DMX REFERENCE

MAC Quantum Wash

LPL



Manufacturer	LPL
GDTF file	LPL_MAC_Quantum_Wash_110382.gdtf
GDTF revision	Rev1_0 · 2025-09-11
Generated	2026-11-24

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1 About this manual

This document describes the MAC Quantum Wash by LPL. It was compiled from the GDTF file LPL_MAC_Quantum_Wash_110382.gdtf from the GDTF-Share library.

File revision: “Rev1_0”.

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	880 W
Weight	21 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Basic	17	30	1, 18, 35, 52, ...
Extended	33	15	1, 34, 67, 100, ...

No light? Check these channels

- Basic: CH 1 Shutter at 20–49 or 201–210 “Open”; CH 2 Dimmer above 0
- Extended: CH 1 Shutter 1 at 20–49 or 201–210 “Open”; CH 2 Dimmer 1 above 0; CH 28 Shutter 2 at 20–49 or 201–210 “Open”; CH 29 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: 120–240 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.

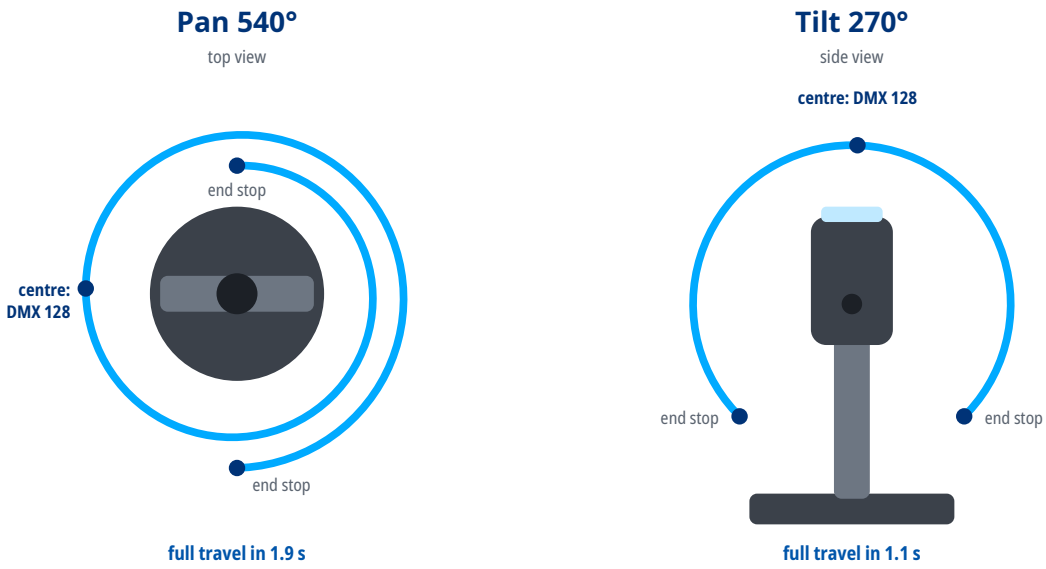
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do 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

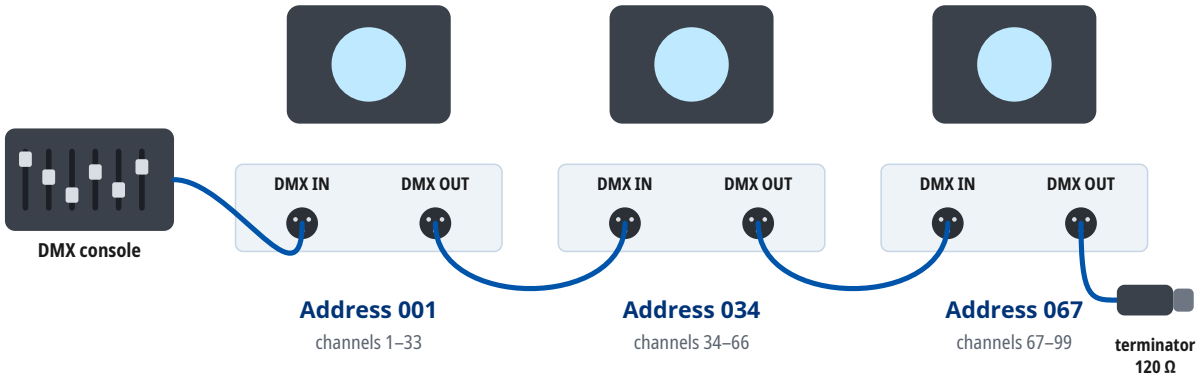
⚠ **WARNING**

- 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: 21 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 33 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”: 33.
- 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, 34, 67, 100.
- 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.

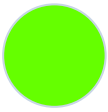
8 Functions at a glance

Functions in each DMX mode

	Basic 17 channels	Extended 33 channels
Pan / Tilt	13, 15	9, 11
Dimmer	2	2, 29
Shutter / strobe	1	1, 28
Color mixing	4, 6, 8	19–27, 30–32
Color temperature	10	4
Color wheel	11	5, 33
Zoom	12	6
Effects / macros		7, 14–18
Pixel control		✓

Color wheel 1

1. Color Selection: Open — DMX 0–10
2. Moroccan Pink — DMX 11–12
3. Pink — DMX 13–14
4. Special Rose Pink — DMX 15–16
5. Follies Pink — DMX 17–18
6. Fuchsia Pink — DMX 19–20
7. Surprise Pink — DMX 21–22
8. Congo Blue — DMX 23–24
9. Tokyo Blue — DMX 25–26
10. Deep Blue — DMX 27–28
11. Just Blue — DMX 29–30
12. Medium Blue — DMX 31–32
13. Double CT Blue — DMX 33–34
14. Slate Blue — DMX 35–36
15. Full CT Blue — DMX 37–38
16. Half CT Blue — DMX 39–40
17. Steel Blue — DMX 41–42
18. Lighter Blue — DMX 43–44
19. Light Blue — DMX 45–46
20. Medium Blue Green — DMX 47–48
21. Dark Green — DMX 49–50
22. Primary Green — DMX 51–52
23. Moss Green — DMX 53–54
24. Fern Green — DMX 55–56

