angle	23.4°
Control	
RDM	yes (manufacturer ID 0x5370, device model ID 0x0040)
Dimensions and construction	
Weight	2.5 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	2400–6500 K

Spot diameter



Distance	Ø 23.4°
2 m	0.83 m
4 m	1.7 m
6 m	2.5 m
8 m	3.3 m
10 m	4.1 m
15 m	6.2 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.