DMX REFERENCE

MicroGen FX 32ch (2 layer) BETA

CTJ LED

Manufacturer	CTJ LED
GDTF file	CTJ_LED_MicroGen_FX_32ch_2_layer_BETA_28916.gdtf
GDTF revision	CONTROL THE JOURNEY, Uploaded to GDTF Share. · 2022-10-06
Generated	2026-11-23

Contents

1 About this manual 2
2 Quick reference 2
3 Safety instructions 3
4 Product description 3
5 Installation 4
6 Connections 4
7 Operation 5
8 Functions at a glance 5
9 DMX channels 8
Mode 2LAY32CH 8
10 Technical specifications 20
11 Maintenance and cleaning 20
12 Troubleshooting 20
13 Disposal 21

1 About this manual

This document describes the MicroGen FX 32ch (2 layer) BETA by CTJ LED. It was compiled from the GDTF file CTJ_LED_MicroGen_FX_32ch_2_layer_BETA_28916.gdtf from the GDTF-Share library.

File revision: “CONTROL THE JOURNEY, Uploaded to GDTF Share.”.

The DMX modes, the channel functions and the technical data are given as the GDTF file states them. Installation, operation from the device's control panel, service and safety instructions are described in the manufacturer's original user manual, which takes precedence over this document.

This document was not issued or endorsed by CTJ LED; 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

DMX modes

Mode	Channels	Units in one universe	First start addresses
2LAY32CH	32	16	1, 33, 65, 97, ...

No light? Check these channels

- 2LAY32CH: CH 1 Dimmer 1 above 0; CH 3 Dimmer 2 above 0; CH 18 Dimmer 3 above 0



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.

4 Product description

Description in the GDTF file

“- Development real-time FX generator for microcontrollers - A "digital" fixture (1D virtual canvas) scaled to the number of pixels of connected fixtures - Number of pixels is set on the device.”

“PixelLED is the integrated and open pixel platform platform for real-time universal LED drivers - Integrates with AI-enabled generative media and real-time synchronisation of WYSIWYH and 3D - Fully plug-and-play hardware with data/power units for LED drivers - Focus on the visual impact instead of complexity”

“CTJ LED provides tools for creators and techies to focus on visual impact - Aims: Tech control, freedom and ownership, open source, honesty, opportunities”

“Say hello! :) info@ctj-led.com”

“MicroGen FX 32ch BETA platform. Version: "V0.5". Synchronised to document ID: 122/2 CONTROL THE JOURNEY Copyright © 2022 CTJ LED http://ctj-led.com”

5 Installation

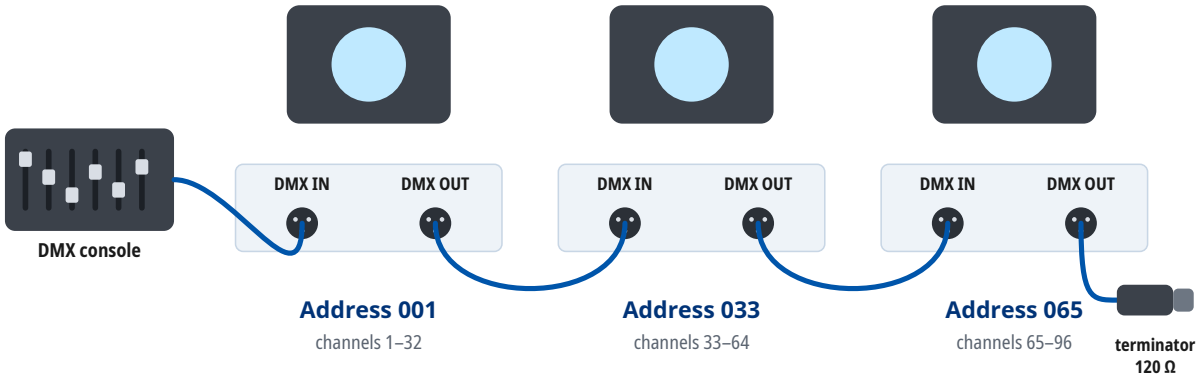
⚠ **WARNING**

- 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.
- 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 2LAY32CH: every unit occupies 32 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 “2LAY32CH”: 32.
- 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 “2LAY32CH”, you can use, for example, the start addresses 1, 33, 65, 97.
- 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

