

MST Midi to CV Expander Visual BOM

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Resistors

150Ω - R1



499Ω 1% - R4



1kΩ - R7



4.7kΩ - R2, R8, R9



10kΩ - R3



100kΩ - R5, R6



1kΩ Resistor Array - R12



100kΩ Resistor Array - R10, R11



Total=12

Diodes

1N4148 - D1, D2, D3, D4



5mm RGB LED - D1 *



Total=5

Capacitors

15pF Ceramic - C11, C12



51pF Ceramic - C15, C16, C17, C18, C19



47nF Ceramic - C4, C7, C8, C9



.1μF Ceramic - C1, C2, C3, C5, C6, C10, C13



10μF Electrolytic - C14



Total=19

Voltage Regulators

TL431 - U1



LM78L05 - VR1



Total=2

Integrated Circuits

TL072 - U2



CD74HC4016E - U3

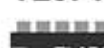


PIC18F2553 - U4

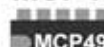


PIC18F2553

TL074 - U5



MCP4922 - U6



Total=5

Potentiometers

1k Linear Trim Pot - R1*



Total=1

Jacks/Switches

4 Pos. side mount DIP switch - S1



3.5mm PJ-301M-12 Vertical Mount Jack - J1*, J2*, J3*, J4*, J5*



SPST Pushbutton - S1*



SPDT Sub mini center off - S2*



Total=8

* Denotes that part goes on front panel pcb

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Connectors

8 Pin (2x4) Right Angle Header - P1, P1*



6 Pin (2x3) Right Angle Header - P2, P2*



Right Angle I2C Headers - P3, P4



10 Pin Unshrouded Right Angle Header - P5



I2C Cable



Total=6

Other

20mHz Crystal - X1



2.5mm Screws



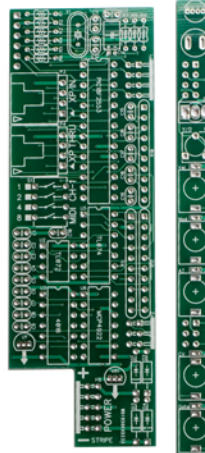
3mm Screws



10 to 16 Pin Keyed Power Cable



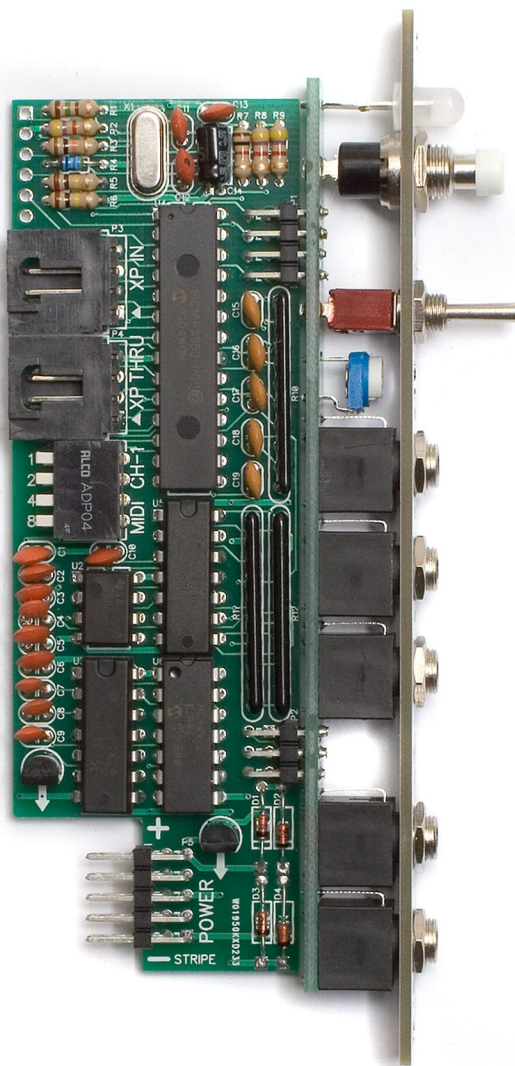
PCB & Panel



* Denotes that part goes on front panel pcb

MST MIDI TO CV EXPANDER

QUICK START GUIDE



Connect IC2 cable to main MIDI to CV Module (or expander)

Connect IC2 cable to additional MIDI to CV Expanders

MIDI Channel Select: add up all pressed down numbers +1 for channel
All switches up = Channel 1

- MODE LED INDICATOR**
 BLUE: Arpeggiator
 RED: High Note Priority
 GREEN: Low Note Priority
 YELLOW: Last Note Priority
- MODE BUTTON**
 Short Press
 - Turns on/off ARP
 Long Press
 - Note priority select
- ARPEGGIO SELECT SWITCH:**
 Forward, Ping Pong or Random
- VOLTS PER OCTAVE TRIMMER**
- VELOCITY CV OUTPUT**
- MOD WHEEL CV OUTPUT**
- AFTERTOUCH CV OUTPUT**
- MIDI EXP**
- CV OUTPUT**
- GATE OUTPUT**

To activate/deactivate "order played" mode, hold the button down and flip the switch to any new position within 2 seconds. The LED will light green when "order played" mode is activated or red when deactivated.

Note: The arpeggiator requires that the module be receiving a clock via either the main module's CLK IN jack, USB port or MIDI IN jack. If the arp doesn't seem to be working when notes are being played or the blue light doesn't flash, check to make sure that it has a clock signal to work with.

