DMX REFERENCE

CloneMonkey Profile

Majehrke CloneMonkey Profile

Majehrke



Manufacturer	Majehrke
GDTF file	Majehrke_CloneMonkey_Profile_63153.gdtf
GDTF revision	1.6. out for real world testing - Pan Tilt 16bit · 2024-05-03
Generated	2026-11-24

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 8bit 11
10 Technical specifications 23
11 Maintenance and cleaning 24
12 Troubleshooting 24
13 Disposal 25

1 About this manual

This document describes the Majehrke CloneMonkey Profile by Majehrke. It was compiled from the GDTF file Majehrke_CloneMonkey_Profile_63153.gdtf from the GDTF-Share library.

File revision: “1.6. out for real world testing - Pan Tilt 16bit”.

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 Majehrke; 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	850 W
Weight	28 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
8bit	34	15	1, 35, 69, 103, ...

No light? Check these channels

- 8bit: CH 18 Shutter at 32–63 or 96–127 or 160–191 or 224–255


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

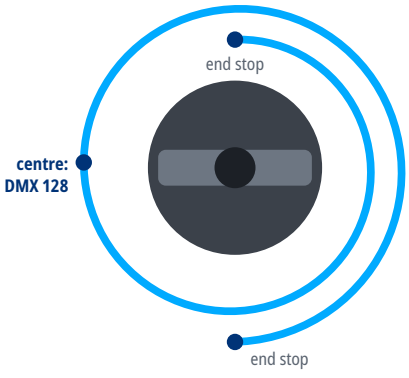
Description in the GDTF file

“Fictitious Movinglight Fixture with many Attributes for preprogramming”

Range of movement

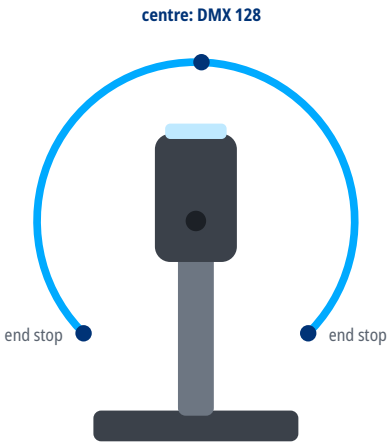
Pan 540°

top view



Tilt 270°

side view



5 Installation

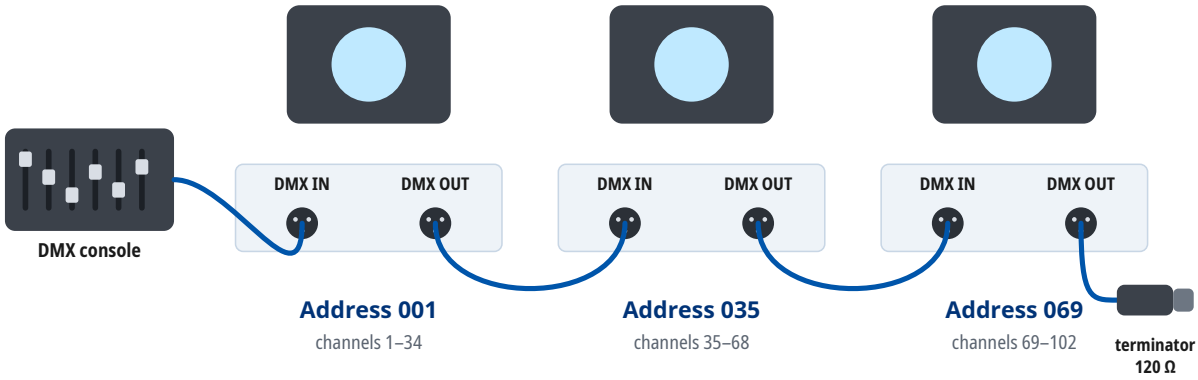
⚠ WARNING

- 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: 28 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 8bit: every unit occupies 34 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 “8bit”: 34.
- 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 “8bit”, you can use, for example, the start addresses 1, 35, 69, 103.
- 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

	8bit 34 channels
Pan / Tilt	2, 4
Dimmer	1, 10
Shutter / strobe	18
Color mixing	12–15
Color temperature	17
Color wheel	16
Gobo wheel	6, 8
Gobo rotation	7, 9 *
Prism	21, 22
Frost	20
Zoom	23
Focus	24
Iris	19
Animation wheel	10, 11

* The function works only when another channel switches it on; see the DMX table.

