

# E352 Cloud Terrarium (coming Aug 25<sup>th</sup>)

[www.synthtech.com/euro rack/e352](http://www.synthtech.com/euro rack/e352)



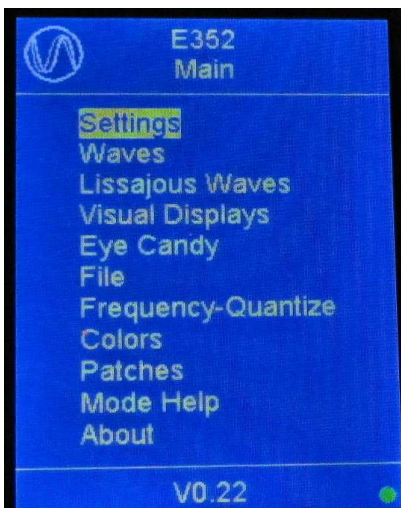
## What is the E352?

The Synthesis Technology E352 is a dual output, wavetable VCO that replaces the older E340 Cloud Generator and the E350 Morphing Terrarium, while adding over 30 new features.

Shipping with all 192 waves of the E350, it also allows 3 User Defined banks (a bank is a 8x8 matrix of 64 individual waves) which are easily loaded using the free WaveEdit application and a uSD card. The WaveEdit program supports PC/Mac/Linux and has a full toolbox for importing, drawing and creating wavetables.

The large color TFT screen is used to select the modes and parameters, using a "shallow" menu: only 1 page is below another page. The E352 uses a mil-spec Grayhill optical encoder with a 30yr life, and like all SynthTech modules, comes with a lifetime warranty. 26HP width, only 0.85in (21.6mm) deep.

## MAIN MENU



The Main Menu is like a table of contents. The encoder is used to highlight the function, and the encoder knob is 'clicked' (like a mouse) to go to that page.

The color scheme is customizable.

There are 8 presets to store the setting of the module. This includes any user-loaded wavetables. Each preset can have 192 different user wavetables plus the 192 factory waves.

The green dot in the lower right turns red (default) when the memory is being written.

## Controls and Jacks

There are 3 CVs that are assigned, based on what mode you are in. Each CV (called X, Y and Z) has a dedicated 'offset' or PARAMETER and an external CV in (-5V to +5V range) with a dedicated attenuator.

It is important to note, just like on all SynthTech modules, the attenuated CV is \*added\* to the PARAMETER knob position. If a PARAMETER knob is at 12:00 (straight up), then a -5V to +5V unattenuated CV input will swing that X/Y/Z value "end-to-end" or minimum to maximum. This is exactly the same as having no CV, and turning the panel knob end-to-end.

The 2 outputs (OUT1 and OUT2) are the same pitch, assuming the associated wave or function is not multiple-cycle. This is not a "dual" VCO.

## BRIEF OVERVIEW

There are common parameters that are available for most modes (not Noise), and then algorithm-specific parameters (like **Spread** for Clouds). The menu system will change, based on what mode you are in. There is a **Mode Help** screen that will show you what parameters are set, and what the 3 CVs are going in that mode. You can **Quantize** Pitch or Pitch + FM, for example. For fun, check out the **Eye Candy** modes.

### MORPH

The bank waves are blended ('morphed') with the 3 CVs. If you want a non-smooth blending ('glitching'), you turn **Phase Interpolation** to OFF, and then select the **Glitch** to be LOW/MED/HI. The E350 only had the HI setting.

### MORPH + PHS (Phase Mode on the E350)

The X PARAMETER becomes a 0-360deg phase shift of OUT2 relative to OUT1. Y PARAMETER is a reversing phase volume control, a Z is a 1-64 scan of the wavetable. Externally mix OUT1 & Out2.

### MORPH+Wfld (Wavefolding)

The X PARAMETER folds OUT1, Y PARAMETER folds OUT2 and Z PARAMETER scans the bank 1-64.

### Cloud

This is a great improvement over the E340. You can not only have the standard Sine and Saw output clouds, but cloud any individual wave in the active wavetable.

### Cloud+Morph

Of all the new features in the E352, this is the #1 awesome thing we added. It's BOTH Clouding and wavetable morphing at the same time. You have to hear it to believe it.

### 2-OP FM

Not only can you use 2 sine waves as in traditional FM patches, you can select other fixed waves or use the wavetables.

### Noise

Different types of noise, coupled with a software 24dB ladder filter with variable cutoff and resonance.

### Power Requirement

+12V @ 65ma, -12V @24ma.