	2LAY32CH 32 channels
Dimmer	1, 3–9, 18–24
Gobo wheel	14, 29
Gobo rotation	15, 30
Effects / macros	11, 12, 26, 27

Gobo wheel 1

1	Content Size/Density	DMX 1	21	BK Full BG		41	RGB 1+2 Gradients BG	
2	FX Colour Gen 1 (FG)	DMX 2	22	BK Block L BG		42	RESERVED	
3	FX Colour Gen 2 (FG)	DMX 3	23	BK Block R BG		43	RESERVED	
4	FX Colour Gen 3 (FG)	DMX 4	24	BK Fade Full BG		44	RESERVED	
5	FX Colour Gen 4 (FG)	DMX 5–49	25	BK Fade L BG		45	RESERVED	
6	BK Full FG		26	BK Fade R BG		46	RESERVED	
7	BK Block L FG		27	BK Lines Full		47	RESERVED	
8	BK Block R FG		28	BK Lines L BG		48	RESERVED	
9	BK Fade Full FG		29	BK Lines R BG		49	RESERVED	
10	BK Fade L FG		30	BK Waves Full BG		50	RESERVED	DMX 50
11	BK Fade R FG		31	BK Waves L BG		51	Fire FG	DMX 51
12	BK Lines Full		32	BK Waves R BG		52	Fire BG	DMX 52
13	BK Lines L FG		33	RESERVED		53	Ember FG	DMX 53
14	BK Lines R FG		34	RESERVED		54	Ember BG	DMX 54
15	BK Waves Full FG		35	RESERVED		55	Satsuma FG	DMX 55
16	BK Waves L FG		36	RGB 1+2 FG		56	Satsuma BG	DMX 56
17	BK Waves R FG		37	RGB 1+2 BG		57	Green Tea FG	DMX 57
18	RESERVED		38	RGB 1+2 Stripes FG		58	Green Tea BG	DMX 58
19	RESERVED		39	RGB 1+2 Stripes BG		59	Forest FG	DMX 59
20	BK Full BG		40	RGB 1+2 Gradients FG		60	Forest BG	DMX 60

61	Aurora FG	DMX 61	81	RESERVED		101	Gold Bar FG	DMX 101
62	Aurora BG	DMX 62	82	RESERVED		102	Gold Bar BG	DMX 102
63	Ocean FG	DMX 63	83	RESERVED		103	Sand Dune FG	DMX 103
64	Ocean BG	DMX 64	84	RESERVED		104	Sand Dune BG	DMX 104
65	Ocean Clear FG	DMX 65	85	RESERVED		105	Autumn FG	DMX 105
66	Ocean Clear BG	DMX 66	86	Blocky quick access		106	Autumn BG	DMX 106
67	Cloud FG	DMX 67	87	TODO		107	Sunrise Early FG	DMX 107
68	Cloud BG	DMX 68	88	RESERVED		108	Sunrise Early BG	DMX 108
69	Pastel Blue FG	DMX 69	89	RESERVED		109	Sunrise FG	DMX 109
70	Pastel Blue BG	DMX 70	90	RESERVED		110	Sunrise BG	DMX 110
71	Pinky Purple FG	DMX 71	91	RESERVED		111	Sunset FG	DMX 111
72	Pinky Purple BG	DMX 72	92	RESERVED		112	Sunset BG	DMX 112
73	Sherbert FG	DMX 73	93	RESERVED		113	Bluey Red FG	DMX 113
74	Sherbert BG	DMX 74	94	RESERVED		114	Bluey Red BG	DMX 114
75	Sherbert2 FG	DMX 75	95	RESERVED		115	Blue Red Spot FG	DMX 115
76	Sherbert2 BG	DMX 76	96	RESERVED		116	Blue Red Spot BG	DMX 116
77	Rainbow FG	DMX 77	97	RESERVED		117	Purpley Blue FG	DMX 117
78	Rainbow BG	DMX 78	98	RESERVED		118	Purpley Blue BG	DMX 118
79	Rainbow Dots FG	DMX 79	99	RESERVED		119	Sherbert Trail FG	DMX 119
80	Rainbow Dots BG	DMX 80–99	100	RESERVED	DMX 100	120	Sherbert Trail BG	DMX 120