Color wheel

1 Color 1: Open
DMX 0–9

2 Red
DMX 10–19

3 Green
DMX 20–29

4 Blue
DMX 30–39

5 Cyan
DMX 40–49

6 Magenta
DMX 50–59

7 Yellow
DMX 60–69

8 Orange
DMX 70–79

9 Lime
DMX 80–89

10 Sea Green
DMX 90–99

11 Lavender
DMX 100–109

12 Violet
DMX 110–119

13 Pink
DMX 120–129

14 Mauve
DMX 130–139

15 Amber
DMX 140–150

Gobo wheel 1

1 G1_Open
DMX 0–6

2 

G1_1 - Index
DMX 7–13

3 

G1_2 - Index
DMX 14–20

4 

G1_3 - Index
DMX 21–27

5 

G1_4 - Index
DMX 28–34

6 

G1_5 - Index
DMX 35–41

7 

G1_6 - Index
DMX 42–48

8 

G1_7 - Index
DMX 49–55

9 

G1_8 - Index
DMX 56–62

10 

G1_9
DMX 63–70

Gobo wheel 2

1 G2_Open
DMX 0–6

2 

G2_1 - Index
DMX 7–13

3 

G2_2 - Index
DMX 14–20

4 

G2_3 - Index
DMX 21–27

5 

G2_4 - Index
DMX 28–34

6 

G2_5 - Index
DMX 35–41

7 

G2_6 - Index
DMX 42–48

8 

G2_7 - Index
DMX 49–55

9 

G2_8 - Index
DMX 56–62

10 

G2_9
DMX 63–70

Prism

1 Prism Open
DMX 0–45

2 
3 facets
3-facet Index
DMX 46–95

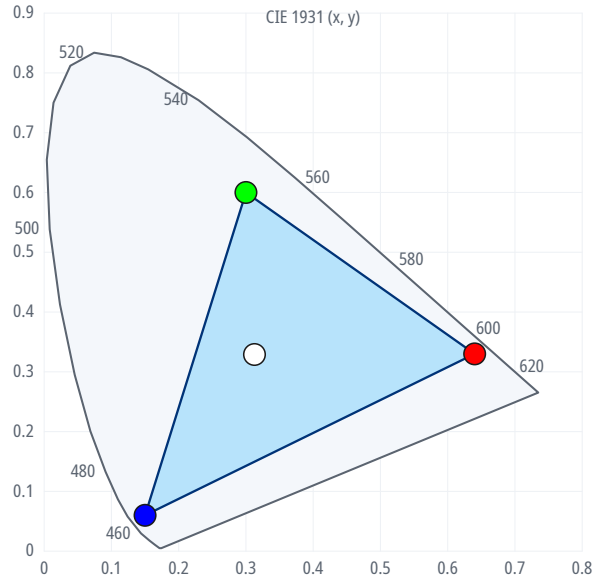
3 
4 facets
4-Linear Index
DMX 146–205

Animation wheel

1 Animation Open
DMX 0–6

2 
Horizontal Indexing
DMX 6–10

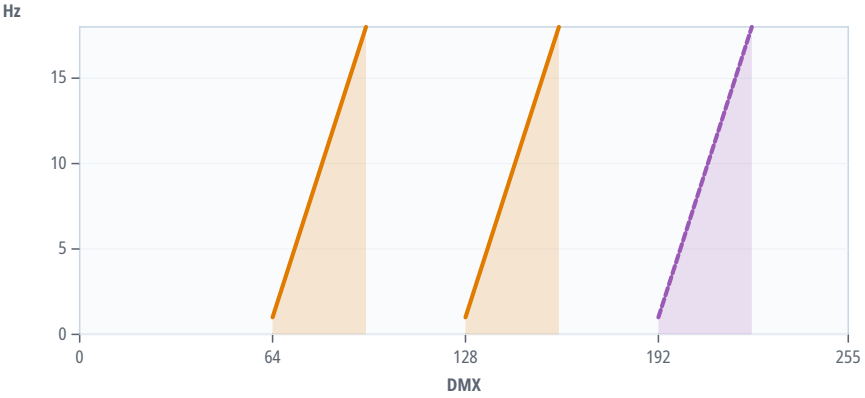
LED colors and the colors they mix



LED	x	y
Red-LED	0.640	0.330
Green-LED	0.300	0.600
Blue-LED	0.150	0.060
White-LED	0.313	0.329

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

Strobe rate

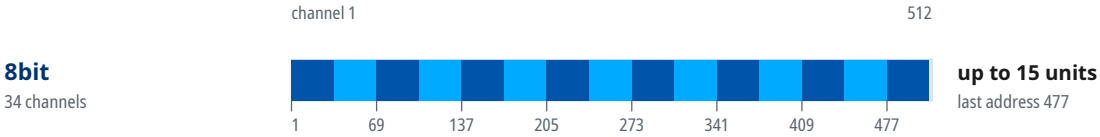


CH 18 · 8bit

- 64–95: 1–18 Hz Shutter Strobe
- 128–159: 1–18 Hz Pulse
- 192–223: 1–18 Hz StrobeRandom

