



ANIMOOG

USER'S MANUAL

QUICK OVERVIEW

ANISOTROPIC SYNTHESIS ENGINE

The Anisotropic Synthesis Engine (ASE) is the heart of Animoog. It is a dynamic waveform animator that is comprised of an X/Y Grid with 8 **TIMBRES**, each containing 16 waveforms represented by a row of blocks. **TIMBRES** are sounds derived from sources that include Moog synthesizers, and Moogerfooger analog effects modules. The oscilloscope display shows the evolving audio waveform created by voices traveling through the X/Y Grid, allowing you to see in detail the changes of timbre you are hearing in real time.

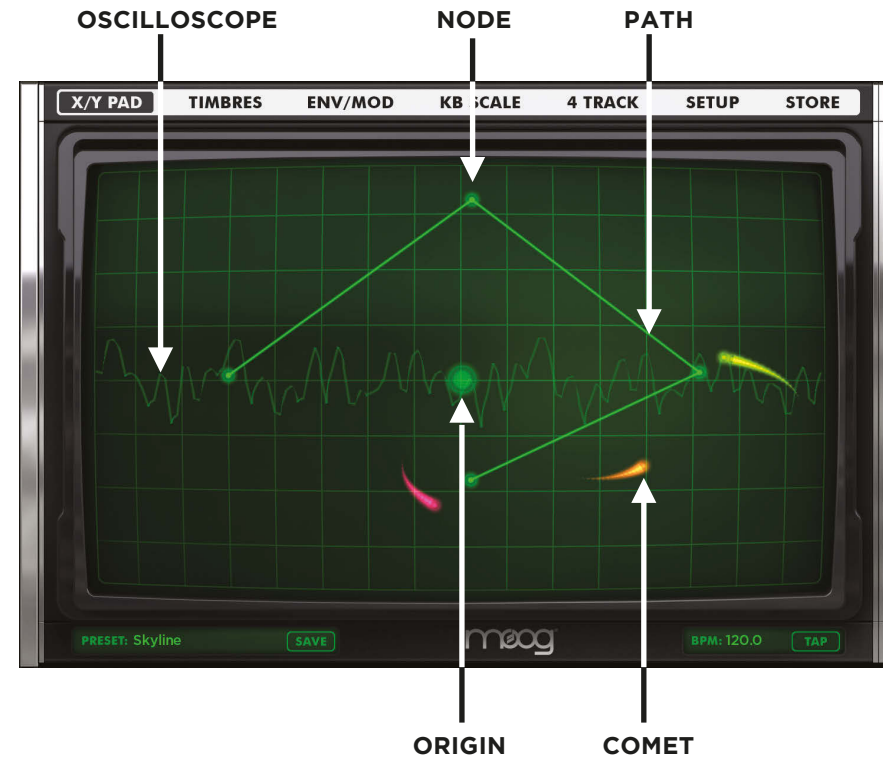
The **ORIGIN** point on the X/Y Grid determines which part of a **TIMBRE** plays when a key is pressed. You can also use it as a performance control. Play a note, and at the same time touch and drag the **ORIGIN**. The voices will change based on their location in the X/Y Grid.



NOTE: Before launching Animoog, please open your iPad **Settings**, select **General**, and turn **Multitasking Gestures** off.

COMETS

COMETS are visual representations of each voice being played. These comets follow a configurable **PATH**. Depending on the chosen preset you will see comets orbit the path or travel fluidly through it.



ORIGIN

The **ORIGIN** determines which part of a timbre will play when a key is pressed. Pressing a key while moving the **ORIGIN** with your finger will cause the sound to change in real time based on its position.

OSCILLOSCOPE

The **OSCILLOSCOPE** provides a visual display of the waveform being generated by Animoog.

Note: The Oscilloscope can be disengaged in the Setup > Configuration menu if desired.

COMETS (CONTINUED)

COMETS are visual representations of each voice that is triggered when a key is pressed. These **COMETS** travel through the X/Y grid as visual feedback regarding each note's place in a timbre.

*Note: If no **Path** or **Orbit** module parameters have been assigned, pressing a key simply causes the **Origin** to glow.*

PATHS AND ORBITS

Each voice follows a path based on settings in the **PATH** module. Voices can also be made to orbit a path by using the **ORBIT** module.

CREATING A PATH AND ORBIT

Select the **X/Y PAD** from the main menu.

X/Y PAD

Select the **PATH** tab on the right to access the **PATH** module.

Press the **EDIT** button to create or edit a path (red light on).

CREATE: Touch points on the grid to create a path. New nodes will automatically connect to each other.

EDIT: Touch and drag nodes to new locations.

DELETE: To delete a node, simply double tap it. When your path is complete, press the **EDIT** button again.

PATH MODULE PARAMETERS

The **RATE** control determines how fast each **COMET** moves along the path.

Note: High settings create complex sounds and geometric shapes in the X/Y grid.

MODE: determines how comets travel through a path.

LOOP: Comets follow the path from beginning to end repeatedly.

BACK-FORTH: Comets move between the start and end point of a path repeatedly.

ONCE: Comets follow the path from beginning to end and latch to the end point.

SYNC: Sets the Path **RATE** to be a multiple or division of Animoog's current BPM.

CLEAR: Erases any existing path and nodes.



ORBIT MODULE PARAMETERS

Select the **ORBIT** tab to access the **ORBIT MODULE**.

RATE: Determines the speed at which a **COMET** will orbit a Path in the X/Y Grid.

The **X AMOUNT** and **Y AMOUNT** controls determine how a Comet will orbit the Path in the X/Y Grid.

X AMOUNT: Defines left to right motion.

Y AMOUNT: Determines top to bottom motion.

At low **RATE** and **AMOUNT** settings, voices follow the **PATH** with minimal orbit.

