

# BENTO RELEASE NOTES

## BUILD 1.3 – OFFICIAL RELEASE

### NEW FEATURES IN 1.3

- Broke apart the Factory Content Download files to reduce risk of losing projects.

### FIXES IN 1.3

- Occasional spontaneous reboots: there was an intermittent crashing bug. We have found the cause and corrected it.
- Granular: If you change octaves while playing a note, it no longer stays stuck on
- Multisample Recording: If you push stop while recording, it will send a MIDI Stop to the device that you are recording to avoid stuck notes.

### KNOWN ISSUES IN 1.3

- Projects: Sometimes, while loading a project with a lot of sample files, it will stay on the Project screen. To get around this, push Inst, and then you should be able to use the project as usual.
- If you run into issues when saving user patches, cancel the save process, push the Tracks button and start over.
- When importing lemondrop and fireball patches, the user patches do not appear in the appropriate Instrument lists until after you reboot.
- The Count In does not play when recording audio.
- Renaming a WAV file allows you to create duplicate files with the same name.
- If you save a Patch while a sequence is playing, the sequence playback will be recorded into the Preview file.
- Track settings are lost when you use the Change Patch option.
- Bento always thinks you need to save the Project, even if you haven't made any changes.
- Patch import: after you import a preset to create a new patch, you may hear a single note triggered. This happens because the patch has a long reverb tail and you are still hearing the sound triggered to create the preview file. We have increased the wait time after generating the preview sound, but you may still hear sound if the reverb tail is very long.
- Slicer tracks: you can only trigger the first 56 slices using the bento pads. You can trigger 92 slicers from an external controller.
- Changing a patch to a one-shot from other track types messes up the sequences.
- Changing pad selection while recording one-shots or loops can result in unexpected results.
- The Seq screen does a little dip when you turn Step Mode on or off.
- Enabling Song Loop during playback does not work. You must enable it while the transports are stopped.
- If Sleep mode is enabled, Bento will sleep even if you have loops and sequences playing.
- Changes made to a Scene while playing do not affect playback until you push Stop and Play again.
- If you want to record into a sequence, you must cue it up to play first. Otherwise, it will not record.

## HOW TO USE THE NEW FACTORY CONTENT DOWNLOADS

The updated factory content pack contains files that support the Patch Preview feature and the Wavetable track type. Here is how to install the content update:

1. **First, back up your microSD card.**
2. Update the Patch Files
  - a. Download and unzip the Patch Files from here:  
<https://download.1010music.com/BentoContentPatchesOnly13RC2.zip>
  - b. Copy the contents of the Patches folder in the zip file to the Patches folder on the bento microSD card. Allow all files to be replaced. This will not impact your User Patches. The factory Patch files contain the following updates:
    - i. add new Wavetable patches,
    - ii. fix issues with starting octave in some factory patches, and
    - iii. add the files needed to support Patch Previewing for factory patches.
3. Update the Project Files (Optional):
  - a. Download and unzip the Project Files from here:  
<https://1010music.com/wp-content/uploads/2025/11/BentoContentProjectsOnly13.zip>
  - b. Copy the folders in the zip to replace the folders with the same name within the Projects Folder on the microSD card. These files will fix issues with starting octave in some factory projects and add a new project that demonstrates the Wavetable track type and song mode.

## BUILD 1.2.36 PUBLIC BETA

### NEW FEATURES IN 1.2.36

#### File Management



- Manage files directly from your computer: In SD Reader Mode, your bento becomes a microSD card reader. Use a USB cable to move files between your bento and your computer.
- Patch Import: You can now place the WAV files in the same directory as the .nnl or .nnf file when importing lemondrop and fireball patches. You can still create the relative file path as specified in the .nnf or .nnl file if preferred.
- Project: Save As is now available in the footer of the Project Management screen. It was previously in the menu on this screen.

### HOW TO USE THE NEW FEATURES IN 1.2.36

#### SD Reader Mode

In SD Reader Mode, you can move files between your bento's microSD card and your supported computer or iOS device using a USB connection.

1. Connect your bento to your computer:
  - a. If bento can run on battery: Connect a USB cable between the Device Port on bento and your computer. Note that bento will charge from the connected device when connected without the USB C Power/Data Splitter.

