DMX REFERENCE

MAC Aura XB

LPL



Manufacturer	LPL
GDTF file	LPL_MAC_Aura_XB_118911.gdtf
GDTF revision	Tested /REAL/MA2/MA3/3D, Uploaded to GDTF Share. · 2025-11-25
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 7
9 DMX channels 12
Mode Standard 12
Mode Extended 22
10 Technical specifications 32
11 Maintenance and cleaning 33
12 Troubleshooting 33
13 Disposal 34

1 About this manual

This document describes the MAC Aura XB by LPL. It was compiled from the GDTF file LPL_MAC_Aura_XB_118911.gdtf from the GDTF-Share library.

File revision: “Tested /REAL/MA2/MA3/3D, 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 LPL; 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	350 W
Weight	6.5 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Standard	14	36	1, 15, 29, 43, ...
Extended	25	20	1, 26, 51, 76, ...

No light? Check these channels

- Standard: CH 1 Shutter at 20–24, 65–69, 85–89, 105–109, 125–129, 145–149, 165–169, 185–189, 205–209, 225–229 or 245–255 “Open”; CH 2 Dimmer above 0
- Extended: CH 1 Shutter 1 at 20–24, 65–69, 85–89, 105–109, 125–129, 145–149, 165–169, 185–189, 205–209, 225–229 or 245–255 “Open”; CH 2 Dimmer 1 above 0; CH 20 Shutter 2 at 20–24, 65–69, 85–89, 105–109, 125–129, 145–149, 165–169, 185–189, 205–209, 225–229 or 245–255 “Open”; CH 21 Dimmer 2 above 0


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.

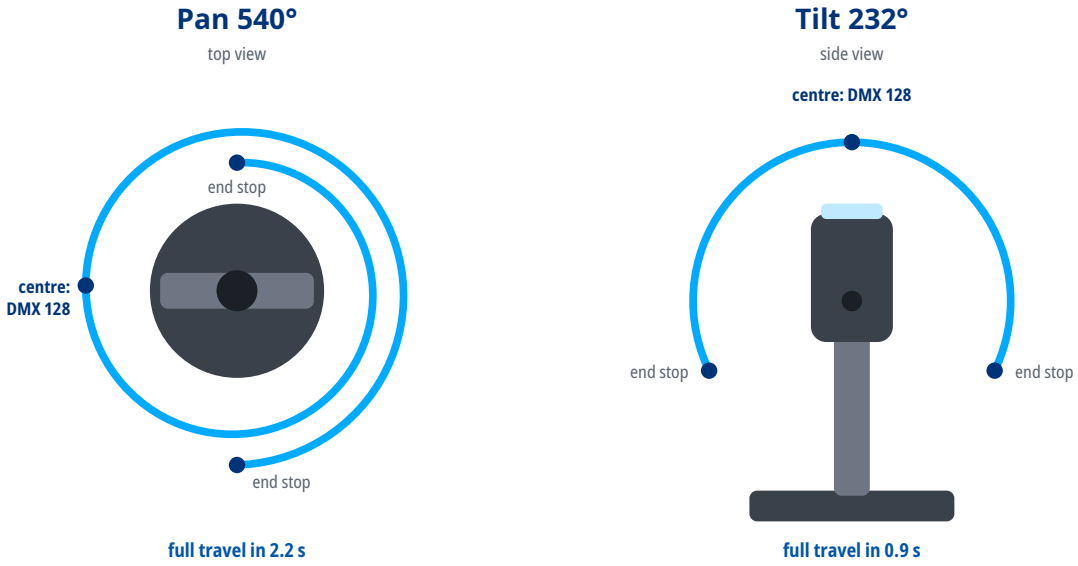
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, move them by hand, or obstruct their movement; this can cause injury (pinching) and damage the drive.
> - Do not carry the device by its moving parts. If the device has a transport lock, engage it before transport and release it before switching on.

4 Product description

Description in the GDTF file

“Official Martin Professional File (no measurements)”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

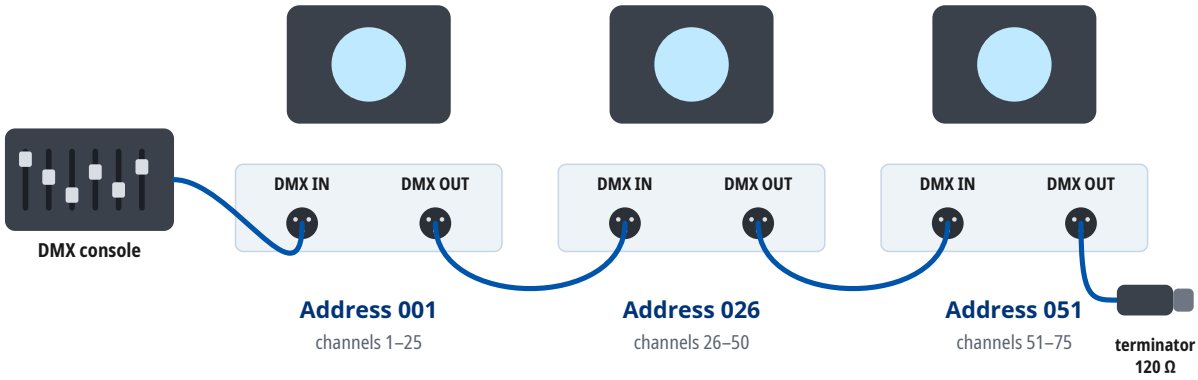
⚠ **WARNING**

- 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: 6.5 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 Extended: every unit occupies 25 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 “Extended”: 25.
- 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, 26, 51, 76.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

