DMX REFERENCE

Tiltbot Trio

MegaLite



Manufacturer	MegaLite
GDTF file	MegaLite_Tiltbot_Trio_39870.gdtf
GDTF revision	Initial upload by GDTFservice.com, powered by Crescit, commissioned by MegaLite · 2023-05-11
Generated	2026-11-24

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1 About this manual

This document describes the Tiltbot Trio by MegaLite. It was compiled from the GDTF file MegaLite_Tiltbot_Trio_39870.gdtf from the GDTF-Share library.

File revision: “Initial upload by GDTFservice.com, powered by Crescit, commissioned by MegaLite”.

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 MegaLite; 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	10.4 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
3Ch Mode	3	170	1, 4, 7, 10, ...
12Ch Mode	12	42	1, 13, 25, 37, ...
14Ch Mode	14	36	1, 15, 29, 43, ...
23Ch Mode	23	22	1, 24, 47, 70, ...
50Ch Mode	50	10	1, 51, 101, 151, ...
62Ch Mode	62	8	1, 63, 125, 187, ...

No light? Check these channels

- 3Ch Mode: CH 3 Shutter at 0–10
- 14Ch Mode: CH 9 Shutter at 0–1; CH 13 Shutter 2 at 0–1
- 62Ch Mode: CH 9 Shutter at 0–1; CH 13 Shutter 2 at 0–1



Read the manual before use



Do not stare into the light



Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

- This device is intended for professional use. Installation, connection, setup and maintenance must be carried out only by suitably qualified persons who have read this manual.
- Use the device only for its intended purpose and as described in this manual.
- Do not open the housing and do not modify or tamper with the device. Refer all repairs to an authorized service center.
- Do not use the device if its housing, power or data cable, or a connector is damaged, if the device has been dropped, or if liquid or a foreign object has entered it. In such a case, have it checked by a service center.
- Disconnect the device from the power supply before cleaning, maintenance or any work on the connections.
- After moving the device from a cold to a warm environment, let it reach room temperature before switching it on to prevent condensation inside.
- The device is not a toy; keep it out of the reach of children.

⚠ WARNING

- This device is designed for indoor use only. Protect it from rain, splashing water, moisture and dust, and do not place containers with liquids on it.
- Do not operate the device in high humidity, near water, or where condensation can form on it.

⚠ CAUTION

- This device emits intense light. Do not look directly into the light source or the beam at close range; doing so may damage your eyes.
- Do not aim the beam at the eyes of people or animals at close range, and do not view the light source through optical instruments (binoculars, camera lenses).
- Do not aim the beam at flammable or heat-sensitive materials at close range.

⚠ 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

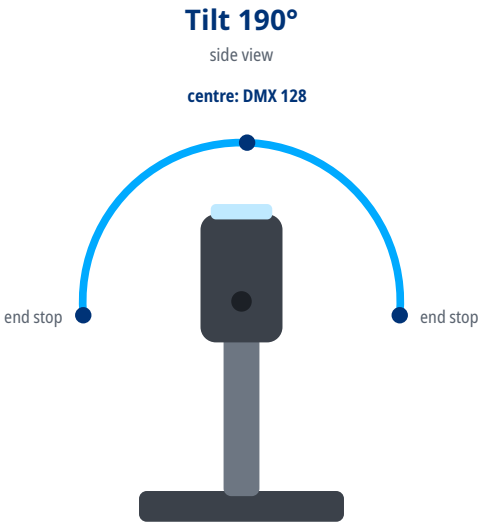
- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, 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

“MegaLite Tiltbot Trio is a new IP rated, versatile LED fixture that can be used as a blinder, strobe and wash.”

Range of movement



5 Installation

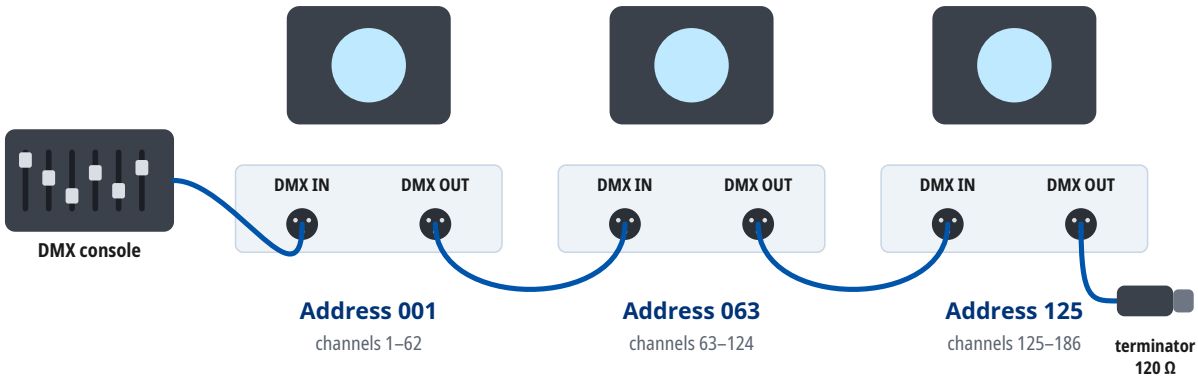
⚠ WARNING

- 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: 10.4 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 62Ch Mode: every unit occupies 62 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

