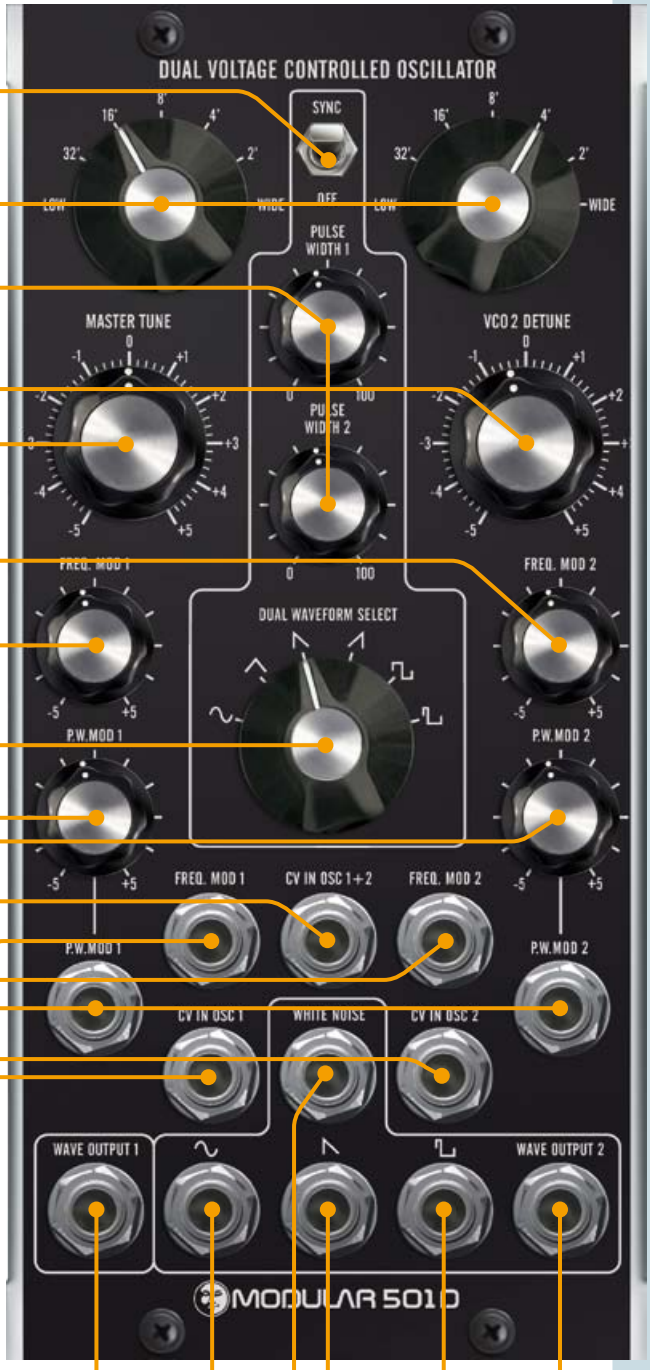
501D
DUAL VOLTAGE CONTROLLED OSCILLATOR



Hard sync vco 1–vco 2

Octave switches vco 1/vco 2

Manual pulse width control vco 1/vco 2

Vco 2 detune control

Master tune control affects both vcos

Attenuator for frequency modulation vco 2

Attenuator for frequency modulation vco 1

Waveform selector affecting wave output jack 1 and 2

Attenuators for pulse width modulation vco 1 and 2

Direct input for frequency control voltage (1 V/oct) affecting both vcos

Pulse width modulation inputs

Direct inputs for frequency voltage (1 V/oct) vco 1 and 2

Attenuated inputs for frequency modulation

Selected waveform output vco2

Pulse wave output vco2

Sawtooth wave output vco2

White noise output

Sine wave output vco2

Selected waveform output vco1

The M 501D **DUAL OSCILLATOR MODULE** combines two voltage controlled oscillator circuits in one double-width unit.
The two oscillator halves enter a symbiosis in that they share some controls which affect both while other functions are individual to each oscillator.

Each oscillator has its own octave range switch (32'...2' plus low frequency and wide settings, 'wide' augmenting the range of the tune pots to the whole 10-octave span of the oscillators).

The master tune control on the left side affects (in the 32' – 2' ranges) both vcos while the corresponding pot on the right controls the detune interval (± 1 octave) beween vco 1 and 2. In the "low" and "wide" both tuning controls are independent.

Bipolar attenuators for frequency and pulse width modulation with their corresponding input jacks are separate as are the two pulse width controls.

The central waveform selector controls both wave outputs 1 and 2 while three additional output jacks provide sine, sawtooth and pulse waves of oscillator 2; the output area is completed by a white noise source. More individual wave outputs can be obtained by adding the 501E expander module.

The seven control voltage inputs allow control of frequency modulation and pulse width modulation of vco 1 and 2. Two more jacks* control frequency (1V/oct) while the central cv input jack controls both oscillators at once.

*These connections are available on rear side of the module for internal cabling within the synthesizer; there are two more internal CV connectors without jacks on the front.