

# Instruo – Tona

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• [Manual PDF](#)

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[Download the Instruō tona User Manual \(PDF\)](#)

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## Instruō Tona Cheat Sheet

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**Type:** All-analog VCO with classic waveforms + analog wavfolder

**Form factor:** 12HP Eurorack

**Power:** +12V: 40mA, -12V: 40mA

**Depth:** 27mm

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## I/O Jack Reference

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### Outputs

Label	Type	Description	Typical Voltage Swing
Square	Output	Square waveform	±5V
Sawtooth/ Ramp	Output	Sawtooth/ramp waveform	±5V
Triangle	Output	Triangle waveform	±5V
Sine	Output	Sine waveform	±5V
Wavefold	Output	Folded sine via wavfolder	±5V

## Inputs

Label	Type	Description	Voltage Range	Notes
1V/Oct	CV Input	V/oct pitch tracking	$-\infty$ to $+\infty$	1V per octave standard
Linear FM	CV Input	Linear FM on pitch	-5V to +5V (typical)	Bipolar, summed with Coarse/Fine
Sync	Gate/ Trig Input	Hard sync input - resets oscillator on rising edge	>2.5V triggers	Use sharp-edged signals (square/ramp)
Wavefold CV	CV Input	CV control of Wavefolder amount	-5V to +5V (typical)	Bipolar, summed with fader

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## Knobs, Sliders, and Controls

Control	Type	Function
Coarse	Knob	Sets base oscillator frequency (pitch)
Fine	Knob	Fine adjustment of pitch, relative to Coarse
Linear FM Attenuator	Knob	Attenuates depth of Linear FM input
Wavefold Fader	Slider	Amount of wavefolding (left = pure sine, right = fully folded)
	Knob	Attenuates depth of Wavefold CV input

Control	Type	Function
Wavefold CV Attenuator		

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## QUICK REFERENCE PATCHING

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### Basic Oscillator Out

- **Connect:** Any waveform output to your mixer/audio path.
- **Pitch Control:** 1V/Oct input from sequencer/keyboard.

### Wavefolded Out

- **Connect:** Wavefold output for timbre-rich, West Coast flavor.
- **Tweak:** Wavefold fader/slider for amount; modulate with Wavefold CV for e.g., audio-rate timbre modulation.

### Sync

- **Apply:** Connect another oscillator's ramp/square to Sync for hard sync tones.

### Linear FM

- **Complex timbres:** Feed another oscillator (audio rate preferred) to Linear FM input, set depth with FM Attenuator.

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## MODULATION/CV RANGES

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- All CV inputs respond to bipolar signals ( $\pm 5V$  typical).
  - Sync triggers on rising edge  $> 2.5V$ .
  - Waveoutput swing: approximately  $\pm 5V$ .
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## DESCRIBED PATCH IDEAS

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- **East Coast Voice:**

Mix square, saw, triangle > filter > VCA; envelope CV sweeps filter/VCA; 1V/Oct input from sequencer/keyboard.

- **FM Voice:**

Use sine from a 2nd oscillator to tona's Linear FM in for FM timbres.

- **Audio-Rate Wavefold Mod:**

Patch any output back to tona's own Wavefold CV input to modulate timbre with its own waveform.

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## PANEL DIAGRAM LEGEND

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1. Square Out
2. Saw/Ramp Out
3. Triangle Out
4. Sine Out
5. Wavefold Out
6. Coarse knob
7. Fine knob
8. 1V/Oct Input
9. Linear FM Input
10. Linear FM Atten.
11. Wavefold Fader
12. Wavefold CV Input
13. Wavefold CV Atten.
14. Sync Input

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## Notes

- Reverse polarity protected.
  - All controls are additive: CV is summed with manual settings.
  - For all classic and experimental analog VCO & West Coast patches!
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