DMX REFERENCE

Ultimo Hybrid

Clay Paky



Manufacturer	Clay Paky
GDTF file	Clay_Paky_Ultimo_Hybrid_135597.gdtf
GDTF revision	ClayPaky FW 1_2 - New Geometries · 2026-03-26
Generated	2026-11-23

Contents

1 About this manual 2
2 Quick reference 2
3 Safety instructions 3
4 Product description 4
5 Installation 5
6 Connections 5
7 Operation 6
8 Functions at a glance 7
9 DMX channels 10
Mode Standard 11
10 Technical specifications 21
11 Maintenance and cleaning 22
12 Troubleshooting 22
13 Disposal 23

1 About this manual

This document describes the Ultimo Hybrid by Clay Paky. It was compiled from the GDTF file Clay_Paky_Ultimo_Hybrid_135597.gdtf from the GDTF-Share library.

File revision: “ClayPaky FW 1_2 - New Geometries”.

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 Clay Paky; 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	-20 kg
Ingress protection	IP66

DMX modes

Mode	Channels	Units in one universe	First start addresses
Standard	43	11	1, 44, 87, 130, ...

No light? Check these channels

- Standard: CH 7 Shutter at 104–107, 208–212 or 252–255 “Open”; CH 8 Dimmer above 0



Read the manual before use



Do not stare into the light

3 Safety instructions



Read the manual before use



Do not stare into the light

⚠ 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.

⚠ CAUTION

- The device is rated IP66 and may be used outdoors within the limits of this rating.
- This protection is effective only when all connectors are mated or closed with their protective caps and all seals are intact. Use cables and connectors with the same or a higher protection rating.
- Do not open the housing; opening it breaks the seals and the protection rating can no longer be guaranteed.
- Install the device so that water cannot collect around connectors and cable glands, and inspect seals and cables regularly.

⚠ 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

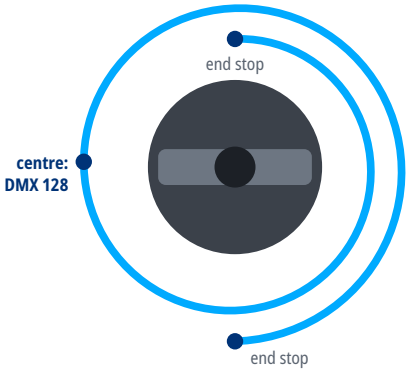
Description in the GDTF file

“Imagine a hybrid fixture that is powerful, versatile, and compact. Ultimo Hybrid brings your vision to life, indoors or out, with its IP66 water and dust resistance. Effortlessly shift between beam, spot, wash, and profile modes, reducing the need for extra fixtures. With intense brightness, a long-lasting short-arc lamp, and an advanced effects engine, every designer needs this all-in-one tool. Ultimo Hybrid: the ultimate evolution of what’s possible.”