- b. If bento needs power: Find the USB C Power/Data Splitter that came with your bento. Connect the Splitter to the Device Port on your bento. Connect the power side (  ) to a USB cable connected to a power source. Connect the USB Side (  ) to a USB cable connected to your Windows PC or Mac.
2. Save any changes to your current project. You cannot use your bento to make music while you are managing the files on the disk. When you enter SD Reader Mode, all project files will be closed.
3. Push PROJ to open the Project Browser.
4. Tap menu, then SD Reader Mode. If you have any unsaved changes in your project, bento will give you the option to Save, Don't Save, or Cancel entering SD Mode. Choose Don't Save or Save from the pop-up window to proceed to SD Reader Mode.
5. On bento, you will see a window titled "bento microSD File Management Mode" with instructions about how to protect your files and exit this mode safely. On your computer or iOS device, you should now see a new microSD drive in your file browser with the contents of your microSD card.
6. Use your file browser to move files between your bento and your computer. You can also delete unneeded files. We recommend that you do not delete Patch files, as this will result in missing files that are still listed in the Patch index file. The files will still appear in the Patch browser, but you won't be able to open them because they aren't there.
7. When you are done working with the files, close any files that are in use, wait for any file movements to complete, then Eject the bento microSD drive:
  - a. On a Windows PC: In File Explorer, right click the drive label and click on Eject.
  - b. On macOS device: In Finder, right click the drive label and click on Eject, or click on the triangular eject icon to the right of the drive name.
  - c. On iPad or iPhone, close the file browser or any other apps that are connected to the bento microSD card.
8. To resume using bento, on your bento, push the < button to exit SD Reader Mode. Bento will reboot and open the last used project. To install new firmware, use the power button to turn off bento, then proceed to install new firmware as usual.
9. Disconnect bento from the external device.

### Hardware Compatibility of SD Reader Mode

We have tested the following OS versions with solid results:

- Windows 10 and 11
- MacOS Big Sur (11.7), Tahoe (26.1) and Sequoia (15.6.1),

We have tested with the following OS versions and they work with specific cabling configurations:

- MacOS Catalina (10.15.7) – generally worked with USB C to USB C connection. Other cable options were less reliable.
- iPhone 14 Pro iOS 26.0.1(lightning). Works with USB C to USB A to Camera Connection Kit (CCK) adapter.
  - Does not work with the USB C power/data splitter adapter. This means that bento will draw power and charge the battery from the iPad.
- iPad Pro iOS 18.6.2 and 18.5(USB-C)
  - Does not work with the USB C power/data splitter adapter. This means that bento will draw power and charge the battery from the iPad.
  - Works with USB C to USB C connection.

- Works with USB C to USB A to Camera Connection Kit (CCK) adapter if you connect cables before entering SD Reader Mode.

#### FIXES IN 1.2.36

- Wavetable Tracks
  - Track output assignment is now saved properly
  - Cleaned up extra OK button on error message when loading a Stereo WAV file into a Wavetable slot.
- Mixer: Touching Main in the mixer no longer mutes Tracks 1
- Granular dashboard: Fixed a display issue with the buttons in the footer of the Grain screens after loading a Grain.
- Modulation: After cutting a track, the modulation settings are now cleared. Previously, when you created a new track, it inherited the modulation settings that were previously configured for that track in some cases.
- Saw and Rev Saw were reversed.

#### KNOWN ISSUES IN 1.2.36

- Occasional spontaneous reboots. We are looking into this as our top priority.
- The Count In does not play when recording audio.
- Renaming a WAV file allows you to create duplicate files with the same name.
- If you save a Patch while a sequence is playing, the sequence playback will be recorded into the Preview file.
- Track settings are lost when you use the Change Patch option.
- Bento always thinks you need to save the Project, even if you haven't made any changes.
- Patch import: after you import a preset to create a new patch, you may hear a single note triggered. This happens because the patch has a long reverb tail and you are still hearing the sound triggered to create the preview file. We have increased the wait time after generating the preview sound, but you may still hear sound if the reverb tail is very long.
- Slicer tracks: you can only trigger the first 56 slices using the bento pads. You can trigger 92 slicers from an external controller.
- Changing a patch to a one-shot from other track types messes up the sequences.
- Changing pad selection while recording one-shots or loops can result in unexpected results.
- The Seq screen does a little dip when you turn Step Mode on or off.
- Enabling Song Loop during playback does not work. You must enable it while the transports are stopped.
- If Sleep mode is enabled, Bento will sleep even if you have loops and sequences playing.
- Changes made to a Scene while playing do not affect playback until you push Stop and Play again.
- If you want to record into a sequence, you must cue it up to play first. Otherwise, it will not record.