121 Purple Pastel FG DMX 121	141 Cyan Orange FG DMX 141	161 Blackout FG DMX 161
122 Purple Pastel BG DMX 122	142 Cyan Orange BG DMX 142	162 Blackout BG DMX 162–255
123 Purple Cyan Spot FG DMX 123	143 Green Landscape FG DMX 143	163 RESERVED
124 Purple Cyan Spot BG DMX 124	144 Green Landscape BG DMX 144	164 RESERVED
125 Pink Pastel FG DMX 125	145 Beach Landscape FG DMX 145	165 RESERVED
126 Pink Pastel BG DMX 126	146 Beach Landscape BG DMX 146	166 RESERVED
127 Pastel2 FG DMX 127	147 Tweed FG DMX 147	167 RESERVED
128 Pastel2 BG DMX 128	148 Tweed BG DMX 148	168 RESERVED
129 Pink Ice FG DMX 129	149 Sherbert Green FG DMX 149	169 RESERVED
130 Pink Ice BG DMX 130	150 Sherbert Green BG DMX 150	170 RESERVED
131 Icicle FG DMX 131	151 Green Red Spot FG DMX 151	171 RESERVED
132 Icicle BG DMX 132	152 Green Red Spot BG DMX 152	172 RESERVED
133 Beach FG DMX 133	153 Antique FG DMX 153	173 RESERVED
134 Beach BG DMX 134	154 Antique BG DMX 154	174 RESERVED
135 Rock Pool FG DMX 135	155 Sweetie FG DMX 155	175 RESERVED
136 Rock Pool BG DMX 136	156 Sweetie BG DMX 156	176 RESERVED
137 Atlantic FG DMX 137	157 Jester1 FG DMX 157	177 RESERVED
138 Atlantic BG DMX 138	158 Jester1 BG DMX 158	178 RESERVED
139 Sapphire Emerald FG DMX 139	159 Jester2 FG DMX 159	179 RESERVED
140 Sapphire Emerald BG DMX 140	160 Jester2 BG DMX 160	180 RESERVED

181 RESERVED	201 RESERVED	221 RESERVED
182 RESERVED	202 RESERVED	222 RESERVED
183 RESERVED	203 RESERVED	223 RESERVED
184 RESERVED	204 RESERVED	224 RESERVED
185 RESERVED	205 RESERVED	225 RESERVED
186 RESERVED	206 RESERVED	226 RESERVED
187 RESERVED	207 RESERVED	227 RESERVED
188 RESERVED	208 RESERVED	228 RESERVED
189 RESERVED	209 RESERVED	229 RESERVED
190 RESERVED	210 RESERVED	230 RESERVED
191 RESERVED	211 RESERVED	231 RESERVED
192 RESERVED	212 RESERVED	232 RESERVED
193 RESERVED	213 RESERVED	233 RESERVED
194 RESERVED	214 RESERVED	234 RESERVED
195 RESERVED	215 RESERVED	235 RESERVED
196 RESERVED	216 RESERVED	236 RESERVED
197 RESERVED	217 RESERVED	237 RESERVED
198 RESERVED	218 RESERVED	238 RESERVED
199 RESERVED	219 RESERVED	239 RESERVED
200 RESERVED	220 RESERVED	240 RESERVED