Range of movement

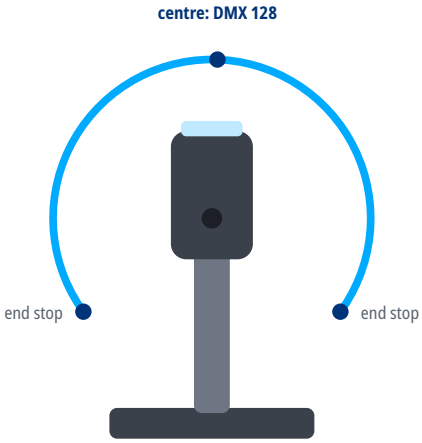
Pan 540°

top view



Tilt 252°

side view



5 Installation

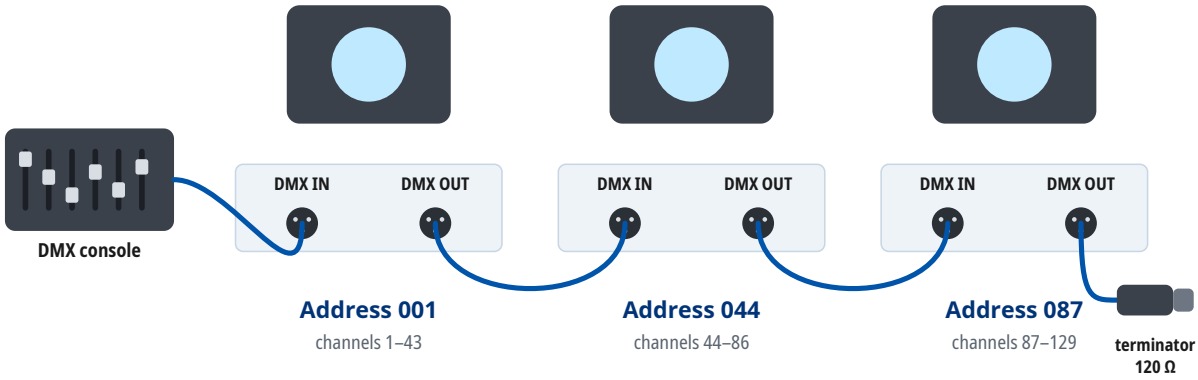
⚠ WARNING

- 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: -20 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 Standard: every unit occupies 43 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 “Standard”: 43.
- 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 “Standard”, you can use, for example, the start addresses 1, 44, 87, 130.
- 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

	Standard 43 channels
Pan / Tilt	37, 39
Dimmer	8
Shutter / strobe	7
Color mixing	1–3
Color temperature	4
Color wheel	6
Gobo wheel	11, 14
Gobo rotation	15
Prism	17–20
Frost	21
Zoom	22
Focus	23
Iris	10
Animation wheel	12, 13
Effects / macros	35

Color wheel

1. Full Color: Open — DMX 0–5
2. Dark Red — DMX 6–11
3. CTO 8000-2500K — DMX 12–17
4. Blue — DMX 18–23
5. Light Green — DMX 24–29
6. Deep Green — DMX 30–35
7. Aquamarine — DMX 36–41
8. Lavender — DMX 42–47
9. Pink — DMX 48–53
10. Deep Blue — DMX 54–59
11. Half Minus Green — DMX 60–65
12. Orange — DMX 66–71
13. Deep Orange — DMX 72–77
14. CTB — DMX 78–83
15. UV — DMX 84–90

