



# **MCVC - Expansion**

## **USER MANUAL**

Version 1.0

## INTRODUCTION

### THE MCVC Expansion

The MCVC is a four-channel MIDI (Musical Instrument Digital Interface) to Control Voltage (CV) expansion module. This module expands the original MCVC with four extra voices offering: Pitch, Velocity and gate output voltages.

### CONTENTS

The MCVC Expansion comes in a box and is fully assembled and tested. Included are a 16-pin IDC power cable and M3 mounting screws + rack crash protection washers.

### SUPPORT

If you have any further questions or queries please contact:

[support@majella-audio.com](mailto:support@majella-audio.com)

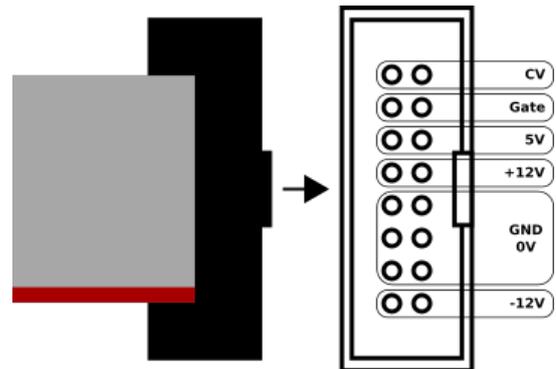
## SPECIFICATIONS

Below are the specifications of the MCVC.

- Dimensions 128,5 x 40 (14 HP) x 15mm
- Doepfer A-100 compatible
- 16pin Power (**Using 5V rail!**)
- Current usage: +12V 12mA, -12V 13mA, 5V 30mA.

## POWER CONNECTION

This Module is designed to be connected to a Eurorack system power supply using a 16 pin ribbon cable. The -12V (red lead) should be directed as shown in the picture below.



### WARNING!

The MCVC Expansion module is designed for Eurorack systems. The supply should be +-12V and connected signals should not be outside of the +-12V range! Do not reverse polarity when connecting the power, this will damage your module permanently!

Please treat your Majella Audio products with care. Majella Audio does not offer warranty for any damages to the module due to irresponsible behaviour.

## OVERVIEW

Each voice has the same outputs: Gate, pitch and velocity.

### 1. VOICE NUMBER

Each voice has a number. When leaved blank they will all be set to 18. The user can fill in the segments to the preferred numbers. The main MCVC will always be voice 1-4. The first chaining will contain voice 5-8. The third will contain 9-12 etc.

### 2. GATE OUTPUT

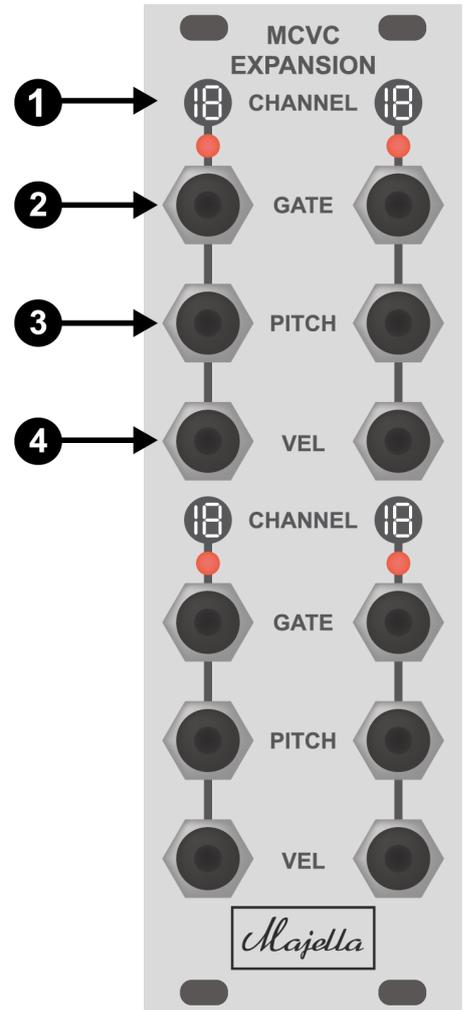
The GATE outputs, output a 5V signal whenever a “note ON” is played on the corresponding channel. The LED blinks red to indicate when a note is played.