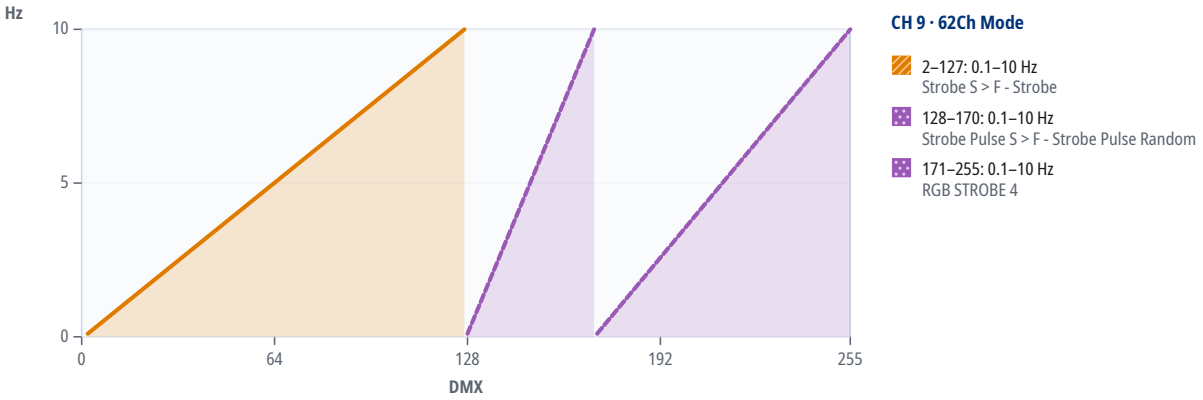
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “62Ch Mode”: 62.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied 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 “62Ch Mode”, you can use, for example, the start addresses 1, 63, 125, 187.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

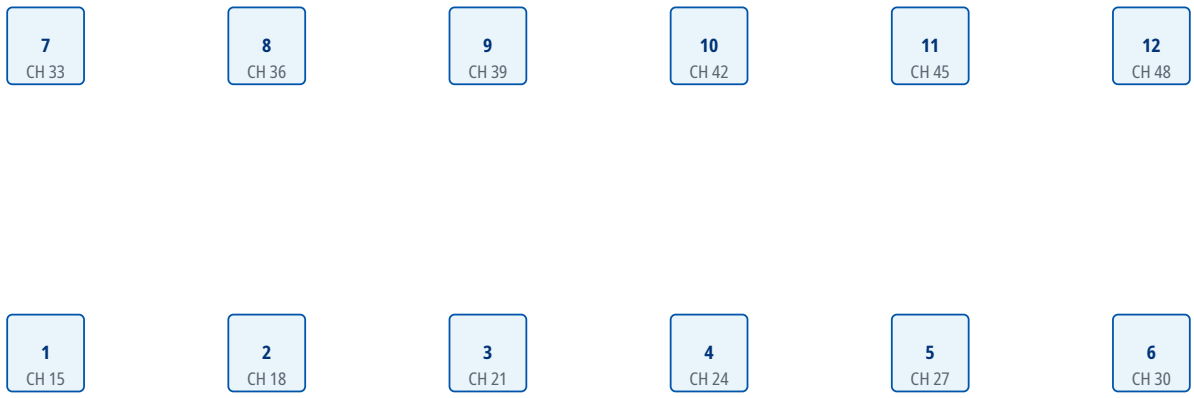
Functions in each DMX mode

	3Ch Mode 3 channels	12Ch Mode 12 channels	14Ch Mode 14 channels	23Ch Mode 23 channels	50Ch Mode 50 channels	62Ch Mode 62 channels
Pan / Tilt	1	1	1	1, 7	1	1
Dimmer		3, 4, 10	3	3, 8		3
Shutter / strobe	3	8, 9, 11, 12	9, 13	4, 5, 7, 9, 10		9, 13
Color mixing		5–7	4–6, 10	12–14	3–50	4–6, 10, 15–62
Effects / macros			7, 8, 11, 12	11 channels (6–23)		7, 11, 12
Pixel control					12 + 12 cells	12 + 12 cells