Gobo wheel 1

1
Gobo: Open
DMX 0–3

2 
Gobo 1
DMX 4–7

3 
Gobo 2
DMX 8–11

4 
Gobo 3
DMX 12–14

5 
Gobo 4
DMX 15–18

6 
Gobo 5
DMX 19–22

7 
Gobo 6
DMX 23–26

8 
Gobo 7
DMX 27–29

9 
Gobo 8
DMX 30–33

10 
Gobo 9
DMX 34–37

11 
Gobo 10
DMX 38–41

12 
Gobo 11
DMX 42–44

13 
Gobo 12
DMX 45–48

14 
Gobo 13
DMX 49–52

15 
Gobo 14
DMX 53–56

16 
Gobo 15
DMX 57–59

17 
Gobo 16
DMX 60–63

18 
Gobo 17
DMX 64–67

19 
Gobo 18
DMX 68–72

Animation wheel

1
Open
DMX 0–7

2 
Animation
DMX 8–255

Gobo wheel 2

1
Gobo: Open
DMX 0–7

2 
Gobo: Half Circle
DMX 8–15

3 
Gobo: Plumens
DMX 16–23

4 
Gobo: Fat Line
DMX 24–31

5 
Gobo: Smooth Breakup
DMX 32–39

6 
Gobo: Multiple Moons
DMX 40–47

7 
Gobo: Grid
DMX 48–55

8 
Gobo: Broken Circle
DMX 56–62

9 
Gobo 8
DMX 63–72

Prism 1

1 Open
DMX 0–127

2 4-Facet Circular Prism
DMX 128–255

Prism 2

1 Open
DMX 0–127

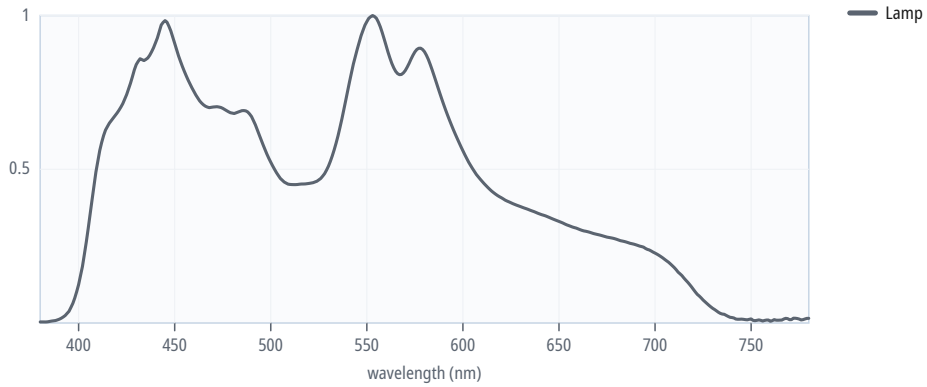
2 8-Facet Circular Prism
DMX 128–255

Gobo wheel 3

1 Open
DMX 0

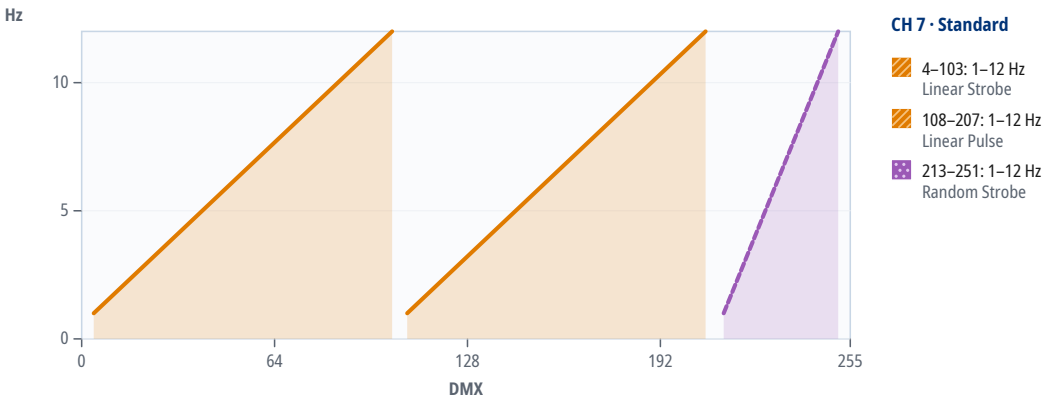
2 Frost
DMX 255

Spectra of the light sources



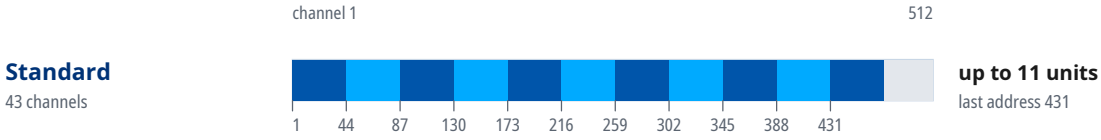
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Standard”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	216	11	431	16	U2 · 173
2	44	7	259	12	U2 · 1	17	U2 · 216
3	87	8	302	13	U2 · 44	18	U2 · 259
4	130	9	345	14	U2 · 87	19	U2 · 302
5	173	10	388	15	U2 · 130	20	U2 · 345

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.

Mode Standard

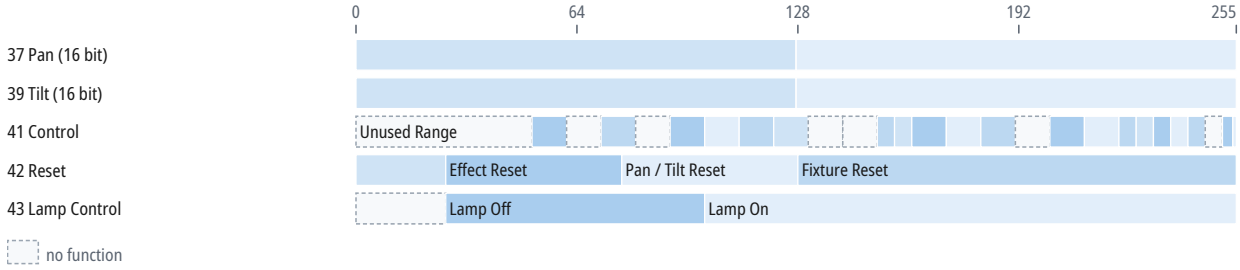
16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 7 Shutter at 104–107, 208–212 or 252–255 “Open”; CH 8 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Cyan 0, CH 2 Magenta 0, CH 3 Yellow 0, CH 4 CTO 0, CH 5 Colors Mode 0, CH 6 Colors 0, CH 7 Shutter 105, CH 8 Dimmer 255.