At medium **RATE** and **AMOUNT** settings each voice will orbit in a circular motion as it follows the **PATH**.

At maximum settings, the voices orbit a **PATH** so rapidly that extremely modulated sounds occur.

SYNC: Sets the **ORBIT** module's **RATE** to be a multiple or division of Animoog's current BPM.

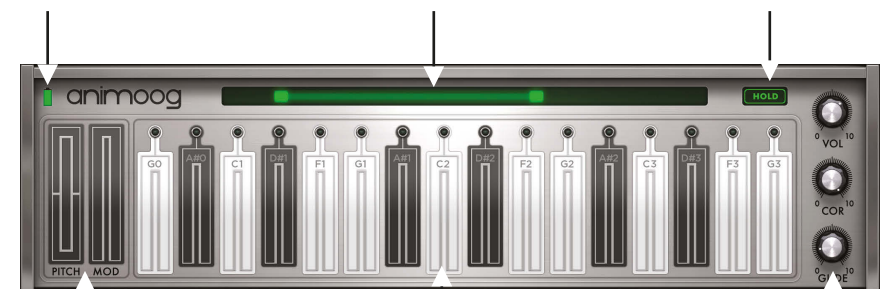


USING THE KEYBOARD

BATTERY LIFE

KEY SPACING CONTROL

HOLD



MOD STRIPS

TOUCH KEYS

VOL, COR, & GLIDE

TOUCH KEYS

Animoog's **TOUCH KEYS** feature an indicator that displays a unique color for each voice as it is played. Note **VELOCITY** is determined by where a key is struck from top to bottom. After a note is pressed, a held key will illuminate. Finger movement toward the top of a key will cause it to illuminate representing an increase in **MODULATION** amount. Key indicators and voice trails remain illuminated until each voice has fully decayed.

USING THE KEYBOARD (CONTINUED)

KEY SPACING

The **KEY SPACING CONTROL** shifts the keyboard to display lower or higher notes in a scale. It also permits stretching or shrinking the number of keys displayed. To shift the keys, press and drag the center of the control. To increase or decrease the number of keys displayed, press and drag the end tab.

MOD STRIPS

MOD and **PITCH** strips are assignable in the **MOD** section and can be toggled On/Off in the **SETUP** page.

VOL, COR, AND GLIDE CONTROLS

The **VOL** (volume) knob sets Animoog's overall volume. The **COR** (correction) knob sets pitch correction between keys. At **10**, no correction occurs. At **5**, rocking your finger side to side will allow for vibrato and pitch bend effects. At **0**, there is no pitch correction between keys and Animoog's keys function as a ribbon controller. The **GLIDE** knob adjusts portamento time (the time it takes for pitch to slide from note to note).

HOLD BUTTON

The **HOLD** button will sustain a note indefinitely. Up to four notes can be played simultaneously, after which the oldest voice is replaced by each new note.

SELECTING PRESETS AND SETTING TEMPO



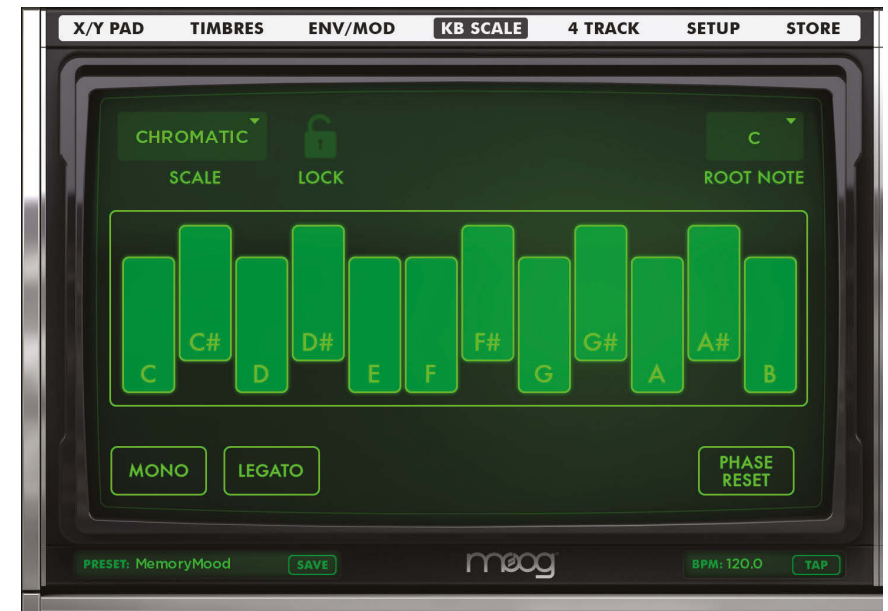
PRESET SELECTOR

Touch the **PRESET** menu to open it, then select a preset from a wide variety of categories. Press and hold **SAVE** to save changes to a preset, or to create a new preset.

BPM/TAP TEMPO

Touch and drag up or down on the BPM indicator to increase or reduce the BPM. Tapping the **TAP** button initiates tap tempo.