#### BUILD 1.2.31 PUBLIC BETA

#### NEW FEATURES IN 1.2.31

##### Patches

- **Wavetable Tracks.** Use your own mono wavetables to create new Wavetable tracks. Download the updated factory content pack to get 65 Wavetable patches.
- **Patch Previewing.** Download the new factory content pack to get the preview files. Enable the Preview option in the footer of the Patch browser. When you save a user patch, a preview file will be generated for that patch.
- **Import lemondrop and fireball presets.** See [How to Use the New Features in 1.2.31](#) below for instructions.
- **Patch Type filter:** On the patch browser screen, use the Type knob to filter the results to a specific patch type.

## MIDI

- **One-Shots send MIDI Out:** One-shot tracks send the appropriate note number out over MIDI when triggered or played by sequence. Lower left pad outputs C1 and notes go up from there.

## UPDATES IN 1.2.31

### Content

- **New Updated Factory Content Pack:** Download here: <https://download.1010music.com/BentoContentBundle13RC2.zip>. To apply the content pack:
  1. **First, back up your microSD card.**
  2. Copy the contents of the Patches folder in the zip file to the Patches folder on the bento microSD card. Allow all files to be replaced. This will not impact your User Patches. The factory Patch files will be updated to:
    - a. add new Wavetable patches,
    - b. fix issues with starting octave in some factory patches, and
    - c. add the files needed to support Patch Previewing for factory patches.
  3. **Optional:** Copy the folders within the Projects Folder in the zip to replace the folders within the Projects Folder on the microSD card. Do not copy the whole Projects folder because this could impact projects you have created. These files will fix issues with starting octave in some factory projects.

### Miscellaneous

- Sequences: **Metronome level** now persists across project changes.
- **Project New Button:** Moved the New button to the footer between Save and Load.
- **Modulation:** Cleaned up some names of parameters on the modulation screen
- **Tracks:** Added Rename Track and Change Patch to the Tracks menu
- Bug fixes for working with loops on the launch screen
- Metronome now works when recording with Metro parameter set to Rec.

## MIDI

- Fixed an issue where sometimes it would not send MIDI Start.
- Fixed CC issues:
  - **MIDI CC recalibration:** The MIDI CCs for parameters that allow negative and positive values have been recalibrated so that a value of 64 will always be zero.

- One-shot and Loop Tracks: fixed problems with cc mappings for pitch, per pad FX Sends, per pad resonance and per pad filters.
- Level across all track types: Previously, the Level CC Worked but values were not reflected on the screen.
- Decay on Slicer: fixed it.
- Pitch on Multi Samples: fixed it
- WT1 Level, WT1 Pitch, WT1 Position, WT2 Level, WT2 Pitch and WT2 Position have been fixed.
- Sustain and MIDI Mod Wheel now work, and External tracks pass through Sustain.

## HOW TO USE THE NEW FEATURES IN 1.2.31

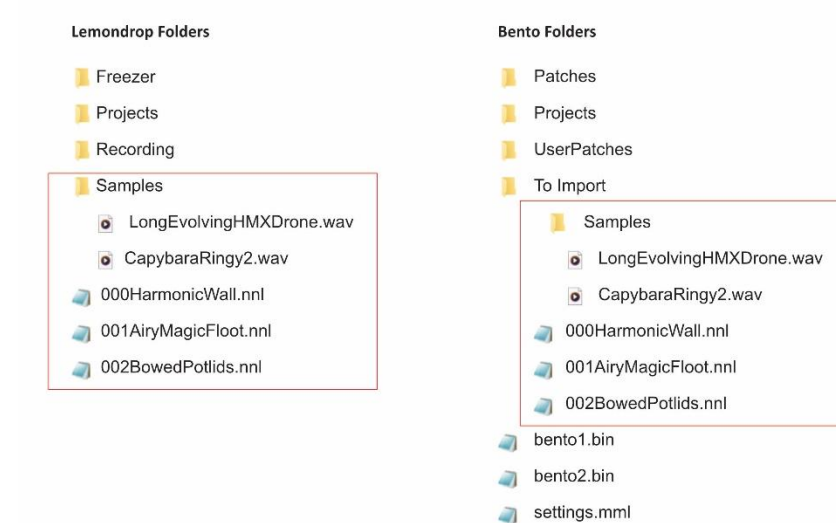
### Wavetable Patches

- Add up to two Wavetable patches to a project. Download the new factory content pack to get 65 Wavetable patches.
- The dashboard for Wavetable tracks works in a manner similar to the Granular tracks dashboard. Check the [fireball user manual](#) to learn about the wavetable parameters.
- Bento is designed to use mono wavetables with 2048 samples per cycle with between 1 and 256 cycles. You can use 16-bit, 24-bit or 32-bit files. Serum is a good tool for creating wavetable files. You can learn more about how to create your own wavetables in [this video](#).
- Create your own wavetable tracks and patches with wavetables you have placed on your microSD card.
  - Open the patch browser for an empty track and select New->Wavetable
  - Add one or more Wavetables by double-tapping the WT1 and WT2 graph slots. Bento uses mono wavetables. If a stereo wavetable is selected, only the left channel will be used.
  - Select a Position number for each Wavetable graph.
  - Configure an oscillator if desired.
  - Configure Envelope, Filter and LFO settings as you would for a granular track. Create a Modulation Sequence if desired.
  - On the dashboard, tap Menu->Modulation to configure modulation settings for the track.

