DMX REFERENCE

Robin 600 LEDWash

Robe Lighting



Manufacturer	Robe Lighting
GDTF file	Robe_Lighting_Robin_600_LEDWash_60186.gdtf
GDTF revision	2024-03-25 Zoom range fix
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 8
9 DMX channels 16
Mode 1 Extended with all zones 16bit 17
Mode 2 Reduced RGBW Wash 16bit 22
Mode 3 Reduced RGBW Wash 8bit 24
Mode 4 Limited macro colors 8bit 25
Mode 5 Extended all zones at the end 16bit 27
Mode 6 Extended all zones 8bit 30
10 Technical specifications 33
11 Maintenance and cleaning 34
12 Troubleshooting 34
13 Disposal 34

1 About this manual

This document describes the Robin 600 LEDWash by Robe Lighting. It was compiled from the GDTF file Robe_Lighting_Robin_600_LEDWash_60186.gdtf from the GDTF-Share library.

File revision: “2024-03-25 Zoom range fix”.

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 Robe Lighting; 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	415 W
Weight	10.6 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Mode 1 Extended with all zones 16bit	37	13	1, 38, 75, 112, ...
Mode 2 Reduced RGBW Wash 16bit	21	24	1, 22, 43, 64, ...
Mode 3 Reduced RGBW Wash 8bit	15	34	1, 16, 31, 46, ...
Mode 4 Limited macro colors 8bit	10	51	1, 11, 21, 31, ...
Mode 5 Extended all zones at the end 16bit	37	13	1, 38, 75, 112, ...
Mode 6 Extended all zones 8bit	25	20	1, 26, 51, 76, ...

No light? Check these channels

- Mode 1 Extended with all zones 16bit: CH 35 Shutter at 240–255 “Shutter open”; CH 36 Dimmer above 0
- Mode 2 Reduced RGBW Wash 16bit: CH 19 Shutter at 240–255 “Shutter open”; CH 20 Dimmer above 0
- Mode 3 Reduced RGBW Wash 8bit: CH 14 Shutter at 240–255 “Shutter open”; CH 15 Dimmer above 0
- Mode 4 Limited macro colors 8bit: CH 9 Shutter at 240–255 “Shutter open”; CH 10 Dimmer above 0
- Mode 5 Extended all zones at the end 16bit: CH 9 Shutter at 240–255 “Shutter open”; CH 10 Dimmer above 0
- Mode 6 Extended all zones 8bit: CH 23 Shutter at 240–255 “Shutter open”; CH 24 Dimmer above 0


Read the manual before use


Risk of electric shock


Do not stare into the light


Indoor use only

3 Safety instructions


Read the manual before use


Risk of electric shock


Do not stare into the light


Indoor use only

⚠ WARNING

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

⚠ WARNING

- Connect the device only to a properly installed mains outlet with a protective earth (ground) contact. The outlet or other means of disconnection must remain easily accessible.
- Power supply: 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.

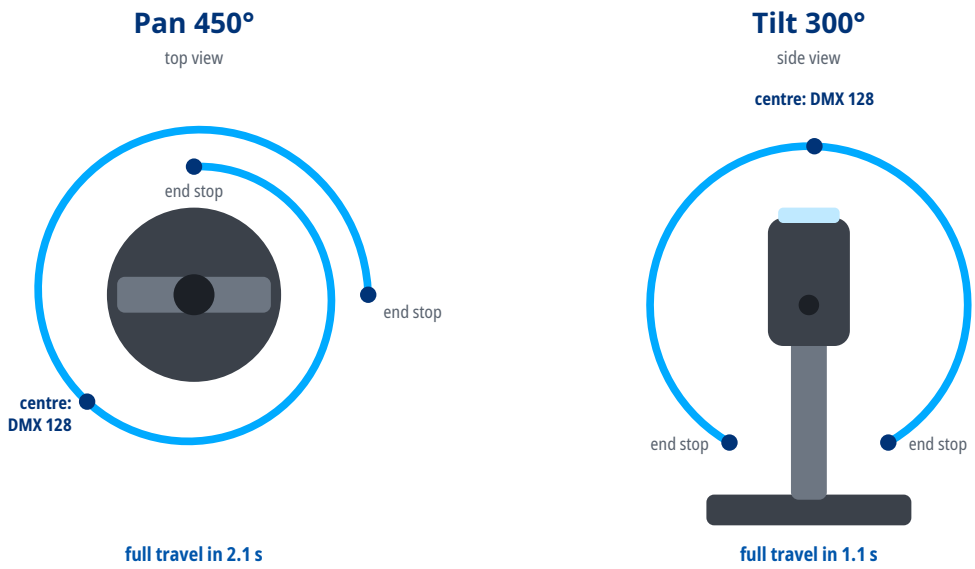
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

“The super-slim ROBIN® 600 LEDWash features 37x 10 Watt RGBW multichip LEDs with colour output ranging from gentle pastels to the richest saturation.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

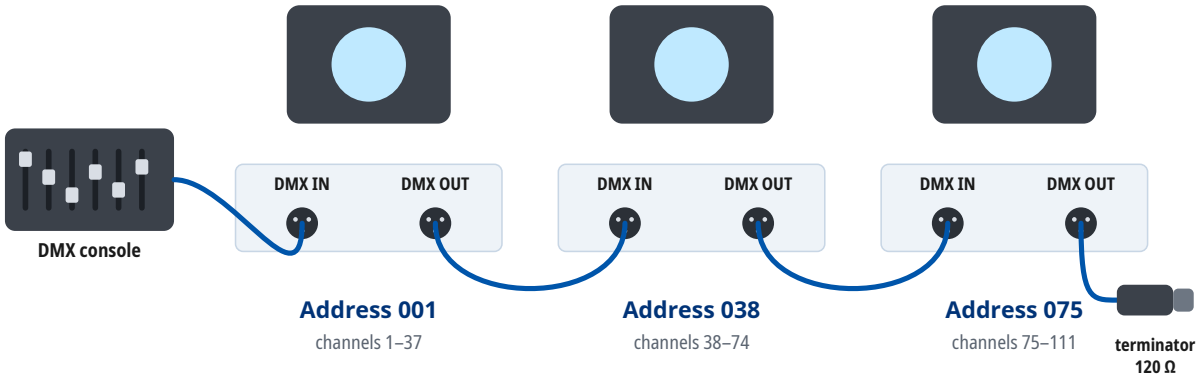
⚠ **WARNING**

- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 10.6 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 1 Extended with all zones 16bit: every unit occupies 37 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 “Mode 1 Extended with all zones 16bit”: 37.
- 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 “Mode 1 Extended with all zones 16bit”, you can use, for example, the start addresses 1, 38, 75, 112.
- 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

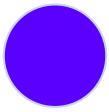
	Mode 1 Extended with all zones 16bit 37 channels	Mode 2 Reduced RGBW Wash 16bit 21 channels	Mode 3 Reduced RGBW Wash 8bit 15 channels	Mode 4 Limited macro colors 8bit 10 channels	Mode 5 Extended all zones at the end 16bit 37 channels	Mode 6 Extended all zones 8bit 25 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3
Dimmer	36	20	15	10	10	24
Dimmer resolution	16 bit	16 bit	8 bit	8 bit	16 bit	16 bit
Shutter / strobe	35	19	14	9	9	23
Color mixing	12× (7–29) *	4× (7–13) *	7–10 *		12× (14–36) *	7–18 *
Color temperature	31	15	11		12	19
Color wheel	32	16	12	7	13	20
Zoom	33	17	13	8	7	21
Pixel control	✓				✓	✓

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

Color wheel

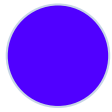
1. Color: Open — DMX 0
2. White 2700 K — DMX 1
3. White 2700 K — DMX 2
4. White 2700 K (Halogen lamp mode) — DMX 3
5. White 3200 K — DMX 4
6. White 2700 K — DMX 5
7. White 3200 K (Halogen lamp mode) — DMX 6
8. White 4200 K — DMX 7
9. White 4200 K — DMX 8
10. White 4200 K — DMX 9
11. White 5600 K — DMX 10
12. White 4200 K — DMX 11
13. White 4200 K — DMX 12
14. White 8000 K — DMX 13
15. White 8000 K — DMX 14
16. White 8000 K — DMX 15
17. Blue — DMX 16
18. Blue + Green >> 0...38 — DMX 17
19. Blue + Green >> 01 — DMX 18
20. Blue + Green >> 02 — DMX 19
21. Blue + Green >> 03 — DMX 20
22. Blue + Green >> 04 — DMX 21
23. Blue + Green >> 05 — DMX 22
24. Blue + Green >> 06 — DMX 23