KB SCALE PAGE

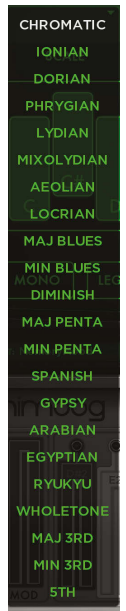


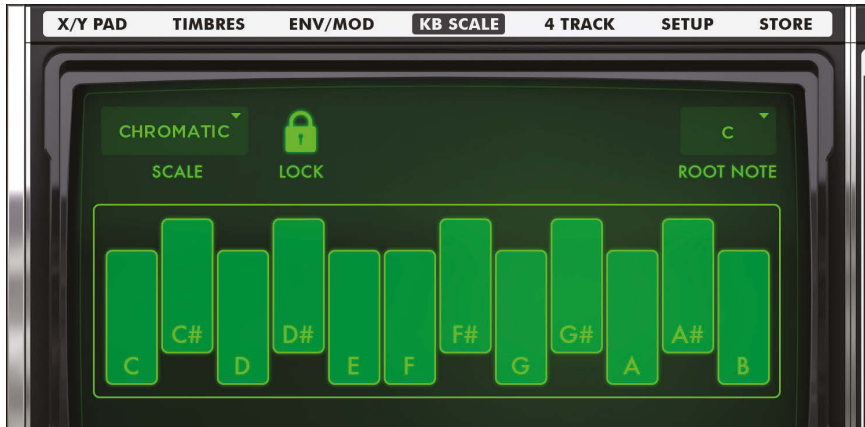
SELECT A SCALE

Touch the **KB SCALE** tab on the **MAIN MENU**.

KB SCALE

Touch the **SCALE** button. A list of scales displays below. Select the desired scale, and the keyboard display will update to reflect the notes included in the scale.

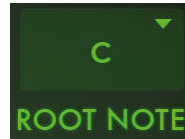




You can add or remove notes from any scale by touching the keys in the keyboard display.

SELECT A ROOT NOTE

The root note is the first note used in a scale. Touch the root note button. A list of notes displays below. Select the desired note.



MONO

In **MONOPHONIC** mode, only one note can be played at a time. This is the classic performance behavior found in many Moog synthesizers.



LEGATO

In Legato mode, playing a new note while holding down another note does not trigger a new envelope. This means that all notes behave as a continuous note until the keys are completely released.



NOTE: Legato mode only works with Mono mode on.

PHASE RESET

Phase Reset mode forces the ASE oscillators to reset their start phase with each new note for a more consistent, hard-edged attack.



With Phase Reset off, voices run free and vary from note to note naturally.

SCALE LOCK

Scale Lock maintains the currently specified keyboard scale when changing presets.



EFFECTS MODULES

THICK MODULE

Touch the **THICK** tab on the right to access the Thick module.

CRUSH: Creates bit crushing effects with aliasing and digital distortion via bit and sample rate reduction.

DRIVE: Adds analog-style overdrive saturation to the overall output of Animoog's combined voices.

DETUNE: Works in conjunction with the **UNISON** knob. When unison voices are added to a sound, this control allows you to detune the pitch of the additional voices. Low settings create classic chorus-like effects, while higher settings create larger intervals. At "10", the pitch of additional voices is detuned one full octave.

UNISON: Adds 2 or 4 additional voices to a sound.

NOTE: Unison voices are panned hard left and right.



DELAY MODULE

Touch the **DELAY** tab on the right to access the Delay module.

SYNC: Sets the delay Time to be a multiple or division of the Animoog's current BPM.

TIME: Adjusts the amount of time between when a note is first played and when it is repeated. Lower settings create slap delays and doubling effects, while higher settings create longer echoes.

FEEDBACK: Sets the amount of audio in the delay line to be fed back into the delay's input. Low settings create single repeats and short echoes, while higher settings generate long, lush delay trails that decay over time. Higher settings can also create complex textures.

MIX: Sets the blend of delayed vs. unaffected sound. The higher the level, the louder the audio from the delay. A setting of "5" sets both at equal volume.



EFFECTS MODULES (CONTINUED)

FILTER MODULE

Touch the **FILTER** tab to access the **FILTER** module.

Select a filter **TYPE**:

- **LP** is a low pass filter that allows only frequencies below the cutoff frequency to pass.
- **BP** is a band pass filter that allows only frequencies at and around the cutoff frequency to pass.
- **HP** is a high pass filter that allows only frequencies above the cutoff frequency to pass.

FREQUENCY: Determines the cutoff **FREQUENCY** of the filter. This is the point at which the filter begins to “work”.

RES: Adjusts the amount of **RESONANCE**, or emphasis, at the filter’s cutoff frequency. Lower settings create subtle colorations of the sound. Higher settings add strong overtones. At 10, the filter is capable of self-resonating.

DRIVE: Sets the amount of pre-filter drive from zero to full saturation. This control is modeled after the classic Moog ladder filter design.

TECHNICAL NOTE: Unity gain is at “5”. Bipolar modulation of the drive control inverts the signal phase as it passes below zero.

ENV: Works in conjunction with the **FILTER ENVELOPE** found in the **ENV/MOD** page. Positive settings apply the envelope in the normal attack, decay, sustain, and release manner. Negative settings mean that the envelope is reversed. A setting of “0” means no envelope is applied.

NOTE: See the Env/Mod section for information on the Filter Envelope.



EFFECTS MODULES (CONTINUED)

RECORD MODULE

Touch the **RECORD** tab to access the **RECORD** module.

Set the record tempo using the BPM/Tap Tempo Control.

Tap the **RECORD** button. A countdown timer counts off four beats before recording begins. The **RECORD** button displays a white ring to indicate the amount of recording time remaining.

Touch the **RECORD** button again to end the current recording and automatically transition into Overdub mode. From this point you can overdub a sound, or press **STOP** to end your recording.

NOTE: The **RECORD** button also clears the memory Buffer.

OVERDUB: Allows you to record additional audio over a previous recording stored in the Buffer.

Press the **OVERDUB** button and then press **PLAY** to record on top of the audio file in the Buffer. You can also press **PLAY** and then touch the **OVERDUB** button at any time.

Touch the **STOP** button to stop recording.

BUFFER CONTROLS

The Buffer stores a good take or mix so that an overdubbed performance can be replaced if desired. Audio in the Buffer is stored as a clipboard.wav, which can be copied and exported to another app. See **AUDIOCOPY** and **AUDIOPASTE** section.