Strobe rate



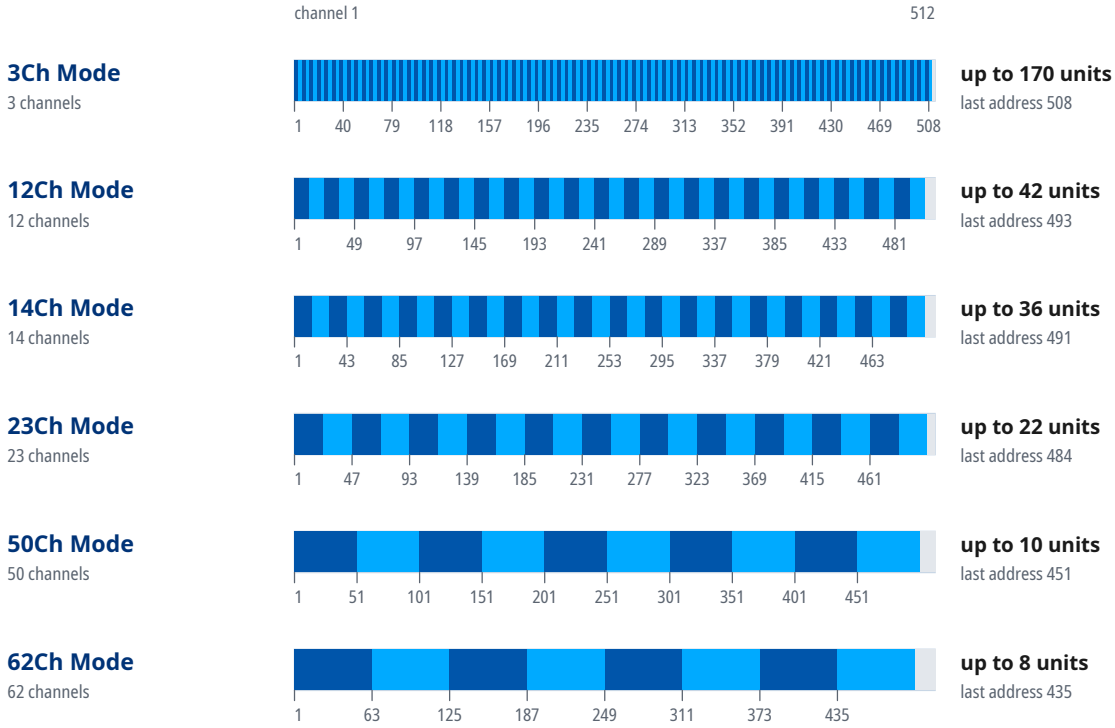
Cells (pixels)



12 cells where the GDTF file places them (seen from above), numbered by their first DMX channel (CH) in the mode “62Ch Mode”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “62Ch Mode”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	311	11	U2 · 125	16	U2 · 435
2	63	7	373	12	U2 · 187	17	U3 · 1
3	125	8	435	13	U2 · 249	18	U3 · 63
4	187	9	U2 · 1	14	U2 · 311	19	U3 · 125
5	249	10	U2 · 63	15	U2 · 373	20	U3 · 187

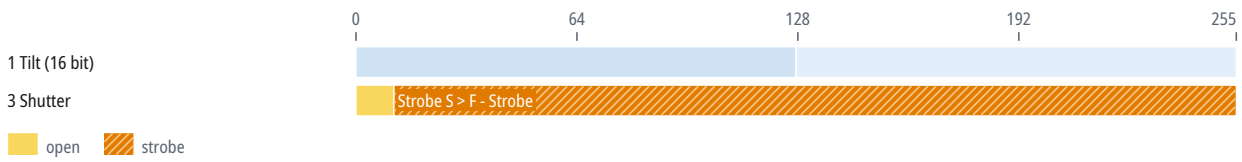
Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode 3Ch Mode

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 3 Shutter at 0–10.

Channel functions at a glance

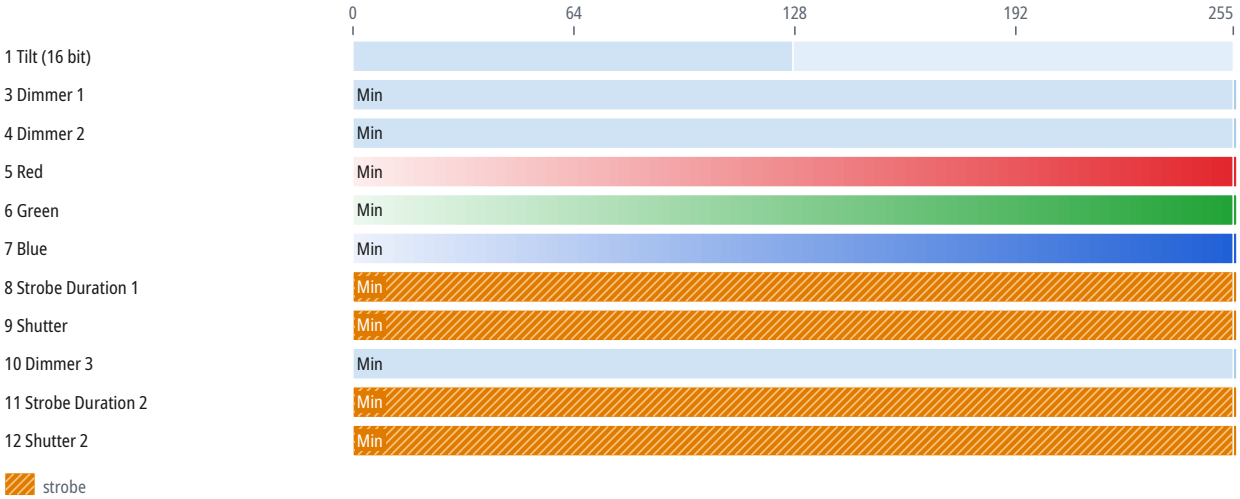


CH	Function	DMX	Description
1	Tilt	0–127	TILT
		127	Center
		128–255	TILT
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Shutter	0–10	Open - Shutter Open
		11–255	Strobe S > F - Strobe (0.1–10 Hz)