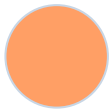
Functions in each DMX mode

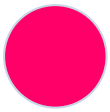
	Standard 14 channels	Extended 25 channels
Pan / Tilt	4, 6	4, 6
Dimmer	2	2, 21
Shutter / strobe	1	1, 20
Color mixing	10–13	10–13, 23–25
Color temperature	14	14
Color wheel	9	9, 22
Zoom	3	3
Effects / macros		15–19

Color wheel 1

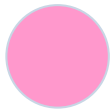
1
Color Selection: Open
DMX 0–9

2
Moroccan Pink
DMX 10–14

3 
Pink
DMX 15–19

4 
Special Rose Pink
DMX 20–24

5 
Follies Pink
DMX 25–29

6 
Fuchsia Pink
DMX 30–34

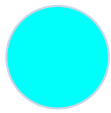
7
Surprise Pink
DMX 35–39

8 
Congo Blue
DMX 40–44

9 
Tokyo Blue
DMX 45–49

10 
Deep Blue
DMX 50–54

11 
Just Blue
DMX 55–59

12 
Medium Blue
DMX 60–64

13
Double CT Blue
DMX 65–69

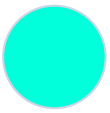
14
Slate Blue
DMX 70–74

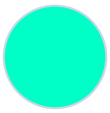
15
Full CT Blue
DMX 75–79

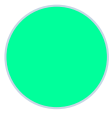
16
Half CT Blue
DMX 80–84

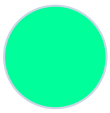
17
Steel Blue
DMX 85–89

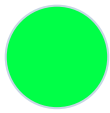
18
Lighter Blue
DMX 90–94

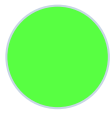
19 
Light Blue
DMX 95–99

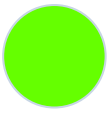
20 
Medium Blue Green
DMX 100–104

21 
Dark Green
DMX 105–109

22 
Primary Green
DMX 110–114

23 
Moss Green
DMX 115–119

24 
Fern Green
DMX 120–124

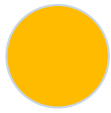
25 
Jas Green
DMX 125–129

26
Lime Green
DMX 130–134

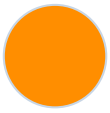
27
Spring Yellow
DMX 135–139

28
Deep Amber
DMX 140–144

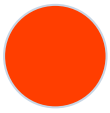
29
Chrome Orange
DMX 145–149

30 
Orange
DMX 150–154

31 
Gold Amber
DMX 155–159

32 
Millennium Gold
DMX 160–164

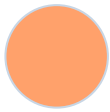
33 
Deep Golden Amber
DMX 165–169

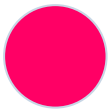
34 
Flame Red
DMX 170–175

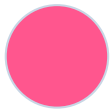
Color wheel 2

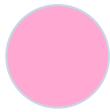
1
Color Selection: Open
DMX 0–9

2
Moroccan Pink
DMX 10–14

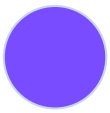
3 
Pink
DMX 15–19

4 
Special Rose Pink
DMX 20–24

5 
Follies Pink
DMX 25–29

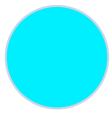
6 
Fuchsia Pink