COPY: Copies the current record Buffer audio to the clipboard.

PASTE: Places the current contents of the clipboard into the Buffer.

CLEAR: Clears the Buffer.

NOTE: Copy and Paste functions can also be used to move audio between Animoog and other apps that support the AudioCopy/AudioPaste standards.

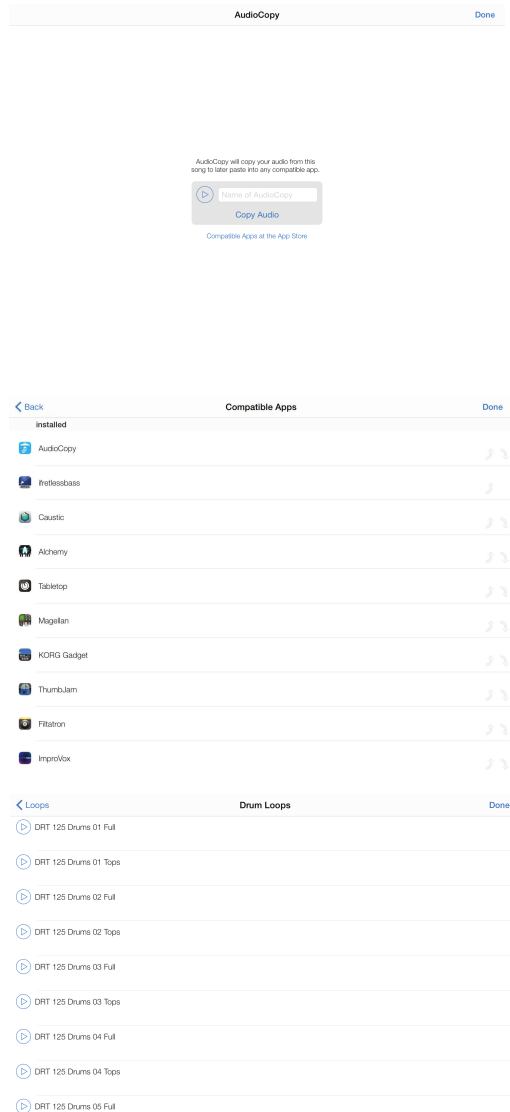


AUDIOCOPY & AUDIOPASTE

AUDIOCOPY and **AUDIOPASTE** tools are used in the **RECORD** module and **4 TRACK RECORDER** to allow sharing of audio files between them, and share audio with other apps.

To open **AUDIOCOPY/AUDIOPASTE** double click on an audio file in the 4 track editor, select **AUDIOCOPY**, and then follow the instructions.

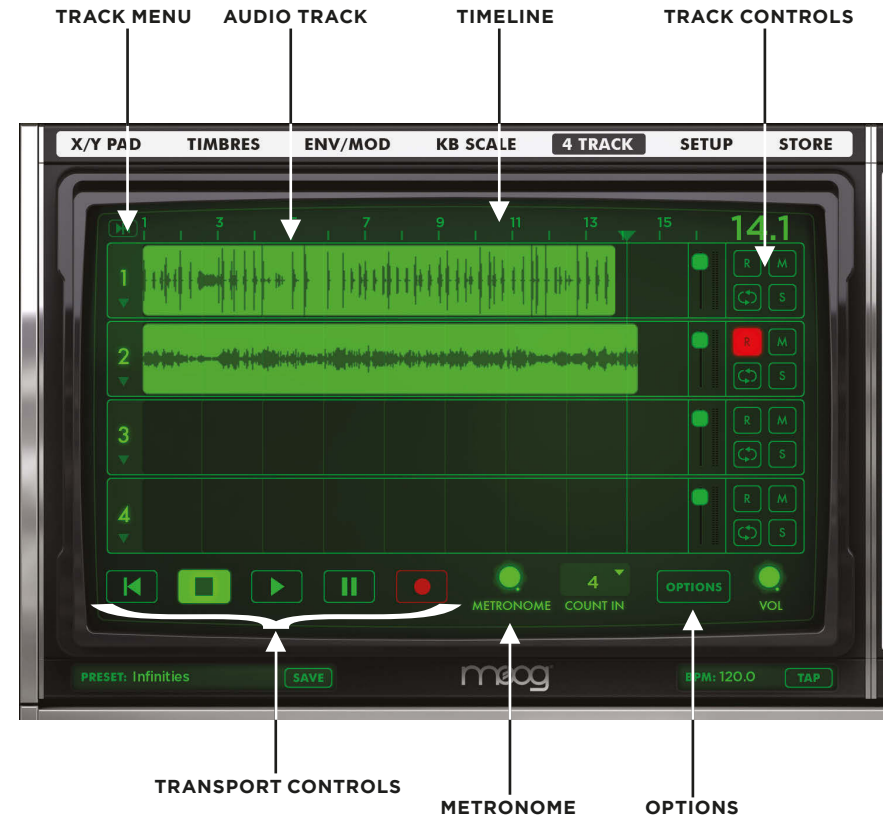
Images below illustrate **AUDIOCOPY** and **AUDIOPASTE** dialogs.



4-TRACK RECORDER

Available for download in the Animoog Store.

The 4-Track Recorder allows you to import, record, edit and mixdown four channels of audio. You can then export your work or share directly to Soundcloud.



TIMELINE

The **TIMELINE** is at the top of the **4 TRACK RECORDER** and displays time in Bars/Beats format. You can press and drag the timeline left or right to scroll to different sections of a song. Press and drag up or down to zoom in or out.

TRANSPORT & METRONOME CONTROLS

TRANSPORT CONTROLS include buttons for **REWIND TO BEGINNING**, **STOP**, **PLAY**, **PAUSE**, and **RECORD** functions.