Mode 12Ch Mode

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

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “3Ch Mode” (p. 9)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Dimmer 1	0–254	Min
		255	Max
4	Dimmer 2		RGB DIMMER
		0–254	Min
		255	Max
5	Red	0–254	Min
		255	Max
6	Green	0–254	Min
		255	Max
7	Blue	0–254	Min
		255	Max
8	Strobe Duration 1	0–254	Min
		255	Max
9	Shutter		RGB STROBE

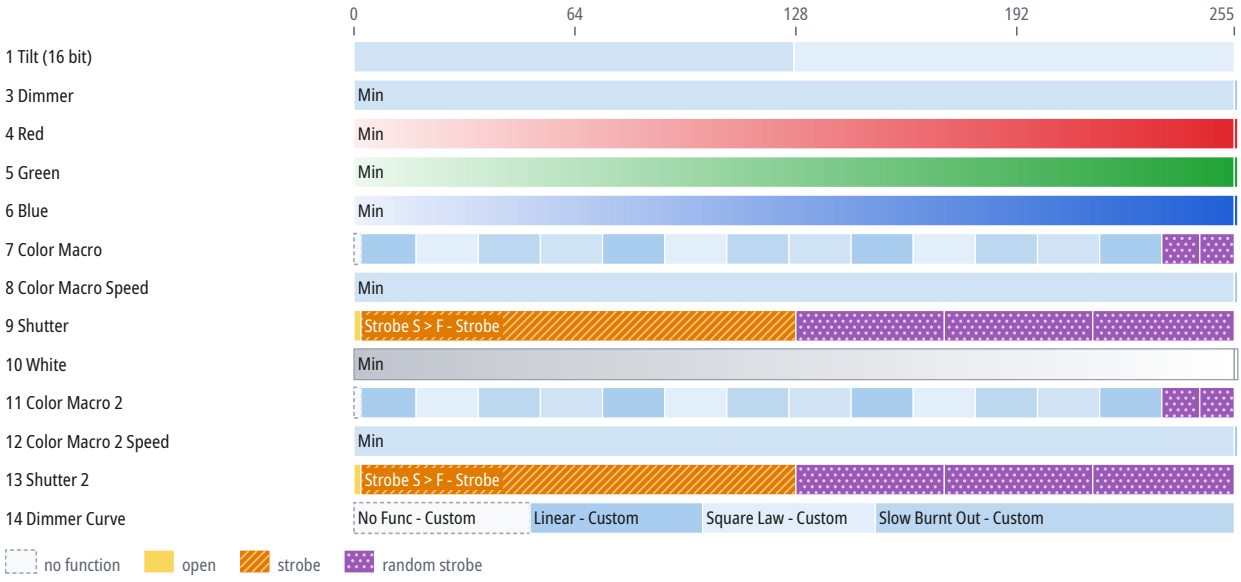
CH	Function	DMX	Description
9	Shutter (continued)	0–254	Min
		255	Max
10	Dimmer 3	0–254	Min
		255	Max
11	Strobe Duration 2		WHITE DURATION
		0–254	Min
		255	Max
12	Shutter 2		WHITE STROBE
		0–254	Min
		255	Max

Mode 14Ch Mode

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 9 Shutter at 0–1; CH 13 Shutter 2 at 0–1.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “3Ch Mode” (p. 9)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Dimmer	0–254	Min
		255	Max
4	Red		Same as CH 5 in the mode “12Ch Mode” (p. 9)
5	Green		Same as CH 6 in the mode “12Ch Mode” (p. 9)
6	Blue		Same as CH 7 in the mode “12Ch Mode” (p. 9)
7	Color Macro	0–1	No Func - Custom
		2–17	Fade 1 2 3 4 5 6 12 11 10 9 8 7 - Macro
		18–35	Fade 12 11 10 9 8 7 1 2 3 4 5 6 - Macro