### Import nanobox | lemondrop and nanobox | fireball Presets into bento patches

- Copy lemondrop .NNL files and fireball .NNF files onto your bento microSD card along with their related WAV files to prepare to import them.
- The patch importer uses relative pathing to look for the WAV files to import. Where to put the files:
  - Place the .NNL or .NNF file from your lemondrop or fireball microSD card into a new folder on the bento card. Place the needed sample files in subdirectories recreating the file path from the lemondrop or fireball card under the folder that contains the .nnf and .nnl files.

- If you want to make it easy to clean up the files when you are done, put the .nnl and .nnf files in a new temporary folder. Here's an example:
  - The lemondrop card has the WAV files in a \Samples folder at the root of the card. All .nnl and .nnf files are always in the root folder of the microSD card.
  - On the bento card, you put the .nnl or .nnf files in a folder named To Import.
  - On the bento card, you need to put the WAV files in the folder \To Import\Samples because the patch importer is looking for the WAV files in a relative path under \To Import. The diagram below shows what this looks like.



- If you want a less complicated way to do it, put the files in the exact same folder structure on the bento card as they were on the lemondrop card. That means the .nnl and .nnf files are in the root folder of the bento microSD card, and the WAV files are in a directory structure that matches where they were on the lemondrop or fireball card. In the example shown above, that would mean putting the .WAV files in the \Samples folder at the root of the card. Keep in mind, that if you used your own samples, they might be in a different folder and you need to recreate that folder on the bento card.
- How to Import:
  - Open a new project
  - Double-tap an empty track to open the patch browser
  - Tap **Menu->Import** in the lower right corner.
  - Navigate to the preset file you want to import and tap **Load**.
  - Tap to select the Instrument Tags you want to apply to the patch
  - Tap **Save Patch**.
  - The patch is created with the same name as the preset and is loaded into the track.
  - You can now delete the WAV files and preset files used from lemondrop and fireball. The needed files have been copied into the \UserPatches folder for the new patch.
  - Note: You must have an available granular or wavetable slot to import the corresponding preset.

## MIDI Out for One-shots

- One-shot tracks can now export MIDI notes for each pad triggered.
  - Select a One-Shot track and tap Menu->Config Track to open the Track Configuration screen.
  - Select a MIDI Out Port using the MIDIOutPrt parameter.
  - Select a MIDI Channel using the MIDI OutCh parameter.
  - Connect a MIDI Cable between the selected MIDI Out Port and another MIDI device.
  - Play the pads for the track or trigger a sequence for the track and bento will send a MIDI Note for each pad trigger.
  - The lower left pad will send the MIDI note for C1, and the note mapping advances from there in half steps. See the user manual for details.

## KNOWN ISSUES IN 1.2.31

- Patch import: after you import a preset to create a new patch, you can hear a single note triggered.
- Slicer tracks: you can only trigger the first 56 slices using the bento pads. You can trigger 92 slicers from an external controller.
- Changing a patch to a one-shot from other track types messes up the sequences.
- Changing pad selection while recording one-shots or loops can result in unexpected results.
- The Seq screen does a little dip when you turn Step Mode on or off.
- Enabling Song Loop during playback does not work. You must enable it while the transports are stopped.
- If Sleep mode is enabled, Bento will sleep even if you have loops and sequences playing.
- Changes made to a Scene while playing do not affect playback until you push Stop and Play again.
- If you want to record into a sequence, you must cue it up to play first. Otherwise, it will not record.

## BUILD 1.2.2 OFFICIAL RELEASE

### WHAT'S UPDATED IN 1.2.2

#### Tracks

- Displays "Loading" in the footer while a project or a patch is loading. It also displays a countdown of the number of WAV files remaining to load. For best results, wait until the project or patch finishes loading before you try to play the tracks or launch sequences.
- The option to create a new project is now in the footer of the Project screen for quicker access.
- The Patch Browser now shows user patches before factory patches. You will see user patches sorted by patch type, then factory patches sorted by patch type.

