FB4 39 Channel DMX Profile layout

Note that this profile is active when the FB4 is in operation mode **DMX-512 or **ArtNET** and in menu “DMX settings”, the profile “FB4” is chosen.****

The 39-channel fixture mode is meant to be used as follow;

1. Place the FB4 in “Setup mode”. (Note that there is a two second delay before “setup mode” will initialize). Now limit the area where the laser may project.
2. Place the FB4 in “playback mode”.
   Do the actual show performance and have the ability to use shape generators.

<WRAP center round important> During “Setup mode”, channels 14 till 39 will ignore DMX/Art-net changes.
During “playback mode”, channels 2 till 13 will ignore DMX/Art-net changes. </WRAP>

Channels	Value	Function	Description	Width
1 [1)]	0-255	Fixture Modes	0-239 Blackout / Safe 240-240 Setup Mode 251-251 Playback mode	8 Bit
2	0-255	Max Intensity	Defines the max intensity that can be used during playback mode (Range 0 till 100)	8 Bit
3	0-255	Test frames	Allows enabling test frames during setup mode\\(1= test frame 1, 255 = test frame 255)	8 Bit
4,5	0-65535	Size X	Defines the maximum width that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
6,7	0-65535	Size Y	Defines the maximum height that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
8,9	0-65535	Position X	Defines the maximum height that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
10,11	0-65535	Position Y	Defines the horizontal position that can be used during playback mode (Range -100 till 100%, 0 = 32768)	16 Bit
12,13	0-65535	Rotation Z	Defines the rotation angle that can be used during playback mode (Range 0 till 360 degrees)	16 Bit
14	0-255	Pages	Page Index, 255 pages in total 1 = page 1, 255 = page 255	8 Bit
15	0-255	Cues	Cue Index, 255 Cues in total (1 = cue 1, 255 = cue 255)	8 Bit
16 [2)]	0-255	Cue Speed	(0 = 0%, 1 – 255 = 1% till 255%)	8 Bit

Channels	Value	Function	Description	Width
17	0-255	Dimmer	Defines the maximum brightness limited by setup mode (Range 0 till 100%)	8 Bit
18,19	0-65535	Zoom	Allows to zoom the cue limited by setup mode (Range 0 till 100%)	16 Bit
20,21	0-65535	X Size	Defines the maximum width limited by setup mode (Range -100 till 100%, 0 = 32768)	16 Bit
22,23	0-65535	Y Size	Defines the maximum height limited by setup mode (Range -100 till 100%, 0 = 32768)	16 Bit
24,25	0-65535	Z Angle	Defines the rotation angle limited by setup mode (Range 0 till 359 degrees)	16 Bit
26,27	0-65535	Z Rotation	Continues rotation from -60 till 60 Rpm Range, 0 = Original 1 till 32767 = -100% till -1% rotation 32768 = keep angle but do not rotate 32769 till 65535 = 1% till 100% rotation	16 Bit
28,29	0-65535	X Position	Allows for changing the horizontal position of the cue limited by setup mode (Range -100 till 100%, center = 32768)	16 Bit
30,31	0-65535	Y Position	Allows for changing the vertical position of the cue limited by setup mode (Range -100 till 100%, center = 32768)	16 Bit
32 [3]	0-255	Scan Rate	Defines the painting speed of the laser beam. (5k till original 30K)	8 Bit
33	0-255	Red	Intensity range from 0 till 100%	8 Bit
34	0-255	Green	Intensity range from 0 till 100%	8 Bit
35	0-255	Blue	Intensity range from 0 till 100%	8 Bit
36	0-255	Alpha	Allows you to shift between original cue color or RGB control. (Range, 0 = original, 1-255 = 0 till 100% alpha blending)	8 Bit
37	0-255	Points start	Allows you to remove points from the start point of a cue (Range from 100 till 0% visibility)	8 Bit
38	0-255	Points End	Allows you to remove points from the end point of a cue (Range from 1000 till 0% visibility)	8 Bit
39	0-255	Strobe	0 = Strobe disabled 1-255 = Strobe from 1 to 20 Hz	8 Bit

Cheat Sheet

Click here to download the cheat sheet

[1]

Set Channel one at least 2 seconds on DMX value 240 to activate setup mode. Channel 2 till 12 can only be modified when channel one is in setup mode During setup the red light on the FB4 will blink. During playback mode, the red light will burn continuously.

[2]

If a BPM based effects is exported at 100BPM, and you want to have a cue running on 128 BPM, change the speed to 128.

3)

Lowering the scan rate can impact the cue speed of the laser

From:
https://wiki.pangolin.com/ - **Complete Help Docs**

Permanent link:
https://wiki.pangolin.com/doku.php?id=hardware:fb4:dmx39

Last update: **2026/01/06 22:06**