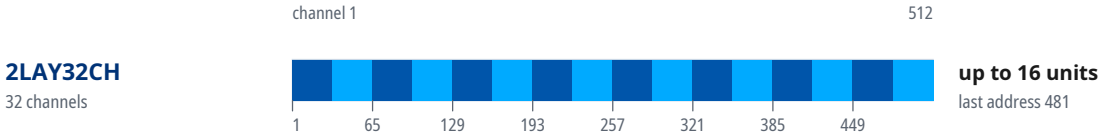
241 RESERVED	247 RESERVED	253 RESERVED
242 RESERVED	248 RESERVED	254 RESERVED
243 RESERVED	249 RESERVED	255 RESERVED
244 RESERVED	250 RESERVED	256 RESERVED
245 RESERVED	251 RESERVED	
246 RESERVED	252 RESERVED	

Gobo wheel 2

1 Zoom Out	2 No Zoom	3 Zoom In

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “2LAY32CH”

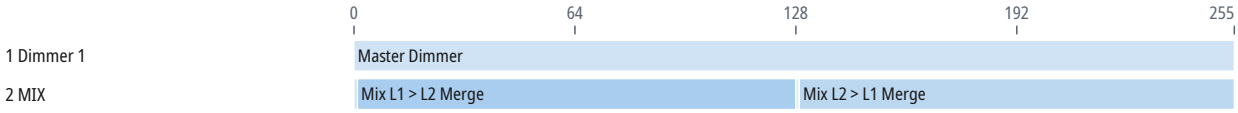
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	161	11	321	16	481
2	33	7	193	12	353	17	U2 · 1
3	65	8	225	13	385	18	U2 · 33
4	97	9	257	14	417	19	U2 · 65
5	129	10	289	15	449	20	U2 · 97

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 2LAY32CH

If the device receives DMX in this mode but gives no light, check these channels: CH 1 Dimmer 1 above 0; CH 3 Dimmer 2 above 0; CH 18 Dimmer 3 above 0. The GDTF file gives these values for a console's Highlight function: CH 1 Dimmer 1 255, CH 3 Dimmer 2 255, CH 18 Dimmer 3 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Dimmer 1		Master Dimmer
		0–255	Master Dimmer
2	MIX		Layer Merge
		0	HTP L1 > L2
		1–127	Mix L1 > L2 Merge
		128	Mix L1 = L2 Merge
		129–255	Mix L2 > L1 Merge
3	Dimmer 2		Layer Dimmer
		0–255	Layer Dimmer
4	FOREGROUNDRED 1		Red FG
		0–255	Red FG (colour 1)
5	FOREGROUNDGREEN 1		Green FG
		0–255	Green FG (colour 1)
6	FOREGROUNDBLUE 1		Blue FG
		0–255	Blue FG (colour 1)

CH	Function	DMX	Description
7	BACKGROUNDRED 1		Red BG
		0–255	Red BG (colour 2)
8	BACKGROUNDGREEN 1		Green BG
		0–255	Green BG (colour 2)
9	BACKGROUNDBLUE 1		Blue BG
		0–255	Blue BG (colour 2)
10	VIDEOSOURCE 1		Content Source
		0	Dimmer (static)
		1	Blocks (static)
		2	Tri-pattern (static)
		3	Spots (static)
		4	Fade (static)
		5	Spots Fade (static)
		6	Breath (static)
		7	Heartbeat (static)
		8	Blink (static)
		9	Strobe (static)
		10	Multi-strobe (static)
		11	BLACKOUT
		12	Rainbow Color Fade (static)
		13	Rainbow Cycle (static)
		14	Rainbow Fade (static)
		15	Blink Random Color (static)
		16	Random Strobe (static)
		17–39	RESERVED CTJ
		40	Lightning (noise)
		41	RESERVED CTJ
		42	Candle (noise)
		43	Multi-candle (noise)
		44	Sparkle (noise)
		45	Sparklers (noise)
		46	Flash Sparkle (noise)
		47	Twinkle (noise)
		48	Twinkle 2 (noise)
		49	Noise (noise)
		50	Fade Noise (noise)
		51	Speckle (noise)
		52	Dissolve Up-down (noise)
		53	Fallen Rain (noise)
		54	Raindrops (noise)
		55	Traffic (noise)
		56	Ripples (noise)