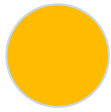
25 
Jas Green
DMX 57–58

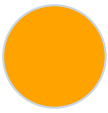
26
Lime Green
DMX 59–60

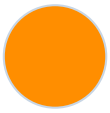
27
Spring Yellow
DMX 61–62

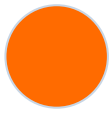
28
Deep Amber
DMX 63–64

29
Chrome Orange
DMX 65–66

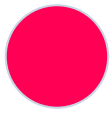
30 
Orange
DMX 67–68

31 
Gold Amber
DMX 69–70

32 
Millennium Gold
DMX 71–72

33 
Deep Golden Amber
DMX 73–74

34 
Flame Red
DMX 75–76

35 
Red Magenta
DMX 77–78

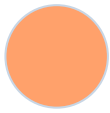
36 
Medium Lavender
DMX 79–80

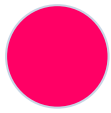
37
Pure White
DMX 81–83

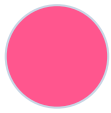
Color wheel 2

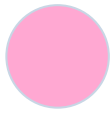
1
Color Selection: Open
DMX 0–10

2
Moroccan Pink
DMX 11–15

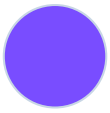
3 
Pink
DMX 16–20

4 
Special Rose Pink
DMX 21–25

5 
Follies Pink
DMX 26–30

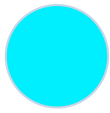
6 
Fuchsia Pink
DMX 31–35

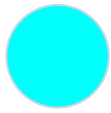
7
Surprise Pink
DMX 36–40

8 
Congo Blue
DMX 41–45

9 
Tokyo Blue
DMX 46–50

10 
Deep Blue
DMX 51–55

11 
Just Blue
DMX 56–60

12 
Medium Blue
DMX 61–65

13
Double CT Blue
DMX 66–70

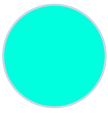
14
Slate Blue
DMX 71–75

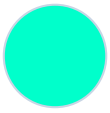
15
Full CT Blue
DMX 76–80

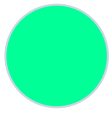
16
Half CT Blue
DMX 81–85

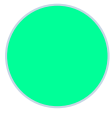
17
Steel Blue
DMX 86–90

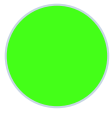
18
Lighter Blue
DMX 91–95

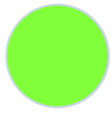
19 
Light Blue
DMX 96–100

20 
Medium Blue Green
DMX 101–105

21 
Dark Green
DMX 106–110

22 
Primary Green
DMX 111–115

23 
Moss Green
DMX 116–120

24 
Fern Green
DMX 121–125

25 Jas Green
DMX 126–130

26 Lime Green
DMX 131–135

27 Spring Yellow
DMX 136–140

28 Deep Amber
DMX 141–145

29 Chrome Orange
DMX 146–150

30 Orange
DMX 151–155

31 Gold Amber
DMX 156–160

32 Millennium Gold
DMX 161–165

33 Deep Golden Amber
DMX 166–170

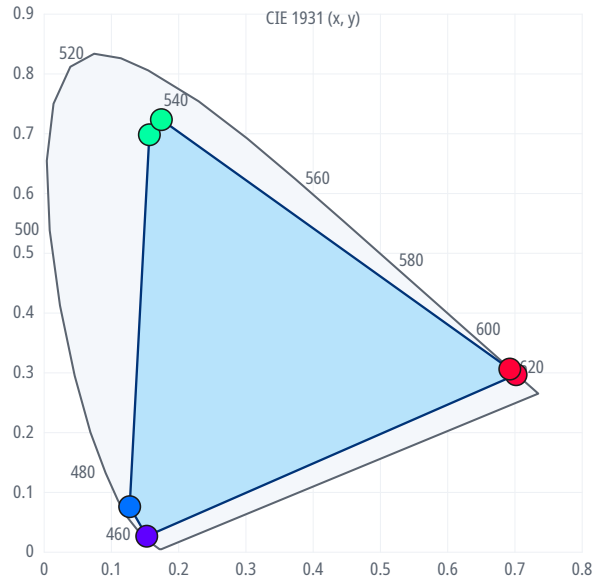
34 Flame Red
DMX 171–175

35 Red Magenta
DMX 176–180

36 Medium Lavender
DMX 181–185

37 Pure White
DMX 186–191

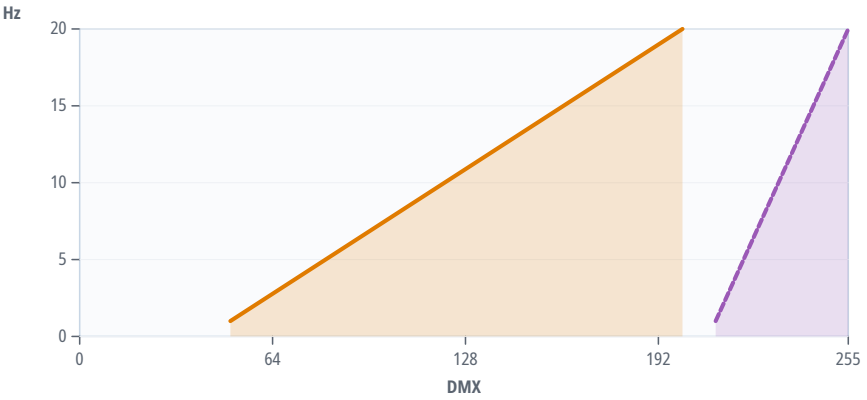
LED colors and the colors they mix



LED	x	y
BeamRed	0.702	0.297
BeamGreen	0.156	0.698
BeamBlue	0.152	0.027
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

