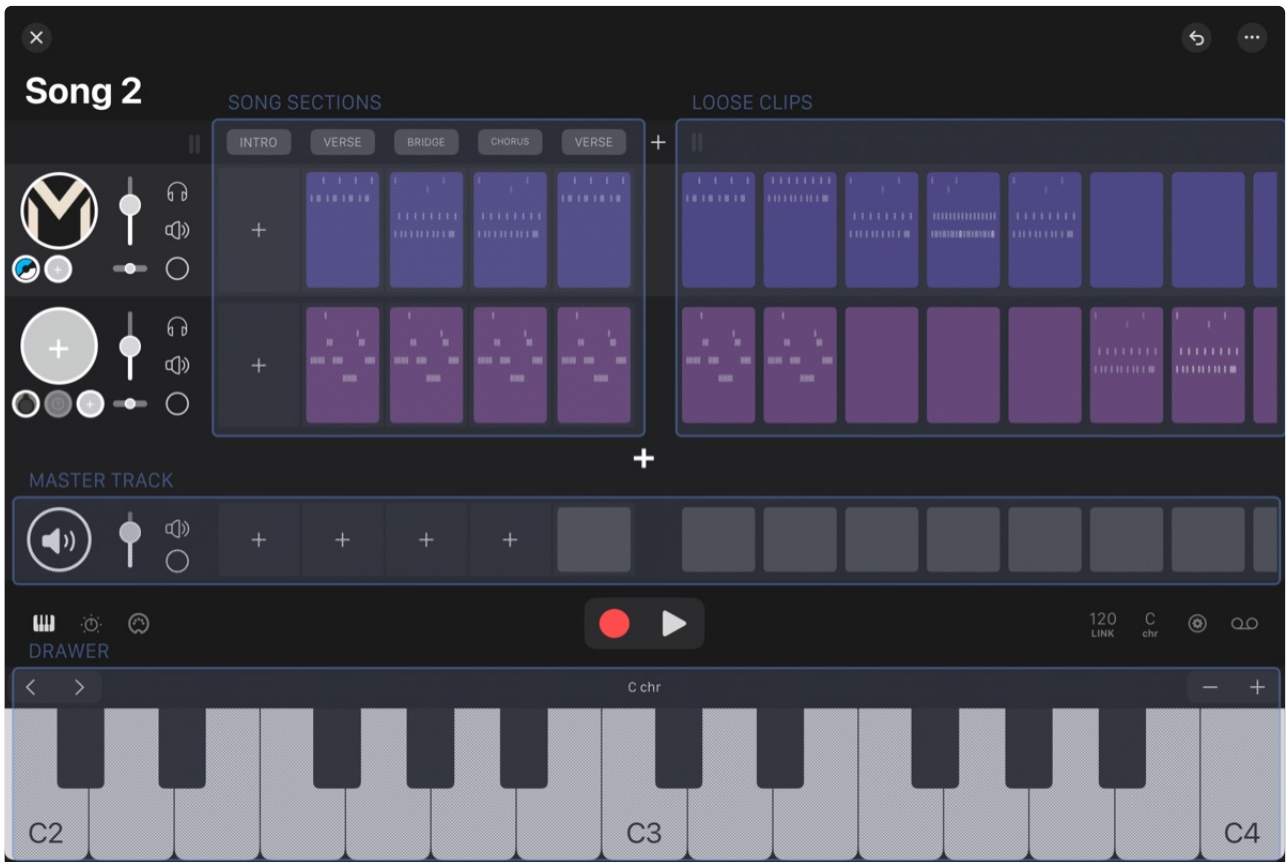


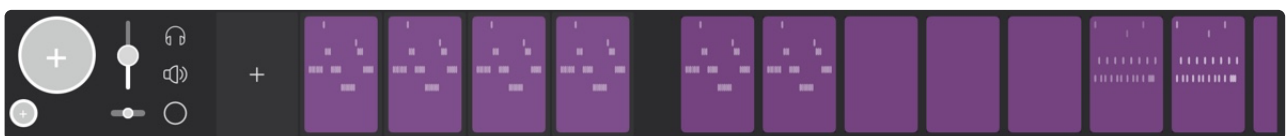
# SAND Reference guide

## Main Screen



## Tracks

Create a track by tapping the + button below the tracks.



