# SAMPLE SETTINGS



## ANALOG COMPUTER



## MOTIONLESS CHORUS



GLITCHY FLANGER



SWEEPING RESONANT FILTER



GLOSSY CHORUS



WIDE VIBRATO

# TAP TEMPO & RAMPING

## **TAP TEMPO**

Sets either LFO speed or chop rate, depending on 'Tempo Target' selection. Honors last two stomps.

The LED indicator will blink red & yellow at the entered tempo until 3 seconds after the last tap have elapsed. If the unit is in bypass, the indicator will alternate between yellow & off to indicate the tempo.

The divisions setting does not affect the rate of the flashing LED.

#### Notes:

When "Chop" is the tap parameter, the tempo entered is subdivided by the divisions selection and then further subdivided by 4 before being applied.

Tapping a rate/chop value into the Random LFO causes it to output samples at a regular (rather than semi-random) interval - 4 samples will be output per tap interval (or per the interval given after applying the current subdivision setting).

## **RAMPING**

Hold the Tap/Ramp footswitch down to begin ramping. The Rate/Chop setting will either begin increasing (if the Rate/Chop knob is left of noon) or decreasing (if the Rate/Chop knob is at or above noon). When the up/lower-most value is reached, the led quickly blinks yellow. Release to exit the ramp, and Rate/Chop will drift back up/down to the original setting (whether that was set via tap tempo or via the respective knob).

#### RAMP PARAMETERS

While the Tap/Ramp switch is held down and ramping is engaged, these alternate parameters can be adjusted. Once one of these parameters is changed, it takes effect immediately, and is stored in memory so that it will be recalled next time you use the pedal.

#### RAMP MODE [DEPTH KNOB]:

Choose between 'Stretch' ramping (default), and 'Bounce' ramping. The LED indicator will blink while turning this knob when the current setting has changed.

**Stretch**: ramp Rate/Chop to the furthest extreme away from the current setting and hold it there until the footswitch is released (Stret

**Bounce:** ramp Rate/Chop to the furthest extreme away from the current setting, then once there, reverse directions and go to the other extreme, over and over.

### RAMP RATE (BATE KNOB):

Control how quickly a parameter is varied while ramping.

#### RAMP TARGET [CHOP KNOB]:

Choose whether 'Rate' or 'Chop' will be ramped when you hold down the 'Tap' footswitch. The LED indicator will blink while turning this knob when the current setting has changed.

# ANALOG MODULATOR





# CONTROL OVERVIEW



## DEPTH

Set how widely the pitch swings as it is modulated.

#### **REGEN.** [ALT PARAMETER]:

Regeneration causes the wet, effected signal to feed back upon itself, creating resonant peaks and notches and intensifying the effect.

Very interactive with Lag. Using some regen with a low lag setting will enunciate moving-filter effects (make sure mix is set to noon for these).

High regeneration settings will lead to self-oscillation, especially when using higher lag, but this will not harm the unit.

## CHOP

Reduce the 'Sampling Rate' of the Periodic LFO, and reduce the time it takes for the Random LFO to glide from one output value to the next.

Sample rate reduction of the Periodic LFO creates a staircase-like waveform that introduces glitchy little pitch jumps into the vibrato as the pitch sweeps up and down.

Glide reduction of the random waveform introduces more abrupt pitch jumps, taking you from a smooth, subtle pitch waver into the territory of computer sounds.

Increased regeneration and longer lag settings can both help to accentuate this effect.

#### **RANDOM** [ALT PARAMETER]:

Mix between the Periodic & Random LFOs - 2 fully independant, simultaneously generated waveforms both dialed in via the Rate, Chop & Depth controls.

Fully CCW: Pure periodic LFO. A mix of Sine & Triangle waveforms, Perfect for a classic charus or vibrato tones.

Fully CW: Pure Random LFO. Ideal for atmospheric, motionless vibrato & chorus. With chop low, this gives the sound of stretched tape. With chop high, it yields the sound of a glitched out computer.

Set this control anywhere in between to find the perfect balance between reliable and inspiring.

## LAG

Sets the resting clock speed of the analog delay line used to generate the wet signal. Very interactive with Regen.