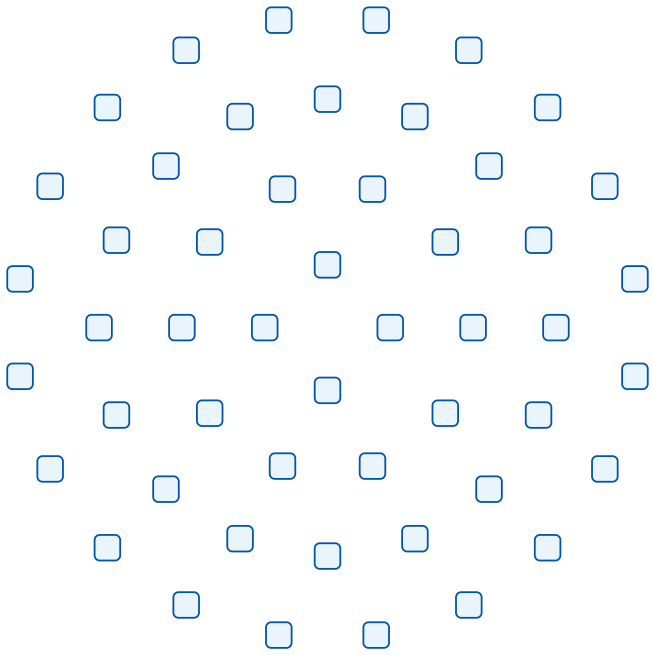


CH 1 · Extended

50–200: 1–20 Hz
Strobe

211–255: 1–20 Hz
Strobe Random

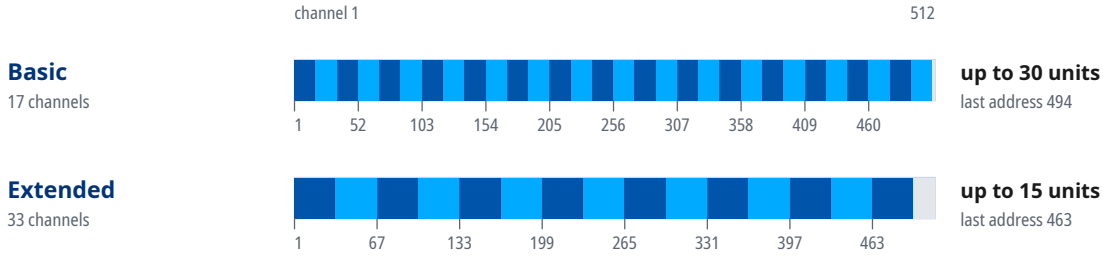
Cells (pixels)



Cells where the GDTF file places them (seen from above), 50 in all in the mode “Extended”.

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	166	11	331	16	U2 · 1
2	34	7	199	12	364	17	U2 · 34
3	67	8	232	13	397	18	U2 · 67
4	100	9	265	14	430	19	U2 · 100
5	133	10	298	15	463	20	U2 · 133

Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

RDM personalities

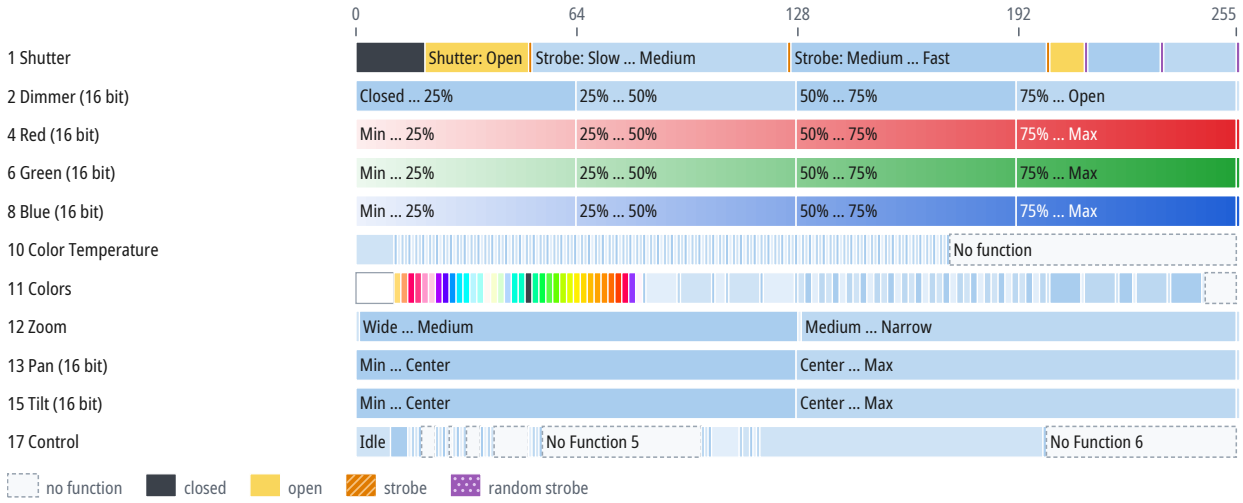
Mode	Channels	RDM personality
Basic	17	1
Extended	33	2

Mode Basic

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 20–49 or 201–210 “Open”; CH 2 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Shutter 30, CH 2 Dimmer 255, CH 4 Red 255, CH 6 Green 255, CH 8 Blue 255, CH 10 Color Temperature 0, CH 11 Colors 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Shutter	0–19	Shutter: Closed
		20–49	Shutter: Open
		50	Strobe: Slow
		51–124	Strobe: Slow ... Medium
		125	Strobe: Medium
		126–199	Strobe: Medium ... Fast
		200	Strobe: Fast
		201–210	Shutter: Open
		211	Strobe Random: Slow
		212–232	Strobe Random: Slow ... Medium
		233	Strobe Random: Medium
		234–254	Strobe Random: Medium ... Fast
		255	Strobe Random: Fast
2	Dimmer	0–63	Closed ... 25%
		64–127	25% ... 50%
		128–191	50% ... 75%
		192–255	75% ... Open
		255	Open
3	Dimmer Fine	0–255	Fine adjustment of CH 2
4	Red	0–63	Min ... 25%
		64–127	25% ... 50%

