MORTOOLS ColorPump
MIDI LED Controller - User Manual

Welcome!

Congratulations on your brand-new ColorPump MIDI LED Controller – a tiny but mighty box that turns your MIDI messages into glorious light.

Use it on your pedalboard, in your studio rack, or anywhere you'd like a splash of color.

What's in the Box

- 1 × MIDI LED Controller
- 1 × 1-meter LED strip
- 1 × User Manual (that's what you're reading)

Important Safety Stuff

We know you want to dive in, but please read this section.

- *Power* – Use a regulated, isolated power supply providing between 9-24V DC, center-negative, at least 4.5W (500mA at 9V). (Yes, the same kind of supply used for most pedalboard gear.)
- *Polarity matters* – This unit is center-negative. Using center-positive may result in sadness, or smoke, and probably both.
- *Environment* – Indoor use only. Keep away from liquids, extreme heat, or curious pets.
- *LED strips* – Only connect LED strips designed for this controller (RJ11 output). Do not connect other devices or cabling.
- *Modification* – Shortening the LED strip is fine (only at the marked cut lines). Modifying the controller itself is not recommended unless you're into voiding warranties.

Example Use Cases

- *On a pedalboard*: Match LED colors to your presets – red for distortion, green for clean, blue for modulation.
- *In a studio rack*: Use lighting as a quick visual cue for which effect chain or synth is active.
- *On stage*: Create atmospheric effects triggered by your MIDI controller – rainbow sweeps with your intro, stars for quieter moments.
- *As a MIDI clock visual*: Flash in time with the beat. (Requires a good and flexible MIDI controller - Are you familiar with *MORTRIX*?)
- *Rehearsals or teaching*: Use LED colors to signal sections of a song or guide a band through transitions.

Regulatory Notes

This device is low-voltage and complies with standard CE/FCC Class B rules for consumer devices. It does not generate harmful interference (though it may generate disco vibes).

Don't use USB cables longer than 2 meters.

Getting Started

1. Connect your LED strip to the *Lights Out* connector.

2. Plug in a 9-24V pedalboard-style power supply (center-negative, ≥4.5 W).

3. Send MIDI from your controller (via USB or TRS In).

4. Watch your stage, studio, or rehearsal space light up.

Tip: If nothing lights up, check power and MIDI channel settings (default is channel **16**).

To change the MIDI channel: First send CC 126 with the value of the new channel 0-16 (0 = OMNI), then send any value to CC 127 *on the new channel* to save.

Connections

Inputs

- *Power*: 2.1 × 5.5 mm DC, 9–24V DC, center-negative, 500 mA min at 9V.
- *USB MIDI*: USB-C, MIDI in + firmware updates
- *MIDI In*: 3.5 mm TRS (Type A), for MIDI control

Outputs

- *MIDI Thru*: 3.5 mm TRS (Type A): Direct copy of the incoming TRS MIDI In (not merged with USB)
- *Lights Out*: For connecting LED strips

Indicators

- Power
- MIDI Activity

A Few Tips

- Shortening LED Strips: Only cut on the marked lines. Otherwise, you'll end up with a sad half-pixel and no warranty.
- MIDI Thru: Use this to chain your MIDI gear. It simply passes along the incoming TRS MIDI In-signal.

Support

If your lights don't shine or your MIDI acts moody, contact support at **support@mortrix.io**

MORTOOLS ColorPump
MIDI Implementation

Program Changes (PC)

PC	Lights	PC	Lights
0	All Off	33	Third Section Yellow
1	All Red	34	Third Section Green
2	All Orange	35	Third Section Blue
3	All Yellow	36	Third Section Magenta
4	All Green	37	Third Section White
5	All Blue	40	Stars
6	All Magenta	41	Moving Dot Red
7	All White	42	Moving Dot Orange
10	First Section Off	43	Moving Dot Yellow
11	First Section Red	44	Moving Dot Green
12	First Section Orange	45	Moving Dot Blue
13	First Section Yellow	46	Moving Dot Magenta
14	First Section Green	47	Moving Dot White
15	First Section Blue	48	Confetti
16	First Section Magenta	49	Sinelon
17	First Section White	50	Juggle
20	Second Section Off	51	ColorWipe Red
21	Second Section Red	52	ColorWipe Orange
22	Second Section Orange	53	ColorWipe Yellow
23	Second Section Yellow	54	ColorWipe Green
24	Second Section Green	55	ColorWipe Blue
25	Second Section Blue	56	ColorWipe Magenta
26	Second Section Magenta	57	ColorWipe White
27	Second Section White	58	Rainbow Slow
30	Third Section Off	59	Rainbow Medium
31	Third Section Red	60	Rainbow Fast
32	Third Section Orange		

Controller Changes (CC)

CC	Function	Default
0	All LEDs Master Level	127
1	All LEDs Hue	
2	All LEDs Saturation	
3	All LEDs Value	
4	First LED Offset, 0-100%	0
5	Last LED Offset, 0-100%	127
125	Set Number of LEDs, 1-120	60
126	Set MIDI Channel 0-16, 0 = OMNI	16
127	Save System Settings (Any value)	