### 3. PITCH OUTPUT

This output converts Pitchbend MIDI messages to a 0-5V CV-signal for modulating/bending the pitch of oscillators. Its initial state is 2.5V and it can bend it 2.5 octaves up or 2.5 octaves down. Of course it can be used for other parameters as well.

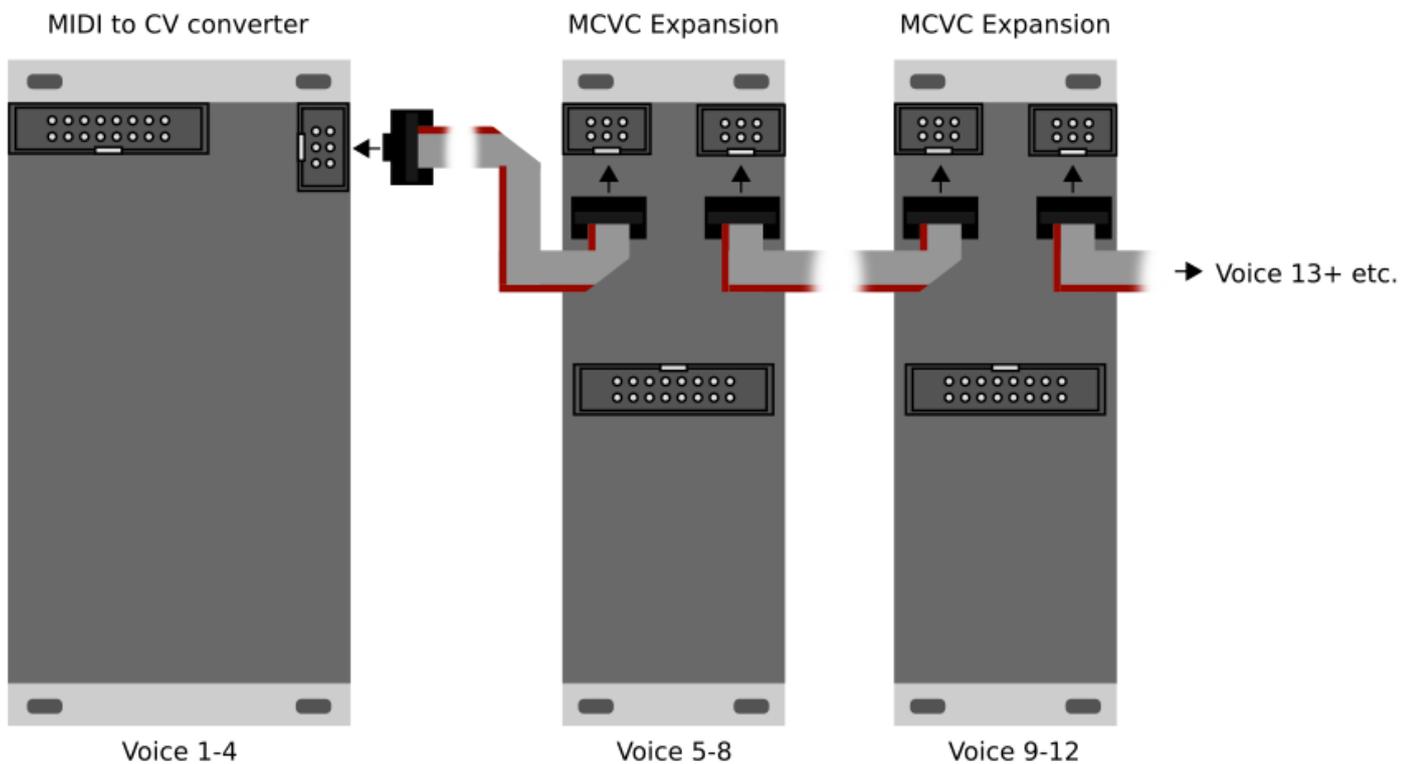
### 4. VELOCITY OUTPUT

The Velocity outputs output a 0-5V control voltage corresponding with the Velocity data received, E.g velocity 127 gives a 5V signal. Lower MIDI velocity values output lower control voltages.