DMX 30–34

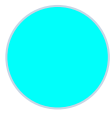
7
Surprise Pink
DMX 35–39

8 
Congo Blue
DMX 40–44

9 
Tokyo Blue
DMX 45–49

10 
Deep Blue
DMX 50–54

11 
Just Blue
DMX 55–59

12 
Medium Blue
DMX 60–64

13
Double CT Blue
DMX 65–69

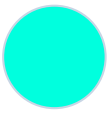
14
Slate Blue
DMX 70–74

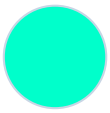
15
Full CT Blue
DMX 75–79

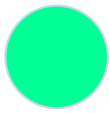
16
Half CT Blue
DMX 80–84

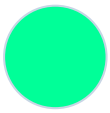
17
Steel Blue
DMX 85–89

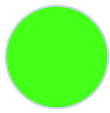
18
Lighter Blue
DMX 90–94

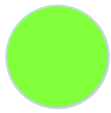
19 
Light Blue
DMX 95–99

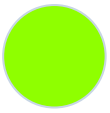
20 
Medium Blue Green
DMX 100–104

21 
Dark Green
DMX 105–109

22 
Primary Green
DMX 110–114

23 
Moss Green
DMX 115–119

24 
Fern Green
DMX 120–124

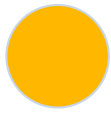
25 
Jas Green
DMX 125–129

26
Lime Green
DMX 130–134

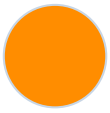
27
Spring Yellow
DMX 135–139

28
Deep Amber
DMX 140–144

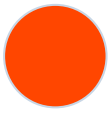
29 
Chrome Orange
DMX 145–149

30 
Orange
DMX 150–154

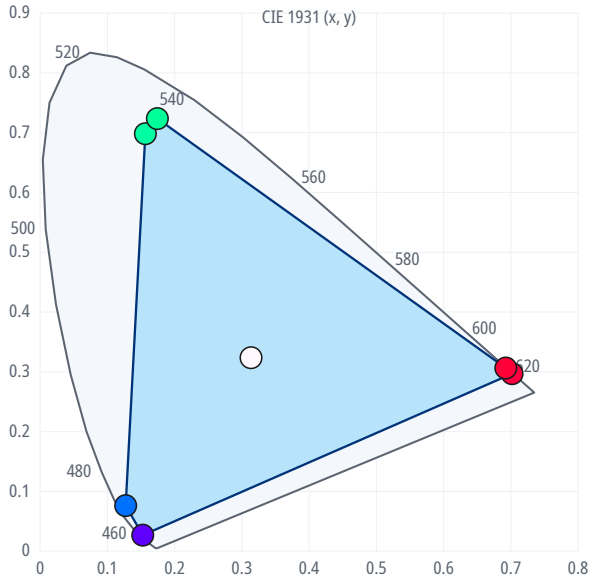
31 
Gold Amber
DMX 155–159

32 
Millennium Gold
DMX 160–164

33 
Deep Golden Amber
DMX 165–169

34 
Flame Red
DMX 170–175

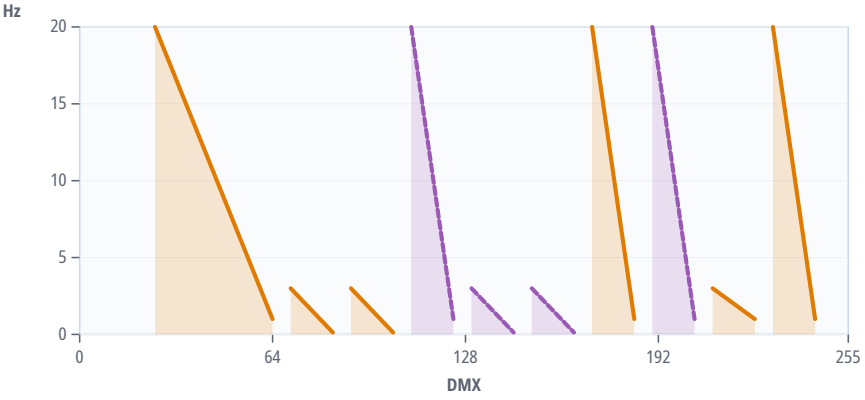
LED colors and the colors they mix



LED	x	y
BeamRed	0.702	0.297
BeamGreen	0.156	0.698
BeamBlue	0.152	0.027
BeamWhite	0.314	0.324
AuraRed	0.692	0.306
AuraGreen	0.174	0.724
AuraBlue	0.127	0.076

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

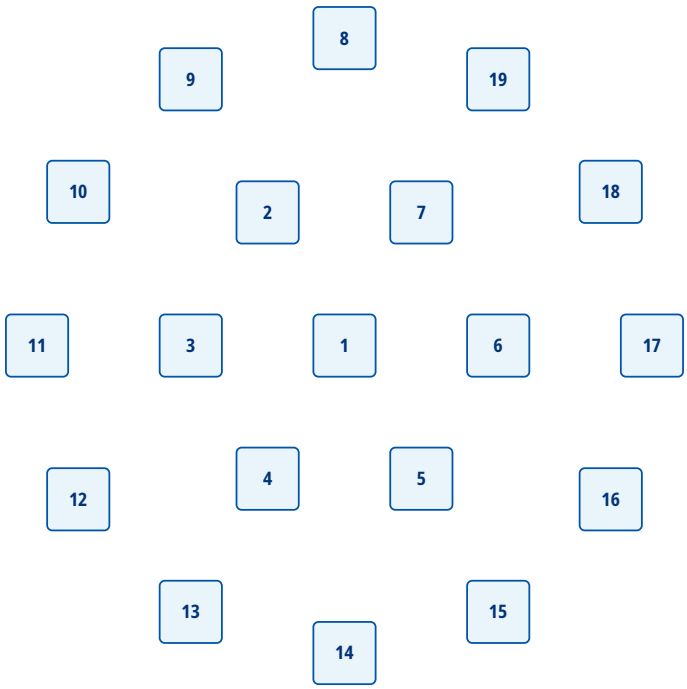
Strobe rate



CH 1 · Extended

- 25–64: 20–1 Hz
  Strobe
- 70–84: 3–0.125 Hz
  Opening Pulse
- 90–104: 3–0.125 Hz
  Closing Pulse
- 110–124: 20–1 Hz
  Strobe Random
- 130–144: 3–0.125 Hz
  Opening Pulse Random
- 150–164: 3–0.125 Hz
  Closing Pulse Random
- 170–184: 20–1 Hz
  Burst Pulse
- 190–204: 20–1 Hz
  Random Burst Pulse

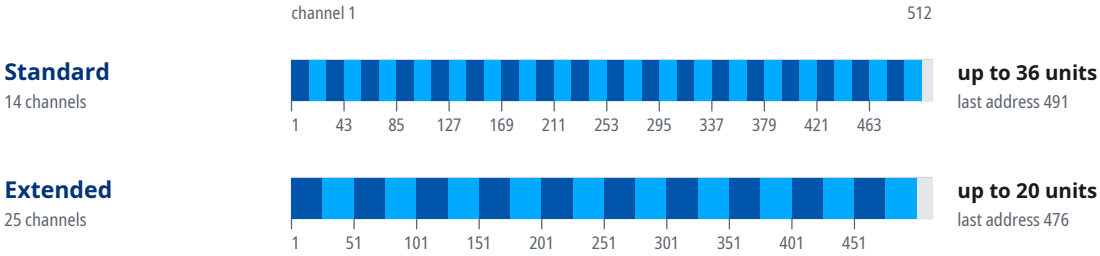
Cells (pixels)



19 cells where the GDTF file places them (seen from above), numbered in the file's order; the mode “Extended” drives them together.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extended”