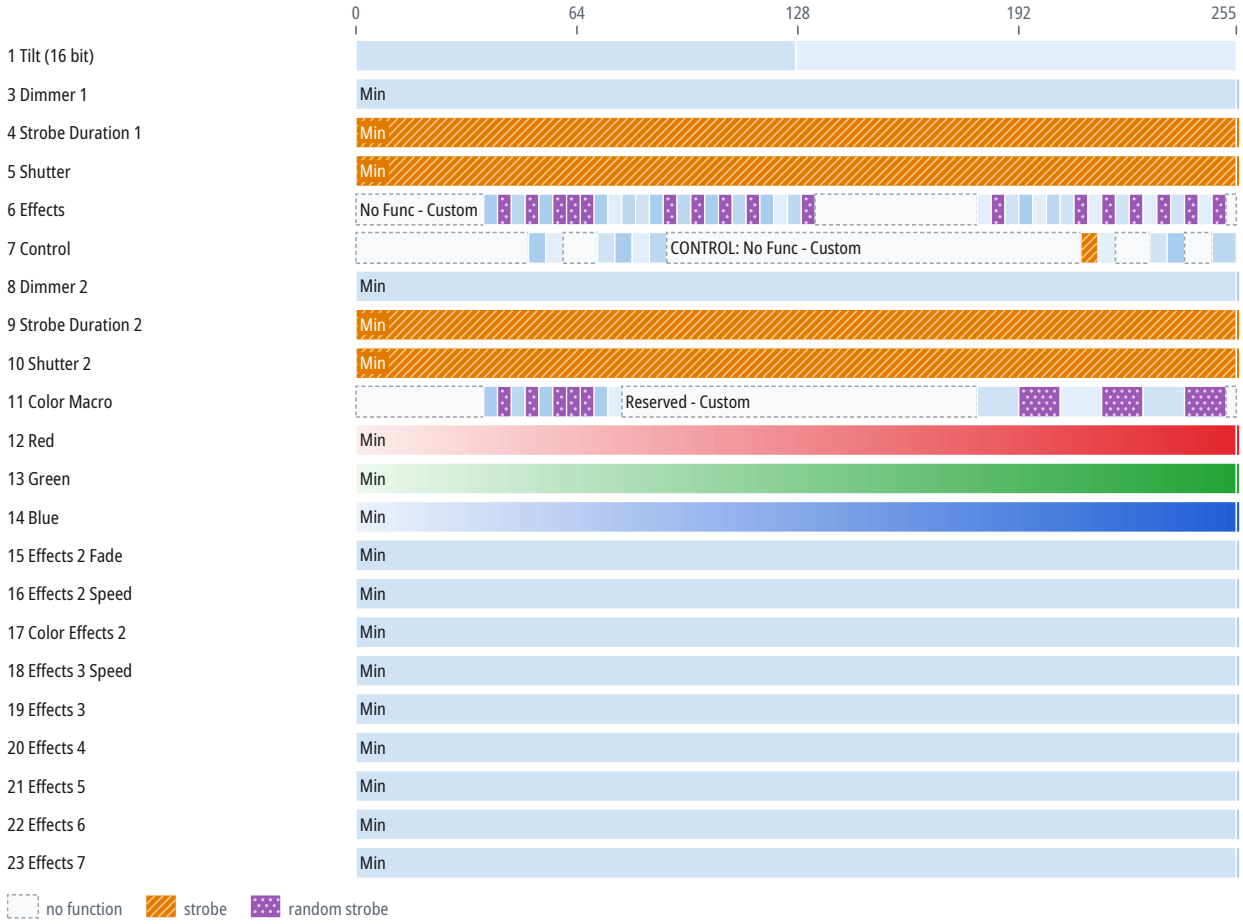
CH	Function	DMX	Description
7	Color Macro (continued)	36–53	Snap 1 2 3 4 5 6 12 11 10 9 8 7 - Macro
		54–71	Snap 12 11 10 9 8 7 1 2 3 4 5 6 - Macro
		72–89	Fade 1+2+3+4+5+6 Then 7+8+9+10+11+12 - Macro
		90–107	Snap 1+2+3+4+5+6 Then 7+8+9+10+11+12 - Macro
		108–125	Bounce 1+7 2+8 3+9 4+10 5+11 6+121+12 - Macro
		126–143	Bounce 6+12 5+11 4+10 3+9 2+8 1+7 - Macro
		144–161	Fade 1+7 2+8 3+9 4+10 5+11 6+12 - Macro
		162–179	Fade 3+4+9+10 2+8+5+11 1+7+6+12 - Macro
		180–197	Snap 1+12 2+11 3+10 4+9 5+8 6+7 - Macro
		198–215	Bounce 1+12 2+11 3+10 4+9 5+8 6+7 - Macro
		216–233	Snap 3+10 4+9 2+11 5+8 1+12 6+7 - Macro
		234–244	Fade Random - Macro
		245–255	Snap Random - Macro
8	Color Macro Speed		RGB MACRO SPEED
		0–254	Min
		255	Max
9	Shutter	0–1	Open - Shutter Open
		2–127	Strobe S > F - Strobe (0.1–10 Hz)
		128–170	Strobe Pulse S > F - Strobe Pulse Random (0.1–10 Hz)
		171–213	Strobe Random S > F - Strobe Random (0.1–10 Hz)
		214–255	Strobe Random 1-12 S > F - Strobe Random (0.1–10 Hz)
10	White	0–254	Min
		255	Max
11	Color Macro 2	0–1	No Func - Custom
		2–17	Fade 1 2 3 4 5 6 78 9 10 11 12 - Macro
		18–35	Fade 12 11 10 9 8 7 65 4 3 2 1 - Macro
		36–53	Snap 1 2 3 4 5 6 7 8 9 10 11 12 - Macro
		54–71	Snap 12 11 10 9 8 7 65 4 3 2 1 - Macro
		72–89	Fade 1+2+3+4+5+6 Then 7+8+9+10+11+1 - Macro
		90–107	Snap 1+2+3+4+5+6 Then 7+8+9+10+11+12 - Macro
		108–125	Bounce 1 2 3 4 5 6 7 8 9 10 11 12 - Macro
		126–143	Bounce 12 11 10 9 8 7 6 5 4 3 2 1 - Macro
		144–161	Bounce 6+7 5+8 4+9 3+10 2+11 1+12 - Macro
		162–179	Fade 6+7 5+8 4+9 3+10 2+11 1+12 - Macro
		180–197	Snap 6+7 5+8 4+9 3+10 2+11 1+12 - Macro
		198–215	Bounce 1+12 2+11 3+10 4+9 5+8 6+7 - Macro
		216–233	Snap 1+2+3+4+9+10+11+12 Then 5+6+7+8 - Macro
		234–244	Fade Random - Macro
		245–255	Snap Random - Macro
12	Color Macro 2 Speed		WHITE MACRO SPEED
		0–254	Min