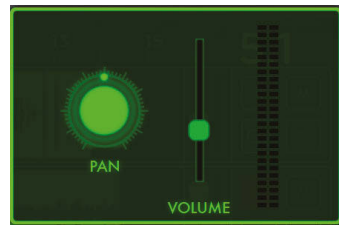
METRONOME sets the volume and number of **COUNT IN BEATS** for the **METRONOME**. Metronome tempo is set to Animoog's BPM setting.

TRACK MENU & CONTROLS

Each track contains controls for **VOLUME/PAN**, **ARM TO RECORD**, **MUTE**, **LOOP**, and **SOLO**.



Touching the volume slider opens a window with **PAN** and **VOLUME** controls.



OPTIONS

Touch the **OPTIONS** button to display the Options menu used for working with projects.

UNDO: Reverts the last edit to the current project.

NEW PROJECT: Starts a new project.

LOAD PROJECT: Loads a previously saved project.

SAVE PROJECT AS: Saves the current project as new.

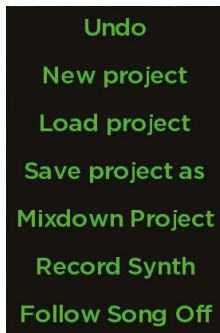
MIXDOWN PROJECT: Mixes project down to stereo file for upload to SoundCloud.

RECORDED AUDIO:

- **RECORD ALL** - The armed track will record all audio currently being output including audio in the Record module looper and other tracks in the 4-track.
- **RECORD SYNTH** - The armed track will only record the ASE output.

FOLLOW SONG ON/OFF:

- **ON** - Timeline scrolls to follow the current cursor position.
- **OFF** - Timeline display is stationary and does not follow the cursor.



RECORDING AND EDITING AUDIO TRACKS

To get started, touch the **OPTIONS** button, then select **NEW PROJECT**.

RECORDING

Touch the Arm button to enable recording for a track.

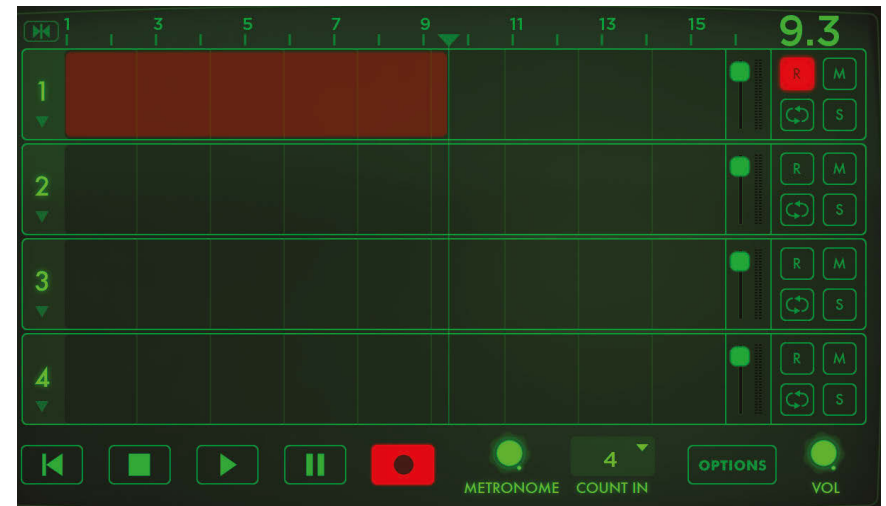
Touch the Record button, then start playing Animoog.

To pause the recording, touch the Pause button.

Touch it again to resume.

Touch the Stop button to stop recording.

Touch Rewind to go back to the starting point of the recording.



CUT, COPY, AND SPLIT TRACKS

Double tap a clip to display the Edit menu:

CUT: Cuts the clip and places it on the clipboard.

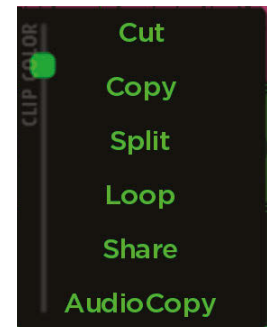
COPY: Copies the clip to the clipboard.

SPLIT: Splits the clip at the current cursor location.

LOOP: Places moveable loop markers around the clip for playing as a loop.

SHARE: Opens dialog for sharing clips on SoundCloud.

AUDIOCOPY: Copies the clip for sharing with AudioCopy enabled apps.



NOTE: Use the Clip Color Slider on the left side of the Edit menu to change the color of a clip.

TRACK MENU

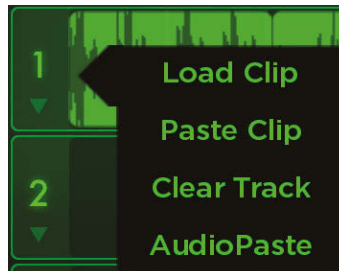
You can paste a clip from the clipboard into a track or load a recording into the 4-track recorder from iTunes. Touch the **TRACK MENU** to open it, then:

LOAD CLIP: Loads a recording stored in iTunes.

PASTE CLIP: Pastes from the clipboard.

CLEAR TRACK: Clears all clips from a track.

AUDIOPASTE: Pastes audio copied via AudioCopy.



MOVING AUDIO CLIPS

Touch and drag a clip to move it within a track.

LOOPING TRACKS

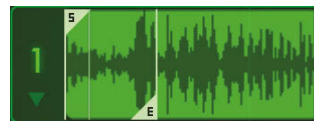
Recorded audio can be looped within a track so that the looped section plays continuously while the player continues to move forward on the timeline. To loop a recording:



Touch the Loop button in the track control area, or from the Track Edit menu.



