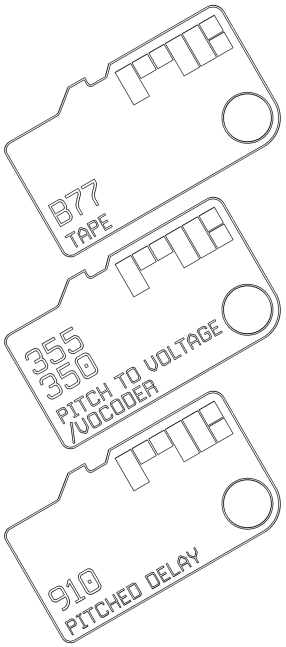
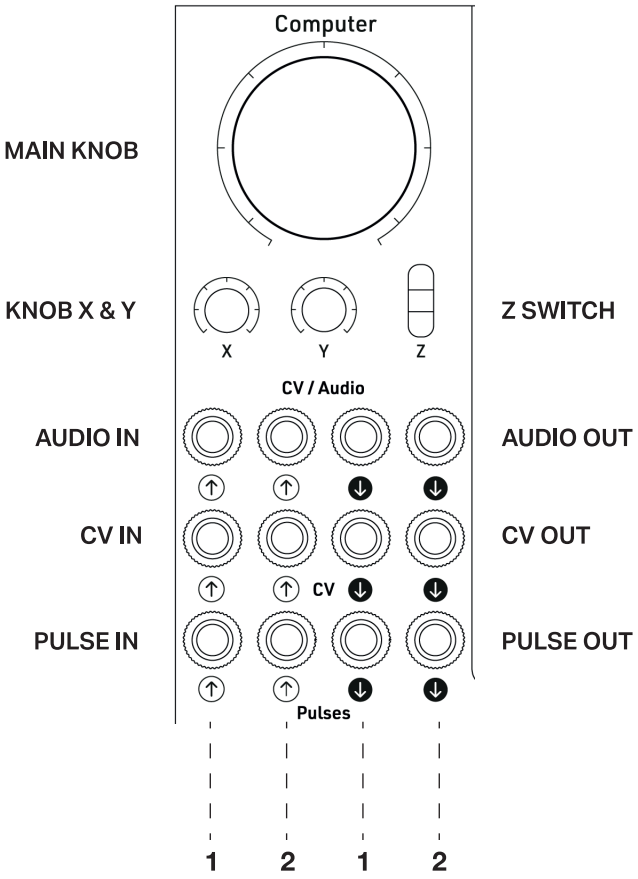
RYK MODULAR PROGRAM CARDS

B77 TAPE
355 PITCH TO VOLTAGE
350 VOCODER
910 PITCHED DELAY

for Music Thing Modular
Computer Module



LAYOUT 1



B77 TAPE 2

TAPE is an audio recorder for recording approximately 1.5 minutes of mono sound onto two separate tracks. Playback speed is continuously variable, as is the mix between the two tracks. Audio data is stored on the card and is kept between sessions.

MAIN KNOB - Playback speed and direction; centre is stop

KNOB X - Tape start position for resets

KNOB Y - Output mix between Track A / Track B; also determines which track to record onto

Z SWITCH -

Up - Record from current position
Centre - Stop record
Down Short - Start / Stop play
Down Long - Start / Stop play + Reset to start position
Down on Startup - Erase Track A / B or both depending on Knob Y position (this takes 15 seconds per track)

AUDIO IN 1 - Audio input; level should occasionally peak on top LED

AUDIO OUT 1 - Track A / B mix out
AUDIO OUT 2 - Track B / A mix out

CV IN 1 - V/Oct playback speed
CV IN 2 - CV mix between tracks

PULSE IN 1 - Retrigger playback from start
PULSE IN 2 - Gated playback from start

355 PITCH TO VOLTAGE 3

PITCH TO VOLTAGE converts a monophonic audio input to a Pitch V/Oct CV and envelope follower CV. Also included is a built-in oscillator with five waveforms that tracks the audio input signal. The input should be a clean monophonic instrument source; guitar can be used but needs careful playing techniques for best results.

To switch between **355** and **350**, press reset and hold down the **Z SWITCH** until you hear the model number.

MAIN KNOB - Pitch output offset

Centre - 0
Full anti-clockwise - 1 octave below
Full clockwise - 1 octave above

KNOB X - Trigger threshold for maintaining pitch

0% - Good for continuous smooth moving pitches (flute, trumpet, etc.)
50% or higher - Good for hard transient sounds (guitar, piano, etc.)

KNOB Y - Slew amount for the tracked V/Oct CV and oscillator output

Z SWITCH DOWN - Cycles through the five waveforms of the tracked oscillator: sine, square, saw, super saw 1, super saw 2

AUDIO IN 1 - Audio input for sound to be processed; level should peak on top LED for attack part of sound

AUDIO OUT 1 - Raw tracked oscillator output
AUDIO OUT 2 - Tracked oscillator output with envelope follower applied

CV OUT 1 - Pitch V/Oct CV out
CV OUT 2 - Envelope follower CV out

PULSE OUT 1 - Gate output; high when input signal is above the trigger threshold set by **Knob X**
PULSE OUT 2 - Trigger output; short pulse high when input signal transitions the trigger threshold set by **Knob X**

350 VOCODER

A classic 14-band vocoder that modulates the spectral content of a carrier signal with a modulator signal. Normally the carrier input takes a harmonically complex sound, but if left unconnected, an internal 4-note polyphonic chord generator can be used instead.

To switch between **350** and **355**, press reset and hold down the **Z SWITCH** until you hear the model number.

MAIN KNOB - Output mix between modulator input and processed carrier output

KNOB X - Internal carrier synth pitch

KNOB Y - Internal carrier synth chord selection: Maj inv, Min inv, Dim, Sus2, Sus4, Maj7, 1/2Dim7, Dim7, Maj6, Min6, Pent

Z SWITCH

Up - Freeze current carrier state
Down - Cycles through the five waveforms for the carrier synth: saw, sync saw, sin-stack

AUDIO IN 1 - Modulator input, usually voice but sparse rhythmic sounds also work well; level should occasionally peak on top LED
AUDIO IN 2 - Carrier input; should be harmonically rich sound such as chords, pulse oscillators, etc. If unplugged, the internal chord synth is used instead

AUDIO OUT 1 - Mix output of modulator / processed carrier
AUDIO OUT 2 - Processed carrier

CV IN 1 - V/Oct internal carrier synth pitch
CV IN 2 - Internal carrier synth chord selection CV

CV OUT 1 - Envelope follower CV from modulator

PULSE IN 1 - Freeze current carrier state

910 PITCHED DELAY

A pitch-shifted delay effect with a pitch shift range of ±1 octave. Use a short delay time with medium feedback and small pitch offset for "Visconti drums". Use no feedback with pitch at 5th down, 3rd, or octave down to add harmonised sound to solo instruments.

MAIN KNOB - Pitch shift amount / or with Z Switch Up - Adjusts mix between dry input and delay effect output

KNOB X - Feedback amount for delay effect

KNOB Y - Delay time of delay effect

Z SWITCH

Up - Allows Main Knob to be used for output mix adjustment
Down - Mute send to the delay effect

AUDIO IN 1 - Audio input; level should occasionally peak on top LED

AUDIO OUT 1 - Mix output of dry and effect
AUDIO OUT 2 - Pitched delay output

CV IN 1 - V/Oct CV for pitch shift
CV IN 2 - CV for Delay time of delay effect

PULSE IN 1 - Freeze current audio buffer
PULSE IN 2 - Gated effect send (NB: unplug if not using)