CH	Function	DMX	Description
12	Color Macro 2 Speed (continued)	255	Max
13	Shutter 2	0–1	Open - Shutter Open
		2–127	Strobe S > F - Strobe (0.1–10 Hz)
		128–170	Strobe Pulse S > F - Strobe Pulse Random (0.1–10 Hz)
		171–213	Strobe Random S > F - Strobe Random (0.1–10 Hz)
		214–255	Strobe Random 1-12 S > F - Strobe Random (0.1–10 Hz)
14	Dimmer Curve	0–50	No Func - Custom
		51–100	Linear - Custom
		101–150	Square Law - Custom
		151–255	Slow Burnt Out - Custom

Mode 23Ch Mode

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

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “3Ch Mode” (p. 9)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Dimmer 1		WHITE DIMMER

CH	Function	DMX	Description
3	Dimmer 1 (continued)	0–254	Min
		255	Max
4	Strobe Duration 1		WHITE DURATION
		0–254	Min
		255	Max
5	Shutter		WHITE STROBE
		0–254	Min
		255	Max
6	Effects	0–36	No Func - Custom
		37–40	Ramp Up - Macro
		41–44	Ramp Up Random - Macro
		45–48	Ramp Down - Macro
		49–52	Ramp Down Random - Macro
		53–56	Ramp Up Down - Macro
		57–60	Ramp Up Down Random - Macro
		61–64	Random White Beam - Macro
		65–68	Random Single Pixel White - Macro
		69–72	Lighting - Macro
		73–76	Spikes - Macro
		77–80	White Beam (L > R) - Macro
		81–84	White Beam (L > R Rnd) - Macro
		85–88	White Beam (R > L) - Macro
		89–92	White Beam (R > L Random) - Macro
		93–96	White Beam (L > R Bounce) - Macro
		97–100	White Beam (L > R Random) - Macro
		101–104	White Beam (L > R Bounce) - Macro
		105–108	White Beam (R > L Bounce/Random) - Macro
		109–112	Zig (6 Steps) - Macro
		113–116	Zig (6 Steps Random) - Macro
		117–120	Zig (6 Steps Out To Center Pixel) - Macro
		121–124	Zig (6 Steps Out To Center Pix Rnd) - Macro
		125–128	Zig (6 Steps) - Macro
		129–132	Zig (6 Steps Random) - Macro
		133–179	MACRO: Reserved - Custom
		180–183	Double Flash - Macro
		184–187	Double Flash (Random) - Macro
		188–191	Double Flash (Beam Color) - Macro
		192–195	Double Flash (Beam Color Rnd) - Macro
		196–199	Double Flash (Color Beam) - Macro
		200–203	Double Flash (Color Beam Rnd) - Macro
		204–207	Triple Flash - Macro

CH	Function	DMX	Description
6	Effects (continued)	208–211	Triple Flash (Random) - Macro
		212–215	Triple Flash (BCB) - Macro
		216–219	Triple Flash (BCB Random) - Macro
		220–223	Triple Flash (CBC) - Macro
		224–227	Triple Flash (CBC Random) - Macro
		228–231	Quad Flash - Macro
		232–235	Quad Flash (Random) - Macro
		236–239	Quad Flash (BCB) - Macro
		240–243	Quad Flash (BCB Random) - Macro
		244–247	Quad Flash (CBC) - Macro
		248–251	Quad Flash (CBC Random) - Macro
		252–255	MACRO: Reserved - Custom
7	Control	0–49	CONTROL: No Func - Custom
		50–54	FX/Pattern Color Priority On - Macro
		55–59	FX/Pattern Color Priority Off - Macro
		60–69	CONTROL: No Func - Custom
		70–74	Normal Tilt Control - Tilt
		75–79	Invert Tilt Control - Tilt
		80–84	Normal Pixel Orientation - Custom
		85–89	Invert Pixel Orientation - Custom
		90–209	CONTROL: No Func - Custom
		210–214	Duration Percentage Mode On - Custom
		215–219	Duration Percentage Mode Off - Custom
		220–229	CONTROL: No Func - Custom
		230–234	FX/Plate Color Priority On - Custom
		235–239	FX/Plate Color Priority Off - Custom
		240–247	CONTROL: No Func - Custom
		248–255	Reset - Reset
8	Dimmer 2		COLOR DIMMER
		0–254	Min
		255	Max
9	Strobe Duration 2		COLOR DURATION
		0–254	Min
		255	Max
10	Shutter 2		COLOR STROBE
		0–254	Min
		255	Max
11	Color Macro	0–36	COLOR MACRO: No Func - Custom
		37–40	Ramp Up - Macro
		41–44	Ramp Up (Random) - Macro
		45–48	Ramp Down - Macro
		49–52	Ramp Down (Random) - Macro