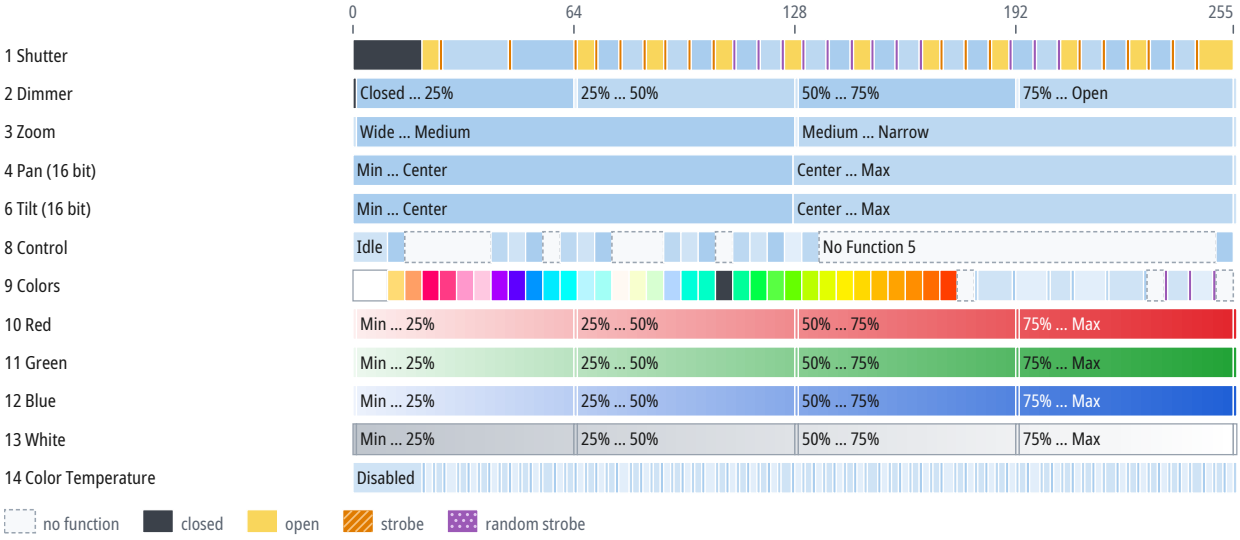
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	126	11	251	16	376
2	26	7	151	12	276	17	401
3	51	8	176	13	301	18	426
4	76	9	201	14	326	19	451
5	101	10	226	15	351	20	476

Mode Standard

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 Shutter at 20–24, 65–69, 85–89, 105–109, 125–129, 145–149, 165–169, 185–189, 205–209, 225–229 or 245–255 “Open”; CH 2 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Shutter 22, CH 2 Dimmer 255, CH 9 Colors 0, CH 10 Red 255, CH 11 Green 255, CH 12 Blue 255, CH 13 White 255, CH 14 Color Temperature 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Shutter	0–19	Shutter: Closed
		20–24	Shutter: Open
		25	Strobe: Fast
		26–44	Strobe: Fast ... Medium
		45	Strobe: Medium
		46–63	Strobe: Medium ... Slow
		64	Strobe: Slow
		65–69	Shutter: Open
		70	Opening Pulse: Fast
		71–76	Opening Pulse: Fast ... Medium
		77	Opening Pulse: Medium
		78–83	Opening Pulse: Medium ... Slow
		84	Opening Pulse: Slow
		85–89	Shutter: Open
		90	Closing Pulse: Fast
		91–96	Closing Pulse: Fast ... Medium
		97	Closing Pulse: Medium
		98–103	Closing Pulse: Medium ... Slow
		104	Closing Pulse: Slow
		105–109	Shutter: Open
		110	Strobe Random: Fast
		111–116	Strobe Random: Fast ... Medium
		117	Strobe Random: Medium
		118–123	Strobe Random: Medium ... Slow
		124	Strobe Random: Slow
		125–129	Shutter: Open
		130	Opening Pulse Random: Fast
		131–136	Opening Pulse Random: Fast ... Medium
		137	Opening Pulse Random: Medium
		138–143	Opening Pulse Random: Medium ... Slow
		144	Opening Pulse Random: Slow
		145–149	Shutter: Open
		150	Closing Pulse Random: Fast
		151–156	Closing Pulse Random: Fast ... Medium
		157	Closing Pulse Random: Medium
		158–163	Closing Pulse Random: Medium ... Slow
		164	Closing Pulse Random: Slow
		165–169	Shutter: Open
		170	Burst Pulse: Fast
		171–176	Burst Pulse: Fast ... Medium

CH	Function	DMX	Description
1	Shutter (continued)	177	Burst Pulse: Medium
		178–183	Burst Pulse: Medium ... Slow
		184	Burst Pulse: Slow
		185–189	Shutter: Open
		190	Random Burst Pulse: Fast
		191–196	Random Burst Pulse: Fast ... Medium
		197	Random Burst Pulse: Medium
		198–203	Random Burst Pulse: Medium ... Slow
		204	Random Burst Pulse: Slow
		205–209	Shutter: Open
		210	Sine Wave: Fast
		211–216	Sine Wave: Fast ... Medium
		217	Sine Wave: Medium
		218–223	Sine Wave: Medium ... Slow
		224	Sine Wave: Slow
		225–229	Shutter: Open
		230	Burst: Fast
		231–236	Burst: Fast ... Medium
		237	Burst: Medium
		238–243	Burst: Medium ... Slow
		244	Burst: Slow
		245–255	Shutter: Open
2	Dimmer	0	Closed
		1–63	Closed ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Open
		255	Open
3	Zoom	0	Wide
		1–127	Wide ... Medium
		128	Medium
		129–254	Medium ... Narrow
		255	Narrow
4	Pan	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
5	Pan Fine	0–255	Fine adjustment of CH 4
6	Tilt	0–127	Min ... Center

