

JUPITER-8

Model Expansion

Parameter Guide

This document explains about the parameters and setting screens for the ZENOLOGY Pro Model Expansion.

The parameter names, the order in which they appear and other information may differ, depending on the product.

The image shows the Roland ZENOLOGY Jupiter-8 synthesizer interface with 12 numbered callouts highlighting specific parameters and sections:

- 1** SECTION: A dropdown menu at the top right, currently set to "SOUND".
- 2** VCO-1: The first oscillator section, featuring knobs for TUNE, RANGE, and WAVE FORM.
- 3** VCO-2: The second oscillator section, featuring knobs for TUNE, RANGE, and WAVE FORM.
- 4** MIXER: A section with a central knob for volume and a "VCO-3" indicator.
- 5** VCF: The filter section, including controls for SLOPE, ENV MOD, FILTER MOD, and KEY FOLLOW.
- 6** VCA: The amplifier section, featuring a "VEL" knob and "LFO MOD" options.
- 7** LFO: The low-frequency oscillator section, including "WAVE FORM" and "VCO MOD" options.
- 8** VCO MODULATOR: A section for modulating the oscillators, with options for "VCO-1", "VCO-2", "LFO", "MIDI", and "ENV".
- 9** ENV-1: The envelope generator section, including a graph and "KEY FOLLOW" controls.
- 10** ENV-2: The second envelope generator section, including a graph and "KEY FOLLOW" controls.
- 11** Modulation Delay: A section for modulation, including "FEED BACK", "RATE", and "MODE" controls.
- 12** TOUCH: A section at the bottom left, including "TOUCH" and "LFO" controls.

1 System

CONDITION

Simulates the changes that occur as a unit ages.

PITCH DRIFT

Adjusts the slight pitch drift that occurs when notes are played on an analog synthesizer.

KEY MODE

[SOLO] button

Sound is produced monophonically.

[POLY] button

Sound is produced polyphonically.

[UNISON] button

Sound is produced in unison.

[SL-UNISON] button

Sound is produced in monophonic unison.



PORTAMENTO [OFF] [ON] button

PORTA MODE

Selects whether portamento is applied to the performance.

PORTA TIME

Specifies the portamento time.

PORTA CRV

[ORIG] button

Change according to the original curve of the model.

[LIN] button

Change in a linear curve.

[EXP-1] button

Change in a non-linear curve (gentle slope).

[EXP-2] button

Change in a non-linear curve (steep slope).

[PRM EXP] button

(PARAM EXPANSION)

If this is ON, the range of the LFO RATE, CUTOFF, RESONANCE, and FILTER ENV DEPTH parameters are extended beyond the range of the original model.

2 VCO-1



[CROSS MOD] knob

Uses the OSC2 waveform to change the frequency of OSC1. Higher values cause the sound of OSC1 to be more complex, allowing you to create metallic sounds or sound effects.

[RANGE] knob (OSC1 RANGE)

Specifies the octave of OSC1.
16', 8', 4', 2'

[WAVE FORM] knob

(OSC1 WAVE FORM)

Selects the waveform that is the basis of the OSC1 sound.
TRI, SAW, PW, SQR

3 VCO-2

[SYNC] button (SYNC SWITCH)

This is oscillator sync. It produces a complex waveform by forcibly resetting OSC1 to the beginning of its cycle in synchronization with the cycle of OSC2.

[FINE TUNE] knob (OSC2 FINE TUNE)

Specifies a fine adjustment to the pitch of OSC2.

[WAVE FORM] knob (OSC2 WAVE FORM)

Selects the waveform that is the basis of the OSC2 sound. SINE, SAW, PW, NOISE



OSC2 MODE NORMAL/LOW FREQ

NORMAL

OSC2 operates as NORMAL (audible frequency range). Use the [RANGE] (OSC2 RANGE) knob to set the frequency. -12→+24



LOW FREQ

OSC2 operates as LFO (low frequency range). Use the [LOW FREQ] knob to set the frequency. 0-127



4 MIXER



[VCO-1] knob (OSC1 LEVEL)

Adjusts the volume balance of OSC1.

[VCO-2] knob (OSC2 LEVEL)

Adjusts the volume balance of OSC2.

5 VCF

[HPF] knob

Adjusts the cutoff frequency of the high-pass filter.

[FREQ] knob (CUTOFF)

Specifies the cutoff frequency of the low-pass filter. The frequency region above the cutoff frequency is cut, producing a more mellow tonal character.

[RES] knob (RESONANCE)

Boosts the region of the filter's cutoff frequency. Higher values produce a stronger result, giving the sound a distinctively synthesizer-like character.



[R] [M] [S] buttons (VINTAGE FLT TYPE)

If a vintage type model is selected, these buttons change the type of filter.

[R] models a Roland filter, and [M] and [S] model vintage synthesizers made by other companies.

SLOPE (FILTER SLOPE)

Selects the type of slope for the low-pass filter.
-12dB/OCT, -24dB/OCT

[ENV-1] [ENV-2] buttons (FLT ENV MODE)

Selects the envelope that is used to control the ENV-1/ENV-2 cutoff frequency.

ENV MOD (FLT ENV DEPTH)

Adjusts the amount by which the cutoff frequency is controlled by the envelope.

