Mojave

quickstart

Mojave

gen   clock

gust

distribute   structure   size

drift   rate   whirl

gen   tap

lock   mix   zone   speed window freeze

left   drift   dist   struct   whirl   left

right   rate   dune   right

QU-BIT

Description

Make It Grain.

Mojave is a granular sandstorm.
Drawing its inspiration from vast swaths of desert in the American Southwest, Mojave is a live granular processor that uses microscopic bits of audio to create beautifully crafted sonic landscapes.

Whether you are constructing pebbles or sandstone monuments, Mojave is the perfect balance between exploratory sound design and harmonious sublimity.

- Live granular processor and stochastic event generator
- Onboard high quality MEMS microphone
- Configurable Dune CV/Gate output
- Firmware updates & alternate firmware via USB
- Based on the Daisy platform

Module Installation

1. Make sure there is appropriate space (14HP) and power (167mA) in your case.

2. Connect the ribbon cable to Mojave (see right) and to your power supply, matching the red stripe indicators.

3. Power up your case, and ensure your modules are properly powered and operating.
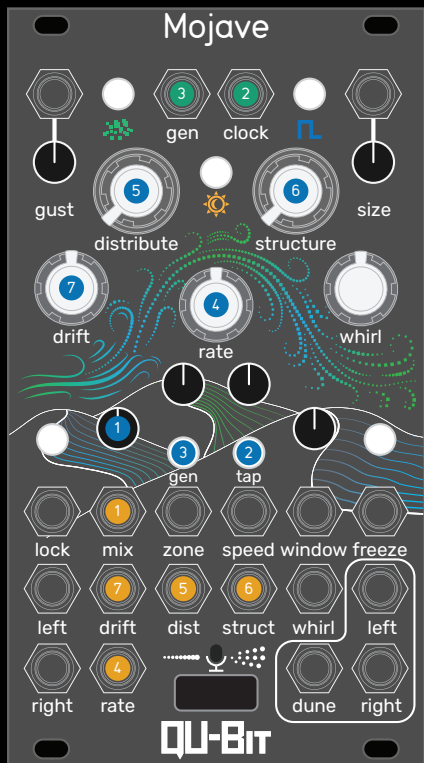

+12V

-12V
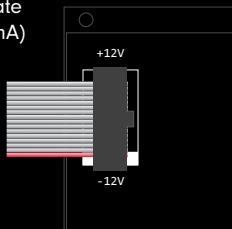
Initial Knob Positions

*These are the recommended initial knob positions, but who are we to pigeonhole you? It's your party, throw it how you want it!

Front Panel

Mojave

Tactile Controls

CV Inputs/ Outputs

Gate Inputs/ Outputs

Audio Inputs/ Outputs

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QU-BIT

1 Mix
- Controls the balance between the dry and wet signal.
- Mix CV input. Range: -5V to +5V

2 Tap/Clock
- Sets internal clock rate by using tap tempo. Use the gate input to sync Mojave to an external clock.
- Clock gate input. Threshold: 0.4V

3 Gen
- Generates new granular events determined by the module settings.
- Gen gate input. Threshold: 0.4V

4 Rate
- Controls the rate of generated grains, from glacial to audio rate.
- Rate CV input. Range: -5V to +5V

5 Distribute
- Introduces stochastic rhythmic displacement to newly generated grains. This is your glitchy, ratcheting, time-shifting knob.
- Distribute CV input. Range: -5V to +5V

6 Structure
- Introduces algorithmic melodic/harmonic displacement to newly generated grains. Build granular arpeggios, evolving harmonies, and more.
- Structure CV input. Range: -5V to +5V

7 Drift
- Introduces random audio buffer positioning to newly generated grains. Mojave sifts through the audio buffer, and unearths new grains for you.
- Drift CV input. Range: -5V to +5V

Front Panel

Mojave

- Tactile Controls
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gust

gen   clock

distribute   structure

10

size

drift   rate   whirl   8

11   12

gen   tap

13

lock   mix   zone   speed   window   freeze

11   12   13

left   drift   dist   struct   whirl   8   left

right   rate   dune   right

QU-Bit

8 Whirl
- Introduces spatial displacement to newly generated grains.
- Whirl CV input. Range: -5V to +5V

9 Gust
- Introduces either feedback (left of center) or reverb (right of center) to the dry and wet signals.
- Gust CV input. Range: -5V to +5V

10 Size
- Controls the size and playback direction of grains. Reverse grains are to the left of center, and forward grains to right of center.
- Size CV input. Range: -5V to +5V

11 Zone
- Sets the position within the live-streaming audio buffer where Mojave will generate grains from.
- Zone CV input. Range: -5V to +5V