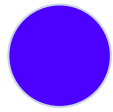
25 
Blue + Green >> 07
DMX 24

26 
Blue + Green >> 08
DMX 25

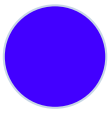
27 
Blue + Green >> 09
DMX 26

28 
Blue + Green >> 10
DMX 27

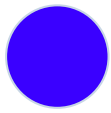
29 
Blue + Green >> 11
DMX 28

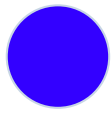
30 
Blue + Green >> 12
DMX 29

31 
Blue + Green >> 13
DMX 30

32 
Blue + Green >> 14
DMX 31

33 
Blue + Green >> 15
DMX 32

34 
Blue + Green >> 16
DMX 33

35 
Blue + Green >> 17
DMX 34

36 
Blue + Green >> 18
DMX 35

37 
Blue + Green >> 19
DMX 36

38 
Blue + Green >> 20
DMX 37

39 
Blue + Green >> 21
DMX 38

40 
Blue + Green >> 22
DMX 39

41 
Blue + Green >> 23
DMX 40

42 
Blue + Green >> 24
DMX 41

43 
Blue + Green >> 25
DMX 42

44 
Blue + Green >> 26
DMX 43

45 
Blue + Green >> 27
DMX 44

46 
Blue + Green >> 28
DMX 45

47 
Blue + Green >> 29
DMX 46

48 
Blue + Green >> 30
DMX 47

49 
Blue + Green >> 31
DMX 48

50 
Blue + Green >> 32
DMX 49

51 
Blue + Green >> 33
DMX 50

52 
Blue + Green >> 34
DMX 51

53 
Blue + Green >> 35
DMX 52

54 
Blue + Green >> 36
DMX 53

55 
Blue + Green >> 37
DMX 54

56 
Blue + Green >> 38
DMX 55

57 
LightBlue
DMX 56

58 
Green + Blue << 0...38
DMX 57

59 
Green + Blue << 01
DMX 58

60 
Green + Blue << 02
DMX 59

61 
Green + Blue << 03
DMX 60

62 
Green + Blue << 04
DMX 61

63 
Green + Blue << 05
DMX 62

64 
Green + Blue << 06
DMX 63

65
Green + Blue << 07
DMX 64

66
Green + Blue << 08
DMX 65

67
Green + Blue << 09
DMX 66

68
Green + Blue << 10
DMX 67

69
Green + Blue << 11
DMX 68

70
Green + Blue << 12
DMX 69

71
Green + Blue << 13
DMX 70

72
Green + Blue << 14
DMX 71

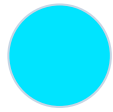
73 
Green + Blue << 15
DMX 72

74 
Green + Blue << 16
DMX 73

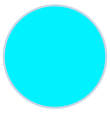
75 
Green + Blue << 17
DMX 74

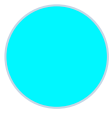
76 
Green + Blue << 18
DMX 75

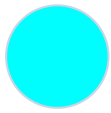
77 
Green + Blue << 19
DMX 76

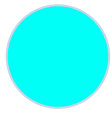
78 
Green + Blue << 20
DMX 77

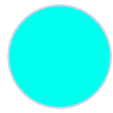
79 
Green + Blue << 21
DMX 78

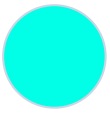
80 
Green + Blue << 22
DMX 79

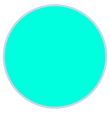
81 
Green + Blue << 23
DMX 80

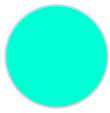
82 
Green + Blue << 24
DMX 81

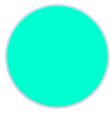
83 
Green + Blue << 25
DMX 82

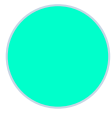
84 
Green + Blue << 26
DMX 83

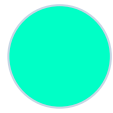
85 
Green + Blue << 27
DMX 84

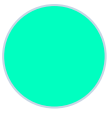
86 
Green + Blue << 28
DMX 85

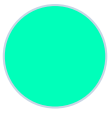
87 
Green + Blue << 29
DMX 86

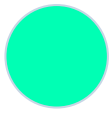
88 
Green + Blue << 30
DMX 87

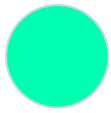
89 
Green + Blue << 31
DMX 88

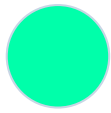
90 
Green + Blue << 32
DMX 89

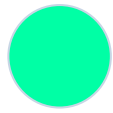
91 
Green + Blue << 33
DMX 90

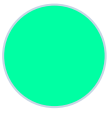
92 
Green + Blue << 34
DMX 91

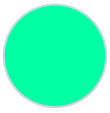
93 
Green + Blue << 35