CH	Function	DMX	Description
10	VIDEOSOURCE 1 (continued)	57	CTJ Plasma (noise)
		58–79	RESERVED CTJ
		80	Phaser (cyclical)
		81	Phaser Noise (cyclical)
		82	Sine Wave (cyclical)
		83	Sawtooth Wave (cyclical)
		84	Theatre Chase (cyclical)
		85	Square Wave (cyclical)
		86	Caterpillars (cyclical)
		87	Block Chase (cyclical)
		88	Fade Chase (cyclical)
		89	Gradient Chase (cyclical)
		90	Block Scan (cyclical)
		91	Dual Block Scan (cyclical)
		92	Sine Scan (cyclical)
		93	Dual Sine Scan (cyclical)
		94	Dual Color Blocks (cyclical)
		95	Dual Color Siren (cyclical)
		96	Wipe (cyclical)
		97	Wipe Up-down (cyclical)
		98	Sparkle Wipe Up-down (cyclical)
		99	Lit Fuse (cyclical)
		100	Meteor (cyclical)
		101–119	RESERVED CTJ
		120	Bouncy Balls (macro)
		121	Pixel Launcher (macro)
		122	Dripping Tap (macro)
		123	Juggle (macro)
		124	Traffic Lights (macro)
		125	Fireworks (macro)
		126	Starbursts (macro)
		127–159	RESERVED CTJ
		160	Color Wipe (chroma)
		161	Color Wipe Up-down (chroma)
		162	Block Chase Random (chroma)
		163	Block Chase Rainbow (chroma)
		164	Theater Chase Rainbow (chroma)
		165	Sine Scan Rainbow (chroma)
		166–255	RESERVED BLOOM
11	Effects Speed 1	0	Freeze (content)
		1–255	Speed (content)
12	Effects Adjust 1 1	0	None (zero content)

CH	Function	DMX	Description
12	Effects Adjust 1 1 (continued)	1–255	Content Size/Density
13	EFFECTSTARTOFFSET 1		Content Offset
		0–255	Content Offset (Start)
14	Gobo 1		Palette Source
		0	No Palette
		1	Test - FG
		2	Test - FG + BG
		3	Test - FG + BG + C3
		4	Test - FG + BG + C3x2
		5–49	RESERVED CTJ
		50	Fire FG
		51	Fire BG
		52	Ember FG
		53	Ember BG
		54	Satsuma FG
		55	Satsuma BG
		56	Green Tea FG
		57	Green Tea BG
		58	Forest FG
		59	Forest BG
		60	Aurora FG CTJ
		61	Aurora BG CTJ
		62	Ocean FG
		63	Ocean BG
		64	Ocean Clear FG
		65	Ocean Clear BG
		66	Cloud FG
		67	Cloud BG
		68	Pastel Blue FG
		69	Pastel Blue BG
		70	Pinky Purple FG
		71	Pinky Purple BG
		72	Sherbert FG
		73	Sherbert BG
		74	Sherbert2 FG
		75	Sherbert2 BG
		76	Rainbow FG
		77	Rainbow BG
		78	Rainbow Dots FG
		79	Rainbow Dots BG
		80–99	RESERVED BLOOM
		100	Gold Bar FG

CH	Function	DMX	Description
14	Gobo 1 (continued)	101	Gold Bar BG
		102	Sand Dune FG
		103	Sand Dune BG
		104	Autumn FG
		105	Autumn BG
		106	Sunrise Early FG
		107	Sunrise Early BG
		108	Sunrise FG
		109	Sunrise BG
		110	Sunset FG
		111	Sunset BG
		112	Bluey Red FG
		113	Bluey Red BG
		114	Blue Red Spot FG
		115	Blue Red Spot BG
		116	CTJ Purpley Blue FG
		117	CTJ Purpley Blue BG
		118	Sherbert Trail FG
		119	Sherbert Trail BG
		120	Purple Pastel FG
		121	Purple Pastel BG
		122	Purple Cyan Spot FG
		123	Purple Cyan Spot BG
		124	Pink Pastel FG
		125	Pink Pastel BG
		126	Pastel2 FG
		127	Pastel2 BG
		128	Pink Ice FG
		129	Pink Ice BG
		130	Icicle FG C_T_J
		131	Icicle BG C_T_J
		132	Beach FG
		133	Beach BG
		134	Rock Pool FG
		135	Rock Pool BG
		136	Atlantic FG
		137	Atlantic BG
		138	Sapphire Emerald FG
		139	Sapphire Emerald BG
		140	Cyan Orange FG
		141	Cyan Orange BG
		142	Green Landscape FG