CH	Function	DMX	Description
4	Red (continued)	128–191	50% … 75%
		192–255	75% … Max
		255	Max
5	Red Fine	0–255	Fine adjustment of CH 4
6	Green	0–63	Min … 25%
		64–127	25% … 50%
		128–191	50% … 75%
		192–255	75% … Max
		255	Max
7	Green Fine	0–255	Fine adjustment of CH 6
8	Blue	0–63	Min … 25%
		64–127	25% … 50%
		128–191	50% … 75%
		192–255	75% … Max
		255	Max
9	Blue Fine	0–255	Fine adjustment of CH 8
10	Color Temperature	0–10	Disabled
		11	2000K
		12	2050K
		13	2100K
		14	2150K
		15	2200K
		16	2250K
		17	2300K
		18	2350K
		19	2400K
		20	2450K
		21	2500K
		22	2550K
		23	2600K
		24	2650K
		25	2700K
		26	2750K
		27	2800K
		28	2850K
		29	2900K
		30	2950K
		31	3000K
		32	3050K
		33	3100K
		34	3150K
		35	3200K

CH	Function	DMX	Description
10	Color Temperature (continued)	36	3250K
		37	3300K
		38	3350K
		39	3400K
		40	3450K
		41	3500K
		42	3550K
		43	3600K
		44	3650K
		45	3700K
		46	3750K
		47	3800K
		48	3850K
		49	3900K
		50	3950K
		51	4000K
		52	4050K
		53	4100K
		54	4150K
		55	4200K
		56	4250K
		57	4300K
		58	4350K
		59	4400K
		60	4450K
		61	4500K
		62	4550K
		63	4600K
		64	4650K
		65	4700K
		66	4750K
		67	4800K
		68	4850K
		69	4900K
		70	4950K
		71	5000K
		72	5050K
		73	5100K
		74	5150K
		75	5200K
		76	5250K
		77	5300K

CH	Function	DMX	Description
10	Color Temperature (continued)	78	5350K
		79	5400K
		80	5450K
		81	5500K
		82	5550K
		83	5600K
		84	5650K
		85	5700K
		86	5750K
		87	5800K
		88	5850K
		89	5900K
		90	5950K
		91	6000K
		92	6050K
		93	6100K
		94	6150K
		95	6200K
		96	6250K
		97	6300K
		98	6350K
		99	6400K
		100	6450K
		101	6500K
		102	6550K
		103	6600K
		104	6650K
		105	6700K
		106	6750K
		107	6800K
		108	6850K
		109	6900K
		110	6950K
		111	7000K
		112	7050K
		113	7100K
		114	7150K
		115	7200K
		116	7250K
		117	7300K
		118	7350K
		119	7400K

CH	Function	DMX	Description
10	Color Temperature (continued)	120	7450K
		121	7500K
		122	7550K
		123	7600K
		124	7650K
		125	7700K
		126	7750K
		127	7800K
		128	7850K
		129	7900K
		130	7950K
		131	8000K
		132	8050K
		133	8100K
		134	8150K
		135	8200K
		136	8250K
		137	8300K
		138	8350K
		139	8400K
		140	8450K
		141	8500K
		142	8550K
		143	8600K
		144	8650K
		145	8700K
		146	8750K
		147	8800K
		148	8850K
		149	8900K
		150	8950K
		151	9000K
		152	9050K
		153	9100K
		154	9150K
		155	9200K
		156	9250K
		157	9300K
		158	9350K
		159	9400K
		160	9450K
		161	9500K

CH	Function	DMX	Description
10	Color Temperature (continued)	162	9550K
		163	9600K
		164	9650K
		165	9700K
		166	9750K
		167	9800K
		168	9850K
		169	9900K
		170	9950K
		171	10000K
		172–255	No function
11	Colors	0–10	Color Selection: Open
		11–12	Moroccan Pink
		13–14	Pink
		15–16	Special Rose Pink
		17–18	Follies Pink
		19–20	Fuchsia Pink
		21–22	Surprise Pink
		23–24	Congo Blue
		25–26	Tokyo Blue
		27–28	Deep Blue
		29–30	Just Blue
		31–32	Medium Blue
		33–34	Double CT Blue
		35–36	Slate Blue
		37–38	Full CT Blue
		39–40	Half CT Blue
		41–42	Steel Blue
		43–44	Lighter Blue
		45–46	Light Blue
		47–48	Medium Blue Green
		49–50	Dark Green
		51–52	Primary Green
		53–54	Moss Green
		55–56	Fern Green
		57–58	Jas Green
		59–60	Lime Green
		61–62	Spring Yellow
		63–64	Deep Amber
		65–66	Chrome Orange
		67–68	Orange
		69–70	Gold Amber

CH	Function	DMX	Description
11	Colors (continued)	71–72	Millennium Gold
		73–74	Deep Golden Amber
		75–76	Flame Red
		77–78	Red Magenta
		79–80	Medium Lavender
		81–82	Pure White
		83	Color Spin: CW Max
		84–92	Color Spin: CW Max ... CW Med
		93	Color Spin: CW Med
		94–102	Color Spin: CW Med ... CW Min
		103	Color Spin: CW Min
		104–106	Color Spin: Stop
		107	Color Spin: CCW Min
		108–116	Color Spin: CCW Min ... CCW Med
		117	Color Spin: CCW Med
		118–126	Color Spin: CCW Med ... CCW Max
		127	Color Spin: CCW Max
		128–129	Macro 1
		130–131	Macro 2
		132–133	Macro 3
		134–135	Macro 4
		136–137	Macro 5
		138–139	Macro 6
		140–141	Macro 7
		142–143	Macro 8
		144–145	Macro 9
		146–147	Macro 10
		148–149	Macro 11
		150–151	Macro 12
		152–153	Macro 13
		154–155	Macro 14
		156–157	Macro 15
		158–159	Macro 16
		160–161	Macro 17
		162–163	Macro 18
		164–165	Macro 19
		166–167	Macro 20
		168–169	Macro 21
		170–171	Macro 22
		172–173	Macro 23
		174–175	Macro 24
		176–177	Macro 25