CH	Function	DMX	Description
6	Tilt (continued)	128–255	Center … Max
		255	Max
7	Tilt Fine	0–255	Fine adjustment of CH 6
8	Control	0–9	Idle
		10–14	Reset Entire Fixture (5s)
		15–39	No Function 1
		40–44	Standard (1s)
		45–49	Pan and Tilt Speed: Fast (1s)
		50–54	Smooth (1s)
		55–59	No Function 2
		60–64	Full Fan Speed (1s)
		65–69	Full Fan Speed (1s) … Regulated Fan Speed (1s)
		70–74	Regulated Fan Speed (1s)
		75–89	No Function 3
		90–94	Calibrated Color Mode (3s)
		95–99	Extended Color Mode (3s)
		100–104	Raw Color Mode (3s)
		105–109	No Function 4
		110–114	Fast Dimming Speed (3s)
		115–119	Fast Dimming Speed (3s) … Smooth Dimming Speed (3s)
		120–124	Smooth Dimming Speed (3s)
		125–129	Smooth Dimming Speed (3s) … Video Dimming Speed (3s)
		130–134	Video Dimming Speed (3s)
		135–249	No Function 5
		250–255	Control Panel Display ON (15s)
9	Colors	0–9	Color Selection: Open
		10–14	Moroccan Pink
		15–19	Pink
		20–24	Special Rose Pink
		25–29	Follies Pink
		30–34	Fuchsia Pink
		35–39	Surprise Pink
		40–44	Congo Blue
		45–49	Tokyo Blue
		50–54	Deep Blue
		55–59	Just Blue
		60–64	Medium Blue
		65–69	Double CT Blue
		70–74	Slate Blue
		75–79	Full CT Blue
		80–84	Half CT Blue

CH	Function	DMX	Description
9	Colors (continued)	85–89	Steel Blue
		90–94	Lighter Blue
		95–99	Light Blue
		100–104	Medium Blue Green
		105–109	Dark Green
		110–114	Primary Green
		115–119	Moss Green
		120–124	Fern Green
		125–129	Jas Green
		130–134	Lime Green
		135–139	Spring Yellow
		140–144	Deep Amber
		145–149	Chrome Orange
		150–154	Orange
		155–159	Gold Amber
		160–164	Millennium Gold
		165–169	Deep Golden Amber
		170–174	Flame Red
		175–179	No Function 1
		180	CW Max
		181–190	CW Max ... CW Med
		191	CW Med
		192–200	CW Med ... CW Min
		201	CW Min
		202–207	Color Spin: Stop
		208	CCW Min
		209–217	CCW Min ... CCW Med
		218	CCW Med
		219–228	CCW Med ... CCW Max
		229	CCW Max
		230–234	No Function 2
		235	Color Random: Fast
		236–241	Fast ... Medium
		242	Medium
		243–248	Medium ... Slow
		249	Color Random: Slow
		250–255	No Function 3
10	Red	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%

CH	Function	DMX	Description
10	Red (continued)	128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
11	Green	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
12	Blue	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
13	White	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
14	Color Temperature	0–19	Disabled
		20	10000K
		21–22	10000K ... 9900K
		23	9900K
		24–25	9900K ... 9800K
		26	9800K
		27–29	9800K ... 9700K
		30	9700K
		31–32	9700K ... 9600K
		33	9600K

CH	Function	DMX	Description
14	Color Temperature (continued)	34–35	9600K … 9500K
		36	9500K
		37–38	9500K … 9400K
		39	9400K
		40–41	9400K … 9300K
		42	9300K
		43–44	9300K … 9200K
		45	9200K
		46–47	9200K … 9100K
		48	9100K
		49–50	9100K … 9000K
		51	9000K
		52–53	9000K … 8900K
		54	8900K
		55–57	8900K … 8800K
		58	8800K
		59–60	8800K … 8700K
		61	8700K
		62–63	8700K … 8600K
		64	8600K
		65–66	8600K … 8500K
		67	8500K
		68–69	8500K … 8400K
		70	8400K
		71–72	8400K … 8300K
		73	8300K
		74–75	8300K … 8200K
		76	8200K
		77–79	8200K … 8100K
		80	8100K
		81–82	8100K … 8000K
		83	8000K
		84–85	8000K … 7900K
		86	7900K
		87–88	7900K … 7800K
		89	7800K
		90–91	7800K … 7700K
		92	7700K
		93–94	7700K … 7600K
		95	7600K
		96–97	7600K … 7500K
		98	7500K

CH	Function	DMX	Description
14	Color Temperature (continued)	99–100	7500K … 7400K
		101	7400K
		102–104	7400K … 7300K
		105	7300K
		106–107	7300K … 7200K
		108	7200K
		109–110	7200K … 7100K
		111	7100K
		112–113	7100K … 7000K
		114	7000K
		115–116	7000K … 6900K
		117	6900K
		118–119	6900K … 6800K
		120	6800K
		121–122	6800K … 6700K
		123	6700K
		124–126	6700K … 6600K
		127	6600K
		128–129	6600K … 6500K
		130	6500K
		131–132	6500K … 6400K
		133	6400K
		134–135	6400K … 6300K
		136	6300K
		137–138	6300K … 6200K
		139	6200K
		140–141	6200K … 6100K
		142	6100K
		143–144	6100K … 6000K
		145	6000K
		146–147	6000K … 5900K
		148	5900K
		149–151	5900K … 5800K
		152	5800K
		153–154	5800K … 5700K
		155	5700K
		156–157	5700K … 5600K
		158	5600K
		159–160	5600K … 5500K
		161	5500K
		162–163	5500K … 5400K
		164	5400K

