

# The Most Complete Keyboard Instrument Available Today



The Prophet-10 is a true synthesizer, with 10 complete voices; each with 2 voltage controlled oscillators, a noise source, a voltage controlled 24 db/octave lowpass filter, and two 4 stage envelope generators. And, not only is it completely programmable, but there are two different programs which can be used at any one time. One is the **UPPER** program—with five voices usually tied to the upper 5 octave keyboard, and the other is the **LOWER** program—with the other five voices, usually tied to the lower 5 octave keyboard. There are 32 programs for each, a total of 64 programs available. These come pre-programmed for immediate use, but they can all be modified or replaced as necessary.

The individual list of features is extensive—the following is a description of each function which will explain most of the instrument's capabilities:

## PROGRAM SECTION

ALL controls inside the **PROGRAM** section are remembered as part of each program.

## POLY-MOD SECTION

The controls in this section allow a mixture of the filter envelope and the output of oscillator B to be used to affect oscillator A frequency, oscillator A pulse width and filter cutoff frequency individually for each voice.

**SOURCE AMOUNT Knobs** determine the relative mixture of filter envelope and oscillator B output taken as modulation source.

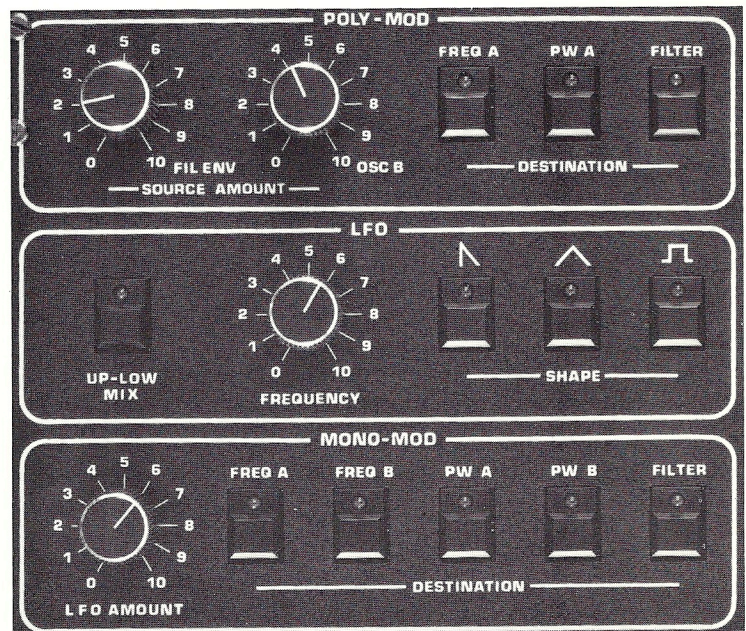
**DESTINATION Buttons.** When on, the modulation source mixture is routed as a control source to the indicated destination.

## LFO SECTION

The controls in this section determine the frequency and output waveform of the **PROPHET's** low frequency oscillator which is then routed as a modulation source via the **MONO-MOD** section.

**FREQUENCY Knob** varies LFO frequency over a range of .01 to 20 Hertz.

**SHAPE Buttons.** When on, the corresponding waveshape is mixed into the LFO output at full level.



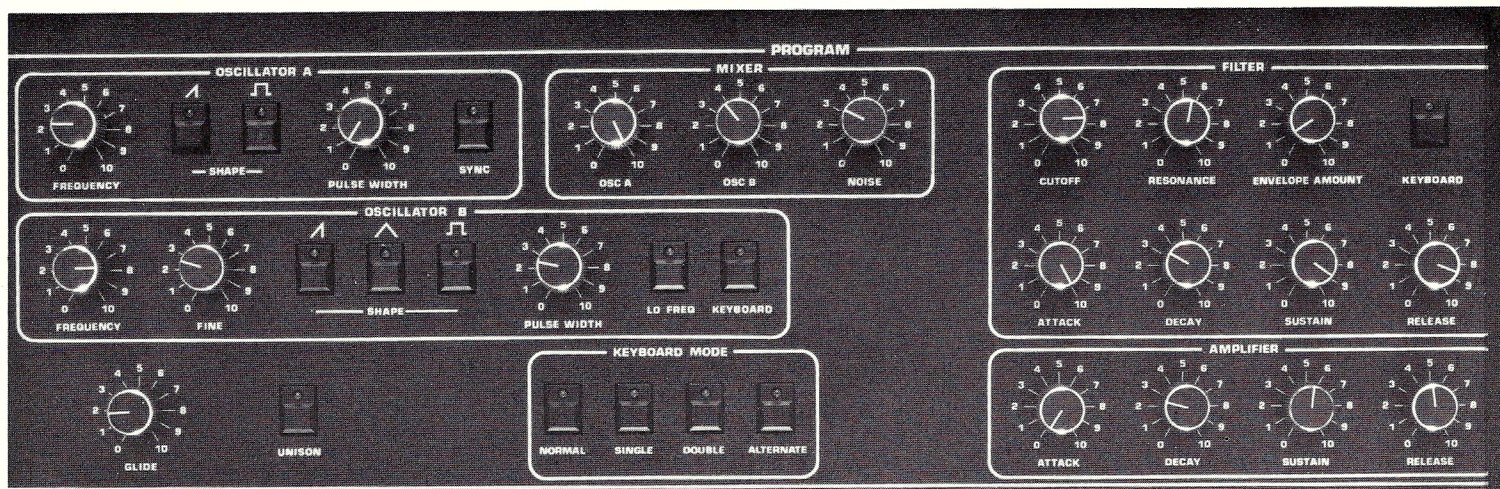
## MONO-MOD SECTION

The controls in this section determine the amount and destination of monophonic modulation.