Channel functions at a glance



Channel functions at a glance



CH	Function	DMX	Description
1	Cyan	0	Min
		1–254	Min ... Max
		255	Max
2	Magenta	0	Min
		1–254	Min ... Max
		255	Max
3	Yellow	0	Min
		1–254	Min ... Max
		255	Max
4	CTO	0	Min
		1–254	Min ... Max
		255	Max
5	Colors Mode		Color Function
		0–89	Full Color
		90–170	Half Color
		171–255	Linear Path
6	Colors		When CH 5 is 0–89:
		0–5	Full Color: Open
		6–11	Dark Red
		12–17	CTO 8000-2500K
		18–23	Blue
		24–29	Light Green
		30–35	Deep Green
		36–41	Aquamarine
		42–47	Lavender
		48–53	Pink
		54–59	Deep Blue
		60–65	Half Minus Green
		66–71	Orange
		72–77	Deep Orange
		78–83	CTB
		84–89	UV
		90–127	CW Slow to Fast (0.44–947.4 °/s)

CH	Function	DMX	Description
6	Colors (continued)	128	0 deg
		129–254	0 deg ... 360 deg
		255	360 deg
			When CH 5 is 90–170:
		0–2	Half Color: Open
		3–5	Open/Dark Red
		6–8	Dark Red
		9–11	Dark Red/CTO 8000-2500K
		12–14	CTO 8000-2500K
		15–17	CTO 8000-2500K/Blue
		18–20	Blue
		21–23	Blue/Light Green
		24–26	Light Green
		27–29	Light Green/Deep Green
		30–32	Deep Green
		33–35	Deep Green/Aquamarine
		36–38	Aquamarine
		39–41	Aquamarine/Lavender
		42–44	Lavender
		45–47	Lavender/Pink
		48–50	Pink
		51–53	Pink/Deep Blue
		54–56	Deep Blue
		57–59	Deep Blue/Half Minus Green
		60–62	Half Minus Green
		63–65	Half Minus Green/Orange
		66–68	Orange
		69–71	Orange/Deep Orange
		72–74	Deep Orange
		75–77	Deep Orange/CTB
		78–80	CTB
		81–83	CTB/UV
		84–86	UV
		87–89	UV/Open
		90–127	CW Slow to Fast (0.44–947.4 °/s)
		128	0 deg
		129–254	0 deg ... 360 deg
		255	360 deg
			When CH 5 is 171–255:
		0	Open to Dark Red
		1–5	Open to Dark Red ... Dark Red
		6	Dark Red

CH	Function	DMX	Description
6	Colors (continued)	7–11	Dark Red ... 2500K
		12	2500K
		13–17	2500K ... Brilliant Blue
		18	Brilliant Blue
		19–23	Brilliant Blue ... Light Green
		24	Light Green
		25–29	Light Green ... Dark Green
		30	Dark Green
		31–35	Dark Green ... Aquamarine
		36	Aquamarine
		37–41	Aquamarine ... Lavender
		42	Lavender
		43–47	Lavender ... Pink
		48	Pink
		49–53	Pink ... Navy Blue
		54	Navy Blue
		55–59	Navy Blue ... H M Green
		60	H M Green
		61–65	H M Green ... Light Orange
		66	Light Orange
		67–71	Light Orange ... Dark Orange
		72	Dark Orange
		73–77	Dark Orange ... CCT Blue
		78	CCT Blue
		79–83	CCT Blue ... UV
		84	UV
		85–89	Linear Path
		90–127	CW Slow to Fast (0.44–947.4 °/s)
		128	0 deg
		129–254	0 deg ... 360 deg
		255	360 deg
7	Shutter	0–3	Closed
		4	Linear Strobe: Slow
		5–102	Linear Strobe: Slow ... Fast
		103	Linear Strobe: Fast
		104–107	Open
		108	Linear Pulse: Slow
		109–206	Linear Pulse: Slow ... Fast
		207	Linear Pulse: Fast
		208–212	Open
		213–225	Random Strobe: Low
		226–238	Medium