CH	Function	DMX	Description
14	Color Temperature (continued)	165–166	5400K … 5300K
		167	5300K
		168–169	5300K … 5200K
		170	5200K
		171–173	5200K … 5100K
		174	5100K
		175–176	5100K … 5000K
		177	5000K
		178–179	5000K … 4900K
		180	4900K
		181–182	4900K … 4800K
		183	4800K
		184–185	4800K … 4700K
		186	4700K
		187–188	4700K … 4600K
		189	4600K
		190–191	4600K … 4500K
		192	4500K
		193–194	4500K … 4400K
		195	4400K
		196–198	4400K … 4300K
		199	4300K
		200–201	4300K … 4200K
		202	4200K
		203–204	4200K … 4100K
		205	4100K
		206–207	4100K … 4000K
		208	4000K
		209–210	4000K … 3900K
		211	3900K
		212–213	3900K … 3800K
		214	3800K
		215–216	3800K … 3700K
		217	3700K
		218–220	3700K … 3600K
		221	3600K
		222–223	3600K … 3500K
		224	3500K
		225–226	3500K … 3400K
		227	3400K
		228–229	3400K … 3300K
		230	3300K

CH	Function	DMX	Description
14	Color Temperature (continued)	231–232	3300K ... 3200K
		233	3200K
		234–235	3200K ... 3100K
		236	3100K
		237–238	3100K ... 3000K
		239	3000K
		240–241	3000K ... 2900K
		242	2900K
		243–245	2900K ... 2800K
		246	2800K
		247–248	2800K ... 2700K
		249	2700K
		250–251	2700K ... 2600K
		252	2600K
		253–254	2600K ... 2500K
		255	2500K

Mode Extended

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 Shutter 1 at 20–24, 65–69, 85–89, 105–109, 125–129, 145–149, 165–169, 185–189, 205–209, 225–229 or 245–255 “Open”; CH 2 Dimmer 1 above 0; CH 20 Shutter 2 at 20–24, 65–69, 85–89, 105–109, 125–129, 145–149, 165–169, 185–189, 205–209, 225–229 or 245–255 “Open”; CH 21 Dimmer 2 above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Shutter 1 22, CH 2 Dimmer 1 255, CH 9 Colors 0, CH 10 Red 1 255, CH 11 Green 1 255, CH 12 Blue 1 255, CH 13 White 255, CH 14 Color Temperature 0, CH 20 Shutter 2 22, CH 21 Dimmer 2 255, CH 22 Colors 2 0, CH 23 Red 2 255, CH 24 Green 2 255, CH 25 Blue 2 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Shutter 1	0–19	Shutter: Closed
		20–24	Shutter: Open
		25	Strobe: Fast
		26–44	Strobe: Fast ... Medium
		45	Strobe: Medium
		46–63	Strobe: Medium ... Slow
		64	Strobe: Slow
		65–69	Shutter: Open

CH	Function	DMX	Description
1	Shutter 1 (continued)	70	Opening Pulse: Fast
		71–76	Opening Pulse: Fast ... Medium
		77	Opening Pulse: Medium
		78–83	Opening Pulse: Medium ... Slow
		84	Opening Pulse: Slow
		85–89	Shutter: Open
		90	Closing Pulse: Fast
		91–96	Closing Pulse: Fast ... Medium
		97	Closing Pulse: Medium
		98–103	Closing Pulse: Medium ... Slow
		104	Closing Pulse: Slow
		105–109	Shutter: Open
		110	Strobe Random: Fast
		111–116	Strobe Random: Fast ... Medium
		117	Strobe Random: Medium
		118–123	Strobe Random: Medium ... Slow
		124	Strobe Random: Slow
		125–129	Shutter: Open
		130	Opening Pulse Random: Fast
		131–136	Opening Pulse Random: Fast ... Medium
		137	Opening Pulse Random: Medium
		138–143	Opening Pulse Random: Medium ... Slow
		144	Opening Pulse Random: Slow
		145–149	Shutter: Open
		150	Closing Pulse Random: Fast
		151–156	Closing Pulse Random: Fast ... Medium
		157	Closing Pulse Random: Medium
		158–163	Closing Pulse Random: Medium ... Slow
		164	Closing Pulse Random: Slow
		165–169	Shutter: Open
		170	Burst Pulse: Fast
		171–176	Burst Pulse: Fast ... Medium
		177	Burst Pulse: Medium
		178–183	Burst Pulse: Medium ... Slow
		184	Burst Pulse: Slow
		185–189	Shutter: Open
		190	Random Burst Pulse: Fast
		191–196	Random Burst Pulse: Fast ... Medium
		197	Random Burst Pulse: Medium
		198–203	Random Burst Pulse: Medium ... Slow
		204	Random Burst Pulse: Slow

CH	Function	DMX	Description
1	Shutter 1 (continued)	205–209	Shutter: Open
		210	Sine Wave: Fast
		211–216	Sine Wave: Fast ... Medium
		217	Sine Wave: Medium
		218–223	Sine Wave: Medium ... Slow
		224	Sine Wave: Slow
		225–229	Shutter: Open
		230	Burst: Fast
		231–236	Burst: Fast ... Medium
		237	Burst: Medium
		238–243	Burst: Medium ... Slow
		244	Burst: Slow
		245–255	Shutter: Open
2	Dimmer 1	0	Closed
		1–63	Closed ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Open
		255	Open
3	Zoom		Same as CH 3 in the mode “Standard” (p. 14)
4	Pan		Same as CH 4 in the mode “Standard” (p. 14)
5	Pan Fine	0–255	Fine adjustment of CH 4
6	Tilt		Same as CH 6 in the mode “Standard” (p. 14)
7	Tilt Fine	0–255	Fine adjustment of CH 6
8	Control		Same as CH 8 in the mode “Standard” (p. 15)
9	Colors		Same as CH 9 in the mode “Standard” (p. 15)
10	Red 1	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Max
		255	Max
11	Green 1	0	Min
		1–63	Min ... 25%
		64	25%