FILTER MOD

Adjusts the amount by which the LFO modulates the cutoff frequency.

KEY FOLLOW (FLT KEY FOLLOW)

Adjusts the amount by which the keyboard pitch affects the cutoff frequency (key follow). With smaller values, the cutoff frequency becomes lower as you play higher notes.

6 VCA



[LEVEL] knob (AMP LEVEL)

Adjusts the volume of the tone.

LFO MOD (AMP MOD STEP)

Uses the LFO to vary the AMP volume (tremolo effect). Higher values produce a greater effect.

7 LFO

RATE (LFO RATE)

Specifies the rate of the LFO cycle.

DELAY TIME (LFO DELAY TIME)

Adjusts the time from when the key is pressed until the LFO starts to apply modulation.



WAVEFORM (LFO WAVEFORM)

Selects the waveform of the LFO.
SINE, SAW-DW, SQR, S&H

8 VCO MODULATOR

LFO MOD

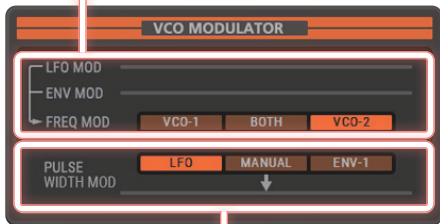
Adjusts the depth at which the LFO modulates the OSC.

ENV MOD (PIT ENV DEPTH)

Adjusts the depth at which the LFO modulates the ENV1.

FREQ MOD (DEST SELECT)

Selects the OSC that is modulated by LFO MOD.



Select buttons (PW MODE)

Specifies the pulse width mode.

LFO: The pulse width is changed by the LFO.

MANUAL: The pulse width is changed by the PULSE WIDTH MOD.

ENV: The pulse width is changed by the ENV1.

Slider (PULSE WIDTH MOD)

Adjusts the amount of pulse width change.

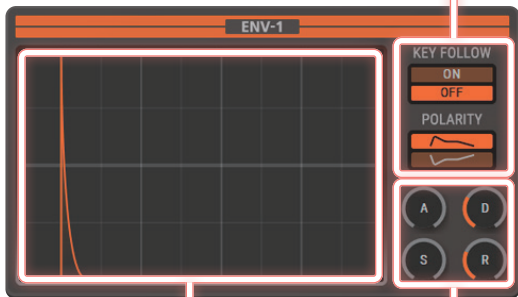
9 ENV-1 (Envelope)

KEY FOLLOW (ENV1 KEY FLW SW)

Specifies the ENV1 key follow. If key follow is on, ADR times become longer for lower notes and shorter for higher notes.

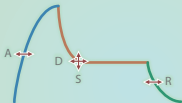
POLARITY

Specifies the polarity of the envelope.



Envelope

You can edit the ADSR settings of the envelope.



[A] knob (ENV1 ATTACK)

Adjusts the Attack time.

[D] knob (ENV1 DECAY)

Adjusts the Decay time.

[S] knob (ENV1 SUSTAIN)

Adjusts the Sustain level.

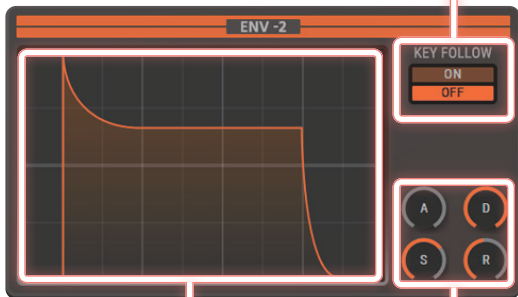
[R] knob (ENV1 RELEASE)

Adjusts the Release time.

10 ENV-2 (Envelope)

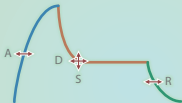
KEY FOLLOW (ENV2 KEY FLW SW)

Specifies the ENV2 key follow. If key follow is on, ADR times become longer for lower notes and shorter for higher notes.



Envelope

You can edit the ADSR settings of the envelope.



[A] knob (ENV2 ATTACK)

Adjusts the Attack time.

[D] knob (ENV2 DECAY)

Adjusts the Decay time.

[S] knob (ENV2 SUSTAIN)

Adjusts the Sustain level.

[R] knob (ENV2 RELEASE)

Adjusts the Release time.

11 MFX

[MFX] button

Turns MFX on/off.

[MFX TYPE] indication

Shows the currently selected MFX name.

[MFX LEVEL] knob

Adjusts the MFX output level.



MFX parameters

The edit screen is different for each MFX type.

12 Controller

BEND [PIT] knob (BEND PITCH)

Specifies the range of pitch change produced by pitch bend.

BEND [FILT] knob (BEND FILTER)

Specifies the range of filter change produced by pitch bend.

MOD [LFO] knob (MODULATION LFO)

Specifies the amount of LFO applied by modulation.



A.TOUCH [LEVEL] knob

Specifies how the volume of the tone is affected by aftertouch.

A.TOUCH [FREQ] knob

Specifies how the frequency of the low-pass filter is affected by aftertouch.

A.TOUCH [LFO] knob

Specifies how the LFO depth is affected by aftertouch.