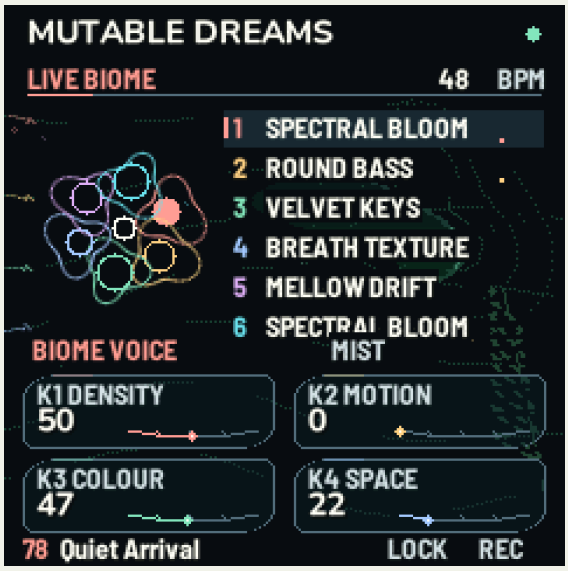
A world of your own

Six freely assignable voices. Begin with a Biome, then shape the details.



Actual firmware display · native capture

Start here
HOME opens the live view. Use PRESET there to choose a complete Biome. PLAY starts or stops. SELECT chooses a track; SEL mutes it. Begin at a comfortable master volume.

Explore gently
15 engines, 288 tones and 92 musical Biomes plus Blank. The new quiet Biomes are a useful starting point for warmer, slower music.

One button, several pages. Tap EDIT, SEQ, FX or GLO to cycle their related pages. The four knobs match the four labelled controls. Hold a function button for contextual help; release, then tap to return.

Keep your work. Loading another factory Biome replaces the live patch and clears the granular memory. Stop and save first. Factory Biomes remain available; your own versions belong in User Banks.

What changed in 1.2? New warm voices and curated sounds; 32-step sequencing and recording; chord journeys; filtered Air for the shared granular bus; more responsive landscapes and clearer lettering. The physical display remains 240 × 240.

Shape the sound

Every track can be a bass, percussion, resonator or ambient voice.



Actual firmware display · native capture

EDIT pages
Sound → Filter → Envelope → Mix → Global Mixer.

Choose a track with SELECT. On Sound, use PRESET for a tone. Engine controls change with the selected voice; held help explains them.

Find warmth
Try Velvet Keys, Spectral Bloom, Breath Texture, Round Bass or Mellow Drift. Lower Tone and open the envelope slowly before adding effects.

Velvet Filter. K1 controls cutoff, K2 resonance, K3 selects OFF / LP12 / LP24 / LPG, and K4 sets slow filter movement. Low resonance and a moderately closed low-pass filter give an easy warm starting point. LPG darkens with the decay.

Global Mixer. Select a track, then adjust level, granular send, delay send and room send. Sends follow track level. Shared Space sets effect timing, feedback/tail and the shared return.

Performance budget. Dense combinations may enter ECO automatically. Use the Quality / System page to inspect the mode; reduce active layers or effects if needed. Browser performance does not measure FM-1 processor load.

Write a phrase

Up to 32 steps per track, with keyboard entry and live recording.



Actual firmware display · native capture

SEQ pages
Rhythm → Groove → Bass → Phrase → Sequence → Expression.

On Sequence: K1 enables it; K2 selects a step; K3 sets the MIDI note (23 means rest); K4 sets length, 1–32.

Hear the shape
Stem height represents pitch. The small bar represents velocity. The selected step is underlined; playback marks its current position.

Step entry. On Sequence or Expression, tap REC once for STEP. Play the keyboard or send MIDI notes on channels 1–6. Tap REC again for LIVE overdub; tap again for OFF. Live recording is monophonic per track, not polyphonic audio recording.

Expression and generation. K1 velocity, K2 gate, K3 chance, K4 generator: Sparse, Arp, Pulse or Drift. Turning the generator replaces that track's sequence. ENV undoes the variation. Try a short length, generate, then edit individual notes.

Save the phrase with its Biome. Recording initially changes RAM. Stop, choose internal clock and SAVE, or store to a named User Biome slot. The older Phrase page remains a separate 16-step feature; the new Sequence page provides 32 steps.

Give the music space

Chord journeys and one shared cloud connect the six voices.



Actual firmware display · native capture

GLO → Chord Journey
K1 chooses Off or one of four journeys. K2 sets 1–8 bars per chord. K3 chooses whether the selected track follows; K4 sets the tonic. Harmony sets the scale.

Slow harmonic movement
Start with one melodic track following and a slow chord pace. Journeys guide existing voices; they do not add extra polyphonic voices.