DMX 92

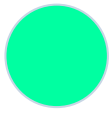
94 
Green + Blue << 36
DMX 93

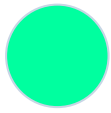
95 
Green + Blue << 37
DMX 94

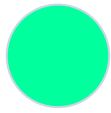
96 
Green + Blue << 38
DMX 95

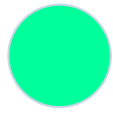
97 
Green
DMX 96

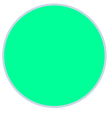
98 
Green + Red >> 0...37
DMX 97

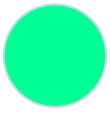
99 
Green + Red >> 01
DMX 98

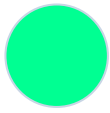
100 
Green + Red >> 02
DMX 99

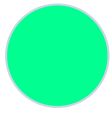
101 
Green + Red >> 03
DMX 100

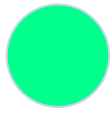
102 
Green + Red >> 04
DMX 101

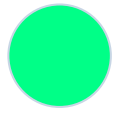
103 
Green + Red >> 05
DMX 102

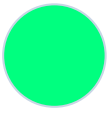
104 
Green + Red >> 06
DMX 103

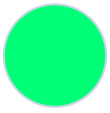
105 
Green + Red >> 07
DMX 104

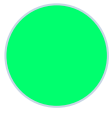
106 
Green + Red >> 08
DMX 105

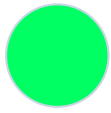
107 
Green + Red >> 09
DMX 106

108 
Green + Red >> 10
DMX 107

109 
Green + Red >> 11
DMX 108

110 
Green + Red >> 12
DMX 109

111 
Green + Red >> 13
DMX 110

112 
Green + Red >> 14
DMX 111

113
Green + Red >> 15
DMX 112

114
Green + Red >> 16
DMX 113

115
Green + Red >> 17
DMX 114

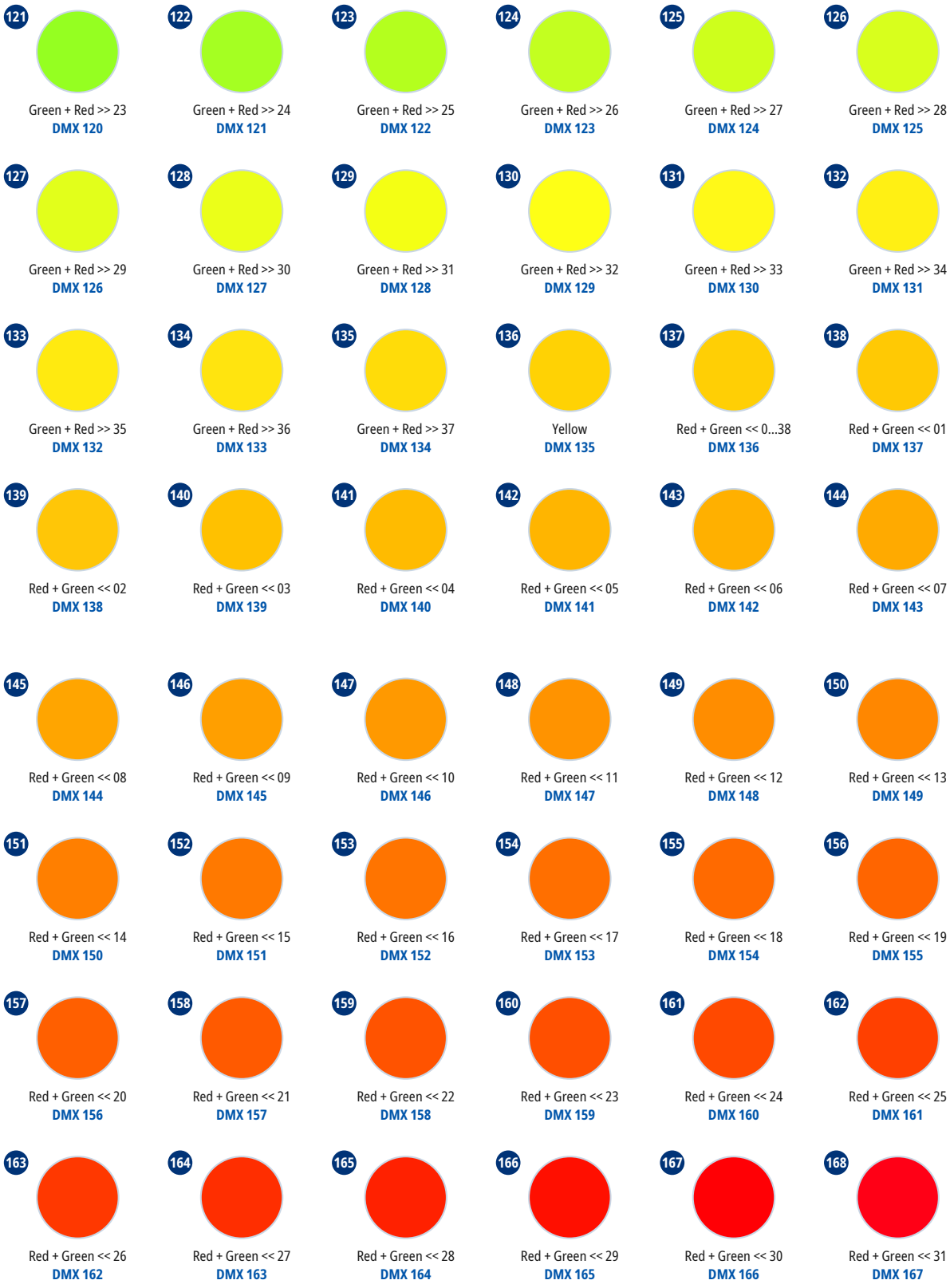
116
Green + Red >> 18
DMX 115

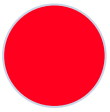
117
Green + Red >> 19
DMX 116

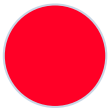
118
Green + Red >> 20
DMX 117

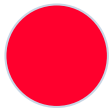
119
Green + Red >> 21
DMX 118

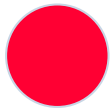
120
Green + Red >> 22
DMX 119

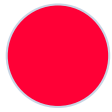

121
Green + Red >> 23
DMX 120
122
Green + Red >> 24
DMX 121
123
Green + Red >> 25
DMX 122
124
Green + Red >> 26
DMX 123
125
Green + Red >> 27
DMX 124
126
Green + Red >> 28
DMX 125
127
Green + Red >> 29
DMX 126
128
Green + Red >> 30
DMX 127
129
Green + Red >> 31
DMX 128
130
Green + Red >> 32
DMX 129
131
Green + Red >> 33
DMX 130
132
Green + Red >> 34
DMX 131
133
Green + Red >> 35
DMX 132
134
Green + Red >> 36
DMX 133
135
Green + Red >> 37
DMX 134
136
Yellow
DMX 135
137
Red + Green << 0...38
DMX 136
138
Red + Green << 01
DMX 137
139
Red + Green << 02
DMX 138
140
Red + Green << 03
DMX 139
141
Red + Green << 04
DMX 140
142
Red + Green << 05
DMX 141
143
Red + Green << 06
DMX 142
144
Red + Green << 07
DMX 143
145
Red + Green << 08
DMX 144
146
Red + Green << 09
DMX 145
147
Red + Green << 10
DMX 146
148
Red + Green << 11
DMX 147
149
Red + Green << 12
DMX 148
150
Red + Green << 13
DMX 149
151
Red + Green << 14
DMX 150
152
Red + Green << 15
DMX 151
153
Red + Green << 16
DMX 152
154
Red + Green << 17
DMX 153
155
Red + Green << 18
DMX 154
156
Red + Green << 19
DMX 155
157
Red + Green << 20
DMX 156
158
Red + Green << 21
DMX 157
159
Red + Green << 22
DMX 158
160
Red + Green << 23
DMX 159
161
Red + Green << 24
DMX 160
162
Red + Green << 25
DMX 161
163
Red + Green << 26
DMX 162
164
Red + Green << 27
DMX 163
165
Red + Green << 28
DMX 164
166
Red + Green << 29
DMX 165
167
Red + Green << 30
DMX 166
168
Red + Green << 31
DMX 167