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “8bit”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	171	11	341	16	U2 · 1
2	35	7	205	12	375	17	U2 · 35
3	69	8	239	13	409	18	U2 · 69
4	103	9	273	14	443	19	U2 · 103
5	137	10	307	15	477	20	U2 · 137

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 8bit

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 18 Shutter at 32–63 or 96–127 or 160–191 or 224–255. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 255, CH 12 Red 255, CH 13 Green 255, CH 14 Blue 255, CH 15 White 255, CH 16 Colors 0, CH 17 CTO 0, CH 18 Shutter 50.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer	0	0%
		1–24	0% ... 10%
		25	10%

CH	Function	DMX	Description
1	Dimmer (continued)	26–50	10% … 20%
		51	20%
		52–62	20% … 25%
		63	25%
		64–75	25% … 30%
		76	30%
		77–101	30% … 40%
		102	40%
		103–126	40% … 50%
		127	50%
		128–152	50% … 60%
		153	60%
		154–177	60% … 70%
		178	70%
		179–190	70% … 75%
		191	75%
		192–203	75% … 80%
		204	80%
		205–228	80% … 90%
		229	90%
		230–254	90% … 100%
		255	100%
2	Pan	0–21	-270 … -225
		21–42	-225 … -180
		42–63	-180 … -135
		64–85	-135 … -90
		85–106	-90 … -45
		106–127	-45 … 0 (Center)
		128–149	0 (Center) … 45
		149–170	45 … 90
		170–191	90 … 135
		191	135
		192–213	135 … 180
		213–234	180 … 225
		234–255	225 … 270
		255	270
3	Pan Fine	0–255	Fine adjustment of CH 2
4	Tilt	0–42	-135 … -90
		42–85	-90 … -45
		85–127	-45 … 0 (Center)
		127	0 (Center)
		128–170	0 (Center) … 45