#### One-shots

- Launch mode of Gate now works properly. Hold a pad to play the one-shot until you release the pad. This also works with MIDI notes.

#### MIDI

- Use CC 6 for mute. A value of 0 will disable mute. Any other value will enable mute for that track.
- External Tracks do not pass through MIDI CCs



## Sequences and Scenes

- Bug fixes to the Launch Screen related to cueing and song mode.

## Recording

- Sequences and Loops are blocked from playing while recording Multisample sets.
- For other recording options, sequences and loops will play so that you can resample them or play along with them. If you don't want them to play, remove them from the cue. You can do this quickly by holding Stop for two seconds.

## General

- Cleaned up knob labels and placement for consistency.

## NOTEWORTHY KNOWN ISSUES IN 1.2.2

### Slicers:

- Slicers only play the first 80 slices in a file.
- When you add a new slice, it doesn't light up an additional pad.

### One-Shots

- One-shot envelopes do not make proper use of Decay and Sustain options.
- Changing a patch to a one-shot from other track types messes up the sequences.
- One-shot tracks always send note 60 for all pads to the MIDI output channel.

## Recording

- Changing pad selection while recording one-shots or loops can result in unexpected results.

## Sequences and Scenes

- The Launch screen does not show cued loops.
- The Seq screen does a little dip when you turn Step Mode on or off.
- Enabling Song Loop during playback does not work. You must enable it while the transports are stopped.
- Bento will sleep even if you have loops and sequences playing.
- Changes made to a Scene while playing do not affect playback until you push Stop and Play again.
- If you want to record into a sequence, you must cue it up to play first. Otherwise, it will not record.

## General:

- LFO Beat Sync option does not use the proper options for LFO Rate.

## BUILD 1.1.32

### WHAT'S NEW IN 1.1.32

- MIDI

- Support for MIDI CC control of bento parameters.
- Recording
  - The Multisample Recording Wizard makes it easy to recreate your favorite synth as a Multisample set in bento.
  - Record a WAV file for a Slicer from the WAV Browser screen.
  - Record a WAV file for a Granular Grain from the WAV Browser screen.
  - Record a WAV file for a One-shot pad, the same way you do for Loops.
- WAV Editor
  - Destructively Trim off leading and trailing parts of WAV files.
  - Normalize WAV files.
  - From the Waveform screen, tap the menu, then select Edi WAV. Tap Save when done to commit the changes to the file.
- Patch saving – from the Tracks screen, select a track, tap the menu, then tap SAVE patch. All patches are saved in the User Patches folder, preserving the factory patches.

#### WHAT'S UPDATED IN 1.1.32

- UI Improvements
  - New horizontal layout for lists of parameters makes it easier to see which parameters are assigned to the knobs. The white frame shows you which row is currently assigned to the knobs. Tap a row to change the assignment.
  - More consistent assignment of knobs across track types makes it easier to develop muscle memory for frequently used features.
  - Track level FX Sends are now all managed on the Mixer screen. Loops and One-shots still have pad level FX Sends on the dashboard.
- Granular
  - Polyphony is now controlled on the dashboard screen. Open the Granular dashboard and tap the Osc + Poly Graph to find the Poly Mode parameter. All track types now control Poly Mode on the dashboard instead of on the Track Config screen.
- Slicer Tracks
  - Pad lights only light up for pads that have slices assigned to them.
- Project: Now remembers per track octave settings.

#### NOTEWORTHY KNOWN ISSUES IN 1.1.32

- Song & Scenes
  - Snap scene does not display the correct list of sequences and loops on the Song Screen when you paste the scene.
  - Changes made to a Scene while playing do not affect playback until you push Stop and Play again.
  - You will get unexpected results if you turn Song Mode on or off while the transports are running.
- Sequences
  - If you want to record into a sequence, you must cue it up to play first. Otherwise, it will not record.
- Loop Tracks
  - Recording via Threshold misses the very start of the file.
- Recording

- Sequences will play while recording audio. We suggest you make sure there are no cued sequences before you start recording audio.
- MIDI
  - The following MIDI mappings for Granular are not working:
    - cc 9 - Env 2 decay
    - cc 49 - Osc Level
    - CC 50 - Osc Pitch
  - One-shot tracks always send note 60 for all pads to the MIDI output channel.
  - External Tracks do not pass through MIDI CCs

## HOW TO USE THE NEW & UPDATED FEATURES IN 1.1.32

### USE MIDI CCS TO CONTROL BENTO PARAMETERS

Bento can receive MIDI CC signals to control parameters at the track level and the pad level. Where possible, the same CC number is assigned to the same parameter across all track types. You can see the hard coded list of CC mappings here: <https://1010music.com/wp-content/uploads/2025/08/bento-MIDI-CC-mapping.pdf>. Each track will respond to the CCs received on the MIDI In Channel (MIDI In Ch) assigned on the Track Config screen.