CH	Function	DMX	Description
11	Colors (continued)	178–179	Macro 26
		180–181	Macro 27
		182–183	Macro 28
		184–185	Macro 29
		186–187	Macro 30
		188–189	Macro 31
		190–191	Macro 32
		192–193	Macro 33
		194–195	Macro 34
		196–197	Macro 35
		198–199	Macro 36
		200	Color Macro Spin: CW Max
		201–209	Color Macro Spin: CW Max ... CW Med
		210	Color Macro Spin: CW Med
		211–219	Color Macro Spin: CW Med ... CW Min
		220	Color Macro Spin: CW Min
		221–224	Color Macro Spin: Stop
		225	Color Macro Spin: CCW Min
		226–234	Color Macro Spin: CCW Min ... CCW Med
		235	Color Macro Spin: CCW Med
		236–244	Color Macro Spin: CCW Med ... CCW Max
		245	Color Macro Spin: CCW Max
		246–255	No Function
12	Zoom	0	Wide
		1–127	Wide ... Medium
		128	Medium
		129–254	Medium ... Narrow
		255	Narrow
13	Pan	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
14	Pan Fine	0–255	Fine adjustment of CH 13
15	Tilt	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
16	Tilt Fine	0–255	Fine adjustment of CH 15
17	Control	0–9	Idle
		10–14	Reset Entire Fixture (5s)
		15	Reset Shutter/Dimmer Only (5s)
		16	Reset Color Only (5s)
		17	Reset Beam Only (5s)
		18	Reset Pan and Tilt Only (5s)

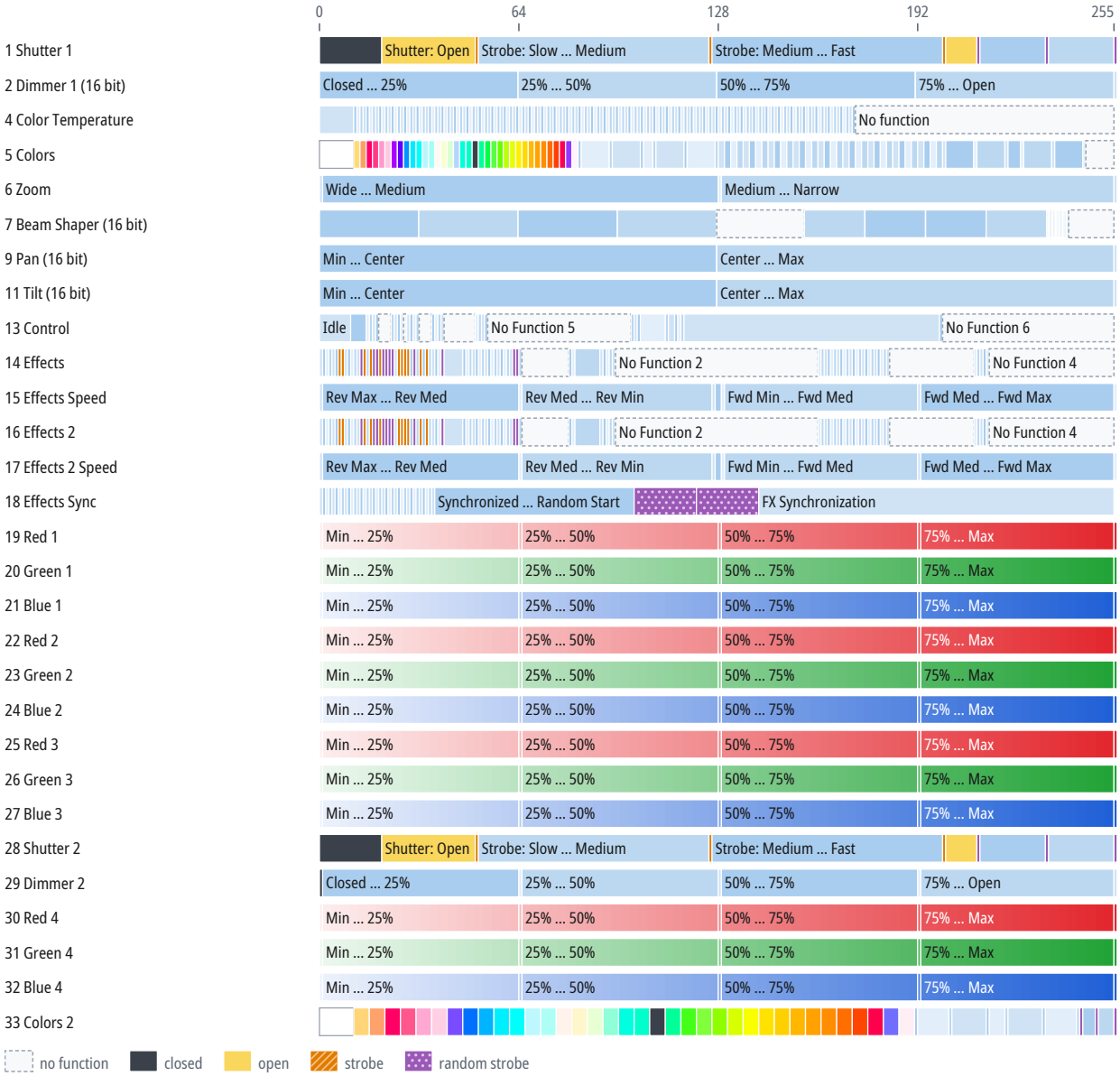
CH	Function	DMX	Description
17	Control (continued)	19–22	No Function 1
		23	Linear (1s)
		24	Square (1s)
		25	Inverse Square (1s)
		26	S-Curve (1s)
		27	No Function 2
		28	Pan and Tilt Speed: Fast (1s)
		29	Smooth (1s)
		30	Shortcuts ON
		31	Shortcuts OFF
		32–35	No Function 3
		36	Video Tracking ON (1s)
		37	Video Tracking OFF (1s)
		38	Extended Color Mode (1s)
		39	Calibrated Color Mode (1s)
		40–49	No Function 4
		50	Regulated Fan Speed (1s)
		51	Fixed Fan Speed (1s)
		52	Control Panel Display ON (1s)
		53	Control Panel Display OFF (1s)
		54–99	No Function 5
		100	Enable Calibration (5s)
		101	Store Pan and Tilt Calibration (5s)
		102	Store Dimmer Calibration (5s)
		103–110	Store Dimmer Calibration (5s) ... Store Beam Twister Calibration (5s)
		111	Store Beam Twister Calibration (5s)
		112–113	Store Beam Twister Calibration (5s) ... Store Zoom Calibration (5s)
		114	Store Zoom Calibration (5s)
		115	Store Pan Calibration
		116	Store Tilt Calibration
		117–198	Store Tilt Calibration ... Reset All Calibration To Factory Default (5s)
		199	Reset All Calibration To Factory Default (5s)
		200–255	No Function 6