CH	Function	DMX	Description
14	Gobo 1 (continued)	143	Green Landscape BG
		144	Beach Landscape FG
		145	Beach Landscape BG
		146	Tweed FG
		147	Tweed BG
		148	Sherbert Green FG
		149	Sherbert Green BG
		150	Green Red Spot FG
		151	Green Red Spot BG
		152	Antique FG
		153	Antique BG
		154	Sweetie FG
		155	Sweetie BG
		156	Jester1 FG
		157	Jester1 BG
		158	Jester2 FG
		159	Jester2 BG
		160	Blackout FG
		161	Blackout BG
		162–255	RESERVED C_T_J
15	Gobo Rotation 1		Palette Zoom
		0–127	Zoom Out (copy palette)
		128	No Zoom (palette)
		129–255	Zoom In (stretch palette)
16	GOBO 1 OFFSET 1		Palette Offset
		0–255	Palette Offset (start)
17	EFFECTDIRECTION 1		Direction + Mirror
		0	Forward (no mirror)
		1	Reverse (no mirror)
		2–4	RESERVED CTJ
		5	End Mir Con Forward
		6	End Mir Con Reverse
		7	End Mir Pal Forward
		8	End Mir Pal Reverse
		9	End Mir Lay Forward
		10	End Mir Lay Reverse
		11–14	RESERVED CTJ
		15	Cen Mir Lay Forward
		16	Cen Mir Lay Reverse
		17	Cen Mir Con Forward
		18	Cen Mir Con Reverse
		19	Cen Mir Pal Forward

CH	Function	DMX	Description
17	EFFECTDIRECTION 1 (continued)	20	Cen Mir Pal Reverse
		21–24	RESERVED CTJ
		25	E+C Mir Lay Forward
		26	E+C Mir Lay Reverse
		27	E+C Mir Con Forward
		28	E+C Mir Con Reverse
		29	E+C Mir Pal Forward
		30	E+C Mir Pal Reverse
		31–255	RESERVED BLOOM
18	Dimmer 3		Layer Dimmer
		0–255	Layer Dimmer
19	FOREGROUNDRED 2		Red FG
		0–255	Red FG (colour 1)
20	FOREGROUNDGREEN 2		Green FG
		0–255	Green FG (colour 1)
21	FOREGROUNDBLUE 2		Blue FG
		0–255	Blue FG (colour 1)
22	BACKGROUNDRED 2		Red BG
		0–255	Red BG (colour 2)
23	BACKGROUNDGREEN 2		Green BG
		0–255	Green BG (colour 2)
24	BACKGROUNDBLUE 2		Blue BG
		0–255	Blue BG (colour 2)
25	VIDEOSOURCE 2		Content Source
		0	Dimmer (static)
		1	Blocks (static)
		2	Tri-pattern (static)
		3	Spots (static)
		4	Fade (static)
		5	Spots Fade (static)
		6	Breath (static)
		7	Heartbeat (static)
		8	Blink (static)
		9	Strobe (static)
		10	Multi-strobe (static)
		11	BLACKOUT
		12	Rainbow Color Fade (static)
		13	Rainbow Cycle (static)
		14	Rainbow Fade (static)
		15	Blink Random Color (static)
		16	Random Strobe (static)
		17–39	RESERVED CTJ