CH	Function	DMX	Description
7	Shutter (continued)	239–251	Random Strobe: High
		252–255	Open
8	Dimmer	0–255	Close … Open
		255	Open
9	Dimmer Fine	0–255	Fine adjustment of CH 8
10	Iris	0–127	Min to Max
		128–131	Open 1
		132	Pulse - Slow
		133–170	Pulse Slow - Fast
		171	Pulse - Fast
		172	Pulse Open Slow
		173–210	Pulse Open
		211	Pulse open Fast
		212	Pulse Close Slow
		213–250	Pulse Close Slow to Fast
		251	Pulse Close Fast
		252–255	Open 2
11	Gobo	0–3	Gobo: Open
		4–7	Gobo 1
		8–11	Gobo 2
		12–14	Gobo 3
		15–18	Gobo 4
		19–22	Gobo 5
		23–26	Gobo 6
		27–29	Gobo 7
		30–33	Gobo 8
		34–37	Gobo 9
		38–41	Gobo 10
		42–44	Gobo 11
		45–48	Gobo 12
		49–52	Gobo 13
		53–56	Gobo 14
		57–59	Gobo 15
		60–63	Gobo 16
		64–67	Gobo 17
		68–71	Gobo 18
		72–113	Gobo 1 Spin: Fast to Slow (360–90 °/s)
		114–117	Gobo 1 Spin: Stop
		118–159	Gobo 1 Spin: Slow to Fast (90–360 °/s)
		160–165	Gobo 1 Shake: Gobo 1
		166–170	Gobo 1 Shake: Gobo 2
		171–175	Gobo 1 Shake: Gobo 3

CH	Function	DMX	Description
11	Gobo (continued)	176–181	Gobo 1 Shake: Gobo 4
		182–186	Gobo 1 Shake: Gobo 5
		187–191	Gobo 1 Shake: Gobo 6
		192–196	Gobo 1 Shake: Gobo 7
		197–202	Gobo 1 Shake: Gobo 8
		203–207	Gobo 1 Shake: Gobo 9
		208–212	Gobo 1 Shake: Gobo 10
		213–218	Gobo 1 Shake: Gobo 11
		219–223	Gobo 1 Shake: Gobo 12
		224–228	Gobo 1 Shake: Gobo 13
		229–233	Gobo 1 Shake: Gobo 14
		234–239	Gobo 1 Shake: Gobo 15
		240–244	Gobo 1 Shake: Gobo 16
		245–249	Gobo 1 Shake: Gobo 17
		250–255	Gobo 1 Shake: Gobo 18
12	Animation Wheel	0–7	Open
		8–255	Animation
13	Animation Wheel Rotation Speed		Animation Wheel Pos Rot
		0–3	Stop
		4–127	CW Slow to Fast (16–1080 °/s)
		128–131	Stop
		132–255	CCW Slow to Fast (16–1080 °/s)
14	Gobo 2	0–7	Gobo: Open
		8–15	Gobo: Half Circle
		16–23	Gobo: Plumens
		24–31	Gobo: Fat Line
		32–39	Gobo: Smooth Breakup
		40–47	Gobo: Multiple Moons
		48–55	Gobo: Grid
		56–62	Gobo: Broken Circle
		63–71	Gobo: Small Dots
		72–113	Gobo 2 Spin: Fast to Slow (360–90 °/s)
		114–117	Gobo 2 Spin: Stop
		118–159	Gobo 2 Spin: Slow to Fast (90–360 °/s)
		160–171	Gobo 2 Shake: Half Circle (1–10 Hz)
		172–183	Gobo 2 Shake: Plumens (1–10 Hz)
		184–195	Gobo 2 Shake: Fat Line (1–10 Hz)
		196–207	Gobo 2 Shake: Smooth Breakup (1–10 Hz)
		208–219	Gobo 2 Shake: Multiple Moons (1–10 Hz)
		220–231	Gobo 2 Shake: Grid (1–10 Hz)
		232–243	Gobo 2 Shake: Broken Circle (1–10 Hz)
		244–255	Gobo 2 Shake: Small Dots (1–10 Hz)