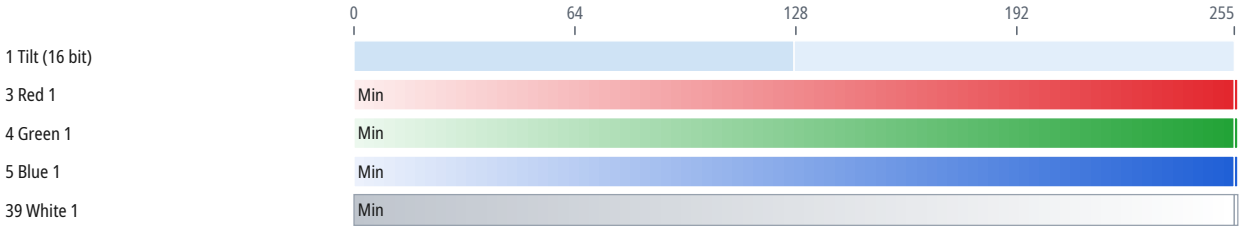
CH	Function	DMX	Description
11	Color Macro (continued)	53–56	Ramp Up/Down - Macro
		57–60	Ramp Up/Down (Random) - Macro
		61–64	Random White Beam - Macro
		65–68	Single White (Random) - Macro
		69–72	Lighting - Macro
		73–76	Spikes (Flash Over Low) - Macro
		77–179	Reserved - Custom
		180–191	Double Flash - Macro
		192–203	Double Flash (Random) - Macro
		204–215	Triple Flash - Macro
		216–227	Triple Flash (Random) - Macro
		228–239	Quad Flash - Macro
		240–251	Quad Flash (Random) - Macro
		252–255	COLOR MACRO: No Func - Custom
12	Red		Same as CH 5 in the mode “12Ch Mode” (p. 9)
13	Green		Same as CH 6 in the mode “12Ch Mode” (p. 9)
14	Blue		Same as CH 7 in the mode “12Ch Mode” (p. 9)
15	Effects 2 Fade		FX CROSS FADE
		0–254	Min
		255	Max
16	Effects 2 Speed		COLOR FX
		0–254	Min
		255	Max
17	Color Effects 2		COLOR SELECT
		0–254	Min
		255	Max
18	Effects 3 Speed		WHITE FX
		0–254	Min
		255	Max
19	Effects 3		WHITE SELECT
		0–254	Min
		255	Max
20	Effects 4		BACKGROUND DIMMER
		0–254	Min
		255	Max
21	Effects 5		BACKGROUND RED
		0–254	Min
		255	Max
22	Effects 6		BACKGROUND GREEN
		0–254	Min
		255	Max

CH	Function	DMX	Description
23	Effects 7		BACKGROUND BLUE
		0–254	Min
		255	Max

Mode 50Ch Mode

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

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “3Ch Mode” (p. 9)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Red 1	0–254	Min
		255	Max
4	Green 1	0–254	Min
		255	Max
5	Blue 1	0–254	Min
		255	Max
39	White 1	0–254	Min
		255	Max

CH 3–38: 12 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 3–5); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	3	4	5	2	6	7	8	3	9	10	11
4	12	13	14	5	15	16	17	6	18	19	20
7	21	22	23	8	24	25	26	9	27	28	29
10	30	31	32	11	33	34	35	12	36	37	38

CH 39–50: 12 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 39); the table below gives each cell's channel numbers.

