



USER MANUAL

Control your rig from your **Stream Deck**

MIDIRover is a free Stream Deck plugin that sends MIDI to **Neural DSP** and any MIDI-enabled plugin or DAW. This guide covers everything — installation, every action, Learning Mode, and a Neural DSP walkthrough.

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1 What you need

- A **Stream Deck** — any model (Mini, MK.2, XL, Neo, Stream Deck +, Pedal, or Mobile).
- The **Stream Deck app** installed (Elgato, free).
- **Windows:** a virtual MIDI port — the free [loopMIDI](#). **macOS:** nothing extra — MIDIRover creates its own port automatically.
- The software you want to control — **Neural DSP** (any plugin), another amp sim, a synth, or a DAW that accepts MIDI.

2 Install & first run

1

Install the plugin

Add MIDI Rover from the Elgato Marketplace. It appears in the Stream Deck app under the **MIDI Rover** category.

2

Set up a MIDI port

Windows: open loopMIDI and create a port (the default “loopMIDI Port” is fine). **macOS:** skip — the port is automatic.

3

Pick the port

Drop any MIDI Rover action on a key and open its settings. Choose your port under **MIDI Port** — or leave it on **Auto-detect**. The choice is shared by every key.

Point your software at the same port. In Neural DSP (or your DAW), set the MIDI *input* to the same loopMIDI port so it receives what MIDI Rover sends.

3 Core concepts

MIDI port

The virtual cable between MIDI Rover and your software. One port is shared across all your keys — set it once.

Channel

MIDI has 16 channels (1–16). Your key and your software must agree on the channel. Most setups leave everything on channel 1. New keys default to the channel you last picked, so once you move your rig to, say, channel 2, every key you add follows automatically.

CC, Program, Note

The three everyday message types. **CC** = a knob/switch (0–127). **Program** = recall a preset. **Note** = a musical note on/off.

MIDI Learn

Most plugins have a “MIDI Learn” mode: you arm a control, send it a message, and it binds. MIDIRover sends the message — you press the key to teach your plugin.

Colour theme

A shared **Deck theme** recolours every MIDIRover key and dial at once — pick one of six presets, or set your own two colours, in any action's settings. Each key can also override it: its **This key** setting follows the deck theme by default, or takes its own preset or custom colour, handy for colour-coding by function. (The Stream Deck + dial's built-in value bar keeps the system colour.)

4

Actions reference

Drag any of these onto a key (or a dial, for the Stream Deck +). Give it a **Name** to label the key. (If you set a Title in the Stream Deck app itself, that always wins over the Name.)



Control Change CC

The workhorse for stomp-style controls — drive, delay, reverb, boost. Toggle an effect on/off, send a fixed value, or make it momentary (on only while held).

Toggle · Icon On / off each press — the key shows its state. Default display: the power icon.



Toggle · Switch (vertical) The same on/off, drawn as a lever switch — up (on) / down (off).



Toggle · Switch (horizontal) The same on/off, drawn as a lever switch — right (on) / left (off).



Toggle · Play / pause The same on/off, drawn as transport — play (off) / pause (on).



Fixed The same value on every press.



Momentary On while held, off on release.



Sweep · Slider Hold the key to sweep the value — a wah or volume ride. Default display: a linear slider gauge.



Sweep · Knob The same hold-to-sweep, shown as a rotary knob with a value ring.



Sweep · Value only The same hold-to-sweep, showing just the number — no gauge.



CC Number The controller number you map in your plugin (0–127).

Value On / Off The values sent for the on and off states (default 127 / 0).

Latch group Toggle keys sharing a group name act like radio buttons — turning one on turns the previous one off. Leave blank for independent toggles.

Sweep time / Range Sweep mode: seconds for a full sweep (1–10) and the min–max span; the sweep bounces at the ends and remembers its position.

Key graphic **Toggle** mode: the **Icon** (power symbol), a lever **Switch (vertical or horizontal)**, or **Play / pause** transport (play when off, pause when on). **Sweep** mode: **Slider** draws a live

linear gauge, **Knob** a rotary knob with a value ring, or **Value only** shows just the number. (Fixed and Momentary each show their own icon.)