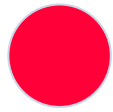
169 
Red + Green << 32
DMX 168

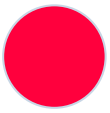
170 
Red + Green << 33
DMX 169

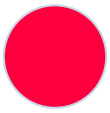
171 
Red + Green << 34
DMX 170

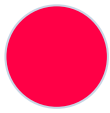
172 
Red + Green << 35
DMX 171

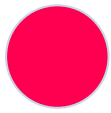
173 
Red + Green << 36
DMX 172

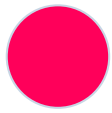
174 
Red + Green << 37
DMX 173

175 
Red + Green << 38
DMX 174

176 
Red
DMX 175

177 
Red + Blue >> 0...38
DMX 176

178 
Red + Blue >> 01
DMX 177

179 
Red + Blue >> 02
DMX 178

180 
Red + Blue >> 03
DMX 179

181 
Red + Blue >> 04
DMX 180

182 
Red + Blue >> 05
DMX 181

183 
Red + Blue >> 06
DMX 182

184 
Red + Blue >> 07
DMX 183

185 
Red + Blue >> 08
DMX 184

186 
Red + Blue >> 09
DMX 185

187 
Red + Blue >> 10
DMX 186

188 
Red + Blue >> 11
DMX 187

189 
Red + Blue >> 12
DMX 188

190 
Red + Blue >> 13
DMX 189

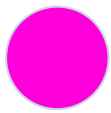
191 
Red + Blue >> 14
DMX 190

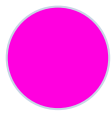
192 
Red + Blue >> 15
DMX 191

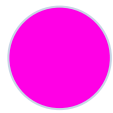
193 
Red + Blue >> 16
DMX 192

194 
Red + Blue >> 17
DMX 193

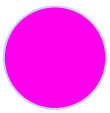
195 
Red + Blue >> 18
DMX 194

196 
Red + Blue >> 19
DMX 195

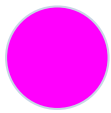
197 
Red + Blue >> 20
DMX 196

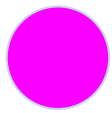
198 
Red + Blue >> 21
DMX 197

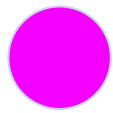
199 
Red + Blue >> 22
DMX 198

200 
Red + Blue >> 23
DMX 199

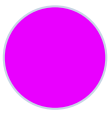
201 
Red + Blue >> 24
DMX 200

202 
Red + Blue >> 25
DMX 201

203 
Red + Blue >> 26
DMX 202

204 
Red + Blue >> 27
DMX 203

205 
Red + Blue >> 28
DMX 204

206 
Red + Blue >> 29
DMX 205

207 
Red + Blue >> 30
DMX 206

208 
Red + Blue >> 31
DMX 207

209
Red + Blue >> 32
DMX 208

210
Red + Blue >> 33
DMX 209

211
Red + Blue >> 34
DMX 210

212
Red + Blue >> 35
DMX 211

213
Red + Blue >> 36
DMX 212

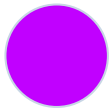
214
Red + Blue >> 37
DMX 213

215
Red + Blue >> 38
DMX 214

216
Magenta
DMX 215

217 
Blue + Red << 0...30
DMX 216

218 
Blue + Red << 01
DMX 217

219 
Blue + Red << 02
DMX 218

220 
Blue + Red << 03
DMX 219

221 
Blue + Red << 04
DMX 220

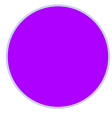
222 
Blue + Red << 05
DMX 221

223 
Blue + Red << 06
DMX 222

224 
Blue + Red << 07
DMX 223

225 
Blue + Red << 08
DMX 224

226 
Blue + Red << 09
DMX 225

227 
Blue + Red << 10
DMX 226

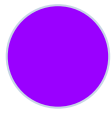
228 
Blue + Red << 11
DMX 227

229 
Blue + Red << 12
DMX 228

230 
Blue + Red << 13
DMX 229

231 
Blue + Red << 14
DMX 230

232 
Blue + Red << 15
DMX 231

233 
Blue + Red << 16
DMX 232

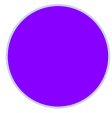
234 
Blue + Red << 17
DMX 233

235 
Blue + Red << 18
DMX 234

236 
Blue + Red << 19
DMX 235

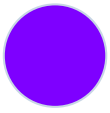
237 
Blue + Red << 20
DMX 236

238 
Blue + Red << 21
DMX 237

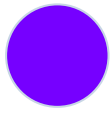
239 
Blue + Red << 22
DMX 238

240 
Blue + Red << 23
DMX 239

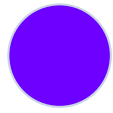
241 
Blue + Red << 24
DMX 240

242 
Blue + Red << 25
DMX 241

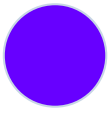
243 
Blue + Red << 26
DMX 242

244 
Blue + Red << 27
DMX 243

245 
Blue + Red << 28
DMX 244

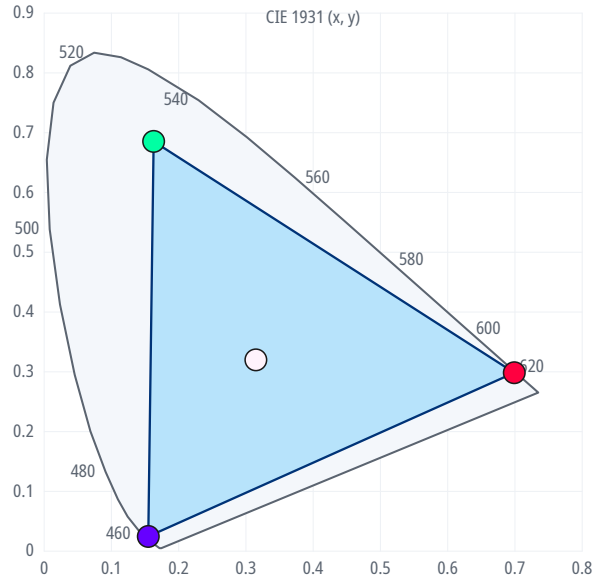
246 
Blue + Red << 29
DMX 245

247 
Blue + Red << 30
DMX 246

248 
Blue
DMX 247–248

249
Black

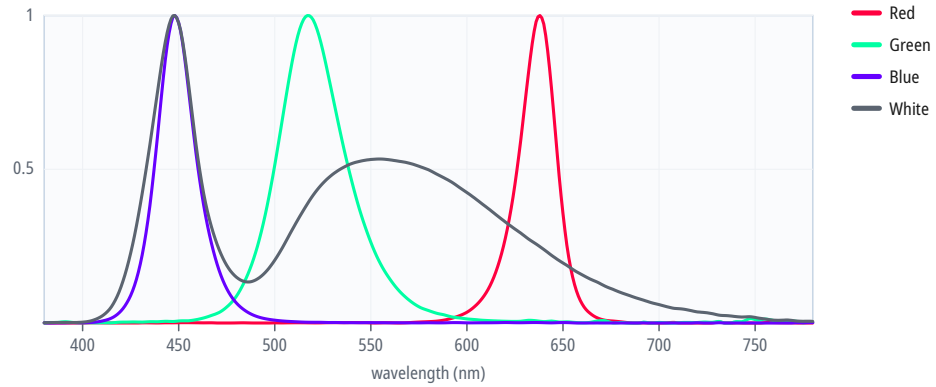
LED colors and the colors they mix



LED	x	y	nm
Red	0.699	0.299	626
Green	0.163	0.685	522
Blue	0.155	0.025	453
White	0.315	0.320	

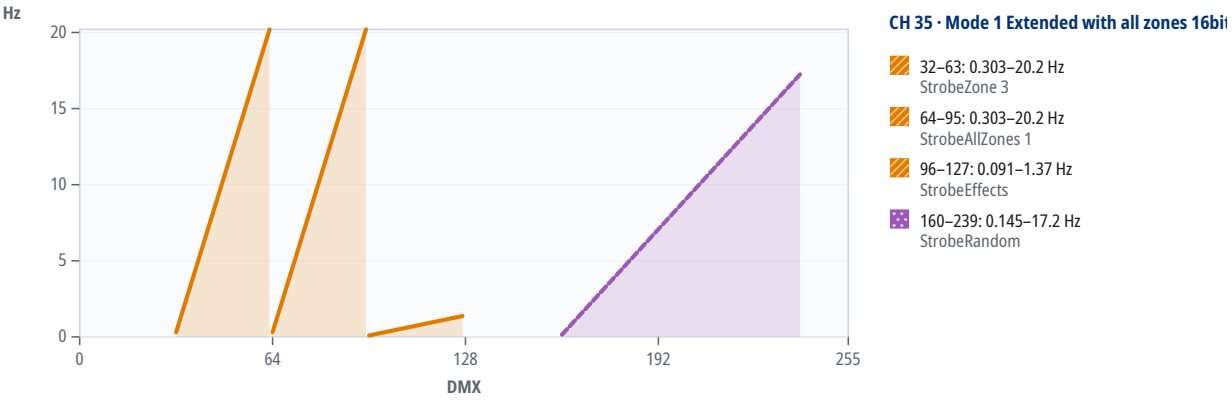
The shaded area holds the colors the LEDs can mix; the dots are the LED colors the GDTF file states.