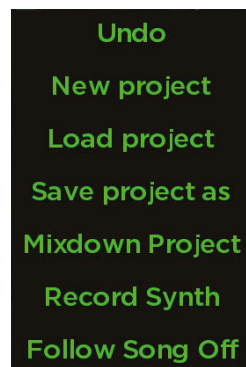
Touch and drag a loop marker to change the loop area.



SAVING & LOADING PROJECTS

To save a project:

Touch the **OPTIONS** menu and select **SAVE PROJECT AS**. Type in a project name then touch **SAVE**.



SAVING & LOADING PROJECTS (CONTINUED)

To load an existing project: Select **LOAD PROJECT** from the **OPTIONS** menu.

Choose a project from the **PROJECTS** list, and then press **LOAD**.

To delete an existing project and all its associated samples: Select a project from the **PROJECTS** list, and then press **DELETE**.



To use a project sample in another application: Select **LOAD PROJECT** from the **OPTIONS** menu. Choose a project from the **PROJECTS** list (The **SAMPLES** menu will display all audio files contained in the project)

Select a sample from the **SAMPLES** list, and then press the **AUDIOCOPY** button.

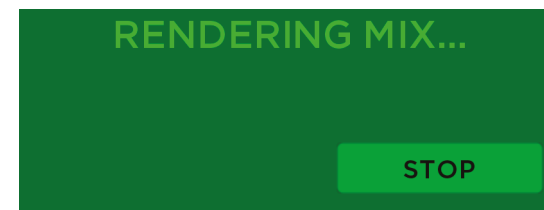


MIXING DOWN PROJECTS

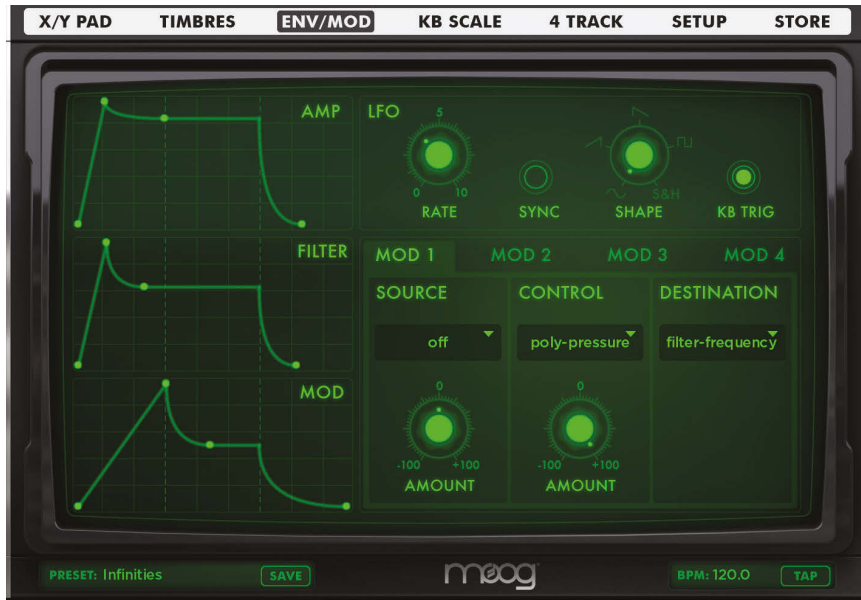
You can mixdown a project to a stereo MP3 file for sharing on SoundCloud. From the **OPTIONS** menu select Mixdown Project.

When mixdown is complete, login to SoundCloud to upload the file.

NOTE: You can also share an individual clip in a track via the Share option on a recording's Edit menu.



ENVELOPES & MODULATION



ENVELOPES

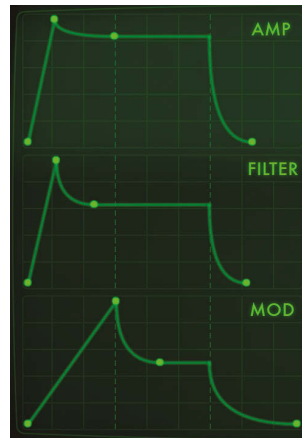
Touch the **ENV/MOD** tab on the **MAIN MENU**.

The **AMPLITUDE, FILTER, AND MODULATION ENVELOPES** essentially automate the parameter they are assigned to by determining the Attack time, Decay time, Sustain Level, and Release time of each function.

AMP controls the dynamics of a sound.

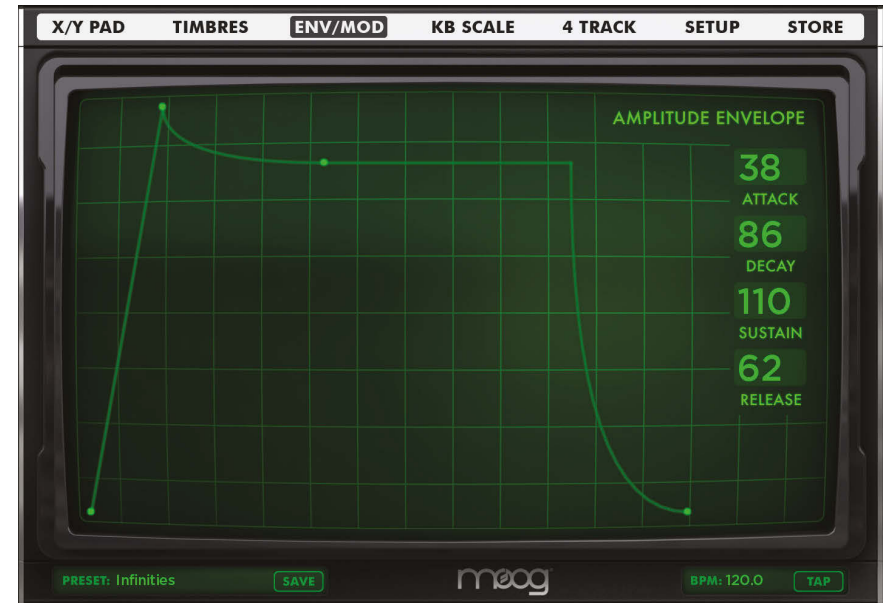
FILTER tailors the timbre of a sound over time.

