

**673 VOLTAGE PROCESSOR** is a three-channel (six-input and four-output) control voltage utility.

Usage:

From the left, the first two channels provide identical signal flow: CROSSFADE > SCALE > OFFSET. CROSSFADE mixes linearly between signals at respective IN A and IN B jacks; fully counter-clockwise is only IN A, and fully clockwise is only IN B. The middle position is an equal mix of both. SCALE is a linear-taper attenuverter. At fully clockwise, the crossfaded signal is at full amplitude, and at fully counter-clockwise, the crossfaded signal is at full amplitude and inverted. The middle position is zero amplitude. OFFSET mixes a DC voltage with the signal, from roughly -5v (counter-clockwise) to roughly +5v (clockwise). The result of the operations is sent to respective OUT jacks in the rightmost column.

The third channel performs the same functions, but the signal flow is CROSSFADE > OFFSET > SCALE. The crossfaded output is mixed with a DC voltage before it is attenuverted and sent to its OUT jack. Additionally, a slewed version of the third channel is available at the SLEW jack with its lag rate set by the SLEW knob.

Trimming potentiometers on the panel set the overall output level for each channel. If these are set above unity gain, the SCALE knobs will amplify as well as attenuate the processed voltages.

*Construction notes:*

- On B-stock boards: cut the trace from the left pad of the SLEW pot and solder a 100-ohm resistor from that pad to the left pad of the 1k resistor that is four up from the bottom.
- On B-stock boards: unmarked resistors are 10 ohms. See the bill of materials below for other unmarked values.
- On B-stock panels: CROSSFADE, SCALE, and OFFSET 1 are incorrectly labeled as CROSSFADE, SCALE, and OFFSET 2.

## 673 VOLTAGE PROCESSOR

### *Bill of Materials:*

	SD SYNTH	Part		Quantity	Supplier	Supplier Part
673	V PRO	100n	capacitor	6		
	v2	1u	capacitor	1		
		1N4148	diode	6	TAYDA	A-157
		10u	elec. capacitor	2	TAYDA	A-1799
		TL074	ic	3	TAYDA	A-1138
		14 PIN	ic socket	3	TAYDA	A-004
		PJ-3001F	jack	10	TAYDA	A-2563
		1900H	knob	10	TAYDA	A-4559
		B100k	potentiometer	9	TAYDA	A-1848
		B1M	potentiometer	1	TAYDA	A-1882
		10 PIN	power header	1	TAYDA	A-2939
		100	resistor	1		
		100k	resistor	28		
		10r	resistor	2		
		1k	resistor	4		
		220k	resistor	3		
		47k	resistor	3		
		100k	trimmer	3	TAYDA	A-587