Tap the + buttons in the circles to:

- add one instrument
- add effects (midi or audio)
- recall a track template

## Track controls

- volume:
  - drag up or down to set the track volume

- double tap to return to default volume (0dB)
- pan:
  - drag left or right to adjust the track's pan
  - double tap to return to default pan (center)
- solo
- mute
- arm:
  - arm a track to enable recording into clips.
  - the length of empty clips gets extended as notes are added
  - unless the length was set manually
  - non-empty clips will be overdubbed, i. e. the recorded notes are added into the clip
- full screen track controls
  - long press on volume or slider to open the track controls in full screen
  - tap on the track name to rename
  - tap on any empty space to dismiss

### **Track menu (long press on a track)**

- rename track
- duplicate track
- save as template, and reuse the template to create another track with the same plugins, color, parameters
- change track color
- recording options:
  - pre midi plugins: record midi as it comes from the midi input
  - post midi plugins: use this to record output from midi plugins.
- export
  - MIDI: generates midi files for the track clips
  - audio: renders all clips in the track and generates one audio wav file per clip
- delete track

### **Clip menu (long press on a clip)**

- edit: open clip editor
- sync with master
  - see "Master Track: Master Clips"
- transpose one octave up or down
- length: change clip length
- quantize: align notes to the grid
- legato: extend notes up to the following ones
- copy

- paste
- import MIDI:
  - depending on the file format, one or more clips and tracks will be created
  - alternatively a MIDI file can be dropped from external apps
- export
  - MIDI:
    - generates a single MIDI file for the clip
    - same operation can be done by dragging the clip to another app
  - audio:
    - generates a single audio wav file
- delete

## Song Mode



Arrange your clips in sections that will be launched sequentially. Tap on a section to launch all the clips in it.

Tap on the **+** button on top of the tracks to create a section.

Add clips to a section:

- copy and paste, or drag and drop other clips
- create an empty clip and record in it


Launch a section tapping on its name:




- all the clips in the section will start playing when it's time
- the section will loop the clips for the duration of its length

Long press on a section button to:

- rename
- change length
  - length is shown in beats
  - automatic length: section will be as long as its longest clip
- duplicate
- delete

Drag and drop a section to move it.

Export the whole song (either main track or separate tracks) via the  menu on the main screen

 →  Export →  Export Song

## **Compact Layout**

Tap the vertical handle on the left side to collapse the track header.

If the project has one or more sections, drag the vertical handle on the right side to make room for sections or clips.

Pinch vertically with two fingers to change tracks height

## Master Track



Process audio from the project tracks.

Add any audio effect plugin to the master track. It will be applied globally.

Menu accessible via long press:

- keep master track's height compact to save space on the main screen
- hide the master track completely
  - master track effects will be still applied
  - show master track again from the ☰ button on the top right of the screen

## Master Clips

Apply edits to multiple clips.

To set this up: long press on a clip in a section and choose "Sync with master"

Clips belonging to a section of a project track can sync editing with a clip belonging to a section of a master track.

The edits done in the "master" clip will be propagated to clips in 2 modes: monophonic and chords. Additionally an offset can be applied to the octave.

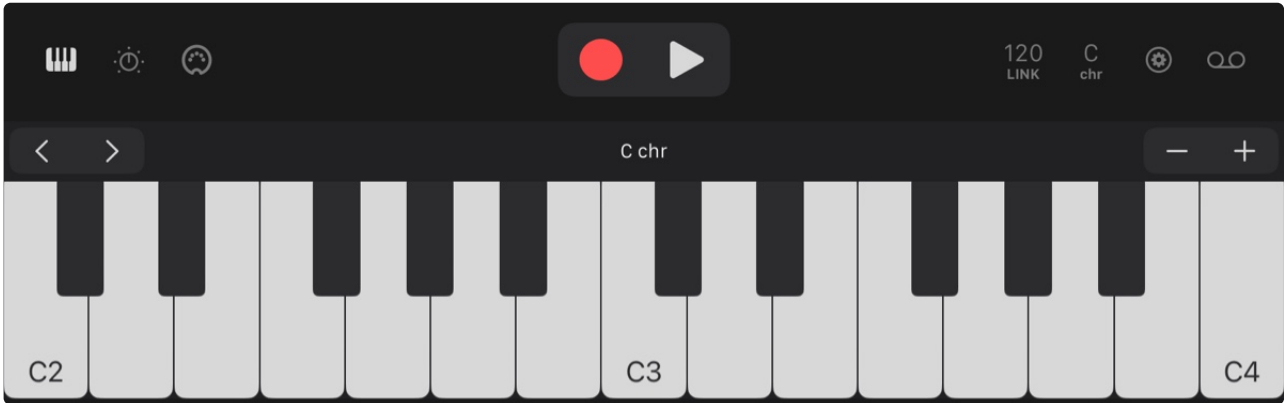
Adding a note in the master clip:

- in a clip set up with "monophonic" sync, a single note will be added (optionally applying the octave offset)
- in a clip set up with "chord", a chord in the project key and with the master clip inserted note as root note

Deleting a note in the master clip will delete those in the synced clips that are contained in the master clip time span.

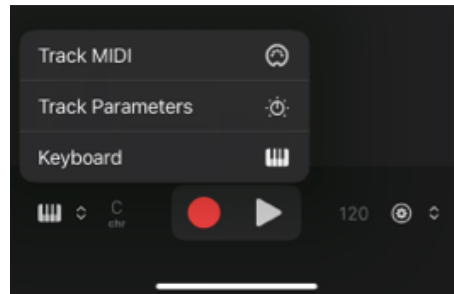
Editing the pitch or the length of a note in the master clip will propagate to the synced clips.

## Toolbar / Drawer



Open the bottom drawer by tapping on one of the buttons on the toolbar.

Close the drawer by dragging the toolbar down.



In narrower screen configurations (such as when using an iPad in multitasking mode or on an iPhone) some buttons could be collapsed. Press the button with the up and down arrow to select a section

### On-screen Keyboard

Add and remove keys with the - + buttons.

Move keyboard with the arrow buttons

- either by one octave or one tone. Can be changed in the settings

Key:

- use the project key
- or override it and set a key for the single track

Velocity is higher when pressing the lower part of a key, velocity sensitivity can be adjusted in the global settings.

### Track Plugin Parameters

Pick and control any parameter of any plugin in the current track.

Long press on a parameter to



- rename
- delete
- drag to reorder

## Track MIDI Settings

MIDI Input: select a device or another track to receive MIDI from

- selected track will receive MIDI when armed

MIDI Output: select a device to send MIDI to. Channel must also be specified

## Tempo

Set the tempo and time signature of the project

Ableton Link indicator is visible when a session is active. Enable or disable Ableton Link in the settings.

## Key

Choose project key

## ⊗ Recording Options

Quantize recording: apply selected quantization when recording notes via on-screen keyboard or MIDI keyboard

Start recording after:

- count-In: after pressing the record button, 4 beats will be counted and then recording starts
- first note: after pressing the record button, SAND waits and starts recording when a note is played (either on the on-screen keyboard or in a MIDI keyboard)