CH	Function	DMX	Description
11	Green 1 (continued)	65–127	25% … 50%
		128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max
12	Blue 1	0	Min
		1–63	Min … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max
13	White		Same as CH 13 in the mode “Standard” (p. 17)
14	Color Temperature		Same as CH 14 in the mode “Standard” (p. 17)
15	Effects	0–9	No Effect
		10–12	Dimmer Sync
		13–15	Strobe Sync
		16–18	Dimmer+Strobe Sync
		19–21	Aura Color Sync
		22–24	Aura All Sync
		25–39	No Function
		40–42	Aura Strobe Delay
		43–45	Strobe Alternate Single
		46–48	Strobe Alternate Dual
		49–51	Strobe Alternate Triple
		52–54	3-Step Strobe
		55–60	3-Step Strobe … Intensity Random Alternate
		61–63	Intensity Random Alternate
		64–66	Aura Ramp Beam Flash
		67–69	Beam Ramp Aura Flash
		70–72	Intensity Aura Beam Ramp
		73–75	Intensity Beam Aura Ramp
		76–99	No Function 1
		100–102	Aura Color Offset
		103–108	Aura Color Offset … Hue Shimmer
		109–111	Hue Shimmer
		112–114	Saturation Shimmer
		115–126	Saturation Shimmer … Color Strobe

CH	Function	DMX	Description
15	Effects (continued)	127–129	Color Strobe
		130–132	Color Offset Strobe
		133–135	Aura Color Strobe
		136–138	Aura Color Offset Strobe
		139–141	Color Spikes
		142–159	No Function 2
		160–162	Color Zoom Ramp In
		163–165	Color Zoom Ramp Out
		166–168	Color Zoom Fade In
		169–171	Color Zoom Fade Out
		172–174	Color Zoom Fade Out ... Zoom Ramp Up
		175–177	Zoom Ramp Up
		178–180	Zoom Ramp Down
		181–255	No Function 3
16	Effects Speed		FX 1 Speed
		0	Rev Max
		1–63	Rev Max ... Rev Med
		64	Rev Med
		65–125	Rev Med ... Rev Min
		126	Rev Min
		127–128	Stop
		129	Fwd Min
		130–191	Fwd Min ... Fwd Med
		192	Fwd Med
		193–254	Fwd Med ... Fwd Max
		255	Fwd Max
17	Effects 2	0–9	No Effect
		10–12	Dimmer Sync
		13–15	Strobe Sync
		16–18	Dimmer+Strobe Sync
		19–21	Aura Color Sync
		22–24	Aura All Sync
		25–39	No Function
		40–42	Aura Strobe Delay
		43–45	Strobe Alternate Single
		46–48	Strobe Alternate Dual
		49–51	Strobe Alternate Triple
		52–54	3-Step Strobe
		55–60	3-Step Strobe ... Intensity Random Alternate
		61–63	Intensity Random Alternate
		64–66	Aura Ramp Beam Flash

CH	Function	DMX	Description
17	Effects 2 (continued)	67–69	Beam Ramp Aura Flash
		70–72	Intensity Aura Beam Ramp
		73–75	Intensity Beam Aura Ramp
		76–99	No Function 1
		100–102	Aura Color Offset
		103–108	Aura Color Offset ... Hue Shimmer
		109–111	Hue Shimmer
		112–114	Saturation Shimmer
		115–126	Saturation Shimmer ... Color Strobe
		127–129	Color Strobe
		130–132	Color Offset Strobe
		133–135	Aura Color Strobe
		136–138	Aura Color Offset Strobe
		139–141	Color Spikes
		142–159	No Function 2
		160–162	Color Zoom Ramp In
		163–165	Color Zoom Ramp Out
		166–168	Color Zoom Fade In
		169–171	Color Zoom Fade Out
		172–174	Color Zoom Fade Out ... Zoom Ramp Up
		175–177	Zoom Ramp Up
		178–180	Zoom Ramp Down
		181–255	No Function 3
18	Effects 2 Speed		FX 2 Speed
		0	Rev Max
		1–63	Rev Max ... Rev Med
		64	Rev Med
		65–125	Rev Med ... Rev Min
		126	Rev Min
		127–128	Stop
		129	Fwd Min
		130–191	Fwd Min ... Fwd Med
		192	Fwd Med
		193–254	Fwd Med ... Fwd Max
		255	Fwd Max
19	Effects Sync		FX Synchronization
		0–49	No Sync
		50	Synchronized
		51–169	Sync Shift
		170–209	Sync Random
		210–255	No Sync Random

CH	Function	DMX	Description
20	Shutter 2	0–19	Shutter: Closed
		20–24	Shutter: Open
		25	Strobe: Fast
		26–44	Strobe: Fast ... Medium
		45	Strobe: Medium
		46–63	Strobe: Medium ... Slow
		64	Strobe: Slow
		65–69	Shutter: Open
		70	Opening Pulse: Fast
		71–76	Opening Pulse: Fast ... Medium
		77	Opening Pulse: Medium
		78–83	Opening Pulse: Medium ... Slow
		84	Opening Pulse: Slow
		85–89	Shutter: Open
		90	Closing Pulse: Fast
		91–96	Closing Pulse: Fast ... Medium
		97	Closing Pulse: Medium
		98–103	Closing Pulse: Medium ... Slow
		104	Closing Pulse: Slow
		105–109	Shutter: Open
		110	Strobe Random: Fast
		111–116	Strobe Random: Fast ... Medium
		117	Strobe Random: Medium
		118–123	Strobe Random: Medium ... Slow
		124	Strobe Random: Slow
		125–129	Shutter: Open
		130	Opening Pulse Random: Fast
		131–136	Opening Pulse Random: Fast ... Medium
		137	Opening Pulse Random: Medium
		138–143	Opening Pulse Random: Medium ... Slow
		144	Opening Pulse Random: Slow
		145–149	Shutter: Open
		150	Closing Pulse Random: Fast
		151–156	Closing Pulse Random: Fast ... Medium
		157	Closing Pulse Random: Medium
		158–163	Closing Pulse Random: Medium ... Slow
		164	Closing Pulse Random: Slow
		165–169	Shutter: Open
		170	Burst Pulse: Fast
		171–176	Burst Pulse: Fast ... Medium
		177	Burst Pulse: Medium