CH	Function	DMX	Description
4	Tilt (continued)	170–213	45 ... 90
		213–255	90 ... 135
		255	135
5	Tilt Fine	0–255	Fine adjustment of CH 4
6	Gobo	0–6	G1_Open
		7–13	G1_1 - Index
		14–20	G1_2 - Index
		21–27	G1_3 - Index
		28–34	G1_4 - Index
		35–41	G1_5 - Index
		42–48	G1_6 - Index
		49–55	G1_7 - Index
		56–62	G1_8 - Index
		63–69	G1_9 - Index
		70–76	G1_1 - Rotation
		77–83	G1_2 - Rotation
		84–90	G1_3 - Rotation
		91–97	G1_4 - Rotation
		98–104	G1_5 - Rotation
		105–111	G1_6 - Rotation
		112–118	G1_7 - Rotation
		119–125	G1_8 - Rotation
		126–132	G1_9 - Rotation
		133–139	G1_1 - Shake (0.1–2.5 Hz)
		140–146	G1_2 - Shake (0.1–2.5 Hz)
		147–153	G1_3 - Shake (0.1–2.5 Hz)
		154–160	G1_4 - Shake (0.1–2.5 Hz)
		161–167	G1_5 - Shake (0.1–2.5 Hz)
		168–174	G1_6 - Shake (0.1–2.5 Hz)
		175–181	G1_7 - Shake (0.1–2.5 Hz)
		182–188	G1_8 - Shake (0.1–2.5 Hz)
		189–195	G1_9 - Shake (0.1–2.5 Hz)
		196–202	<<< WheelSpin
		203–209	<< WheelSpin
		210–216	< WheelSpin
		217–224	< WheelSpin ... WheelSpin STOP
		225–226	WheelSpin STOP
		227–234	WheelSpin STOP ... WheelSpin >
		235–241	WheelSpin >
		242–248	WheelSpin >>
		249–255	WheelSpin >>>
7	Gobo Rotation		When CH 6 is 0–69:

CH	Function	DMX	Description
7	Gobo Rotation (continued)	0–43	-180 deg thru -6 deg
		44–45	0 deg
		46–255	6 deg thru 180 deg
			When CH 6 is 70–132:
		90–100	<<< Gobo Rotation (360–264 °/s)
		101–113	<< Gobo Rotation (254.4–139.2 °/s)
		114–126	< Gobo Rotation (129.6–14.4 °/s)
		127–128	Gobo Rotation STOP
		129–140	Gobo Rotation > (14.4–120 °/s)
		141–152	Gobo Rotation >> (129.6–235.2 °/s)
		153–255	Gobo Rotation >>> (244.8–360 °/s)
			When CH 6 is 133–195:
		166–209	-180 deg thru -6 deg
		210–211	0 deg
		212–255	6 deg thru 180 deg
8	Gobo 2	0–6	G2_Open
		7–13	G2_1 - Index
		14–20	G2_2 - Index
		21–27	G2_3 - Index
		28–34	G2_4 - Index
		35–41	G2_5 - Index
		42–48	G2_6 - Index
		49–55	G2_7 - Index
		56–62	G2_8 - Index
		63–69	G2_9 - Index
		70–76	G2_1 - Rotation
		77–83	G2_2 - Rotation
		84–90	G2_3 - Rotation
		91–97	G2_4 - Rotation
		98–104	G2_5 - Rotation
		105–111	G2_6 - Rotation
		112–118	G2_7 - Rotation
		119–125	G2_8 - Rotation
		126–132	G2_9 - Rotation
		133–139	G2_1 - Shake (0.1–2.5 Hz)
		140–146	G2_2 - Shake (0.1–2.5 Hz)
		147–153	G2_3 - Shake (0.1–2.5 Hz)
		154–160	G2_4 - Shake (0.1–2.5 Hz)
		161–167	G2_5 - Shake (0.1–2.5 Hz)
		168–174	G2_6 - Shake (0.1–2.5 Hz)
		175–181	G2_7 - Shake (0.1–2.5 Hz)
		182–188	G2_8 - Shake (0.1–2.5 Hz)