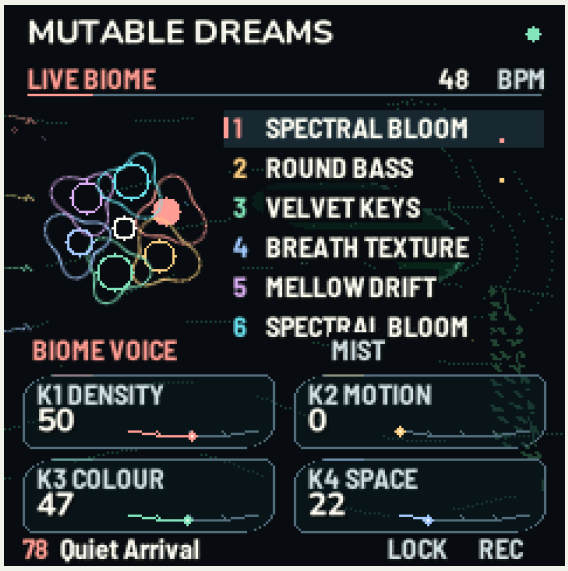
The granular engine is global. Grain Size, tape motion, freeze and the granular return belong to ONE shared cloud, not six separate granular instances. A change can therefore affect several tracks. Each track's send is independent.

FX → Air. K1 adds filtered noise into the shared tape, K2 sets the shared granular return, K3 sets the selected track's grain send, and K4 freezes the shared memory. Freeze stops new noise and track sends entering the tape. LFO also toggles freeze.

A little goes a long way. Begin with low sends and a low return, then increase gradually. Delay and room help sounds settle together. Granular audio is temporary: it is not stored in Biome files or bank backups.

Keep your worlds

Browser banks, live patches and complete device backups have different roles.



Actual firmware display · native capture

GLO → User Banks
K1 slot; K2 Biome or Tone; K3 load; K4 name cursor. PRESET edits a character. Stop and use internal clock before SAVE. Repeat SAVE to confirm an occupied slot.

16 Biomes · 64 tones
A Biome stores the six-track world, phrases and shared settings. A tone slot stores a sound. Keep separate exported copies for safekeeping.

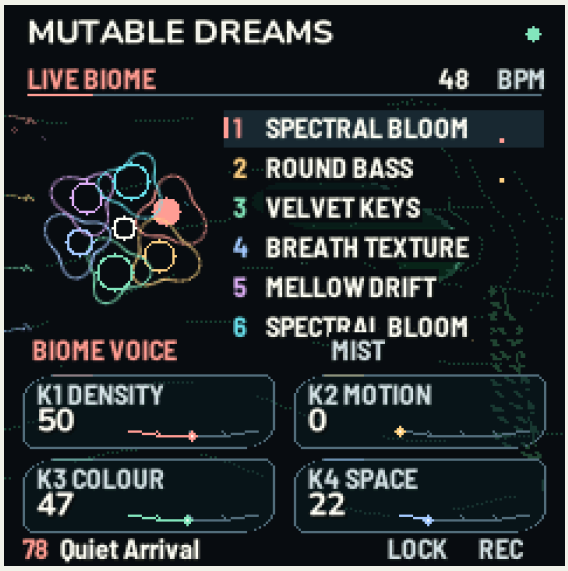
In the browser. Start instrument to play locally. Version 1.2 has its own browser storage. To bring older browser patches across, open the retained 1.1 browser, export JSON, then import into 1.2. Keep original files if you want to downgrade.

Connect FM-1. Use Chrome or Edge with Web MIDI SysEx support. The connected device supplies the audio. Both sides follow live parameter changes. Return to browser disconnects hardware editing. Keep only the intended FM-1 connected.

Two backups. JSON exports one live Biome, including unsaved edits. A full .mddb contains the saved project, preferences and all User Banks; it does not implicitly save the live patch. Restore replaces those saved objects and needs physical SEL on the FM-1.

Update with care

Install from Stock V15, or follow the backup route for your existing version.



Actual firmware display · native capture

Before installing
Save, export your banks and unsaved live JSON, stop playback and disconnect the editor. Connect only the FM-1 you intend to update. Keep USB and power connected until success.

Held help
The instrument explains its controls where you need them. Background movement responds to settings; it is not an oscilloscope or CPU meter.

Stock V15 / 1.1 → 1.2. Use the 1.2 installer and read Recovery-1.2.txt first. For 1.0, use its legacy backup workflow and the qualified route through published 1.1. A direct update from every third-party firmware is not certified.

Return to Stock V15. The installer verifies the manufacturer file hash. Returning to stock erases User Banks and preferences. After reinstalling Mutable Dreams, restore .mddb with physical SEL, then import any separate unsaved JSON. Keep an older-format backup to downgrade.

Tested scope. 29 controlled device audio cases, sequence/storage checks, V15 roundtrip, bank restoration, browser installer and physical cold start passed. USB MIDI is tested; the physical TRS-MIDI cable test remains outstanding. See the release qualification report.

With gratitude to Émilie Gillet, Mutable Instruments and the open-source community. An independent project by Kid Bunka / Christoph Link; selected algorithms, not complete module ports.

mutable-dreams.sugarypixie10.chatgpt.site