## CONNECTING THE MODULE

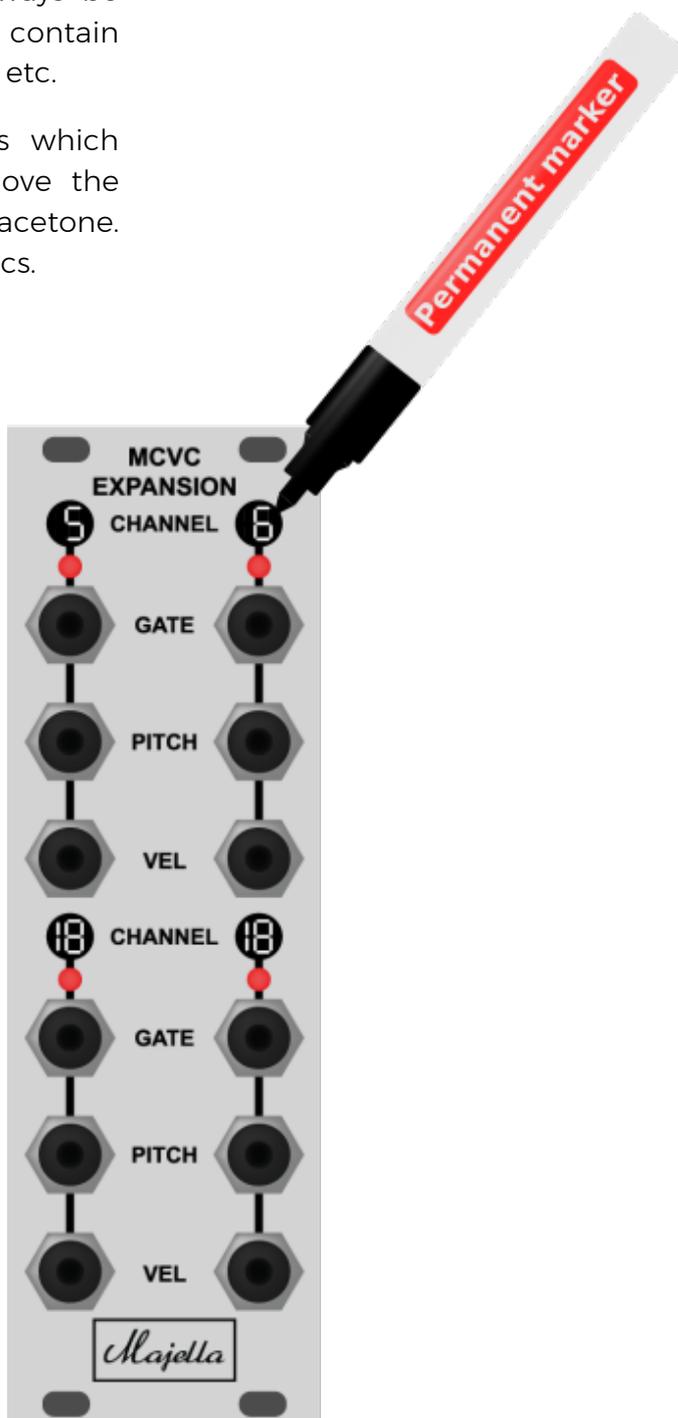
The expansion module(s) can be connected to the MCVC main MIDI CV converter, using a 6-pin IDC cable. Each expansion module adds four voices to your system. You can chain as many expansion modules as you like, but keep in mind that each chained module adds a small bit of delay. We (Majella team) found the delay noticeable at 16 or more voices, which is more than three expansion modules.



## VOICE NUMBERS

Each voice has a number. When leaved blank they will all be set to 18. The user can fill in the segments to the preferred numbers. The main MCVC will always be voice 1-4. The first chaining will contain voice 5-8. The third will contain 9-12 etc.

The panel has anodized graphics which means that it is possible to remove the marker with cleaning alcohol/acetone. without damaging the panel graphics.



Special thanks to:

Rob Cottam

MCVC User Manual

version 1.0

06-12-2018

©2018



<https://majella-audio.com>  
[support@majella-audio.com](mailto:support@majella-audio.com)

Designed and made in the Netherlands