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 20–49 or 201–210 “Open”; CH 2 Dimmer 1 above 0; CH 28 Shutter 2 at 20–49 or 201–210 “Open”; CH 29 Dimmer 2 above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Shutter 1 30, CH 2 Dimmer 1 255, CH 4 Color Temperature 0, CH 5 Colors 0, CH 19 Red 1 255, CH 20 Green 1 255, CH 21 Blue 1 255, CH 22 Red 2 255, CH 23 Green 2 255, CH 24 Blue 2 255, CH 25 Red 3 255, CH 26 Green 3 255, CH 27 Blue 3 255, CH 28 Shutter 2 30, CH 29 Dimmer 2 255, CH 30 Red 4 255, CH 31 Green 4 255, CH 32 Blue 4 255, CH 33 Colors 2 0.

Channel functions at a glance



CH	Function	DMX	Description
1	Shutter 1	0–19	Shutter: Closed
		20–49	Shutter: Open
		50	Strobe: Slow

CH	Function	DMX	Description
1	Shutter 1 (continued)	51–124	Strobe: Slow ... Medium
		125	Strobe: Medium
		126–199	Strobe: Medium ... Fast
		200	Strobe: Fast
		201–210	Shutter: Open
		211	Strobe Random: Slow
		212–232	Strobe Random: Slow ... Medium
		233	Strobe Random: Medium
		234–254	Strobe Random: Medium ... Fast
		255	Strobe Random: Fast
2	Dimmer 1	0–63	Closed ... 25%
		64–127	25% ... 50%
		128–191	50% ... 75%
		192–255	75% ... Open
		255	Open
3	Dimmer 1 Fine	0–255	Fine adjustment of CH 2
4	Color Temperature		Same as CH 10 in the mode “Basic” (p. 14)
5	Colors		Same as CH 11 in the mode “Basic” (p. 18)
6	Zoom		Same as CH 12 in the mode “Basic” (p. 20)
7	Beam Shaper	0–31	0 deg ... 90 deg
		32–63	90 deg ... 180 deg
		64–95	180 deg ... 270 deg
		96–127	270 deg ... 360 deg
		128	360 deg
		128–156	No Function 1
		156–175	CW Max ... CW Med
		175–195	CW Med ... CW Min
		195	CW Min
		195	Beam Twister Rotation: Stop
		195–214	CCW Min ... CCW Med
		214–234	CCW Med ... CCW Max
		234	CCW Max
		234	Disable
		234	Wide
		234–235	Smooth
		235	Texture
		235	Dots
		235–236	Eye
		236	Donut
		236–237	Beam
		237	Beam 2
		237	Beam 3

CH	Function	DMX	Description
7	Beam Shaper (continued)	237–238	Beam 4
		238	Mixed
		238–239	Separation
		239	Separation 2
		239	Rays
		239–240	Halo
		240	Two Areas
		240–241	Clean Colors
		241	Crossover
		241–255	No Function 2
8	Beam Shaper Fine	0–255	Fine adjustment of CH 7
9	Pan		Same as CH 13 in the mode “Basic” (p. 20)
10	Pan Fine	0–255	Fine adjustment of CH 9
11	Tilt		Same as CH 15 in the mode “Basic” (p. 20)
12	Tilt Fine	0–255	Fine adjustment of CH 11
13	Control		Same as CH 17 in the mode “Basic” (p. 20)
14	Effects	0	No Effect
		1	Aura All Sync Center
		2	Aura All Sync Middle
		3	Aura All Sync Outside
		4	Aura Color offset
		5	Aura Dimmer Sync
		6	Aura Strobe Sync
		7	Aura DimmerStrobe Sync
		8	Aura DimmerStrobe Sync ... Beam Color Tuner
		9	Beam Color Tuner
		10	Ring Chase Fader
		11	Ring Chase Ramp
		12	Sinewave Roll
		13	Ring Chase Fade Random
		14	Ring Pulse VU
		15	Ring Roll
		16	Ring Strobe
		17	Ring Strobe Random
		18	Ring Strobe Random MidFast
		19	Ring Chase Strobe Uni
		20	Ring Random Strobe Uni
		21	Ring Chase Random Strobe
		22	Ring Random Strobe Random
		23	Ring Random Strobe MidFast Unit
		24	Flash RingScroll
		25	Strobe Alternate 1