CH	Function	DMX	Description
25	VIDEOSOURCE 2 (continued)	40	Lightning (noise)
		41	RESERVED CTJ
		42	Candle (noise)
		43	Multi-candle (noise)
		44	Sparkle (noise)
		45	Sparklers (noise)
		46	Flash Sparkle (noise)
		47	Twinkle (noise)
		48	Twinkle 2 (noise)
		49	Noise (noise)
		50	Fade Noise (noise)
		51	Speckle (noise)
		52	Dissolve Up-down (noise)
		53	Fallen Rain (noise)
		54	Raindrops (noise)
		55	Traffic (noise)
		56	Ripples (noise)
		57	CTJ Plasma (noise)
		58–79	RESERVED CTJ
		80	Phaser (cyclical)
		81	Phaser Noise (cyclical)
		82	Sine Wave (cyclical)
		83	Sawtooth Wave (cyclical)
		84	Theatre Chase (cyclical)
		85	Square Wave (cyclical)
		86	Caterpillars (cyclical)
		87	Block Chase (cyclical)
		88	Fade Chase (cyclical)
		89	Gradient Chase (cyclical)
		90	Block Scan (cyclical)
		91	Dual Block Scan (cyclical)
		92	Sine Scan (cyclical)
		93	Dual Sine Scan (cyclical)
		94	Dual Color Blocks (cyclical)
		95	Dual Color Siren (cyclical)
		96	Wipe (cyclical)
		97	Wipe Up-down (cyclical)
		98	Sparkle Wipe Up-down (cyclical)
		99	Lit Fuse (cyclical)
		100	Meteor (cyclical)
		101–119	RESERVED CTJ
		120	Bouncy Balls (macro)

CH	Function	DMX	Description
25	VIDEOSOURCE 2 (continued)	121	Pixel Launcher (macro)
		122	Dripping Tap (macro)
		123	Juggle (macro)
		124	Traffic Lights (macro)
		125	Fireworks (macro)
		126	Starbursts (macro)
		127–159	RESERVED CTJ
		160	Color Wipe (chroma)
		161	Color Wipe Up-down (chroma)
		162	Block Chase Random (chroma)
		163	Block Chase Rainbow (chroma)
		164	Theater Chase Rainbow (chroma)
		165	Sine Scan Rainbow (chroma)
		166–255	RESERVED BLOOM
26	Effects Speed 2	0	Freeze (content)
		1–255	Speed (content)
27	Effects Adjust 1 2	0	None (zero content)
		1–255	Content Size/Density
28	EFFECTSTARTOFFSET 2		Content Offset
		0–255	Content Offset (Start)
29	Gobo 2		Palette Source
		0	No Palette
		1	Test - FG
		2	Test - FG + BG
		3	Test - FG + BG + C3
		4	Test - FG + BG + C3x2
		5–49	RESERVED CTJ
		50	Fire FG
		51	Fire BG
		52	Ember FG
		53	Ember BG
		54	Satsuma FG
		55	Satsuma BG
		56	Green Tea FG
		57	Green Tea BG
		58	Forest FG
		59	Forest BG
		60	Aurora FG CTJ
		61	Aurora BG CTJ
		62	Ocean FG
		63	Ocean BG
		64	Ocean Clear FG

CH	Function	DMX	Description
29	Gobo 2 (continued)	65	Ocean Clear BG
		66	Cloud FG
		67	Cloud BG
		68	Pastel Blue FG
		69	Pastel Blue BG
		70	Pinky Purple FG
		71	Pinky Purple BG
		72	Sherbert FG
		73	Sherbert BG
		74	Sherbert2 FG
		75	Sherbert2 BG
		76	Rainbow FG
		77	Rainbow BG
		78	Rainbow Dots FG
		79	Rainbow Dots BG
		80–99	RESERVED BLOOM
		100	Gold Bar FG
		101	Gold Bar BG
		102	Sand Dune FG
		103	Sand Dune BG
		104	Autumn FG
		105	Autumn BG
		106	Sunrise Early FG
		107	Sunrise Early BG
		108	Sunrise FG
		109	Sunrise BG
		110	Sunset FG
		111	Sunset BG
		112	Bluey Red FG
		113	Bluey Red BG
		114	Blue Red Spot FG
		115	Blue Red Spot BG
		116	CTJ Purpley Blue FG
		117	CTJ Purpley Blue BG
		118	Sherbert Trail FG
		119	Sherbert Trail BG
		120	Purple Pastel FG
		121	Purple Pastel BG
		122	Purple Cyan Spot FG
		123	Purple Cyan Spot BG
		124	Pink Pastel FG
		125	Pink Pastel BG