MOD can be selected as a modulation source for a Mod slot, but is only used when selected.



EDITING ENVELOPES

Double tap the corresponding **ENVELOPE** box to enlarge it.

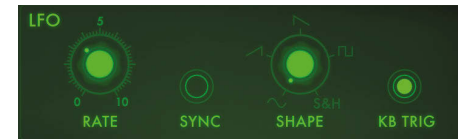


Touch and drag the **ENVELOPE NODES** to adjust the Attack, Decay, Sustain, and Release settings. Double tap the envelope to minimize the display.

NOTE: You can also modify an envelope while minimized.

LFO SECTION

The LFO (low frequency oscillator) is a **MODULATION SOURCE** accessible via **MOD SLOTS 1-4**.



RATE: Adjusts the LFO frequency (how rapidly the LFO waveform cycles.)

SYNC: Sets the current LFO Rate to be a multiple or division of Animoog's current BPM, ranging from 8 Wn (whole notes) to 1/64 Wn.

SHAPE: Provides continuously variable selection between five different wave shapes: Sine, Ramp, Sawtooth, Square, & Sample and Hold.

TECHNICAL NOTE: All of the wave shapes are bipolar (symmetrical over the zero crossing) except for Square wave, which is unipolar.

KB TRIG: Causes the LFO waveform to restart with each new note. This is useful for creating consistent sound from note to note.

MODULATION SLOTS



SOURCE

The **SOURCE** is a constantly changing signal that is used to create mild to extreme modulation.

Touch the **SOURCE MENU** to select a source.

OFF: (A source is not necessary). You can use the **CONTROL** to manipulate a destination, but a positive or negative value must be applied to the **AMOUNT**.

LFO: Applies the **LFO** to the **DESTINATION**.

MOD: Applies the **MODULATION ENVELOPE** to the **DESTINATION**.

POSITION-X: Applies modulation according to a voice's **X** position on the **X/Y GRID**.

POSITION-Y: Applies modulation according to a voice's **Y** position on the **X/Y GRID**.

SOURCE AMOUNT

The **AMOUNT** control scales the maximum amount of modulation sent from the **SOURCE** to the **CONTROL** or **DESTINATION**.

The **AMOUNT** knob is bipolar and can be used to scale or invert the selected source's modulation amount. A positive or negative value must be assigned or nothing will occur.

NOTE: Double tapping the **Amount** Knob returns it to 0.

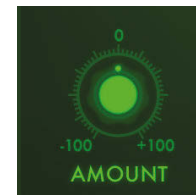


CONTROL

Control scales and adjusts the level of a **SOURCE** before using it to modulate a **DESTINATION**, similar to a volume control.

Touch the **CONTROL** menu to select a controller.

Adjust the **AMOUNT** knob to scale (positive) or invert (negative) the Control. A setting of "0" means no scaling or inversion will occur.



CONTROL AMOUNT

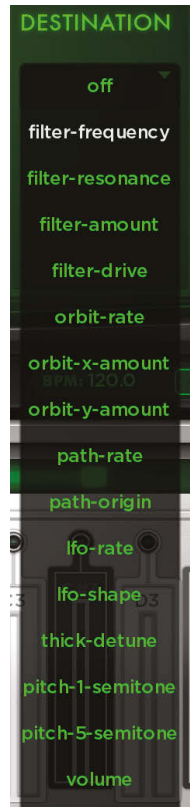
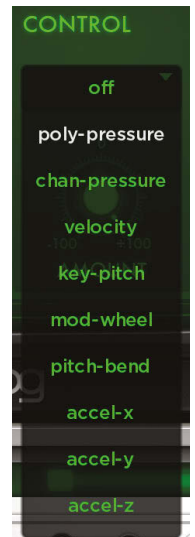
If the **SOURCE** is set to **OFF**, the selected **CONTROL** is scaled by the **CONTROL AMOUNT** knobs and routed to the **DESTINATION**.

If a **SOURCE** has been selected, the **SOURCE AMOUNT** sets the initial modulation amount, and the **CONTROL AMOUNT** scales the minimum to maximum modulation sent to a **DESTINATION**.

NOTE: If you simply want to send a Modulation Source to a Destination with no **Control**, select **Off** from the **CONTROL** menu.

DESTINATION

The **DESTINATION** menu allows you to select a modulation's final **DESTINATION**. Once selected, your **SOURCE** and **CONTROL** will dynamically effect and control the assigned **DESTINATION** parameter.



TIMBRES PAGE



CHOOSING A TIMBRE

Select the **TIMBRES** tab from the **MAIN MENU** bar.

The **TIMBRES** page contains two columns. The left column displays Timbres as they appear in the X/Y PAD. The right column displays all available Timbres, which are organized into Categories.

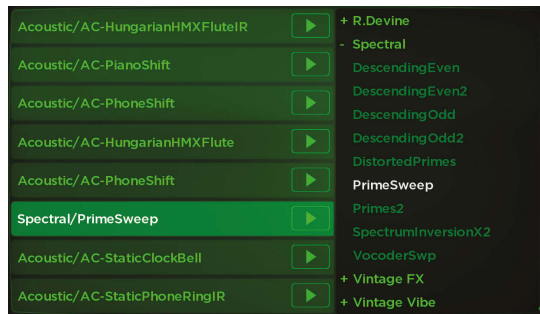
Press and hold the **PLAY** button to listen to any **TIMBRE** currently in use.