### ASSIGN A MIDI CHANNEL TO A TRACK:

1. Push TRACKS
2. Tap to select the track
3. Push the Right Arrow button to open the Track Config screen
4. Turn the knob assigned to the MIDI In Ch parameter to select a channel or choose None to ignore all incoming MIDI CCs and Note events.

### RECORD A MULTISAMPLE SET

Bento can automate the process of sampling an external MIDI controlled instrument to create a new Multisample patch.

1. Connect the audio output of your external device to one of bento's Audio In ports.
2. Connect one of the bento TRS MIDI Out ports to the MIDI In port of your external device. You may need to use the included MIDI adapter to connect via MIDI 5 Pin DIN.
3. On bento, double-tap an empty track on the TRACKS screen. You will see the Patch Browser screen.
4. At the bottom of the screen, tap New, then tap Multisample in the pop-up.
5. On the WAV Browser screen, tap the Record button at the bottom of the screen, next to the Preview button.
6. Use the on-screen keyboard to enter a name for the multisample set. This will be used as a prefix for the individual WAV files that are captured.
7. Use the knobs to choose options for the two rows of settings. In the second row of parameters, the range of notes to be recorded, how many steps between recorded notes, and the number of velocity layers will determine how many WAV files will be recorded. Be sure to monitor the level meter while adjusting the level of the source device, and the Rec Gain on bento.

8. Push the Rec and Play buttons together to start recording. Bento will send out MIDI note events to trigger the external gear, and capture the resulting audio in individual WAV files. The progress will be displayed while recording is happening. The files are saved in a subfolder of the Project folder for this project.
9. When done, you can play your new Multisample instrument in this project, or save it as a patch for use with other projects. See Saving a Patch below for more info.

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## RECORD A WAV FOR ONE-SHOTS

The one-shot bank screen provides a quick way to record into the 16 pads for the track.

1. Connect an audio input to bento.
2. From the one-shot bank screen, tap the Recording button at the bottom of the screen. The knob controls change to the recording settings.
3. Select the pad you want.
4. Adjust the recording settings. You will see a level meter appear on the pad when a signal is received on the selected input.
5. Push Rec and Play at the same time to start recording. Push Stop if needed to finish recording.
6. The file is stored in the project folder for this project.

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## RECORD A WAV FILE FOR GRANULAR AND SLICER TRACKS

You can record WAV files directly into Granular and Slicer Tracks.

1. Connect your audio input to bento.
2. Navigate to the WAV Browser for the individual grain of a granular track, or create a new Slicer Track.
  - a. For granular tracks, open the dashboard for the track, tap the Grain 1 or Grain 2 button, then double-tap the Waveform area to open the WAV Browser.
  - b. For slicer tracks, open the Patch Browser, tap New, Tap Slicer. You are now on the WAV Browser screen.
3. Tap the Record button at the bottom of the WAV browser screen, next to the Preview button.
4. Enter a file name.
5. Adjust the recording settings as needed, paying attention to the Audio Level meter while adjusting the incoming volume and the Rec Gain on bento.
6. Push Rec and Play together to start recording.
7. Push Stop when done recording. You will see the WAV Editing screen where you can trim the ends off the file and normalize the level. Push Save when you have finished adjusting the settings.
8. The file is stored in the project folder for this project.

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## EDIT A WAV

The WAV edit screen allows you to trim the start and end of a file and normalize the level of the file. You will see this screen while recording a WAV for a Granular or Slicer track. You can also access it for these track types as well as the Loop and One-Shot tracks from the waveform screen.

1. Open the WAV or Grain screen for the file you want to edit.
2. Tap menu, then select Edit WAV.
3. Use the knobs to adjust the Trim Start and Trim End points. Push the lower left pad to preview the trimmed file.
4. Tap the Normalize button if you want to adjust the level of the WAV file to be within the normal range.
5. Tap Save when done to commit the changes to the WAV file. If the original file was in the Patches directory, a new file is saved in the project folder, and the track is changed to point to this new file. This ensures you do not overwrite the files used by the factory patches.

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## SAVE A PATCH

If you create a sound for a track that you want to reuse on other projects, you can save it as a patch. All saved patches are stored in the \User Patches folder of the microSD card to prevent overwriting factory patches.