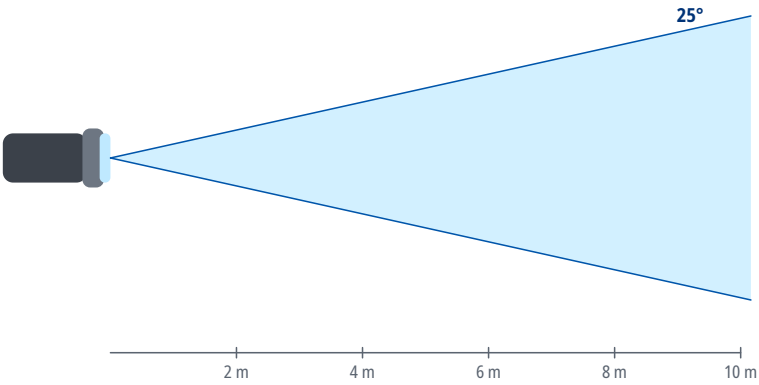
CH	Function	DMX	Description
29	Gobo 2 (continued)	126	Pastel2 FG
		127	Pastel2 BG
		128	Pink Ice FG
		129	Pink Ice BG
		130	Icicle FG C_T_J
		131	Icicle BG C_T_J
		132	Beach FG
		133	Beach BG
		134	Rock Pool FG
		135	Rock Pool BG
		136	Atlantic FG
		137	Atlantic BG
		138	Sapphire Emerald FG
		139	Sapphire Emerald BG
		140	Cyan Orange FG
		141	Cyan Orange BG
		142	Green Landscape FG
		143	Green Landscape BG
		144	Beach Landscape FG
		145	Beach Landscape BG
		146	Tweed FG
		147	Tweed BG
		148	Sherbert Green FG
		149	Sherbert Green BG
		150	Green Red Spot FG
		151	Green Red Spot BG
		152	Antique FG
		153	Antique BG
		154	Sweetie FG
		155	Sweetie BG
		156	Jester1 FG
		157	Jester1 BG
		158	Jester2 FG
		159	Jester2 BG
		160	Blackout FG
		161	Blackout BG
		162–255	RESERVED C_T_J
30	Gobo Rotation 2		Palette Zoom
		0–127	Zoom Out (copy palette)
		128	No Zoom (palette)
		129–255	Zoom In (stretch palette)
31	GOBO 1 OFFSET 2		Palette Offset

CH	Function	DMX	Description
31	GOBO 1 OFFSET 2 (continued)	0–255	Palette Offset (start)
32	EFFECTDIRECTION 2		Direction + Mirror
		0	Forward (no mirror)
		1	Reverse (no mirror)
		2–4	RESERVED CTJ
		5	End Mir Con Forward
		6	End Mir Con Reverse
		7	End Mir Pal Forward
		8	End Mir Pal Reverse
		9	End Mir Lay Forward
		10	End Mir Lay Reverse
		11–14	RESERVED CTJ
		15	Cen Mir Lay Forward
		16	Cen Mir Lay Reverse
		17	Cen Mir Con Forward
		18	Cen Mir Con Reverse
		19	Cen Mir Pal Forward
		20	Cen Mir Pal Reverse
		21–24	RESERVED CTJ
		25	E+C Mir Lay Forward
		26	E+C Mir Lay Reverse
		27	E+C Mir Con Forward
		28	E+C Mir Con Reverse
		29	E+C Mir Pal Forward
		30	E+C Mir Pal Reverse
		31–255	RESERVED BLOOM

10 Technical specifications

Parameter	Value
Operating temperature	0 to 40 °C

Spot diameter



Distance	Ø 25°
2 m	0.89 m
4 m	1.8 m
6 m	2.7 m
8 m	3.5 m
10 m	4.4 m
15 m	6.7 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.

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.