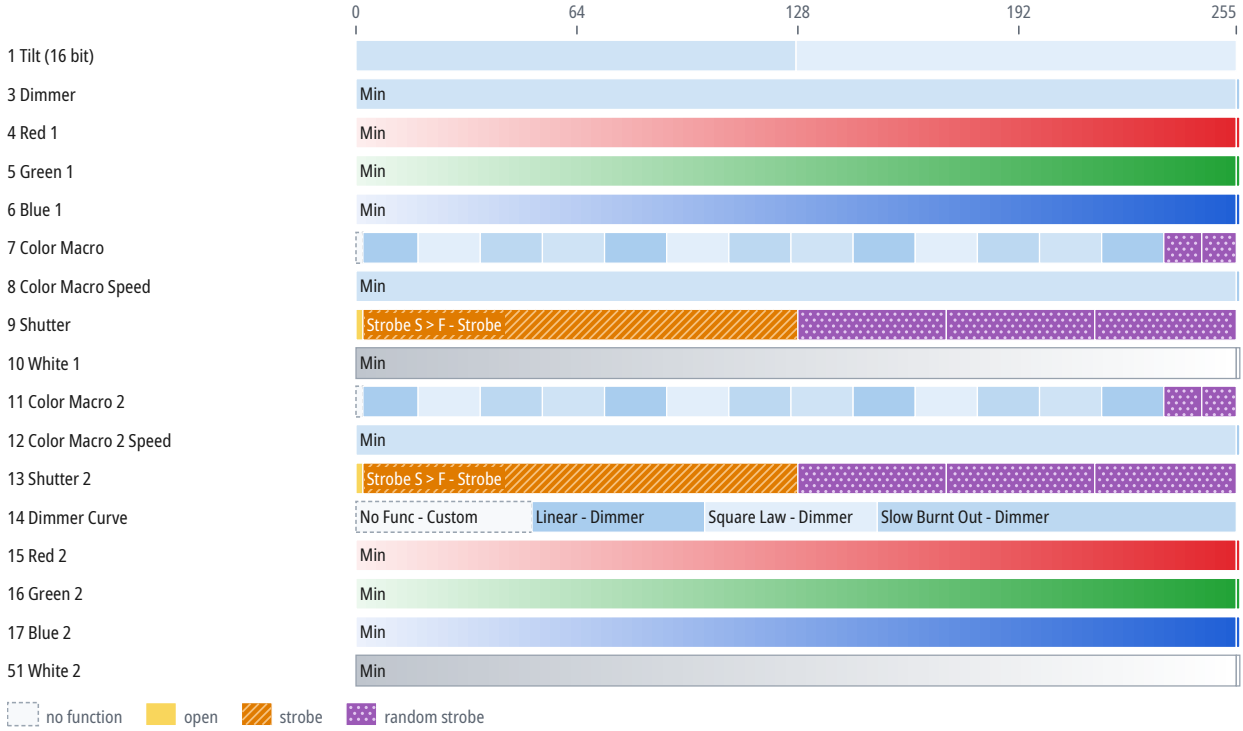
Cell	White	Cell	White	Cell	White	Cell	White	Cell	White	Cell	White
1	39	2	40	3	41	4	42	5	43	6	44
7	45	8	46	9	47	10	48	11	49	12	50

Mode 62Ch Mode

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 9 Shutter at 0–1; CH 13 Shutter 2 at 0–1.

Channel functions at a glance



CH	Function	DMX	Description
1	Tilt		Same as CH 1 in the mode “3Ch Mode” (p. 9)
2	Tilt Fine	0–255	Fine adjustment of CH 1
3	Dimmer		Same as CH 3 in the mode “14Ch Mode” (p. 10)
4	Red 1	0–254	Min
		255	Max
5	Green 1	0–254	Min
		255	Max
6	Blue 1	0–254	Min
		255	Max
7	Color Macro		Same as CH 7 in the mode “14Ch Mode” (p. 10)
8	Color Macro Speed		Same as CH 8 in the mode “14Ch Mode” (p. 11)
9	Shutter		Same as CH 9 in the mode “14Ch Mode” (p. 11)
10	White 1	0–254	Min
		255	Max
11	Color Macro 2		Same as CH 11 in the mode “14Ch Mode” (p. 11)
12	Color Macro 2 Speed		Same as CH 12 in the mode “14Ch Mode” (p. 11)
13	Shutter 2		Same as CH 13 in the mode “14Ch Mode” (p. 12)
14	Dimmer Curve	0–50	No Func - Custom

CH	Function	DMX	Description
14	Dimmer Curve (continued)	51–100	Linear - Dimmer
		101–150	Square Law - Dimmer
		151–255	Slow Burnt Out - Dimmer
15	Red 2	0–254	Min
		255	Max
16	Green 2	0–254	Min
		255	Max
17	Blue 2	0–254	Min
		255	Max
51	White 2	0–254	Min
		255	Max

CH 15–50: 12 cells of 3 channels each. Every cell works as cell 1 in the table above (CH 15–17); the table below gives each cell's channel numbers.

Cell	Red	Green	Blue	Cell	Red	Green	Blue	Cell	Red	Green	Blue
1	15	16	17	2	18	19	20	3	21	22	23
4	24	25	26	5	27	28	29	6	30	31	32
7	33	34	35	8	36	37	38	9	39	40	41
10	42	43	44	11	45	46	47	12	48	49	50

CH 51–62: 12 cells of 1 channel each. Every cell works as cell 1 in the table above (CH 51); the table below gives each cell's channel numbers.

Cell	White	Cell	White	Cell	White	Cell	White	Cell	White	Cell	White
1	51	2	52	3	53	4	54	5	55	6	56
7	57	8	58	9	59	10	60	11	61	12	62

10 Technical specifications

Parameter	Value
Light source	LED
Tilt	190°
Weight	10.4 kg
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0.1–10 Hz
Strobe flash duration	0.007–1 s

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.