CH	Function	DMX	Description
20	Shutter 2 (continued)	178–183	Burst Pulse: Medium ... Slow
		184	Burst Pulse: Slow
		185–189	Shutter: Open
		190	Random Burst Pulse: Fast
		191–196	Random Burst Pulse: Fast ... Medium
		197	Random Burst Pulse: Medium
		198–203	Random Burst Pulse: Medium ... Slow
		204	Random Burst Pulse: Slow
		205–209	Shutter: Open
		210	Sine Wave: Fast
		211–216	Sine Wave: Fast ... Medium
		217	Sine Wave: Medium
		218–223	Sine Wave: Medium ... Slow
		224	Sine Wave: Slow
		225–229	Shutter: Open
		230	Burst: Fast
		231–236	Burst: Fast ... Medium
		237	Burst: Medium
		238–243	Burst: Medium ... Slow
		244	Burst: Slow
		245–255	Shutter: Open
21	Dimmer 2	0	Closed
		1–63	Closed ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%
		129–191	50% ... 75%
		192	75%
		193–254	75% ... Open
		255	Open
22	Colors 2	0–9	Color Selection: Open
		10–14	Moroccan Pink
		15–19	Pink
		20–24	Special Rose Pink
		25–29	Follies Pink
		30–34	Fuchsia Pink
		35–39	Surprise Pink
		40–44	Congo Blue
		45–49	Tokyo Blue
		50–54	Deep Blue
		55–59	Just Blue
		60–64	Medium Blue

CH	Function	DMX	Description
22	Colors 2 (continued)	65–69	Double CT Blue
		70–74	Slate Blue
		75–79	Full CT Blue
		80–84	Half CT Blue
		85–89	Steel Blue
		90–94	Lighter Blue
		95–99	Light Blue
		100–104	Medium Blue Green
		105–109	Dark Green
		110–114	Primary Green
		115–119	Moss Green
		120–124	Fern Green
		125–129	Jas Green
		130–134	Lime Green
		135–139	Spring Yellow
		140–144	Deep Amber
		145–149	Chrome Orange
		150–154	Orange
		155–159	Gold Amber
		160–164	Millennium Gold
		165–169	Deep Golden Amber
		170–174	Flame Red
		175–179	No Function 1
		180	CW Max
		181–190	CW Max ... CW Med
		191	CW Med
		192–200	CW Med ... CW Min
		201	CW Min
		202–207	Color Spin: Stop
		208	CCW Min
		209–217	CCW Min ... CCW Med
		218	CCW Med
		219–228	CCW Med ... CCW Max
		229	CCW Max
		230–234	No Function 2
		235	Color Random: Fast
		236–241	Fast ... Medium
		242	Medium
		243–248	Medium ... Slow
		249	Color Random: Slow
		250–255	No Function 3
23	Red 2	0	Min

CH	Function	DMX	Description
23	Red 2 (continued)	1–63	Min … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max
24	Green 2	0	Min
		1–63	Min … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max
25	Blue 2	0	Min
		1–63	Min … 25%
		64	25%
		65–127	25% … 50%
		128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max

10 Technical specifications

Parameter	Value
Light	
Light source	LED
Optics	
Zoom	9–41.7°
Movement	
Pan	540°
Tilt	232°
Control	
DMX connection	5-pin XLR IN/OUT
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	350 W
Power connectors	powerCONTRUE1TOP IN
Dimensions and construction	
Weight	6.5 kg
Operating environment	
Operating temperature	5 to 40 °C

Speeds and ranges

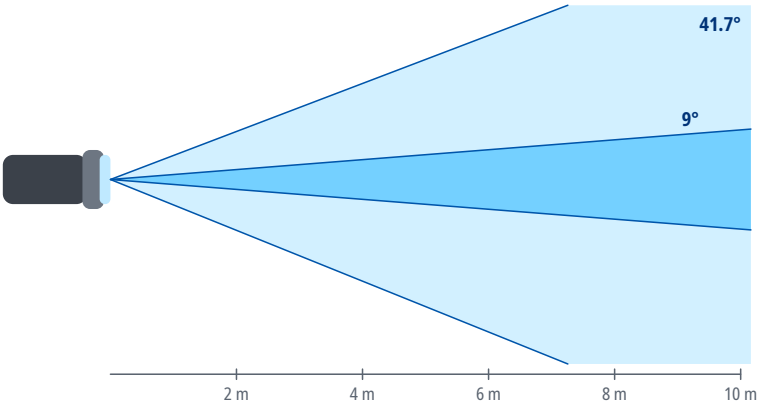
Parameter	Value
Color temperature range	2500–10000 K
Strobe frequency	1–20 Hz
Color wheel 1 rotation	up to 75 °/s (12 rpm)
Color wheel 2 rotation	up to 75 °/s (12 rpm)

Dimensions

weight 6.5 kg



Spot diameter



Distance	Ø 9°	Ø 41.7°
2 m	0.31 m	1.5 m
4 m	0.63 m	3 m
6 m	0.94 m	4.6 m
8 m	1.3 m	6.1 m
10 m	1.6 m	7.6 m
15 m	2.4 m	11.4 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.
Movement is reversed	Check whether Pan/Tilt inversion is enabled in the device menu or in the controller.
Moving parts do not reach the correct position after power-on or transport	Switch the device off and on again to reset the position, and make sure the transport lock, if any, is released. If this does not help, contact a service center.
Movement is jerky	Check the value of the Pan/Tilt speed channel, if the device has one, and the stability of the DMX signal.

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.