CH	Function	DMX	Description
14	Effects (continued)	26	Strobe Alternate 2
		27	Strobe Alternate 3
		28	3-Step Strobe
		29	Tick Tock
		30	Tick Tock Random
		31	Tick Tock Random … Beam Pulse
		32	Beam Pulse
		33	Beam Ramp
		34	Aura Pulse
		35	Aura Ramp
		36	Aura Ramp Beam Flash
		37	Beam Ramp Aura Flash
		38	BeamAura Ramp
		39	Ring Random Strobe Uni
		40–45	Ring Random Strobe Uni … Electric Arc
		46	Electric Arc
		47	Atomic Lighting
		48	Thunderstorm
		49	Welding
		50	Rainbow Fade
		51	Rainbow Solid
		52	Rainbow Roll
		53	RGB Fade
		54	RGB Step
		55	RGB Roll
		56	CMY Fade
		57	CMY Step
		58	CMY Roll
		59	Beam RedWhiteBlue
		60	Beam RedWhite
		61	Beam White Chase
		62	Beam Random White Chase
		63	Beam Random Color Rings
		64	Beam Color Flicker
		65–79	No Function 1
		80	Twister Animate 1
		81	Twister Animate 2
		82–89	Twister Animate 2 … Zoom Ramp
		90	Zoom Ramp
		91	Zoom Sawtooth
		92	Zoom Dimmer Ramp
		93	Zoom Dimmer Sawtooth

CH	Function	DMX	Description
14	Effects (continued)	94	Zoom Sawtooth Color White
		95–159	No Function 2
		160–182	Eye Candy 1...23
		183–209	No Function 3
		210	Ani Twist Fade
		211	Ani Twist All
		212	Ani Twist Rings
		213	Twist Aura
		214	Crazy Twister
		215–255	No Function 4
15	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
16	Effects 2	0	No Effect
		1	Aura All Sync Center
		2	Aura All Sync Middle
		3	Aura All Sync Outside
		4	Aura Color offset
		5	Aura Dimmer Sync
		6	Aura Strobe Sync
		7	Aura DimmerStrobe Sync
		8	Aura DimmerStrobe Sync ... Beam Color Tuner
		9	Beam Color Tuner
		10	Ring Chase Fader
		11	Ring Chase Ramp
		12	Sinewave Roll
		13	Ring Chase Fade Random
		14	Ring Pulse VU
		15	Ring Roll
		16	Ring Strobe
		17	Ring Strobe Random
		18	Ring Strobe Random MidFast
		19	Ring Chase Strobe Uni

CH	Function	DMX	Description
16	Effects 2 (continued)	20	Ring Random Strobe Uni
		21	Ring Chase Random Strobe
		22	Ring Random Strobe Random
		23	Ring Random Strobe MidFast Unit
		24	Flash RingScroll
		25	Strobe Alternate 1
		26	Strobe Alternate 2
		27	Strobe Alternate 3
		28	3-Step Strobe
		29	Tick Tock
		30	Tick Tock Random
		31	Tick Tock Random ... Beam Pulse
		32	Beam Pulse
		33	Beam Ramp
		34	Aura Pulse
		35	Aura Ramp
		36	Aura Ramp Beam Flash
		37	Beam Ramp Aura Flash
		38	BeamAura Ramp
		39	Ring Random Strobe Uni
		40–45	Ring Random Strobe Uni ... Electric Arc
		46	Electric Arc
		47	Atomic Lighting
		48	Thunderstorm
		49	Welding
		50	Rainbow Fade
		51	Rainbow Solid
		52	Rainbow Roll
		53	RGB Fade
		54	RGB Step
		55	RGB Roll
		56	CMY Fade
		57	CMY Step
		58	CMY Roll
		59	Beam RedWhiteBlue
		60	Beam RedWhite
		61	Beam White Chase
		62	Beam Random White Chase
		63	Beam Random Color Rings
		64	Beam Color Flicker
		65–79	No Function 1
		80	Twister Animate 1

CH	Function	DMX	Description
16	Effects 2 (continued)	81	Twister Animate 2
		82–89	Twister Animate 2 ... Zoom Ramp
		90	Zoom Ramp
		91	Zoom Sawtooth
		92	Zoom Dimmer Ramp
		93	Zoom Dimmer Sawtooth
		94	Zoom Sawtooth Color White
		95–159	No Function 2
		160–182	Eye Candy 1...23
		183–209	No Function 3
		210	Ani Twist Fade
		211	Ani Twist All
		212	Ani Twist Rings
		213	Twist Aura
		214	Crazy Twister
		215–255	No Function 4
17	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
18	Effects Sync		FX Synchronization
		0	No Sync
		1	Fixture Offset 10deg
		2	Fixture Offset 20deg
		3	Fixture Offset 30deg
		4	Fixture Offset 40deg
		5	Fixture Offset 50deg
		6	Fixture Offset 60deg
		7	Fixture Offset 70deg
		8	Fixture Offset 80deg
		9	Fixture Offset 90deg
		10	Fixture Offset 100deg
		11	Fixture Offset 110deg
		12	Fixture Offset 120deg

CH	Function	DMX	Description
18	Effects Sync (continued)	13	Fixture Offset 130deg
		14	Fixture Offset 140deg
		15	Fixture Offset 150deg
		16	Fixture Offset 160deg
		17	Fixture Offset 170deg
		18	Fixture Offset 180deg
		19	Fixture Offset 190deg
		20	Fixture Offset 200deg
		21	Fixture Offset 210deg
		22	Fixture Offset 220deg
		23	Fixture Offset 230deg
		24	Fixtrue Offset 240deg
		25	Fixture Offset 250deg
		26	Fixture Offset 260deg
		27	Fixture Offset 270deg
		28	Fixture Offset 280deg
		29	Fixture Offset 290deg
		30	Fixture Offset 300deg
		31	Fixture Offset 310deg
		32	Fixture Offset 320deg
		33	Fixture Offset 330deg
		34	Fixture Offset 340deg
		35	Fixture Offset 350deg
		36	Synchronized
		37–100	Synchronized ... Random Start
		101–120	Random Start
		121–140	Random Duration
		141–255	FX Synchronization
19	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
20	Green 1	0	Min
		1–63	Min ... 25%
		64	25%
		65–127	25% ... 50%
		128	50%