CH	Function	DMX	Description
15	Gobo 2 Rotation	0–127	0 … 540
		127	540
		128–190	Gobo 2 Rotate: Fast to Slow (1080–16.9 °/s)
		191–192	Gobo 2 Rotate: Stop
		192	Gobo 2 Rotate: Stop … Slow to Fast
		193–255	Gobo 2 Rotate: Slow to Fast (16.9–1080 °/s)
16	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 15
17	Prism		Prism 1
		0–127	Open
		128–255	4-Facet Circular Prism
18	Prism Rotation Speed	0	0
		1–126	0 … 540
		127	540
		128–190	CW Fast to Slow (540–8 °/s)
		191–192	Prism Rotation: Stop
		193–255	CCW Slow to Fast (8–540 °/s)
19	Prism 2	0–127	Open
		128–255	8-Facet Circular Prism
20	Prism 2 Rotation Speed	0	0
		1–126	0 … 540
		127	540
		128–190	CW Fast to Slow (up to 540 °/s (90 rpm))
		191–192	Prism Rotation: Stop (up to 540 °/s (90 rpm))
		193–255	CCW Slow to Fast (up to 540 °/s (90 rpm))
21	Frost	0	Open
		1–254	Open … Frost
		255	Frost
22	Zoom	0	Min
		1–127	Min … Home
		128	Home
		129–254	Home … Max
		255	Max
23	Focus	0–255	Min … Max
		255	Max
24	Focus Fine	0–255	Fine adjustment of CH 23
25	Zoom Mode		Beam Mode
		0–127	Spot Mode
		128–255	Beam Mode
26	Blade 1 A	0	Min 1A
		1–127	Min 1A … Center
		128	Center
		129–254	Center … Max 1A

CH	Function	DMX	Description
26	Blade 1 A (continued)	255	Max 1A
27	Blade 1 Rotation	0	-30
		1–127	-30 - 0
		128	0
		129–254	0 - 30
		255	30
28	Blade 2 A	0	Min 2A
		1–127	Min 2A ... Center
		128	Center
		129–254	Center ... Max 2A
		255	Max 2A
29	Blade 2 Rotation	0	- 30
		1–127	-30 - 0
		128	0
		129–254	0 - 30
		255	30
30	Blade 3 A	0	Min 3A
		1–127	Min 3A ... Center
		128	Center
		129–254	Center ... Max 3A
		255	Max 3A
31	Blade 3 Rotation	0	-30
		1–127	-30 - 0
		128	0
		129–254	0 - 30
		255	30
32	Blade 4 A	0	MIn 4A
		1–127	MIn 4A ... Center
		128	Center
		129–254	Center ... Max 4A
		255	Max 4A
33	Blade 4 Rotation	0	-30
		1–127	-30 - 0
		128	0
		129–254	0 - 30
		255	30
34	Shaper Rotation	0	Left
		1–127	Left - Center
		128	Center
		129–254	Center - Right
		255	Right
35	Shaper Macros		Framing Macro Effects

CH	Function	DMX	Description
35	Shaper Macros (continued)	0–3	Off
		4–11	Macro 1
		12–18	Macro 2
		19–25	Macro 3
		26–32	Macro 4
		33–39	Macro 5
		40–47	Macro 6
		48–54	Macro 7
		55–61	Macro 8
		62–68	Macro 9
		69–75	Macro 10
		76–82	Macro 11
		83–90	Macro 12
		91–97	Macro 13
		98–104	Macro 14
		105–111	Macro 15
		112–118	Macro 16
		119–125	Macro 17
		126–133	Macro 18
		134–140	Macro 19
		141–147	Macro 20
		148–154	Macro 21
		155–161	Macro 22
		162–168	Macro 23
		169–176	Macro 24
		177–183	Macro 25
		184–190	Macro 26
		191–197	Macro 27
		198–204	Macro 28
		205–211	Macro 29
		212–219	Macro 30
		220–226	Macro 31
		227–233	Macro 32
		234–240	Macro 33
		241–247	Macro 34
		248–255	Macro 35
36	Shaper Macros Speed	0	Slow
		1–254	Slow ... Fast
		255	Fast
37	Pan	0–127	Pan
		128	Home
		128–255	Pan