Orientation

Sweep mode, **Slider** graphic only: draw it **vertical** or **horizontal** (the Knob is always round).

Feedback

Optional MIDI input, shared by every action. For this key, an incoming CC keeps a Toggle's state and light or a Sweep key's value (and its on-key graphic — slider or knob) in sync with the MIDI your DAW sends back. Neural DSP is receive-only, so the source is your DAW's automation (or another controller), not the plugin itself. Off by default.

Channel

MIDI channel 1–16.



Program Change PC

Jump straight to a saved preset or tone. Assign one program number per key — the fastest way to switch Neural DSP presets. (In Neural DSP, add a **Program Change** → **Preset** mapping for each preset first. In a DAW the host must forward Program Change — Ableton Live doesn't and Logic often doesn't, so the standalone app is the reliable path.)

Program

The program number to recall (0–127).

Bank

Optional Bank Select sent right before the program (coarse CC0 / fine CC32) — for gear whose presets live in banks. Leave on “—” to skip.

Channel

MIDI channel 1–16.



Bank Up / Down

PC / CC STEPPER

Classic preset scrolling, or in Control Change mode step a CC-Absolute value up/down (with wrap). Pair an **Up** key and a **Down** key with the same Bank id and channel — they share one counter and both show the current value.

Output

Program Change (default) sends the classic preset PC.
Control Change sends a CC whose value is the stepped counter (0–127) — cycle or nudge a CC-Absolute parameter. A Dec/Inc parameter instead needs a Fixed-value key on each of its inc/dec CCs.

CC Number

Control Change output only: the controller sent (0–127). A CC Up/Down pair must share it (as well as Bank id + channel) to move one counter.

Direction

Whether this key steps up (next) or down (previous).

Bank id

Keys sharing this id + channel move the same counter. Use different ids for independent banks.

From / To

The range to move within (e.g. 0–9) — program numbers in PC mode, CC values in CC mode.

Step

How many to move per press.

At ends

Wrap around loops past the end back to the start; **Stop at ends** clamps.

Key shows

Show the current value on the key, or the name only.

Steps

Optional ordered list (value:label, ...) replacing From/To — the key shows each step's label; one list item per press (the Step size is ignored in Steps mode, but At ends still wraps/clamps at the list ends). Paste the same list on the paired key. Items the plugin would skip outline the field in red as you type.



Note

NOTE

Send a MIDI note — for parameters that learn to notes, tap-tempo, or triggering things in your DAW.

Tap Note-on then note-off on each press.



Hold Sounds while the key is held.



Toggle On / off per press — lights while the note is on.



Note On only Lets the note sustain — end it with a Tap on the same note.



Note

The note number (0–127), shown with its musical name, e.g. 60 • C4.

Velocity / Off velocity

How hard the note is struck (0–127), and the release velocity (default 0 — most gear ignores it).

Feedback

Optional shared MIDI input — an incoming note-on / note-off matching a **Toggle** action's note and channel keeps its state and key light in sync (e.g. when your DAW plays the same note). Off by default.

Channel

MIDI channel 1–16.



Advanced MIDI

ADVANCED

For gear that needs more than CC / PC / Note. Pick one message type per key.

Pitch Bend 0–16383 (8192 = centre, 16383 = full up, 0 = full down). Sent once per press — the bend stays there, so pair a second key at 8192 to snap back to centre.



Aftertouch Channel pressure, 0–127.



NRPN 14-bit parameter + value (sent as CC 99 / 98 / 6 / 38).



SysEx Raw hex bytes — F0/F7 are added automatically if you omit them. Separate bytes with spaces, commas, periods, colons, semicolons, or dashes; anything the plugin can't parse outlines the field in red and nothing is sent.





MIDI Dial

STREAM DECK +

Ride a parameter by hand — gain, mix, wah — on a rotary dial. The touch strip shows the name and the live value as a bar or a rotary knob. (Stream Deck + and + XL only.)

CC Number

The controller the dial sweeps (0–127).

CC mode

Absolute (default) sends the 0–127 value the dial rides.
Relative sends +/– deltas for an endless encoder, so a DAW parameter never jumps on pickup — Range / Reset / Display and feedback don't apply, and the touch strip shows the CC number with a $\pm$ mark.