CH	Function	DMX	Description
20	Green 1 (continued)	129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max
21	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
22	Red 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
23	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
24	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
25	Red 3	0	Min
		1–63	Min … 25%

CH	Function	DMX	Description
25	Red 3 (continued)	64	25%
		65–127	25% … 50%
		128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Max
		255	Max
26	Green 3	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
27	Blue 3	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
28	Shutter 2	0–19	Shutter: Closed
		20–49	Shutter: Open
		50	Strobe: Slow
		51–124	Strobe: Slow … Medium
		125	Strobe: Medium
		126–199	Strobe: Medium … Fast
		200	Strobe: Fast
		201–210	Shutter: Open
		211	Strobe Random: Slow
		212–232	Strobe Random: Slow … Medium
		233	Strobe Random: Medium
		234–254	Strobe Random: Medium … Fast
		255	Strobe Random: Fast
29	Dimmer 2	0	Closed
		1–63	Closed … 25%
		64	25%
		65–127	25% … 50%

CH	Function	DMX	Description
29	Dimmer 2 (continued)	128	50%
		129–191	50% … 75%
		192	75%
		193–254	75% … Open
		255	Open
30	Red 4	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
31	Green 4	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
32	Blue 4	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
33	Colors 2	0–10	Color Selection: Open
		11–15	Moroccan Pink
		16–20	Pink
		21–25	Special Rose Pink
		26–30	Follies Pink
		31–35	Fuchsia Pink
		36–40	Surprise Pink
		41–45	Congo Blue
		46–50	Tokyo Blue
		51–55	Deep Blue

CH	Function	DMX	Description
33	Colors 2 (continued)	56–60	Just Blue
		61–65	Medium Blue
		66–70	Double CT Blue
		71–75	Slate Blue
		76–80	Full CT Blue
		81–85	Half CT Blue
		86–90	Steel Blue
		91–95	Lighter Blue
		96–100	Light Blue
		101–105	Medium Blue Green
		106–110	Dark Green
		111–115	Primary Green
		116–120	Moss Green
		121–125	Fern Green
		126–130	Jas Green
		131–135	Lime Green
		136–140	Spring Yellow
		141–145	Deep Amber
		146–150	Chrome Orange
		151–155	Orange
		156–160	Gold Amber
		161–165	Millennium Gold
		166–170	Deep Golden Amber
		171–175	Flame Red
		176–180	Red Magenta
		181–185	Medium Lavender
		186–190	Pure White
		191	CW Max
		192–201	CW Max ... CW Med
		202	CW Med
		203–213	CW Med ... CW Min
		214	CW Min
		215–219	Color Spin: Stop
		220	CCW Min
		221–231	CCW Min ... CCW Med
		232	CCW Med
		233–242	CCW Med ... CCW Max
		243	CCW Max
		244	Color Random: Fast
		245–248	Fast ... Medium

CH	Function	DMX	Description
33	Colors 2 (continued)	249	Medium
		250–254	Medium ... Slow
		255	Color Random: Slow

10 Technical specifications

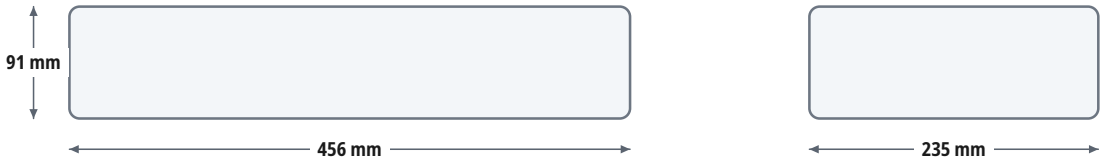
Parameter	Value
Light	
Light source	LED
Optics	
Zoom	11–53°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT
RDM	yes (manufacturer ID 0x4D50, device model ID 0x0049)
Electrical	
Power supply	120–240 V, 50/60 Hz
Power consumption	880 W
Power connectors	NAC3FCA IN
Dimensions and construction	
Weight	21 kg
Operating environment	
Operating temperature	5 to 40 °C

Speeds and ranges

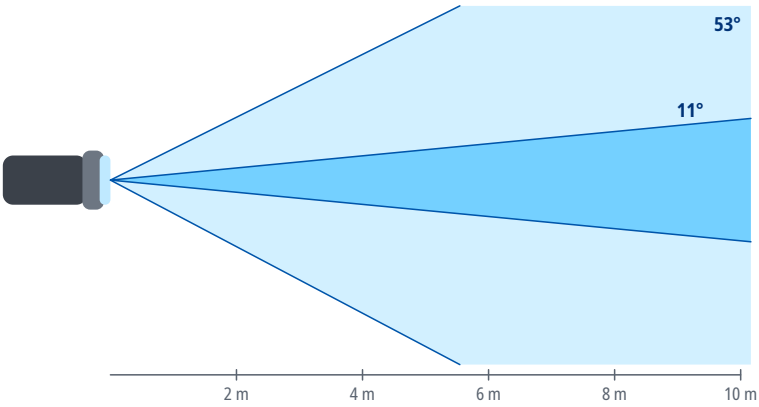
Parameter	Value
Color temperature range	2000–10000 K
Strobe frequency	1–20 Hz
Color wheel 1 rotation	up to 75 °/s (12 rpm)
Color wheel 2 rotation	up to 75 °/s (12 rpm)
Beam shaper rotation	up to 360 °/s (60 rpm)

Dimensions

weight 21 kg



Spot diameter



Distance	Ø 11°	Ø 53°
2 m	0.39 m	2 m
4 m	0.77 m	4 m
6 m	1.2 m	6 m
8 m	1.5 m	8 m
10 m	1.9 m	10 m
15 m	2.9 m	15 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.

Problem	Remedy
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.