1. Configure a track to sound the way you want. All settings on the INST screens will be saved with the patch.
2. Push Tracks.
3. Select the track.
4. Tap menu, then tap Save Patch in the pop-up. You will see the Patch Naming screen.
5. The Patch Name defaults to the name of the track. Type in a name, and then tap Enter. If there is a User Patch on this microSD card with the same name, you will see an option to overwrite the patch or cancel saving.
6. You will now see the patch tagging screen. Tap the Instrument Tags that you want to apply to this patch. This controls which Instrument lists will display this patch.  
Note: All saved patches will always appear in the new User Instrument group.  
Note: Within an Instrument list, the user saved patches appear together at the end of the list.
7. Tap Save Patch when you are done selecting Instrument tags.
8. The new patch is saved in the \User Patches folder.

## BUILD 1.1.14

### WHAT'S NEW

- Sequencer: now supports Unquantized mode for off grid sequencing
  - Set Step Mode to Off to record notes in real time without snapping to the start or end of a step.
- Rename Loop WAV files: Select Rename WAV from the Menu on the Loop Bank and Loop Dashboard screens.

### WHAT'S UPDATED

- Sequencer
  - Launching a sequence using the pads now also selects the sequence
  - Smarter scrolling to display notes and follow the pad octave assignment
  - Improved sequencing for Slicer tracks

- Launch screen now shows which sequences are cued to play.
- Pushing Stop once will cause the sequences and loops to stop at the next quant break as defined for each sequence or loop. Pushing Stop twice will stop all audio on all tracks.
- Pushing record while on the sequence screen will activate that sequence. It might take a moment as it waits for the next quant break to start in order to keep things in sync.
- File Browsing
  - New: Patch browsing supports Arrow buttons. Use the left/right arrows to control the Instrument selection. Use the Up/Down arrows to select a patch. Hold an arrow button to auto repeat moving in the selected direction.
  - Cleaned up knob and arrow button behavior
- Tracks
  - All Tracks respect the selected Root Note and Scale
  - Pad lights show which pads are loaded (dim lights), which are triggered (bright lights), and which is selected (White)
  - Control of the polyphony for a track or pad is controlled on the dashboard for most Track Types. For Granular, it is still controlled on the Track Config screen.
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- Scenes:
  - The pads now launch the corresponding Scene and switch to that scene for editing.

## WHAT GOT FIXED

### Sequencer:

- Bug fixes related to actions on multiple notes
- Launch screen no longer names empty sequences.
- Fixed an issue with recording sequences for some tracks over MIDI

### Tracks:

- Fixed an issue with persistence of parameters for slicer tracks.

## KNOWN ISSUES

- Launch Screen
  - Snap scene doesn't reflect the correct list of sequences and loops when you paste.
- Song & Scenes
  - Changes made to the Scene while playing do not affect playback until you push Stop and Play again.
- Cutting a track leaves some residual selections behind on the scene screen

## BUILD 1.1.4

This build has two small bug fixes:

1. Fixed: The Clear function on the Seq screen resets the seq length to 0.
2. Fixed: The sequencer for slicer tracks didn't

## BUILD 1.1.1

This is an officially supported release. However, Song mode is still considered a beta feature.

These notes cover what has changed since 1.0.1.

### WHAT'S NEW

- External Track mode
- Scenes
- Song mode
- WAV file previewing

### WHAT'S UPDATED

- Battery charging indicator
- Launch Screen:
  - Improved Launch screen with support for 8 sequences or loops per track
  - Tap the screen to select a sequence to edit.
  - Push the pads to trigger the sequences.
  - Use the Up and Down Arrow buttons to change which sequences are controlled by the pads.
  - Swing Control for Sequences
  - Hold Launch and push a pad to stop playing the sequence for that Track.
  - Push Stop once and the sequences and loops will stop at the next quant break defined for each sequence and loop. The armed sequences are remembered and will launch you push Play again.
  - Push Stop twice and all scenes and loops stop immediately. The armed sequences are forgotten. Nothing will launch when you push Play until you start pushing pads.
  - You can now see the progress of sequences launched by the Scenes in Song mode.
- Cut, Copy & Paste for sequences and scenes
- Rename your sequences from the Launch and Sequence screens
- Reverb and Delay Sends for Slicer tracks now work
- Output selection:
  - You select the output on the Track config screen for all tracks.
  - The Output option on the pads and loops is missing. We plan to allow you to override the output for individual pads and loops on their dashboards.