Encoding

Relative mode only: **Signed bit**, **Two's complement**, or **Binary offset** — match your DAW's relative-CC mode (Ableton / Reaper / Bitwig / Cubase all list these).

Step / tick

How much the value changes per detent. Hold the dial while turning for coarse steps ($\times 4$).

Reset to

Press and release the dial (without turning) or tap the screen to jump to this value (clamped into Range). Holding while turning gives coarse steps and never resets.

Range

Limit the sweep to a min–max span (default 0–127) — e.g. keep a wah between 20 and 100. The touch strip display follows the range.

Display

Bar (default), **Knob** (a rotary knob with a ring filling from the low end), or **Knob (ring from centre)** for bipolar controls like pan.

Feedback

Optional shared MIDI input — an incoming CC matching this dial moves its value and touch strip display (e.g. when the DAW automates the parameter). Off by default. (Not used in Relative mode.)

Channel

MIDI channel 1–16.



Panic

ALL NOTES OFF

One press clears a stuck note or hung sustain — it sends All Sound Off (CC120), All Notes Off (CC123) and Reset All Controllers (CC121). Especially handy next to Note keys set to **Note On only** / **Hold** / sustain, which don't release on their own.

Send on

All channels (default, all 16) or a single channel 1–16.

5 Learning Mode

The fast way to set up a key — no typing CC numbers. Available on **Control Change**, **Note**, and **MIDI Dial**.

1

Open the Learn row

In the key's settings, find **Learn**. Pick the MIDI input your controller is on — or leave **Auto (first input)**.

2

Press Learn

The key reads **Listening...** Move a knob, press a switch, or turn a dial on your controller.

3

It fills itself

MIDI Rover captures the CC or Note and fills the Channel and number for you. Status shows what it learned.

Listening stops after about **12 seconds** if nothing arrives, and you can click **Learn** again to cancel. The input port is only opened while you're learning.

6 Naming values

Give channels, CCs and programs friendly names so the dropdowns read **22 • Drive** instead of just **22**.

- Type a name in the small field next to a Channel / CC / Program dropdown.

- Names are **shared across every key**, so you label a value once.
- CC and program names are **scoped per channel** — CC 22 on channel 1 and channel 2 keep separate names and never mix.

7 Neural DSP quick-start

1

Route MIDI in

Open your Neural DSP plugin (or its standalone) and set its MIDI **input** to your loopMIDI port.

2

MIDI-Learn a control

Right-click a stomp or knob in Neural DSP and choose **MIDI Learn**. Press your MIDI Rover **Control Change** key — it binds instantly.

3

Switch presets

In Neural DSP's MIDI Mapping window, add a **Program Change** → **Preset** entry per preset, then use Program Change or Bank Up / Down keys to jump or scroll tones. In a DAW the host has to forward Program Change (Ableton Live doesn't; Logic often doesn't) — the standalone app is the reliable path, or map presets to CCs there instead.

Neural DSP treats a learned CC on a button as a **toggle** — use **Fixed** mode for one value per press, or **Toggle** with **Feedback** on so the key light stays in sync. To flip a parameter between two settings without a dial, put **two** Control Changes on the **same CC** in **Fixed** mode with different values (e.g. a rhythm and a lead gain) — each jumps the parameter to its value. And CC **Toggle** keys sharing a **Latch group** name act like radio buttons, so the deck shows one active at a time. To see your whole MIDI map at a glance — or build a new one from scratch — open the MIDI Map Studio.

Nothing happens when I press a key

Check that a MIDI port is selected (or Auto-detect finds one), that loopMIDI is running (Windows), and that your software's MIDI *input* is the same port.

The plugin isn't receiving in Neural DSP

Confirm the **channel** matches on both sides, and that you MIDI-Learned the right control. Watch incoming MIDI with a monitor if unsure.

I can't find the MIDI Dial action

Dials only exist on the **Stream Deck +** (the model with dials + a touch strip). On other models the dial action is hidden by design — use the key actions (e.g. CC **Sweep** mode to ride by hand).

Windows: no ports listed

Open loopMIDI and create at least one port, then reopen the key settings so the list refreshes.

MIDIRover is free and made by an independent developer who plays guitar. If it saves you setup time, [buy me a coffee](#).