

## PH-4

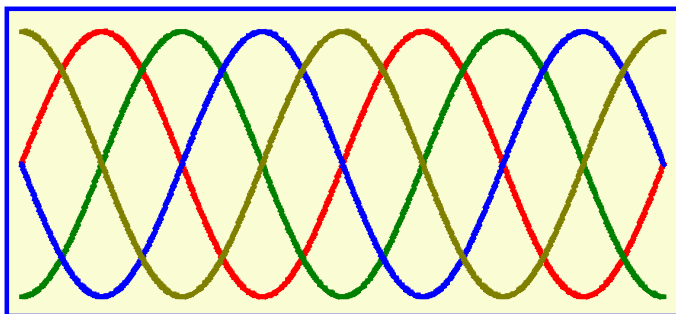
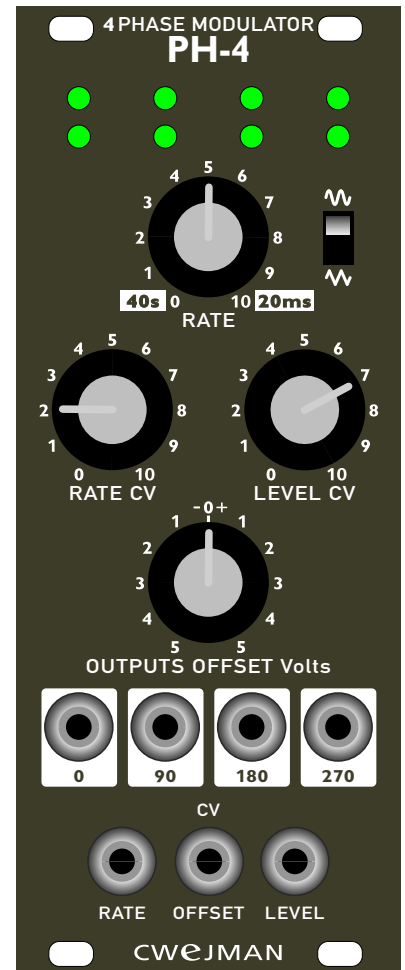
The PH-4 is a generator with four signal outputs. All outputs has the same signal frequency, strenght and shape but with 90 degrees phase shift between two nearest outputs. Consequently the phase relation counted from first to fourth output is; 0, 90, 180 and 270 degrees. The main duty of the PH-4 is to controll four identical modulated devices. One example; the phase shifter (phaser) is a signal processing device which substitute phase change components applied to an external audio source for the frequency components of the Tone. The characteristic of multiple phase shifters are controlled by the PH-4 so that the phasing effect doesn't simply swing back and forth, like it's normally used , but rather sweeps up and down eternally. The same effect can be acheved with filters, oscillators and amplifiers.

Rate (or speed) can be controlled manually and by an external CV signal. The modulating waveform can be selected by the switch; sine/triangle. The output level can be controlled by an external CV signal. The voltage offset is controlled by knob and by an external CV signal.

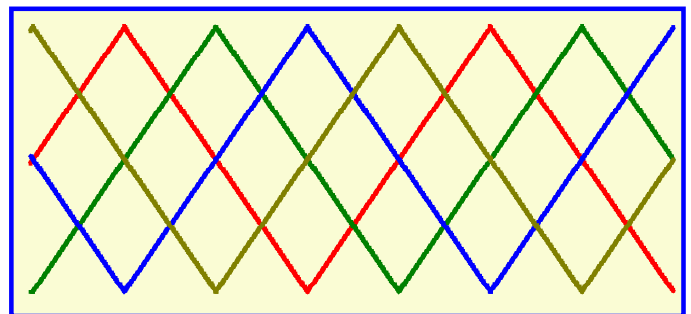
### Performances

RATE   40 sec's to 20 msec's, 1 Volt/octave  
 RATE CV  leveled CV control, 0 to 5 Volts  
 LEVEL CV  leveled CV control, 0 to 5 Volts  
 OUTPUTS  
 OFFSET  from -5 Volts (waveforms -10 to 0 Volts) to  
  +5 Volts (waveforms 0 to 10 Volts)  
 LED display  indicates waveforms strenght

Current 20-40 mA  
 Dimensions 128.4mm (H), 91mm (B)  
 3 HE, 10TE



SINE WAVES, four outputs



TRIANGLE WAVES, four outputs