

MC8P MIDI Controller - Owner's Manual
AXS Instruments

Firmware v1.0

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Introduction

The MC8P MIDI Controller is a compact, TRS Type A MIDI device designed to enhance hands-on control of the OP-XY by Teenage Engineering. Featuring 8 fully assignable potentiometers, this controller provides immediate access to critical parameters—eliminating menu-diving and streamlining your live performance workflow.

Built around the Teensy 4.0 microcontroller, the MC8P is an open-source project, offering both reliability and customization. I developed this controller out of necessity, seeking a more fluid and intuitive way to manipulate the OP-XY in real time. Whether tweaking filters, modulating effects, or shaping envelopes, the MC8P puts essential controls at your fingertips.

This manual will guide you through setup, configuration, and operation—helping you unlock the full potential of your MC8P.

User Guide

1.0 PERFORMANCE Mode (Main Screen)

- Displays real-time MIDI control message (CC) values for each potentiometer.
- No assignments can be edited here—this is purely for live control.
- To enter ASSIGN Mode: Hold the ASSIGN button for 2 seconds. The screen will flash to confirm.
- There are no other button configurations yet - updates may come in the future.

2.1 ASSIGN Mode Screen Layout (Configuration Screen)

In this mode, you can assign, edit, or remove MIDI CCs for each potentiometer.

Screen Layout:

- Top Right: A diagram of all 8 potentiometers. The currently selected pot is highlighted with a star(-ish) symbol.
- MIDI CC List: Shows all assigned control messages for the selected potentiometer.
 - Use the arrow indicator (→) to see which CC is being edited.
 - The underlined parameter shows whether you're adjusting the MIDI Channel or CC Number.
- Note: Turning pots in this mode won't send MIDI data—changes take effect only in PERFORMANCE Mode.

2.2 ASSIGN Mode Navigation (Configuration)

Switch Pots/CCs:

- Hold ASSIGN + press NEXT/PREV to jump between potentiometers.
- Hold ENTER + press NEXT/PREV to cycle through CCs on the current pot.

Edit Parameters:

- Press ASSIGN to toggle between editing MIDI Channel or CC Number.
- Press NEXT/PREV to increment/decrement the selected value.

Add a New CC:

- Hold ENTER + NEXT (2 sec) to create a blank CC (default: Ch 1, CC1).
- Limit: 10 CCs per pot (to avoid visual clutter).

Delete a CC:

- Hold ENTER + PREV (2 sec) to remove the selected CC.

Save & Exit:

- Hold ASSIGN + ENTER (2 sec) to save to EEPROM and return to PERFORMANCE Mode.

Factory Reset:

- Hold NEXT + PREV (5 sec) to restore defaults (*Ch 1–8, CC7 [OP-XY Track Volume]*).

A Note of Thanks

Thank you for purchasing the MC8P MIDI Controller and supporting this passion project of mine! As someone who loves making music and tinkering with hardware, creating this controller has been a deeply rewarding experience—and I'm incredibly grateful that you've chosen to be part of its journey.

The MC8P was born out of my own need for a more tactile, performance-friendly way to control the OP-XY, and I hope it brings the same fluidity and joy to your setup as it has to mine.

Your Feedback Matters

This is an evolving project, and I'd love to hear from you! If you have ideas for new features, improvements, or just want to share how you're using the MC8P, please reach out via:

Email: djaxiisuk@gmail.com

Instagram: @axiismusicuk

GitHub: coming soon! *shhh*

Your input helps shape future updates, so don't hesitate to get in touch.

Most of all—have fun! I hope the MC8P becomes an indispensable part of your creative process.