CH	Function	DMX	Description
8	Gobo 2 (continued)	189–195	G2_9 - Shake (0.1–2.5 Hz)
		196–202	<<< Wheel2Spin
		203–209	<< Wheel2Spin
		210–216	< Wheel2Spin
		217–224	< Wheel2Spin ... Wheel2Spin STOP
		225–226	Wheel2Spin STOP
		227–234	Wheel2Spin STOP ... Wheel2Spin >
		235–241	Wheel2Spin >
		242–248	Wheel2Spin >>
		249–255	Wheel2Spin >>>
9	Gobo 2 Rotation		When CH 8 is 0–69:
		0–43	-180 deg thru -6 deg
		44–45	0 deg
		46–255	6 deg thru 180 deg
			When CH 8 is 70–132:
		90–100	<<< Gobo Rotation (360–264 °/s)
		101–113	<< Gobo Rotation (254.4–139.2 °/s)
		114–126	< Gobo Rotation (129.6–14.4 °/s)
		127–128	Gobo Rotation STOP
		129–140	Gobo Rotation > (14.4–120 °/s)
		141–152	Gobo Rotation >> (129.6–235.2 °/s)
		153–255	Gobo Rotation >>> (244.8–360 °/s)
			When CH 8 is 133–195:
		166–209	-180 deg thru -6 deg
		210–211	0 deg
		212–255	6 deg thru 180 deg
10	Animation Wheel	0–5	Anim Open
		6–10	Horizontal Indexing
		11–15	Horizontal Rotation
		16–20	Vertical Rotation
		21–25	Vertical Indexing
		26	Angled Rotation Out
		27–59	Angled Rotation Inserting
		60	Angled Rotation Horizontal
		61–109	Angled Rotation Diagonal
		110	Angled Rotation Vertical
		111	Angled Indexing Vertical
		112–198	Angled Indexing Diagonal
		199	Angled Indexing Horizontal
		200–254	Angled Indexing Inserting
		255	Angled Indexing Out
11	Animation Wheel Rotation		When CH 10 is 0–5:

CH	Function	DMX	Description
11	Animation Wheel Rotation (continued)	0–255	No Function
			When CH 10 is 6–10:
		0	-180 deg
		1–63	-180 deg ... -90 deg
		64	-90 deg
		65–127	-90 deg ... 0 deg
		128	0 deg
		129–191	0 deg ... 90 deg
		192	90 deg
		193–254	90 deg ... 180 deg
		255	180 deg
			When CH 10 is 11–15:
		0–2	Stop Horizantal 0
		3	<<< Anim Rotation
		4–63	<<< Anim Rotation ... << Anim Rotation
		64	<< Anim Rotation
		65–125	<< Anim Rotation ... < Anim Rotation
		126	< Anim Rotation
		127–129	Anim Rotation STOP
		130	Anim Rotation >
		131–191	Anim Rotation > ... Anim Rotation >>
		192	Anim Rotation >>
		193–252	Anim Rotation >> ... Anim Rotation >>>
		253	Anim Rotation >>>
		254–255	Stop Horizontal 90
			When CH 10 is 16–20:
		0–2	Stop Vertical 0
		3	<<< Anim Rotation
		4–63	<<< Anim Rotation ... << Anim Rotation
		64	<< Anim Rotation
		65–125	<< Anim Rotation ... < Anim Rotation
		126	< Anim Rotation
		127–129	Anim Rotation STOP
		130	Anim Rotation >
		131–191	Anim Rotation > ... Anim Rotation >>
		192	Anim Rotation >>
		193–252	Anim Rotation >> ... Anim Rotation >>>
		253	Anim Rotation >>>
		254–255	Stop Vertical 90
			When CH 10 is 21–25:
		0	-180 deg
		1–63	-180 deg ... -90 deg