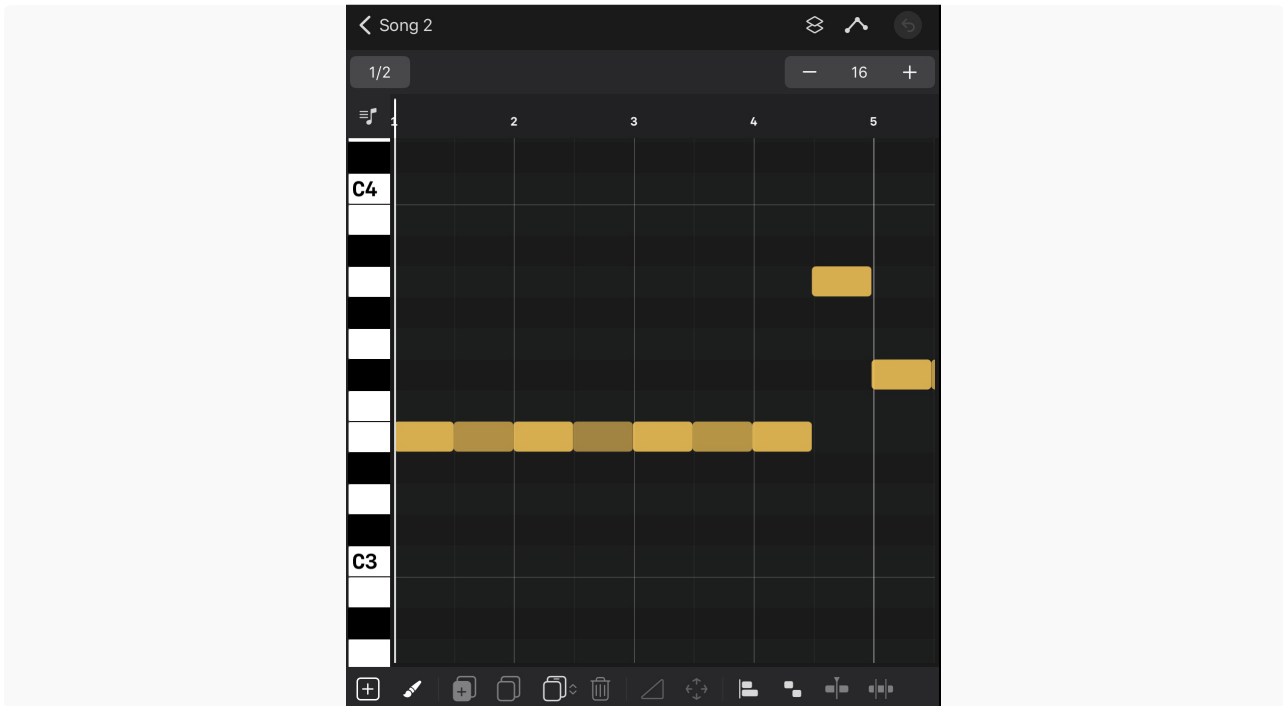
## 🎙️ Tape Recorder

Record to audio file(s).

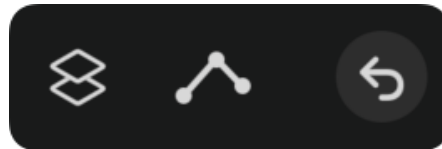
Tap the red record button and then start the song with the play button. The audio will be recorded onto audio files, one per track.

After stopping the recorder the audio file(s) can be exported.

## Clip Editor



### Top bar



### Ghost clip :

- pick another clip to be displayed together with the current clip
- "switch to ghost clip" will switch to the ghost clip, having the current clip as ghost clip

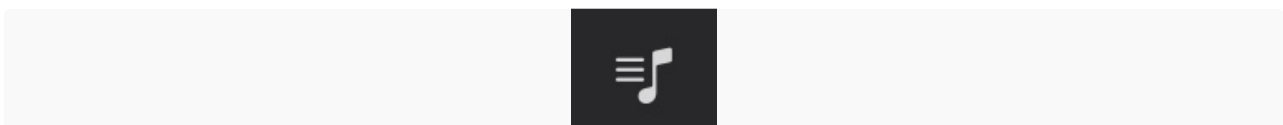
### Automation:

- toggle visibility of the clip automation area

### Undo / Redo:

- undo edits
- long press for Redo

### Grid Options



### Audition notes

- enable item to hear the selected notes

- if transport is stopped, notes will play in a sequence at the current tempo, this is useful to preview a melody without having to play the whole clip
- the selected notes will play in the same sequence as they would be when playing the clip
  - tap on the keyboard on the left to hear a note