### SMALL FIXES

- You can now use MIDI to record sequences
- Track Config Screens
  - You can rename a Track on the Track Config screen
  - We cleaned up the Track Config screens
  - You can now change patches on Granular tracks.
  - Changing a Patch no longer clears the sequences for the track
- Improved the hardware pad performance to reduce double hits and cross hits
- Improved support for using a single sample with a multisample track
- If you unload a Loop Pad while that pad is playing, there was a bug that played a loud buzzing sound. This has been fixed.

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### EXTERNAL TRACKS

An External Track is designed to allow you to include external gear in the music you compose on bento. With an External Track, you can use the bento pads or an external MIDI controller connected to bento to play and sequence an external MIDI Device. You can then bring the audio output from the external device into bento, so you can add effects and control the mix. You can also use the audio in and MIDI out functionality separately.

To create an External Track:

1. Double tap an empty Track on the Tracks screen.
2. Tap the New button at the bottom of the Patch Selection screen, then tap External in the pop-up.
3. Push Tracks. Select the new Track and push the Right Arrow button to open the Track Config screen.
4. Select options for the following:
  - a. Output – the audio output that will play this track
  - b. Input – the audio input where you will send audio to be used by this track
  - c. MIDI In Ch – the MIDI channel that can be used to record sequences for this track.
  - d. MIDI Out P: the MIDI Out port where you will connect the external device to be controlled by this channel.
  - e. MIDI Out C: The MIDI Channel that this track will use on the selected MIDI Out Port.
5. Push Tracks. Double tap the track to edit the settings for this track. Here you can also see a level meter for the input received for this track, and a MIDI In and Out indicator.

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### SONG MODE

A Song is a list of scenes that will be played in order when Song mode is enabled. You can specify how many times each scene will play before advancing to the next screen. Turn on Scene Hold to play the current scene until you are ready to move on. Turn on Song Loop to play the entire list of scenes in a loop until you decide to stop it. You can jump around between scenes simply by pushing the pad that corresponds to the scene. The change will happen at the next quantization break, as specified with the Quant Size on the Song Screen.

Push Song, then tap the Song button at the bottom of the screen to toggle the state of Song mode. Push Play and bento will start playing from the currently selected scene. Push Launch to watch the progress of the sequences and to swap out sequences on the fly. Turn off song mode to work with sequences on the Launch screen without playing scenes.

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### SCENES

A scene is a group of sequences that will be launched together when bento is in Song mode. The list of Scenes is displayed on the Song Screen. Select a scene on the Song screen, then push Scene to edit this scene. Tap to select the sequence or loop you want to play for each track for this scene.

You can also copy a Scene from the Launch screen. Go to the Launch screen and use the pads to trigger the sequences you want in your scene. When you have the combination you want, tap the menu icon in the lower right, then tap Snap Scene. Push Song and select the Scene you want to paste into. Tap the menu icon, then tap Paste Scene. The list of scenes for this Song has been updated to match what you copied from the Launch screen.



You can also rename your scenes so you can keep track of how you plan to use them. You can find Rename Scene on the menu for the Song and Scene screens.

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## BATTERY CHARGING

The battery icon is now updated in the lower right to show when the battery is being charged. A lightning icon appears on the left side of the battery icon while charging. Allow up to 10 seconds for the icon to refresh when plugging and unplugging the device.

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## LAUNCH

The Launch screen now supports 8 sequences or loops for each track. Use the touch screen to select sequences to edit. Use the pads to launch the sequences.

You can launch one sequence or loop for each track at a time. The white frame around two rows of sequences is the focus ring that shows you which sequences are currently controlled by the pads. Tap a pad to activate the selected sequence for that track, and deactivate the previously active sequence. Push play and watch the progress of the sequences and loops. Tap the menu icon, then tap Snap Scene. You now have a scene on the clipboard that you can paste on the Song or Scene screen.

If the Launch screen is not behaving the way you expect, make sure Song mode is off:

1. Push Song or Launch.
2. Look at the Song button at the bottom of the screen, next to the battery icon. If it has a white background and black text, song mode is enabled. If it has a black background and white text, song mode is disabled.
3. Tap the Song button on the screen to toggle the state of song mode.

For Loop tracks, the Launch screen displays the top row of loops for the track. You can also use the Instrument screen to play Loops on top of what is active on the Launch screen.

While sequences are playing, you can also play along on other tracks to improvise or explore additions to your composition. You can even record new sequences.

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## CLIPBOARD FUNCTIONS

On the Launch and Sequence screens, you can now copy and paste the full contents of a sequence. You will find the Copy and Paste options on the menu for these screens. The Launch screen menu also includes a Snap Scene option. Use the option to copy the current set of sequences and then paste them into a scene on the Song screen.

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## SWING

On the Launch and Scene screens, you can now control the Swing for the sequences.