CH	Function	DMX	Description
11	Animation Wheel Rotation (continued)	64	-90 deg
		65–127	-90 deg ... 0 deg
		128	0 deg
		129–191	0 deg ... 90 deg
		192	90 deg
		193–254	90 deg ... 180 deg
		255	180 deg
			When CH 10 is 26–110:
		0–2	Stop Angled 0
		3	<<< Anim Rotation
		4–63	<<< Anim Rotation ... << Anim Rotation
		64	<< Anim Rotation
		65–125	<< Anim Rotation ... < Anim Rotation
		126	< Anim Rotation
		127–129	Anim Rotation STOP
		130	Anim Rotation >
		131–191	Anim Rotation > ... Anim Rotation >>
		192	Anim Rotation >>
		193–252	Anim Rotation >> ... Anim Rotation >>>
		253	Anim Rotation >>>
		254–255	Stop Angled 90
			When CH 10 is 111–255:
		0	-180 deg
		1–63	-180 deg ... -90 deg
		64	-90 deg
		65–127	-90 deg ... 0 deg
		128	0 deg
		129–191	0 deg ... 90 deg
		192	90 deg
		193–254	90 deg ... 180 deg
		255	180 deg
12	Red	0	0% Red
		1–62	0% Red ... 25% Red
		63	25% Red
		64–126	25% Red ... 50% Red
		127	50% Red
		128–190	50% Red ... 75% Red
		191	75% Red
		192–254	75% Red ... 100% Red
		255	100% Red
13	Green	0	0% Green
		1–62	0% Green ... 25% Green

CH	Function	DMX	Description
13	Green (continued)	63	25% Green
		64–126	25% Green ... 50% Green
		127	50% Green
		128–190	50% Green ... 75% Green
		191	75% Green
		192–254	75% Green ... 100% Green
		255	100% Green
14	Blue	0	0% Blue
		1–62	0% Blue ... 25% Blue
		63	25% Blue
		64–126	25% Blue ... 50% Blue
		127	50% Blue
		128–190	50% Blue ... 75% Blue
		191	75% Blue
		192–254	75% Blue ... 100% Blue
		255	100% Blue
15	White	0	0% White
		1–62	0% White ... 25% White
		63	25% White
		64–126	25% White ... 50% White
		127	50% White
		128–190	50% White ... 75% White
		191	75% White
		192–254	75% White ... 100% White
		255	100% White
16	Colors	0–9	Color 1: Open
		10–19	Red
		20–29	Green
		30–39	Blue
		40–49	Cyan
		50–59	Magenta
		60–69	Yellow
		70–79	Orange
		80–89	Lime
		90–99	Sea Green
		100–109	Lavender
		110–119	Violet
		120–129	Pink
		130–139	Mauve
		140–149	Amber
		150	<<< Color-Wheel Rotation
		151–176	<<< Color-Wheel Rotation ... << Color-Wheel Rotation

CH	Function	DMX	Description
16	Colors (continued)	177	<< Color-Wheel Rotation
		178–199	<< Color-Wheel Rotation ... < Color-Wheel Rotation
		200	< Color-Wheel Rotation
		201	< Color-Wheel Rotation ... Stop Color-Wheel Rotation
		202–203	Stop Color-Wheel Rotation
		204	Stop Color-Wheel Rotation ... Color-Wheel Rotation >
		205	Color-Wheel Rotation >
		206–227	Color-Wheel Rotation > ... Color-Wheel Rotation >>
		228	Color-Wheel Rotation >>
		229–254	Color-Wheel Rotation >> ... Color-Wheel Rotation >>>
		255	Color-Wheel Rotation >>>
17	CTO	0	6500 K
		1–69	6500 K ... 5600 K
		70	5600 K
		71–153	5600 K ... 4500 K
		154	4500 K
		155–254	4500 K ... 3200 K
		255	3200 K
18	Shutter	0–31	Shutter Closed (1)
		32–63	Shutter Open (1)
		64–66	Strobe Slow
		67–77	Strobe Slow ... Strobe Medium
		78–80	Strobe Medium
		81–92	Strobe Medium ... Strobe Fast
		93–95	Strobe Fast
		96–127	Shutter Open (2)
		128–130	Pulse Slow
		131–141	Pulse Slow ... Pulse Medium
		142–144	Pulse Medium
		145–156	Pulse Medium ... Pulse Fast
		157–159	Pulse Fast
		160–191	Shutter Open (3)
		192–194	Rnd Slow
		195–205	Rnd Slow ... Rnd Medium
		206–208	Rnd Medium
		209–220	Rnd Medium ... Rnd Fast
		221–223	Rnd Fast
		224–255	Shutter Open (4)
19	Iris	0	Iris Open
		1–49	Iris Open ... Iris 25%
		50	Iris 25%
		51–99	Iris 25% ... Iris 50%