Spectra of the light sources

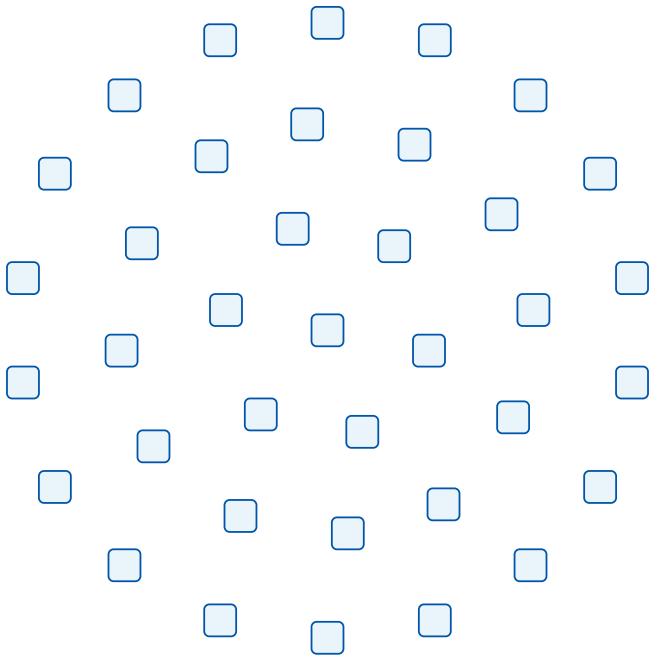


Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



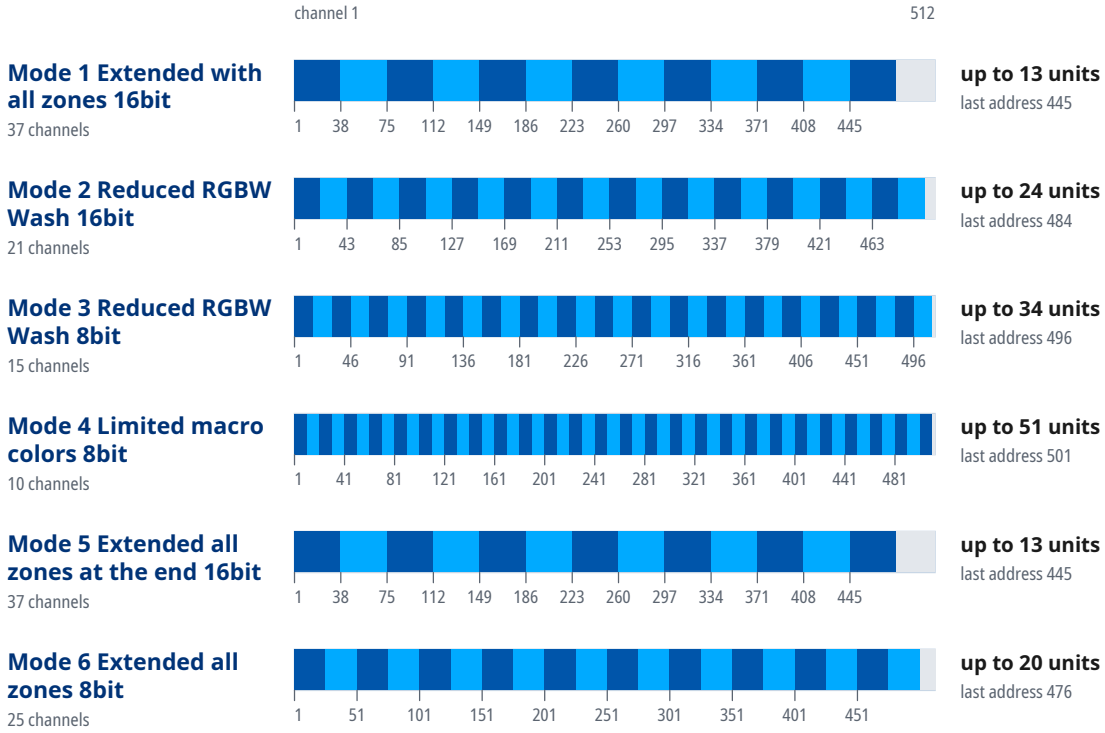
Cells (pixels)



Cells where the GDTF file places them (seen from above), 37 in all in the mode “Mode 1 Extended with all zones 16bit”.

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Mode 1 Extended with all zones 16bit”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	186	11	371	16	U2 · 75
2	38	7	223	12	408	17	U2 · 112
3	75	8	260	13	445	18	U2 · 149
4	112	9	297	14	U2 · 1	19	U2 · 186
5	149	10	334	15	U2 · 38	20	U2 · 223

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

RDM personalities

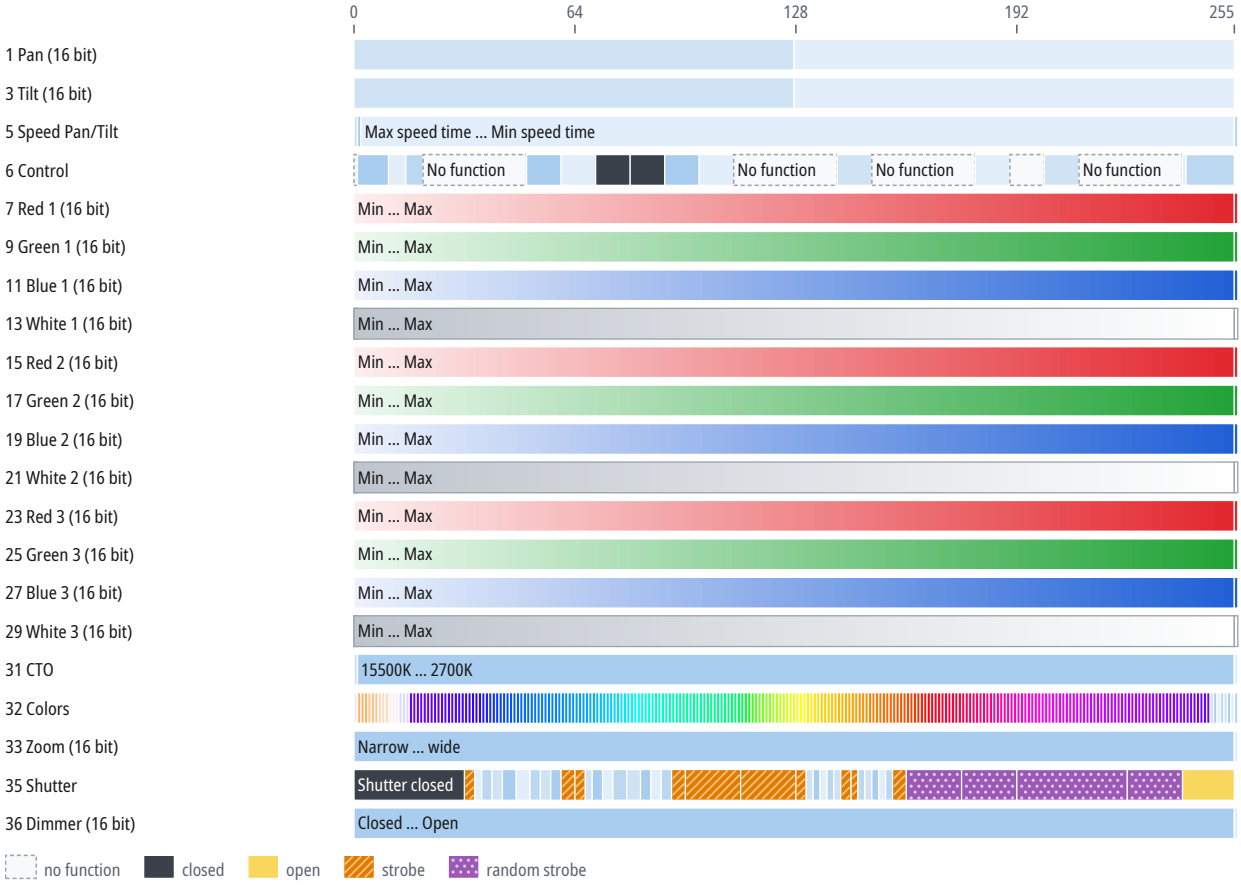
Mode	Channels	RDM personality
Mode 1 Extended with all zones 16bit	37	1
Mode 2 Reduced RGBW Wash 16bit	21	2
Mode 3 Reduced RGBW Wash 8bit	15	3
Mode 4 Limited macro colors 8bit	10	4
Mode 5 Extended all zones at the end 16bit	37	5
Mode 6 Extended all zones 8bit	25	6

Mode 1 Extended with all zones 16bit

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 35 Shutter at 240–255 “Shutter open”; CH 36 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Red 1 255, CH 9 Green 1 255, CH 11 Blue 1 255, CH 13 White 1 255, CH 15 Red 2 255, CH 17 Green 2 255, CH 19 Blue 2 255, CH 21 White 2 255, CH 23 Red 3 255, CH 25 Green 3 255, CH 27 Blue 3 255, CH 29 White 3 255, CH 31 CTO 0, CH 32 Colors 0, CH 35 Shutter 255, CH 36 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan
		128	Center
		128–255	Pan
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Tilt
		128	Center
		128–255	Tilt
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0	Standard mode
		1	Max speed time
		2–254	Max speed time ... Min speed time
		255	Min speed time

CH	Function	DMX	Description
6	Control	0	No function
		1–9	No function
		10–14	Wired DMX
		15–19	Wireless DMX
		20–49	No function
		50–59	P/T speed mode
		60–69	P/T time mode
		70–79	Blackout while P/T moving: ON
		80–89	Blackout while P/T moving: OFF
		90–99	Theatre mode ON
		100–109	Theatre mode OFF
		110–139	No function
		140–149	P/T reset
		150–179	No function
		180–189	Zoom/Beam shaper reset
		190–199	No function
		200–209	Total reset
		210–239	No function
		240	Disabled Quiet mode
		241–255	Quiet mode min to max
7	Red 1		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
8	Red 1 Fine	0–255	Fine adjustment of CH 7
9	Green 1		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
10	Green 1 Fine	0–255	Fine adjustment of CH 9
11	Blue 1		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
12	Blue 1 Fine	0–255	Fine adjustment of CH 11
13	White 1		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:

CH	Function	DMX	Description
13	White 1 (continued)	0–255	
14	White 1 Fine	0–255	Fine adjustment of CH 13
15	Red 2		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
16	Red 2 Fine	0–255	Fine adjustment of CH 15
17	Green 2		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
18	Green 2 Fine	0–255	Fine adjustment of CH 17
19	Blue 2		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
20	Blue 2 Fine	0–255	Fine adjustment of CH 19
21	White 2		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
22	White 2 Fine	0–255	Fine adjustment of CH 21
23	Red 3		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
24	Red 3 Fine	0–255	Fine adjustment of CH 23
25	Green 3		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
26	Green 3 Fine	0–255	Fine adjustment of CH 25
27	Blue 3		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:

CH	Function	DMX	Description
27	Blue 3 (continued)	0–255	
28	Blue 3 Fine	0–255	Fine adjustment of CH 27
29	White 3		When CH 32 is 0:
		0–255	Min ... Max
		255	Max
			When CH 32 is 1–255:
		0–255	
30	White 3 Fine	0–255	Fine adjustment of CH 29
31	CTO	0	15500K
		1–254	15500K ... 2700K
		255	2700K
32	Colors	0	Color: Open
		1–2	White 2700 K
		3	White 2700 K (Halogen lamp mode)
		4	White 3200 K
		5	White 2700 K
		6	White 3200 K (Halogen lamp mode)
		7–9	White 4200 K
		10	White 5600 K
		11–12	White 4200 K
		13–15	White 8000 K
		16	Blue
		17–55	Blue + Green >> 0...38
		56	LightBlue
		57–95	Green + Blue << 0...38
		96	Green
		97–134	Green + Red >> 0...37
		135	Yellow
		136–174	Red + Green << 0...38
		175	Red
		176–214	Red + Blue >> 0...38
		215	Magenta
		216–246	Blue + Red << 0...30
		247	Blue
		248	Rainbow effect (with fade time)
		249	Rainbow effect
		250–255	Zone effect 1...6
33	Zoom	0–255	Narrow ... wide
		255	Wide
34	Zoom Fine	0–255	Fine adjustment of CH 33
35	Shutter	0–31	Shutter closed
		32–34	Strobe Zone: Slow to fast - Slow (0.3–0.41 Hz)

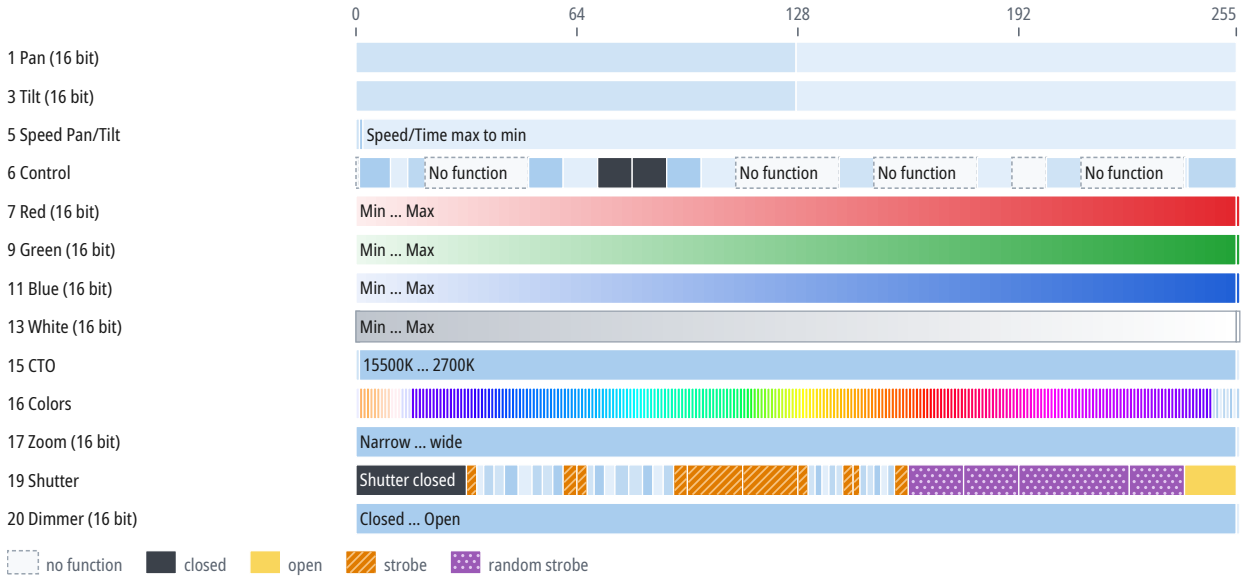
CH	Function	DMX	Description
35	Shutter (continued)	35–59	Strobe Zone: Slow to fast - Slow ... Slow to fast - Fast (0.46–11 Hz)
		60–63	Strobe Zone: Slow to fast - Fast (13–20 Hz)
		64–66	Strobe All Zones: Slow to fast - Slow (0.3–0.41 Hz)
		67–91	Strobe All Zones: Slow to fast - Slow ... Slow to fast - Fast (0.46–11 Hz)
		92–95	Strobe All Zones: Slow to fast - Fast (13–20 Hz)
		96–111	Zone + Rainbow effects slow to fast
		112–127	Zone + Rainbow effects fast to slow
		128–130	Shutter 1 Strobe Pulse Open: Slow to fast - Slow (0.119–0.179 Hz)
		131–140	Shutter 1 Strobe Pulse Open: Slow to fast - Slow ... Slow to fast - Fast (0.208–0.476 Hz)
		141–143	Shutter 1 Strobe Pulse Open: Slow to fast - Fast (0.526–0.667 Hz)
		144–145	Shutter 1 Strobe Pulse Close: Fast to slow - Slow (0.667–0.588 Hz)
		146–155	Shutter 1 Strobe Pulse Close: Fast to slow - Slow ... Fast to slow - Fast (0.526–0.238 Hz)
		156–159	Shutter 1 Strobe Pulse Close: Fast to slow - Fast (0.208–0.119 Hz)
		160–175	Random zone effect slow to fast (0.14–17.2 Hz)
		176–191	Random zone + strobe effect slow to fast (0.14–17.2 Hz)
		192–223	Random strobe slow to fast (all zones) (0.14–17.2 Hz)
		224–239	Random strobe slow to fast (random LEDs) (0.14–17.2 Hz)
		240–255	Shutter open
36	Dimmer	0–255	Closed ... Open
		255	Open
37	Dimmer Fine	0–255	Fine adjustment of CH 36

Mode 2 Reduced RGBW Wash 16bit

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 19 Shutter at 240–255 “Shutter open”; CH 20 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Red 255, CH 9 Green 255, CH 11 Blue 255, CH 13 White 255, CH 15 CTO 0, CH 16 Colors 0, CH 19 Shutter 255, CH 20 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0	Standard mode
		1	Max speed time
		2–255	Speed/Time max to min
6	Control		Same as CH 6 in the mode “Mode 1 Extended with all zones 16bit” (p. 18)
7	Red		When CH 16 is 0:
		0–255	Min ... Max
		255	Max
			When CH 16 is 1–255:
		0–255	
8	Red Fine	0–255	Fine adjustment of CH 7
9	Green		When CH 16 is 0:
		0–255	Min ... Max
		255	Max
			When CH 16 is 1–255:

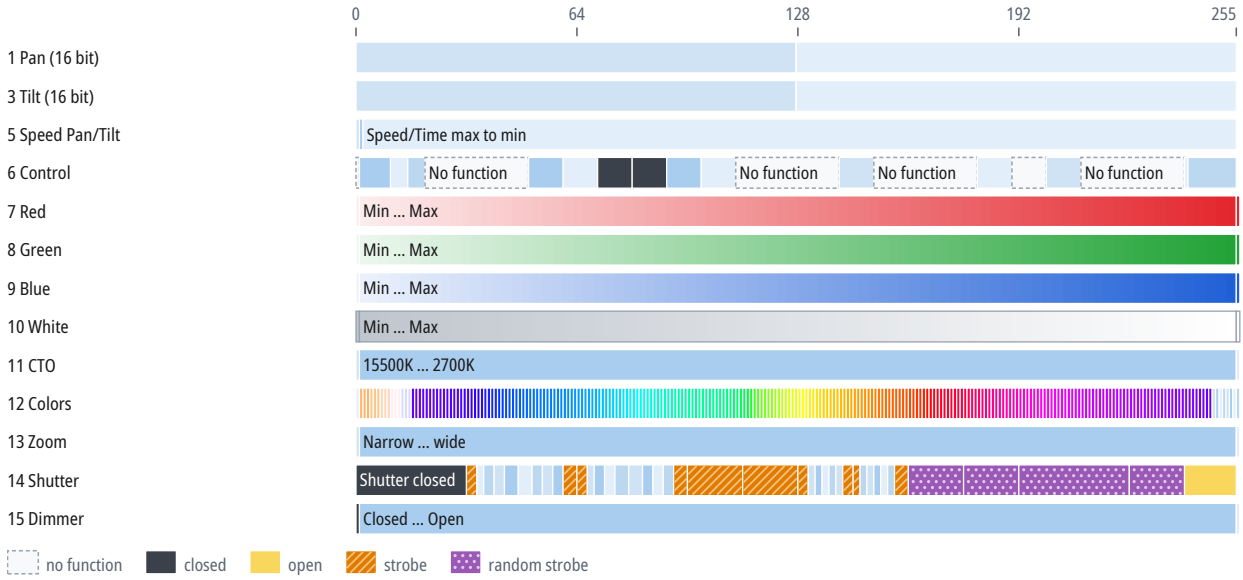
CH	Function	DMX	Description
9	Green (continued)	0–255	
10	Green Fine	0–255	Fine adjustment of CH 9
11	Blue		When CH 16 is 0:
		0–255	Min ... Max
		255	Max
			When CH 16 is 1–255:
		0–255	
12	Blue Fine	0–255	Fine adjustment of CH 11
13	White		When CH 16 is 0:
		0–255	Min ... Max
		255	Max
			When CH 16 is 1–255:
		0–255	
14	White Fine	0–255	Fine adjustment of CH 13
15	CTO		Same as CH 31 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
16	Colors		Same as CH 32 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
17	Zoom		Same as CH 33 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
18	Zoom Fine	0–255	Fine adjustment of CH 17
19	Shutter		Same as CH 35 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
20	Dimmer		Same as CH 36 in the mode “Mode 1 Extended with all zones 16bit” (p. 21)
21	Dimmer Fine	0–255	Fine adjustment of CH 20

Mode 3 Reduced RGBW Wash 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 14 Shutter at 240–255 “Shutter open”; CH 15 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Red 255, CH 8 Green 255, CH 9 Blue 255, CH 10 White 255, CH 11 CTO 0, CH 12 Colors 0, CH 14 Shutter 255, CH 15 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 2 Reduced RGBW Wash 16bit” (p. 22)
6	Control		Same as CH 6 in the mode “Mode 1 Extended with all zones 16bit” (p. 18)
7	Red		When CH 12 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 12 is 1–255:
		0–255	
8	Green		When CH 12 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 12 is 1–255:

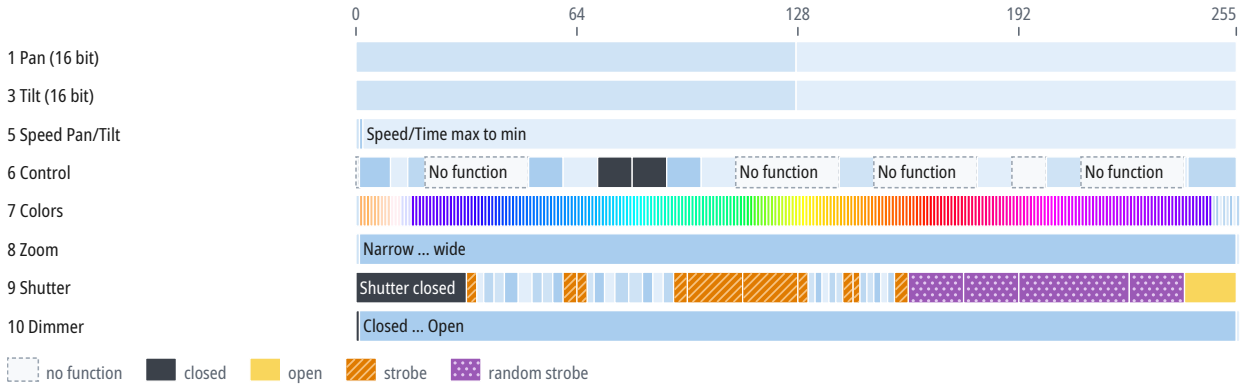
CH	Function	DMX	Description
8	Green (continued)	0–255	
9	Blue		When CH 12 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 12 is 1–255:
		0–255	
10	White		When CH 12 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 12 is 1–255:
		0–255	
11	CTO		Same as CH 31 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
12	Colors		Same as CH 32 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
13	Zoom	0	Narrow
		1–254	Narrow ... wide
		255	Wide
14	Shutter		Same as CH 35 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
15	Dimmer	0	Closed
		1–254	Closed ... Open
		255	Open

Mode 4 Limited macro colors 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 9 Shutter at 240–255 “Shutter open”; CH 10 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 9 Shutter 255, CH 10 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 2 Reduced RGBW Wash 16bit” (p. 22)
6	Control		Same as CH 6 in the mode “Mode 1 Extended with all zones 16bit” (p. 18)
7	Colors	0	Black
		1–2	White 2700 K
		3	White 2700 K (Halogen lamp mode)
		4	White 3200 K
		5	White 2700 K
		6	White 3200 K (Halogen lamp mode)
		7–9	White 4200 K
		10	White 5600 K
		11–12	White 4200 K
		13–15	White 8000 K
		16	Blue
		17–55	Blue + Green >> 0...38
		56	LightBlue
		57–95	Green + Blue << 0...38
		96	Green
		97–134	Green + Red >> 0...37
		135	Yellow
		136–174	Red + Green << 0...38
		175	Red
		176–214	Red + Blue >> 0...38
		215	Magenta
		216–246	Blue + Red << 0...30
		247	Blue
		248	Rainbow effect (with fade time)
		249	Rainbow effect
		250–255	Zone effect 1...6
8	Zoom		Same as CH 13 in the mode “Mode 3 Reduced RGBW Wash 8bit” (p. 25)
9	Shutter		Same as CH 35 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
10	Dimmer		Same as CH 15 in the mode “Mode 3 Reduced RGBW Wash 8bit” (p. 25)

Mode 5 Extended all zones at the end 16bit

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 240–255 “Shutter open”; CH 10 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 9 Shutter 255, CH 10 Dimmer 255, CH 12 CTO 0, CH 13 Colors 0, CH 14 Red 1 255, CH 16 Green 1 255, CH 18 Blue 1 255, CH 20 White 1 255, CH 22 Red 2 255, CH 24 Green 2 255, CH 26 Blue 2 255, CH 28 White 2 255, CH 30 Red 3 255, CH 32 Green 3 255, CH 34 Blue 3 255, CH 36 White 3 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 2 Reduced RGBW Wash 16bit” (p. 22)
6	Control		Same as CH 6 in the mode “Mode 1 Extended with all zones 16bit” (p. 18)
7	Zoom		Same as CH 33 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
8	Zoom Fine	0–255	Fine adjustment of CH 7

CH	Function	DMX	Description
9	Shutter		Same as CH 35 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
10	Dimmer		Same as CH 36 in the mode “Mode 1 Extended with all zones 16bit” (p. 21)
11	Dimmer Fine	0–255	Fine adjustment of CH 10
12	CTO		Same as CH 31 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
13	Colors		Same as CH 32 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
14	Red 1		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
15	Red 1 Fine	0–255	Fine adjustment of CH 14
16	Green 1		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
17	Green 1 Fine	0–255	Fine adjustment of CH 16
18	Blue 1		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
19	Blue 1 Fine	0–255	Fine adjustment of CH 18
20	White 1		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
21	White 1 Fine	0–255	Fine adjustment of CH 20
22	Red 2		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
23	Red 2 Fine	0–255	Fine adjustment of CH 22
24	Green 2		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:

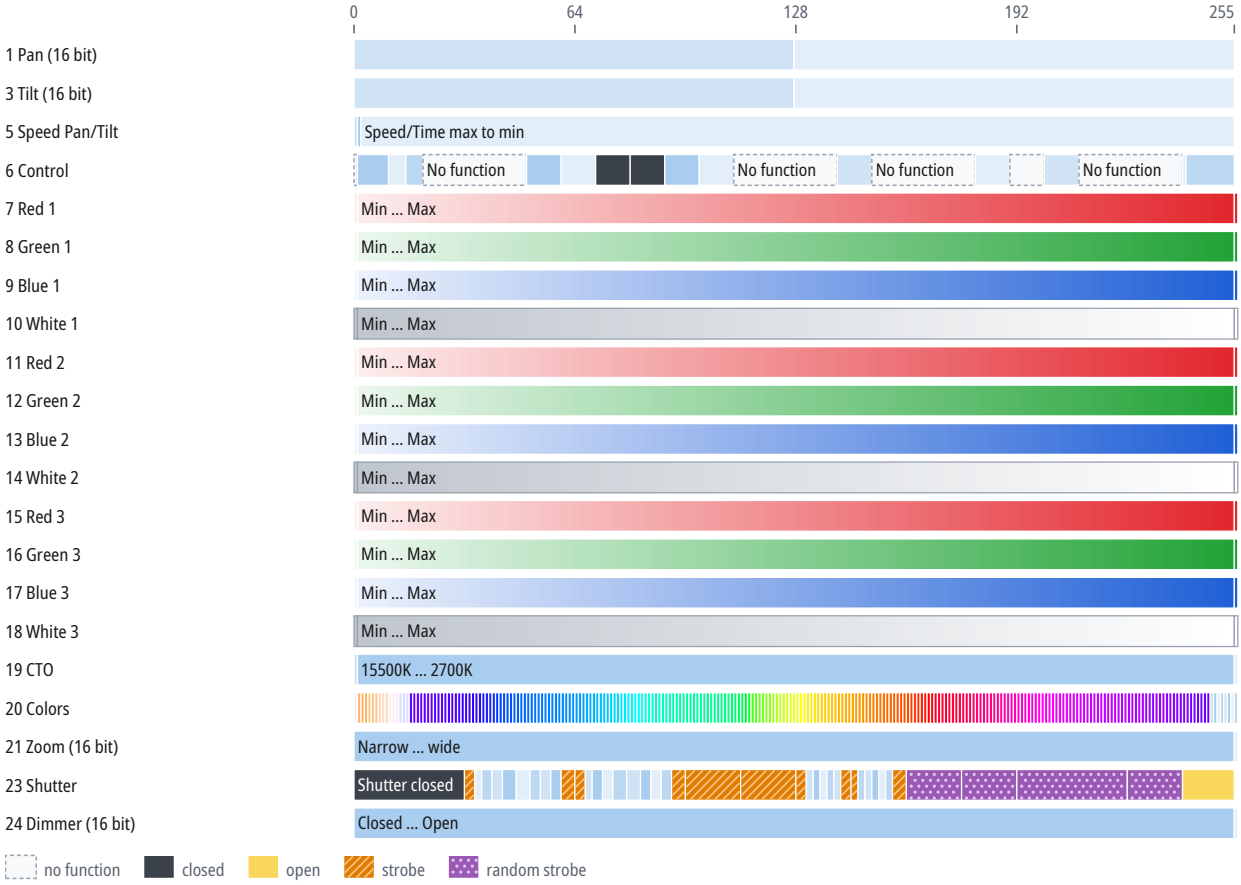
CH	Function	DMX	Description
24	Green 2 (continued)	0–255	
25	Green 2 Fine	0–255	Fine adjustment of CH 24
26	Blue 2		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
27	Blue 2 Fine	0–255	Fine adjustment of CH 26
28	White 2		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
29	White 2 Fine	0–255	Fine adjustment of CH 28
30	Red 3		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
31	Red 3 Fine	0–255	Fine adjustment of CH 30
32	Green 3		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
33	Green 3 Fine	0–255	Fine adjustment of CH 32
34	Blue 3		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
35	Blue 3 Fine	0–255	Fine adjustment of CH 34
36	White 3		When CH 13 is 0:
		0–255	Min ... Max
		255	Max
			When CH 13 is 1–255:
		0–255	
37	White 3 Fine	0–255	Fine adjustment of CH 36

Mode 6 Extended all zones 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 23 Shutter at 240–255 “Shutter open”; CH 24 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Red 1 255, CH 8 Green 1 255, CH 9 Blue 1 255, CH 10 White 1 255, CH 11 Red 2 255, CH 12 Green 2 255, CH 13 Blue 2 255, CH 14 White 2 255, CH 15 Red 3 255, CH 16 Green 3 255, CH 17 Blue 3 255, CH 18 White 3 255, CH 19 CTO 0, CH 20 Colors 0, CH 23 Shutter 255, CH 24 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Mode 1 Extended with all zones 16bit” (p. 17)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “Mode 2 Reduced RGBW Wash 16bit” (p. 22)
6	Control		Same as CH 6 in the mode “Mode 1 Extended with all zones 16bit” (p. 18)
7	Red 1		When CH 20 is 0:
		0	Min
		1–254	Min ... Max

CH	Function	DMX	Description
7	Red 1 (continued)	255	Max
			When CH 20 is 1–255:
		0–255	
8	Green 1		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
9	Blue 1		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
10	White 1		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
11	Red 2		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
12	Green 2		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
13	Blue 2		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
14	White 2		When CH 20 is 0:
		0	Min

CH	Function	DMX	Description
14	White 2 (continued)	1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
15	Red 3		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
16	Green 3		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
17	Blue 3		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
18	White 3		When CH 20 is 0:
		0	Min
		1–254	Min ... Max
		255	Max
			When CH 20 is 1–255:
		0–255	
19	CTO		Same as CH 31 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
20	Colors		Same as CH 32 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
21	Zoom		Same as CH 33 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
22	Zoom Fine	0–255	Fine adjustment of CH 21
23	Shutter		Same as CH 35 in the mode “Mode 1 Extended with all zones 16bit” (p. 20)
24	Dimmer		Same as CH 36 in the mode “Mode 1 Extended with all zones 16bit” (p. 21)
25	Dimmer Fine	0–255	Fine adjustment of CH 24

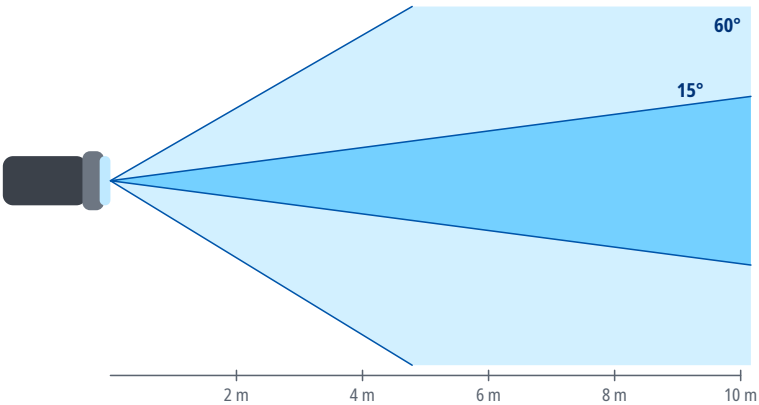
10 Technical specifications

Parameter	Value
Light	
Light source	LED
Optics	
Zoom	15–60°
Movement	
Pan	450°
Tilt	300°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45
RDM	yes (manufacturer ID 0x5253, device model ID 0x0076)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	415 W
Power connectors	powerCON TRUE1 IN
Dimensions and construction	
Weight	10.6 kg
Operating environment	
Operating temperature	0 to 45 °C

Speeds and ranges

Parameter	Value
Color temperature range	2700–15500 K
Strobe frequency	0.303–20.2 Hz

Spot diameter



Distance	Ø 15°	Ø 60°
2 m	0.53 m	2.3 m
4 m	1.1 m	4.6 m
6 m	1.6 m	6.9 m
8 m	2.1 m	9.2 m
10 m	2.6 m	11.5 m
15 m	3.9 m	17.3 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.