NOTE: Timbres evolve so be sure to press the button long enough to hear waveform in its entirety.

LOADING TIMBRES

Touch a **TIMBRE** on the left row, and then choose a **TIMBRE** from the list on the right to load it into the currently selected position.

Touch and hold any **TIMBRE** from the list on the right to preview it without loading.



MOVING TIMBRES

Press and drag any currently used **TIMBRE** up or down to move it to a desired location in the X/Y PAD.

SETUP PAGE

MIDI TAB



SELECTING A MIDI CHANNEL

To control Animoog from an external MIDI device, specify a MIDI input channel that corresponds to the MIDI output source. If **MIDI IN** is set to **OMNI** Animoog will receive all messages sent on any MIDI channel.

NOTE: An iPad appropriate MIDI connection device is required.

PITCH BEND

RANGE: Sets the Pitch Bend range to 2, 3, 4, 5, 7, or 12 semitones.

LOAD FROM PRESET: Allows Animoog to load new Pitch Bend ranges as defined within a preset.

SENDS - CH. PRESSURE, POLY PRESSURE AND VELOCITY

Touch to enable/disable the associated MIDI messages.

NOTE: Only available as part of the MIDI Expansion Pack.

REFRESH: Touch to refresh the list of connected MIDI devices.

PANIC!: Touch to reset a stuck MIDI note.

MAPPING MIDI CCs

To map a function, touch the desired parameter. (All controls outlined in red can be mapped.) The outline changes to green.

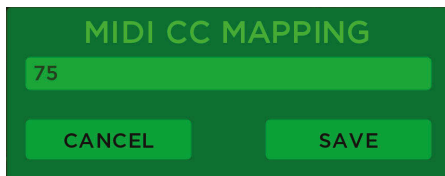
Adjust the desired control on your connected MIDI device. The CC is now mapped, and the assigned CC number displays on the specified Animoog control.

You can assign multiple CCs. When complete, be sure to turn off MAP CCs, save your preset, and save your CC Map.



MANUAL MAPPING

Tap a control twice to display the **MIDI CC MAPPING** box, type in a **VALUE**, then touch **SAVE**.

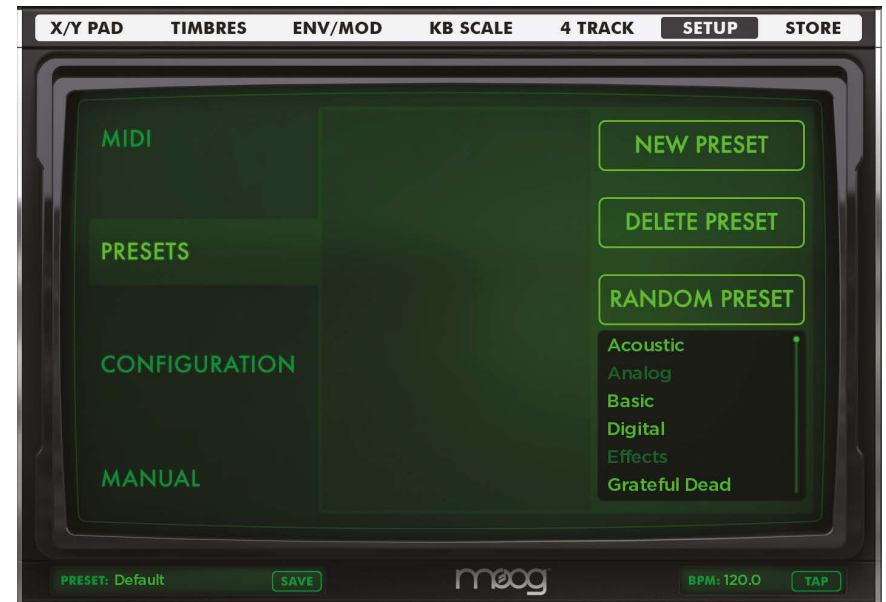


To erase or change, tap a control twice, delete the numbers or type in a new value, then touch **SAVE**.

SAVE/LOAD CC MAP: Press this button to save and recall any of your CC maps.

NOTE: The X/Y Origins, Module controls, Envelope ADSR, and LFO can all be MIDI mapped.

PRESETS TAB



NEW PRESET: Creates a new preset.

DELETE PRESET: Deletes the currently-selected preset.

RANDOM PRESET: Loads a preset based on a completely random set of parameters and Timbres.

CONFIGURATION TAB



BACKGROUND AUDIO: Toggles background audio on/off.

MOD STRIPS: Toggles the Pitch and Mod Strips displayed on the keyboard on/off.

OSCILLOSCOPE: Toggles the oscilloscope display on the X/Y Pad on/off.

RECORDER BEEP: Toggles the recorder metronome beeps on/off.

IMPORTING AND EXPORTING PRESETS

EXPORT PRESETS, TIMBRES AND 4 TRACK PROJECTS

Use a 30-PIN or LIGHTNING cable to connect your iPad to a computer with iTunes.

Click on your iPad under the **DEVICES** menu in iTunes.

Select the **APPS** tab at the top of the iTunes window.

Scroll down until you see **FILE SHARING**.

Select **ANIMOOG** from the **FILE SHARING** list.

You can now select and drag the folders to your computer from here.

TIMBRES are located inside the categories folder.

PRESETS are location inside the presets folder.

4 TRACK PROJECTS are located inside the projects folder.

IMPORT PRESETS, TIMBRES AND 4 TRACK PROJECTS

Retrieve the appropriate folder on your computer as described in the **EXPORT** section above. Do not rename it.

Leave the iPad connected to your computer.

Add the desired files into the folder that you dragged to your computer.

Click and drag the folder with new contents to where you exported it from in iTunes.

Completely restart Animoog on the iPad.

Note: Specifications subject to change without notice.

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