Clockwise = slower clock, longer lag, wider pitch swing.

Counter Clockwise = faster clock, shorter lag, more swept filter effects.

Low lag settings are where you'll find the sweeping phase cancellation phenomenon at the heart of flanging (you'll neet to set mix around noon as well). This is one place where use of regeneration really shines.

Mid-length lag settings give a more standard glassy chorusing sound.

Long lag times give way to wide pitch vibrato territory. This is best if you're playing with the mix knob set to full vibrato, or if you're after a very thick chorus sound. Regen should be set low or off for this, so as to avoid self-oscillation.

This is a knob you'll need to play with and find the setting that's right for you.

## MIX

Blend between dry unmodulated signal and the wet, pitch modulated signal.

For vibrato (no dry signal), turn fully clockwise. Longer lag times often sound best when using the unit purely for vibrato.

For Chorus (even amounts dry and wet) set to 12 o'clock. Set here, you can experiment with the Lag knob to dial in a variety of modulated sounds.

## EQ

The T-60 features a brilliant little EQ circuit that can be set to apply to the wet signal only, or to both the dry and wet signals together (see 'DRY EQ').

EQ allows you to sculpt the frequency response of your signal in any number of ways.

Rather than providing a typical tone-stack-style response, this control lets you roll off treble as you turn it down, leave the output unchanged by setting the knob at noon, or roll off bass and retain only the treble content as you turn it clockwise.

## **ENG/ALT FOOTSWITCH**

Press and release quickly to engage or bypass the effect.

#### Momentary Engage:

When in bypass, press and hold the footswitch for 2+ seconds to utilize 'momentary' activation - ie, the effect will engage upon the initial press, and then disengage once the footswitch is released.

#### Alt Parameters:

When engaged, press and hold until the indicator LED turns yellow to access the secondary parameters (Regen, Divs, & Random). Turn the knobs associated with these while holding the footswitch to modify their values. Once the footswitch is released, the settings of the primary parameters associated with these knobs will not have changed. Secondary parameter settings are retained in memory between power cycles.

#### DRY EQ

Choose whether the EQ Knob affects the overall signal (wet + dry) or the wet signal only, leaving your dry signal untouched.

To toggle this, do as follows: with the effect engaged, hold down the 'Eng/Alt' footswitch until the indicator LED turns yellow, then Tap on the 'Tap/Ramp' footswitch to toggle the Dry EQ mode.

The indicator LED will blink 3 times in a color that indicates the EQ Mode:

Red: EQ setting applies to BOTH Dry & Wet

Yellow: EQ setting applies ONLY to Wet.

## **TEMPO TARGET**

Choose whether you'd like to tap in the LFO rate or the Chop rate. The selection for tap divisions will apply to either one you choose.

Similarly to toggling Dry EQ, with the effect engaged, hold down the 'Tap/Ramp' footswitch, and then tap on the 'Eng/Alt' footswitch.

The LED will blink 3 times to indicate the new setting:

Red: LFO rate is targeted by tap tempo

Yellow: Chop rate is targeted by tap tempo.

## **STEREO OUTPUT**

To take advantage of the stereo output capabilities of the T-60, use a 1/4" TRS cable on the output (use a TRS to dual TS Y-splitter if sending the 2 outputs to 2 separate input jacks).

No special considerations are necessary when using a mono output.

### **POWER**

 $\pm 9v$  Center Negative Power supply (not included). Input voltages above 10v will be blocked by the unit to prevent damage to the internal circuitry.

Approx. 90mA Power Consumption

Sets the speed of the LFO that modulates the wet signal. Simply, the speed of the chorus/vibrato modulation.

#### **DIVISIONS** [ALT PARAMETER]:

Select between four tap tempo divisions, from counterclockwise to clockwise: Quarter, Dotted Eighth, Eighth, Triplet. While turning this knob, the LED indicator will indicate change by blinking each time a new division setting is landed on.

Changing the divisions will update the current tempo ONLY IF the current tempo was entered via tap.

Changing the divisions setting will not have any impact on the range of the Rate or Chop knobs, and will not alter any setting you currently have dialed in via those knobs.