**LFO AMOUNT Knob** determines the amount of LFO modulation to be programmed.

**DESTINATION Buttons.** When on, the corresponding destination is modulated in an amount determined by either the MOD wheel, MOD pedal (see PEDAL section), or the programmed LFO AMOUNT.





## OSCILLATOR SECTIONS

The controls in these sections determine the relative oscillator frequencies and the output waveforms sent to the **MIXER** and **POLY-MOD** sections for each of the **PROPHET's** voices.

**FREQUENCY Knob.** Frequency varying in semi-tones over a 4 octave range.

**FINE Knob** (B only). Frequency varying continuously over a range of approximately one whole-tone.

**LOW FREQUENCY Button** (B only). When lit, oscillator B functions in low frequency range (approximately .4 to 10 Hz).

**KEYBOARD Button** (B only). When off, oscillator B frequency is not affected by the keyboard.

**SHAPE Buttons.** When lit, the corresponding waveform is mixed at full level into oscillator output.

**PULSE WIDTH Knob** determines pulse wave duty cycle (0% to 100%).

**SYNC Button** (A only). When lit, oscillator A frequency follows oscillator B frequency in "hard synchronization."

## MIXER SECTION

The **OSC A**, **OSC B** and **NOISE** control settings determine the amount of each signal which will be input to the low pass filter.

## FILTER SECTION

**CUTOFF Knob** determines the cutoff frequency for the **PROPHET's** 24 db/octave low pass filter.

**RESONANCE Knob** determines the amount of resonance of the filter. When fully clockwise the filter will oscillate in a sine wave.

**ENVELOPE AMOUNT Knob** determines that the filter cutoff frequency is affected by the ADSR envelope in the filter section.

**ATTACK Knob** varies attack time from 1 millisecond to more than 30 seconds.

**DECAY Knob** varies decay time from 1 millisecond to more than 30 seconds.

**SUSTAIN Knob** varies sustain level from 0 to full level.

**RELEASE Knob** varies release time from 1 millisecond to more than 30 seconds.

## AMPLIFIER SECTION

The **ATTACK**, **DECAY**, **SUSTAIN** and **RELEASE** Knobs in this section determine the envelope applied to the amplifier in the same manner as the similarly named controls in the **FILTER** section.

**GLIDE Knob.** This control is effective only when the **PROPHET** is in **UNISON** mode (UNISON button lit). In **UNISON** mode this knob determines the amount (rate) of glide (portamento) between notes.

**UNISON Button.** When lit, all the **PROPHET's** voices play in unison (monophonic), following the same keyboard note.

## KEYBOARD MODES

**NORMAL Mode.** The **UPPER** five voices play on the upper keyboard with the upper program, and the lower 5 voices play on the lower keyboard with the lower program.

**SINGLE Mode.** All ten voices play the same program (upper or lower—whichever is selected). The notes can be played on either keyboard in any combination.

**DOUBLE Mode.** Hitting a key (on either keyboard) will simultaneously play one voice with the upper program and one voice with the lower program. In this mode only 5 keys can be played at one time.

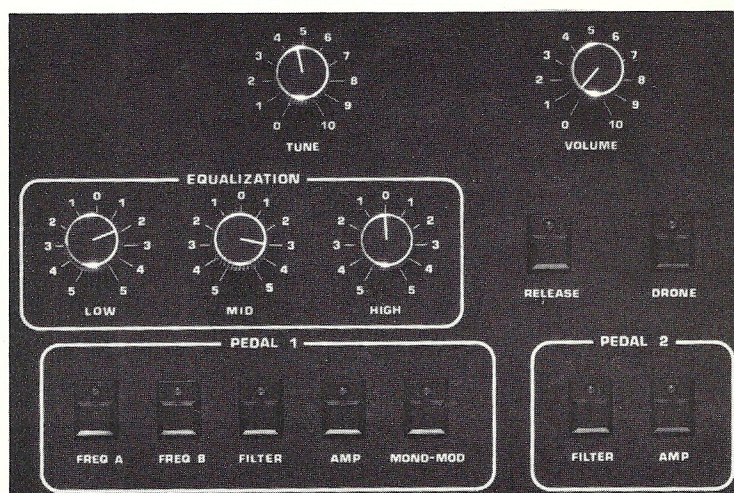
**ALTERNATE Mode.** Every new key hit will alternate between the upper and lower programs.

**TUNE Knob** is used to provide programmed detuning of the upper 5 voices and the lower 5 voices with a range of approximately one semi-tone.

**VOLUME Knob** is used as a programmed volume control to match the volume levels between different programs, and between upper and lower programs.

**RELEASE Button.** When off, the release time of the amplifier envelope is minimum regardless of the release control setting.

**DRONE Button.** When on, the amplifiers on all five voices will stay on for continuous sound without holding down keys.



## EQUALIZATION SECTION

**LOW Knob** provides cut/boost facilities for lower frequency signals.

**MID Knob** provides cut/boost facilities for middle frequency signals.

**HIGH Knob** provides cut/boost facilities for high frequency signals.

## PEDAL SECTION

The switches in this section select the destination for the two control voltage pedal jacks on the back panel. **PEDAL 1** can control any combination of oscillator A frequency, oscillator B frequency, filter cutoff frequency, volume level, or amount of **MONO-MOD** modulation. **PEDAL 2** can control either the filter or amplifier.