CH	Function	DMX	Description
19	Iris (continued)	100	Iris 50%
		101–149	Iris 50% ... Iris 75%
		150	Iris 75%
		151–199	Iris 75% ... Iris Closed
		200	Iris Closed
		201	Iris Pulse Open Fast
		202–212	Iris Pulse Open Fast ... Iris Pulse Open Medium
		213	Iris Pulse Open Medium
		214–224	Iris Pulse Open Medium ... Iris Pulse Open Slow
		225	Iris Pulse Open Slow
		226–230	Stop Iris Pulse
		231	Iris Pulse Closed Slow
		232–242	Iris Pulse Closed Slow ... Iris Pulse Closed Medium
		243	Iris Pulse Closed Medium
		244–254	Iris Pulse Closed Medium ... Iris Pulse Closed Fast
		255	Iris Pulse Closed Fast
20	Frost	0	Frost Open
		1–63	Frost Open ... Frost 25%
		64	Frost 25%
		65–127	Frost 25% ... Frost 50%
		128	Frost 50%
		129–191	Frost 50% ... Frost 75%
		192	Frost 75%
		193–254	Frost 75% ... Frost Full
		255	Frost Full
21	Prism	0–45	Prism Open
		46–95	3-facet Index
		96–145	3-facet Rotation
		146–205	4-Linear Index
		206–255	4-Linear Rotation
22	Prism Rotation		When CH 21 is 0–45:
		0–255	No Function
			When CH 21 is 46–95:
		0–126	-180 deg thru -2 deg
		127	-180 deg thru -2 deg ... 0 deg
		128	0 deg
		129–255	2 deg thru 180 deg
			When CH 21 is 96–145:
		0	<<< Prism Rotation
		1–63	<<< Prism Rotation ... << Prism Rotation
		64	<< Prism Rotation
		65–125	<< Prism Rotation ... < Prism Rotation

CH	Function	DMX	Description
22	Prism Rotation (continued)	126	< Prism Rotation
		127–128	Prism Rotation STOP
		129	Prism Rotation >
		130–190	Prism Rotation > ... Prism Rotation >>
		191	Prism Rotation >>
		192–254	Prism Rotation >> ... Prism Rotation >>>
		255	Prism Rotation >>>
			When CH 21 is 146–205:
		0–126	-180 deg thru -2 deg
		127	-180 deg thru -2 deg ... 0 deg
		128	0 deg
		129–255	2 deg thru 180 deg
			When CH 21 is 206–255:
		0	<<< Prism Rotation
		1–63	<<< Prism Rotation ... << Prism Rotation
		64	<< Prism Rotation
		65–125	<< Prism Rotation ... < Prism Rotation
		126	< Prism Rotation
		127–128	Prism Rotation STOP
		129	Prism Rotation >
		130–190	Prism Rotation > ... Prism Rotation >>
		191	Prism Rotation >>
		192–254	Prism Rotation >> ... Prism Rotation >>>
		255	Prism Rotation >>>
23	Zoom	0	Wide
		1–127	Wide ... Medium
		128	Medium
		129–254	Medium ... Narrow
		255	Narrow
24	Focus	0	Far
		1–127	Far ... Medium
		128	Medium
		129–254	Medium ... Near
		255	Near
25	Control	0–22	Idle
		23–45	Reset Entire Fixture (5s)
		46–67	No Function (1)
		68–89	Reset Dimmer (5s)
		90–111	Reset Position (5s)
		112–133	Reset ColorMix (5s)
		134–140	Linear (1s)
		141–145	Square (1s)

