

Current Features of **madmod** Boards Ver 2.0 (also detailed in this [Description video](#)):

(See last page for contact information)

- 1) **SUBOSC:** (mounts on right side of Monotribe case)
  - a) Suboscillator
    - i) 1x Switches (ON/OFF/ON):
      - (a) Source [VCO1|Off|VCO2]
    - ii) 1x Switches (ON/ON):
      - (a) Phase [0|180°]
    - iii) 1x Switches (ON/ON/ON):
      - (a) Octave [-1 Square|-2 Pulse|-2 Square]
  - b) As stand-alone: (needs VCO2/PWM board)
  
- 2) **RHYTHM:** (mounts on left side of Monotribe case)
  - a) Bass Drum/Snare Frame/Snare Noise/Hi Hat
    - i) 4x (1x each) Switches (ON/OFF/ON):
      - (a) [Mix Output External & Internal|Off|Individual Out External]
    - ii) 4x (1x each) Pots:
      - (a) Decay from (set) maximum to zero.
  - b) As stand-alone:

There would be no amps/jacks for the individual and external mix outputs (they're on OUTPUT), so the switches would only turn on/off the individual drums to the internal mix.
  
- 3) **VCO2/PWM:** (mounts on front of Monotribe case)
  - a) VCO2:
    - i) 1x Switches (ON/ON):
      - (a) Frequency [30Hz – 1.2kHz (REG) | ~500mHz – 30Hz (LFO)]
    - ii) 2x Switches (ON/ON/ON):
      - (a) FM In [VCO1|None|Ext2 CV (AC-coupled)]
      - (b) CV In [VCO1 (tracking ~4.5 octaves) | Manual | Ext2 CV]
    - iii) 1x Switch (ON/OFF/ON):
      - (a) VCF Mixer Out [Triangle|Off|Square]
    - iv) 3x Pots:
      - (a) Fine Tune
      - (b) Coarse Tune
      - (c) VCO1 Sync Amount
  - b) Pulse Width Modulation:
    - i) 1x Switch (ON/OFF/ON):
      - (a) Source [VCO1|Off|VCO2]
    - ii) 1x Switch (ON/ON/ON):
      - (a) Modulation Source [VCOx|Ext2 CV/Manual|EG]
    - iii) 2x Pots:
      - (a) Initial Pulse Width
      - (b) Intensity
  - c) As stand-alone (or with SUBOSC board):

Volume knobs for VCO2 & PWM (& SUBOSC) are on OUTPUT, so either the outputs can be tied directly to the VCF mixer via spare resistors on the boards, or pots should be supplied.

- 4) **INTERCONNECT:** (mounts on bottom of Monotribe main board)
  - a) Hub:
    - i) 1x DIP Switch (6-position):
      - (1) Reinserts any of the 6 resistors removed from the main board
  - b) As stand-alone:

The INTERCONNECT board's purpose is to provide a stable hub for wires from the main board to the other boards, buffer signals, and if necessary, to reinsert resistance removed from the main board to allow switching (e.g. volume control for VCO1). This allows the stock Monotribe to be run normally with all the other boards removed.
  
- 5) **OUTPUT:** (mounts on top of Monotribe main board)
  - a) Control/Selection
    - i) 5x Pot:
      - (1) VCO1 Volume
      - (2) VCO2 Volume
      - (3) PWM Volume
      - (4) SUBOSC Volume
      - (5) Rhythm Attenuation Intensity
    - ii) 3x Switch (ON/ON):
      - (1) VCA CV Preselect [VCO2 Triangle|Ext1 CV]
      - (2) VCA CV [Preselect|EG]
      - (3) Rhythm Attenuation CV [VCO2 Triangle|Ext1 CV]
    - iii) 1x Switch (ON/OFF/ON):
      - (1) Click-Pop Suppression [Low|Off|High]
  - b) As stand-alone:

The volume knobs for VCO2, PWM, & SUBOSC would be unused, and the VCO2 input for the Amp CV and Rhythm Attenuation CV would be missing.
  
- 6) **JACKS:** (mounts on top of Monotribe case)
  - a) Input/Output:
    - i) 11x Jacks:
      - (1) MIDI In
      - (2) MIDI Out
      - (3) VCO1 Pitch CV Out (1V/octave ~0-5V) - Trim adjustable for base frequency (e.g. 1V)
      - (4) GATE Out (0-5V)
      - (5) External 1 CV In (0-5V)
      - (6) External 2 CV In (0-5V)
      - (7) VCF Cutoff CV In (0-5V)
      - (8) BD Trigger Out (0-5V) = Tip / BD Sound Out = Ring
      - (9) SD Trigger Out (0-5V) = Tip / SD Sound Out = Ring
      - (10) HH Trigger Out (0-5V) = Tip / HH Sound Out = Ring
      - (11) MIX Trigger Out (0-5V) = Tip / Rhythm MIX Out = Ring
  - b) As stand-alone: (needs OUTPUT board)

People interested in prices for Ver.2 boards (with schematics, templates, labels, etc.) should email me at [mmadel@gmail.com](mailto:mmadel@gmail.com). I'm located in Amsterdam, the Netherlands.

Cheers.