### Scale mode

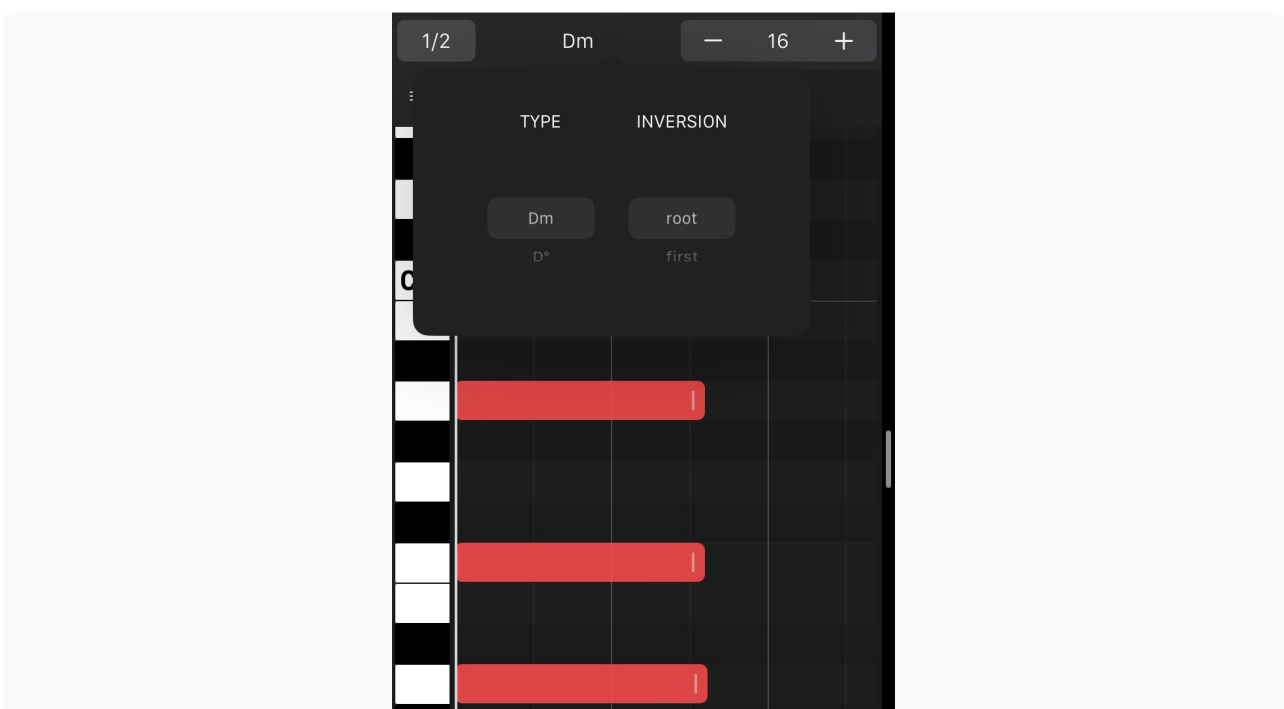
- none:
  - notes can be moved freely on any row
- highlight:
  - notes in the project or track key will be colored
  - moving notes will keep them in the project or track key
- show only notes in key:
  - only rows which are in key are shown
  - moving notes will keep them in the project or track key

### Grid background:

- optionally use a light background

### Notes Editor

#### Top bar:



- grid size (used to quantize, split to grid and to align notes when moving)
- chord selector
  - select one or more notes
  - tap on the note / chord name at the center

- select a type and an inversion
- clip length

### Select notes:

- tap on a single note
- long press and drag to select multiple notes
- tap on the keyboard on the left to select all the notes of a pitch
- double tap to select all notes
- double tap on the ruler to select all the notes that intersect the playhead

### Move selected notes

- by dragging them
- or with the arrow buttons. Toggle visibility of the arrow buttons by tapping the four arrows button

Change notes length by dragging the handle on the right of the note.

### Toolbar:



From the left:

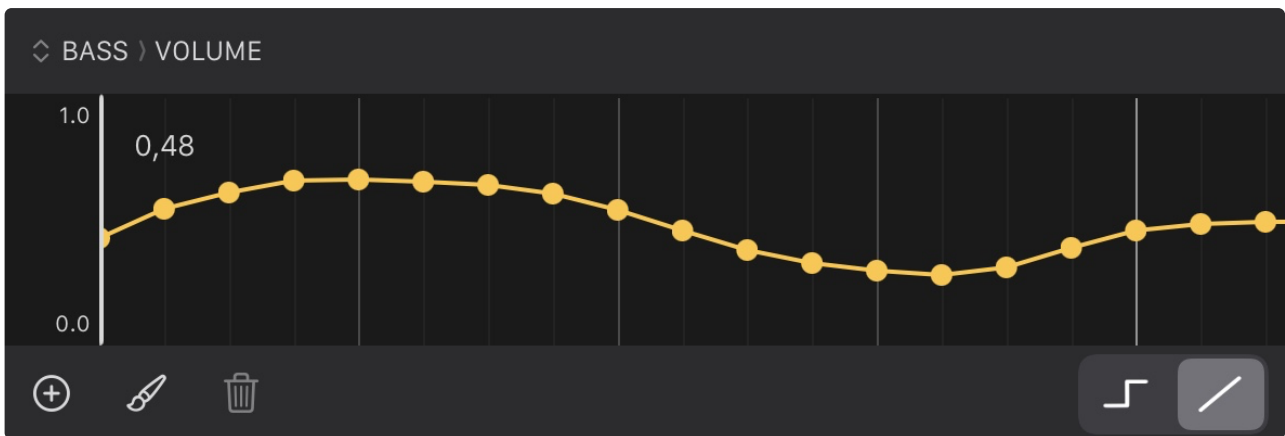
1. plus: add notes
2. brush: add several notes on the same pitch, length is specified by grid size
3. duplicate selected notes
4. copy selected notes
5. paste selected notes at the position of the playhead indicator
  - move the playhead indicator by tapping or dragging the beat numbers bar
  - paste notes velocity:
    - long press on the clip button to apply the velocity of the copied notes
    - the notes velocity will be applied repeatedly. For example if you copy the velocity of two notes (let's say 100 and 80), select another 5 notes, pasting velocity will result in the 5 notes having respectively 100, 80, 100, 80, 100 velocity
6. trash can: delete selected notes
7. change notes velocity
8. quantize notes
9. legato: extend notes up to the following ones
10. split note at playhead
  - select one or more notes
  - move the playhead where the notes should be split
  - tap the split button
11. split notes to grid