CH	Function	DMX	Description
25	Control (continued)	146–150	Inverse Square (1s)
		151–155	S-Curve (1s)
		156–177	Lamp On (5s)
		178–199	No Function (2)
		200–221	Lamp Off
		222–255	No Function (3)
26	Blade 1 A	0	Min
		1–127	Min ... Med
		128	Med
		129–254	Med ... Max
		255	Max
27	Blade 1 Rotation	0	CCW Max
		1–127	CCW Max ... Parallel
		128	Parallel
		129–254	Parallel ... CW Max
		255	CW Max
28	Blade 2 A	0	Min
		1–127	Min ... Med
		128	Med
		129–254	Med ... Max
		255	Max
29	Blade 2 Rotation	0	CCW Max
		1–127	CCW Max ... Parallel
		128	Parallel
		129–254	Parallel ... CW Max
		255	CW Max
30	Blade 3 A	0	Min
		1–127	Min ... Med
		128	Med
		129–254	Med ... Max
		255	Max
31	Blade 3 Rotation	0	CCW Max
		1–127	CCW Max ... Parallel
		128	Parallel
		129–254	Parallel ... CW Max
		255	CW Max
32	Blade 4 A	0	Min
		1–127	Min ... Med
		128	Med
		129–254	Med ... Max
		255	Max
33	Blade 4 Rotation	0	CCW Max

CH	Function	DMX	Description
33	Blade 4 Rotation (continued)	1–127	CCW Max … Parallel
		128	Parallel
		129–254	Parallel … CW Max
		255	CW Max
34	Shaper Rotation	0	CCW Max
		1–127	CCW Max … Parallel
		128	Parallel
		129–254	Parallel … CW Max
		255	CW Max

10 Technical specifications

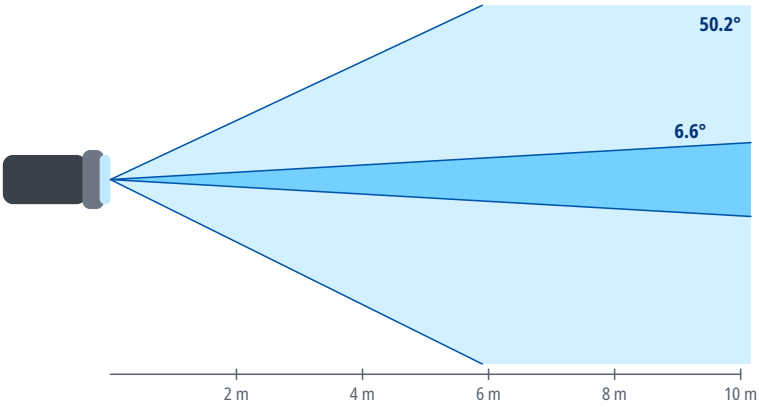
Parameter	Value
Light	
Light source	LED
LED power	700 W
Luminous flux	10,000 lm
Color temperature	6,500 K
Color rendering index (CRI)	85
Optics	
Zoom	6.6–50.2°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45 IN
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	850 W
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	28 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Color temperature range	3200–6500 K
Strobe frequency	1–18 Hz
Color wheel rotation	up to 360 °/s (60 rpm)

Parameter	Value
Gobo wheel 1 rotation	up to 360 °/s (60 rpm)
Gobo wheel 2 rotation	up to 360 °/s (60 rpm)
Gobo 1 rotation	up to 360 °/s (60 rpm)
Gobo 2 rotation	up to 360 °/s (60 rpm)
Prism rotation	up to 360 °/s (60 rpm)
Animation wheel rotation	up to 360 °/s (60 rpm)

Spot diameter



Distance	Ø 6.6°	Ø 50.2°
2 m	0.23 m	1.9 m
4 m	0.46 m	3.7 m
6 m	0.69 m	5.6 m
8 m	0.92 m	7.5 m
10 m	1.2 m	9.4 m
15 m	1.7 m	14.1 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.

Problem	Remedy
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.