

JMB Lighting — DMX Personality Chart

JMB one / 4our / 8ight · Firmware 2.x · 2026-08-20

Personalities (per port)

#	Name	Footprint	Channels
1	RGB 8-bit	3	R, G, B
2	RGB 16-bit	6	R, Rf, G, Gf, B, Bf
3	CW/WW 8-bit	2	CW, WW
4	CW/WW 16-bit	4	CWc, CWf, WWc, WWf
5	FX 10ch	10	see below

Each port's whole footprint must fit inside the universe, so the start address caps at **513 – footprint**: RGB 8-bit → 510, RGB 16-bit → 507, CW/WW 8-bit → 511, CW/WW 16-bit → 509, **FX 10ch** → **503**. Changing a port to a larger personality re-clamps its start down if it would overhang. Offset apply mode spaces ports by the widest footprint (10ch → 40ch across a 4-port, 80ch across an 8-port).

FX 10ch personality

CH	Function	Values
1	Dimmer	0–255 master
2–3	Red coarse + fine	16-bit
4–5	Green coarse + fine	16-bit
6–7	Blue coarse + fine	16-bit
8	Effect select	ranges below
9	Effect speed	128 = designed tempo; exponential — $0 \approx \frac{1}{8}\times$, $255 = 8\times$
10	Strobe	0 = open · 1–128 fixed rate ~0.8→14 Hz · 129–255 random, mean 1 s→60 ms

When CH8 selects an effect it replaces the RGB channels as the colour source; the strobe shutter chops whatever is playing; the dimmer scales last.

Effect ranges (CH8)

21 effects, each an **11-value band** from 10 up (the last extends to 255):

Range	Effect	Range	Effect
0–9	Off (safe park)	120–130	Sunset
10–20	Candle	131–141	TV Sim
21–31	Fire	142–152	Strobe
32–42	Fireworks	153–163	Police
43–53	Water	164–174	Pulse
54–64	Siren	175–185	Party
65–75	Laser	186–196	Traffic
76–86	Club	197–207	Fluoro
87–97	Lightning	208–218	Paparazzi
98–108	Rainbow	219–229	Explosion
109–119	Aurora	230–255	Clouds

Notes: Siren and Police alternate phase across ports (lightbar feel); Club and Party run a 128 BPM clock by default (Party hops hue every 4th beat and renders greens as mint — never black, never strobes); Traffic plays passing-headlight sweeps with independent random timing per port; Water, Pulse and Clouds never go fully dark; effect speed (CH9) does not affect the CH10 strobe rate. The film gags: **Fluoro** is a failing fluorescent tube (rapid failed strikes, then it catches and holds with a faint mains buzz); **Paparazzi** fires irregular hard white pops, independent per port, like a press pit; **Explosion** is a white-hot flash blooming to an orange fireball with an ember-flicker decay; **Clouds** drifts daylight slowly dimmer and cooler as cloud passes the sun, then back.

Rig-wide FX controls (config, not DMX): **FX Tempo** (60–240 BPM, tap-settable from the app or set in panel Setup) scales every beat effect, and **FX Spread** (0–100%) staggers the effect clock across ports. Defaults (128 BPM, 0%) reproduce the behaviour above.

Sources

The rig accepts **wired DMX (5-pin)** and **CRMX wireless** (LumenRadio). One source owns the decode at a time, selected in the Sources hub (panel or app).

Hold-on-loss: if the active source drops, every port holds its last look — nothing ever auto-runs on signal loss; changes made after the loss apply immediately. Runt packets (under 25 slots) are rejected as line noise rather than treated as a new look.

RDM

Root device (sub 0): rack footprint, start address = port 1; SET fans out per the Apply mode (JMB parameter 0x8001: 1=Same 2=Seq 3=Offset). Each port is a sub-device (1–N) with its own start address, personality and identify. E1.37-1 CURVE (dimmer curve) and MODULATION_FREQUENCY (PWM 1=Smooth 8 kHz, 2=Silent 20 kHz, 3=Camera 62.5 kHz — the flicker-free default) are supported on the root. The root also exposes each port's temperature and output current as E1.20 sensors, and personality is settable at the root for sub-0-only consoles.