- select one or more notes
- choose a grid value
- tap the split notes button
- notes will be split at any intersection with the grid

### Step Editor (via MIDI controller)

- enter via "Enter" command when inside the clip editor
- navigate to a step via "left" and "right" commands
- toggle the step by hitting a key on the MIDI keyboard

## Automation



Pick a parameter to be automated. Available parameters:

- volume or pan of a track
- MIDI pitch bend, program change or controllers
- any track plugin parameter

Adding points will stick to the grid on the top of the clip editor, unless it's disabled ("off" value).

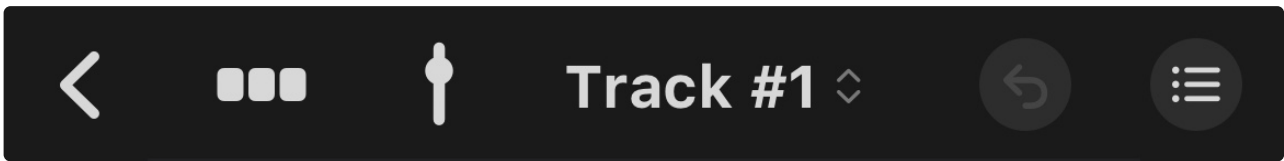
Select points by long press and dragging (like for notes) or tap on single points.

### Toolbar

- plus: add a single point
- brush: tap and move to add multiple points
- trash: delete selected points
- curve switch: the selector determines if the values are ramped or not. For example parameters with on / off values, or "Program change" shouldn't be normally ramped.