CH	Function	DMX	Description
38	Pan Fine	0–255	Fine adjustment of CH 37
39	Tilt	0–127	Tilt
		128	Home
		128–255	Tilt
40	Tilt Fine	0–255	Fine adjustment of CH 39
41	Control	0–50	Unused Range
		51–60	Pan Invert: On
		61–70	Pan Invert: Off
		71–80	Tilt Invert: On
		81–90	Tilt Invert: Off
		91–100	Pan/Tilt Position: 0%
		101–110	Pan/Tilt Position: 100%
		111–120	Normal Speed
		121–130	CMY Movement: Fast Speed
		131–140	Dimmer Range STD
		141–150	Dimmer Range Fast
		151–155	STD Speed
		156–160	Boost Speed
		161–170	Display Off
		171–180	Display On
		181–190	Framing Dimming Delay: On
		191–200	Framing Dimming Delay: Off
		201–210	Standard
		211–220	Linear
		221–225	Factory
		226–230	Customized
		231–235	Calibration Set
		236–240	Calibration Record
		241–245	Safety Black Out: On
		246–250	Safety Black Out: Off
		251–253	Dimmer Reset: 0%
		254–255	Dimmer Reset: 100%
42	Reset	0–25	Unused Range
		26–76	Effect Reset
		77–127	Pan / Tilt Reset
		128–255	Fixture Reset
43	Lamp Control	0–25	Unused Range
		26–100	Lamp Off
		101–255	Lamp On

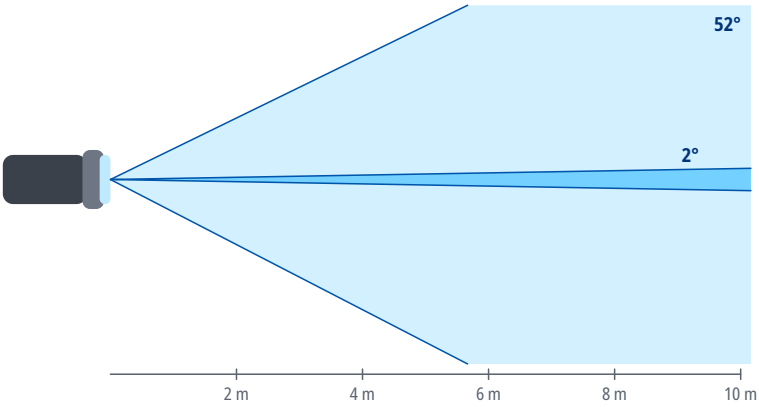
10 Technical specifications

Parameter	Value
Light	
Light source	discharge lamp
Lamp power	550 W
Luminous flux	19,000 lm
Color temperature	8,000 K
Color rendering index (CRI)	80
Optics	
Zoom	2–52°
Movement	
Pan	540°
Tilt	252°
Control	
RDM	yes (manufacturer ID 0x4350, device model ID 0x052B)
Dimensions and construction	
Weight	-20 kg
Operating environment	
Ingress protection	IP66
Meaning of the IP code (IEC 60529)	Dust-tight; protected against powerful water jets
Operating temperature	0 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	3000–6000 K
Strobe frequency	1–12 Hz
Color wheel rotation	up to 947.4 °/s (158 rpm)
Gobo wheel 1 rotation	up to 360 °/s (60 rpm)
Gobo wheel 2 rotation	up to 360 °/s (60 rpm)
Gobo 2 rotation	up to 1080 °/s (180 rpm)
Prism 1 rotation	up to 540 °/s (90 rpm)
Prism 2 rotation	up to 540 °/s (90 rpm)
Animation wheel rotation	up to 1080 °/s (180 rpm)

Spot diameter



Distance	Ø 2°	Ø 52°
2 m	0.07 m	2 m
4 m	0.14 m	3.9 m
6 m	0.21 m	5.9 m
8 m	0.28 m	7.8 m
10 m	0.35 m	9.8 m
15 m	0.52 m	14.6 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.