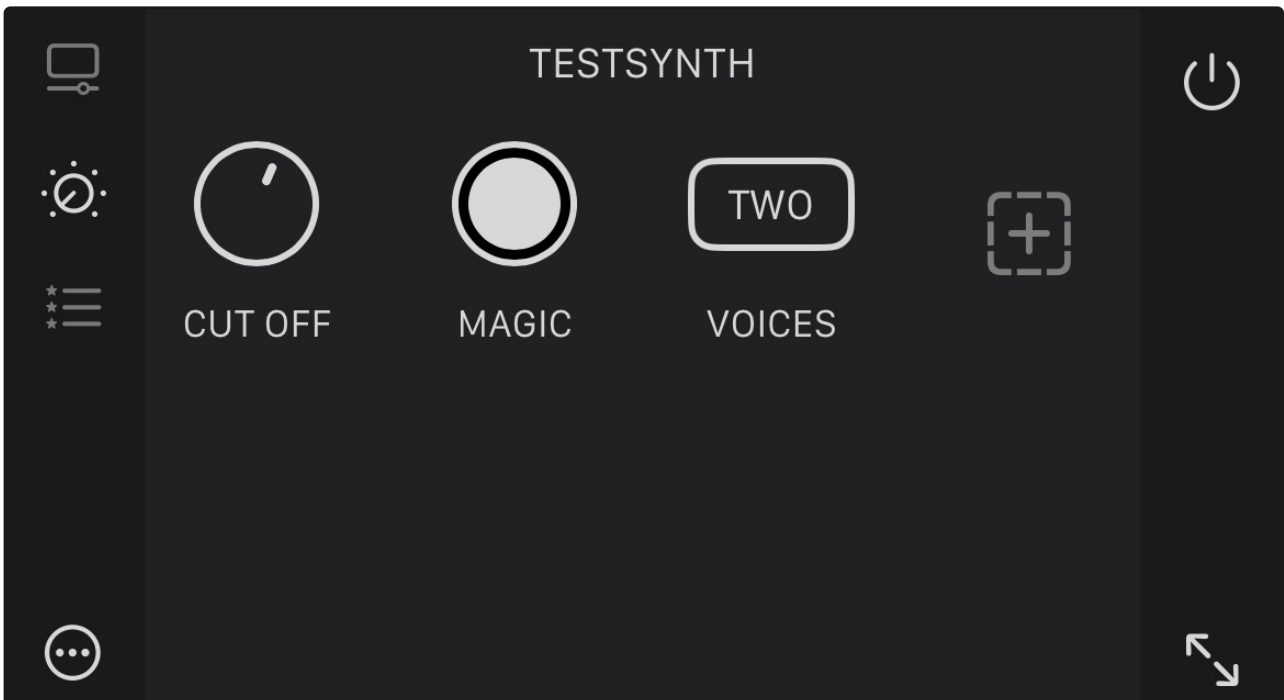
## Track Devices

Access by tapping on a plugin circle in the main screen



1. Back to main screen
2. Toggle mini-clips view
3. Open track controls
4. Track selector: quickly switch to another track
5. Undo / Redo
6. Enter edit mode to change order or delete plugins

## Plugin View



show plugin interface



show parameters



preset list



show plugin interface fullscreen



menu

- default state for plugin: save the current state as default. Every new instance of the plugin will start with that state and parameters
- replace plugin with another
- delete plugin

# Settings

## MIDI Controllers

Connect and map MIDI devices to control SAND.

- create new mapping by pressing the + button on the top right
- delete a mapping by swiping it to the left
- Map actions to MIDI controllers
  - Transport
    - control transport by mapping play, stop and record actions
  - Mixer
    - map tracks volume, pan, arm, mute, solo
  - Track
    - map actions to select previous / next track  
parameters of the selected track will receive changes mapped to "Change Param X"  
map actions to navigate previous / next effect in a track  
parameters of the selected effect will receive changes mapped to "Change Param X"  
toggle playing state of a clip
  - Editing
    - Shift keys
      - map up to 4 buttons on the MIDI controller to behave as shift keys: any other button on the MIDI controller can then be mapped to multiple commands, depending on the shift button(s) being pressed or not
    - Enter:
      - when a track is selected, shows the plugins screen
      - when a clip is selected, enters the clip editor
      - inside the clip editor: enables the step editor
      - adds a parameter in the parameters view (track or plugin)
      - selects an item in a list
    - Escape:
      - exit the step editor
      - dismiss the clip editor
      - dismiss plugin and parameter lists
    - Up, Down:
      - select previous / next item in plugin, parameter and preset lists
    - Left, Right:
      - go to previous / next beat in the step editor
      - when a plugin is focused: switch plugin tab (plugin's UI, parameters, presets)



## Bluetooth:

connect to MIDI bluetooth devices, must be done prior to being able to use them as inputs or controllers

## Ableton Link

- sync
  - Ableton Link: enable or disable

## Export Project

Export MIDI: export clips as MIDI files, one per clip.

Export Audio: export clips as Audio files (.wav), one per clip

Ableton Live Set Export: export whole project as Live Set, can be opened in Ableton Live on Mac or Windows. Each track in SAND will be included twice in the Ableton Set: one with MIDI data, the other with rendered audio.

## App Preferences

Show or hide master track

Audio

- preferred sample rate (iOS will actually decide which sample rate to use, based on audio interface and other apps)
- buffer size
- output device: use this to select a bluetooth device
- keep active in background:
  - off: SAND will stop audio and MIDI processing when going in background if transport is stopped.
  - on: SAND will not stop audio and MIDI processing when going in background. This means SAND will continue using CPU and battery also when not actively in use. Remember to kill the app when necessary.

Interface:

- auto arm track on selection:
  - on: selecting a track will also arm it
- project name:
  - choose your preferred way assign a name when creating a project:
  - random: two random words
  - template: use the template specified below to name a project.
  - if a file with the same name already exists, an incremental number will be appended
  - Edit on project creation:
    - this gives the opportunity to immediately edit the chosen name when creating a project.

On Screen Keyboard:

- settings for adjusting the on-screen keyboard, applied globally

App Icon: pick your favorite color