12 Speed
- Controls the pitch of new grains, and tracks 1V/Oct. This knob acts as the foundation on which Structure manipulates the grains.
- Speed CV input. Range: -5V to +5V

13 Window
- Selects the shape of the envelope applied to new grains. Windows shown from left to right on knob.

- Window CV input. Range: -5V to +5V

Front Panel

Mojave

- ● Tactile Controls
- ● CV Inputs/ Outputs
- ● Gate Inputs/ Outputs
- ● Audio Inputs/ Outputs

gust   16   gen   clock   17   size

distribute   structure

drift   rate   whirl

14   gen   tap   15

lock   mix   zone   speed   window   freeze

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QU-BIT

14 Lock

- Activating this function preserves the audio in the buffer, preventing the live input from being read in. Grains are generated from this locked buffer, which can be scrubbed using the Zone control.
- Lock gate input. Threshold: 0.4V

15 Freeze

- While active, all existing grains loop, and no new grains are generated while the audio buffer continues to refresh.
- Freeze gate input. Threshold: 0.4V

16 Gen Mode

- Sets the grain generation mode, cycling between 3 types:

Mode	Color	Description
Erode	Blue (Default)	Grains are generated automatically with each clock pulse
Shear	Green	Incoming audio stream is monitored, and grains are generated when audio hits a determined threshold
Chisel	Gold	Gen must be triggered to generate grains

17 Clock Mode

- Sets the Clock Mode:

Name	Color	Description
Free (Default)	Blue	Rate knob adjusts grain rate across a smooth range
Quantized	Gold	Rate knob selects division/ multiple of the clock rate
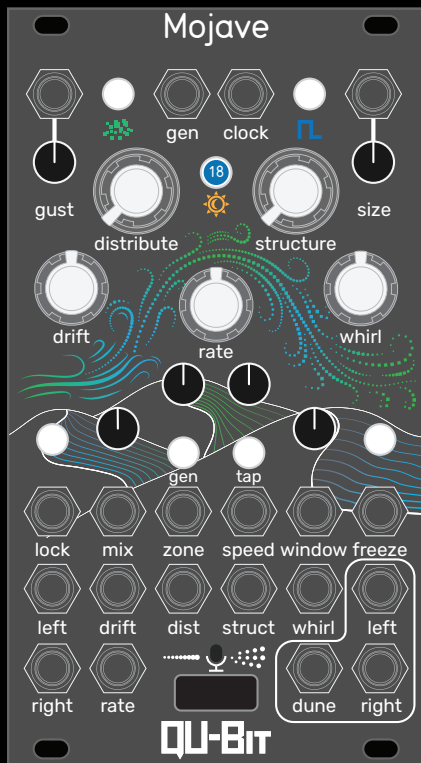
8

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18

distribute structure

drift rate whirl

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left drift dist struct whirl left

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18 Sky Mode

- Determines macro control behaviors on these functions:

• Distribute	• Rate
• Structure	• Speed
• Drift	• Zone

● **Dawn   Color: Blue**
Mojave generates grains within a **major** scale.

● **Day   Color: Green**
Mojave generates grains within a **minor** scale.

● **Dusk   Color: Gold**
Mojave generates grains within a **chromatic** scale.

● **Twilight   Color: Purple**
Mojave generates grains with no adherence to any scales or synchronous rhythms.

Want something other than the default Sky Modes? Use Narwhal to customize the behaviors of each mode to your taste!

Change scales, temporal characteristics, and more! See the manual for more info.

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⑲ Dune Output

A configurable CV/Gate output that is algorithmically generated by Mojave. Swap between output options via the Narwhal web app. See the manual for a full list of available outputs!

• CV Output (Default): Variable modulation source generated by the environmental conditions at play in Mojave. Range: 0V to +5V.

⑳ Microphone

• Become the wind itself with Mojave's onboard microphone! The mic normals to the left input by default.

Control the input level by holding the Clock Mode button and turning the Mix knob.

Reset the input level settings by holding the Clock Mode and pressing the Freeze button.

Avoiding Feedback: Minimize completely dry mix and original Speed settings.

Mic Mode

• Sets the mic relationship with the audio input. Hold the Clock Mode button and press the Lock button to cycle modes:

Mode	Color	Description
Normalled	Blue	Mic is normalled to the left input
Off	Green	Mic is turned off
Summed	Gold	Mic is summed with the audio inputs

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22 left drift dist struct whirl 24 left

23 right rate 21 dune 25 right

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21 USB Drive

- Used for firmware updates, alternate firmware, configurable settings, and more! See the manual for full details.

Configurable Settings App

Head to Narwhal to configure your Mojave's internal settings:

22 Audio Input Left

- Audio input for the left channel. Normals to the right input when no cable is present in Audio Input Right.
  Range: 10Vpp (AC-Coupled)

23 Audio Input Right

- Audio input for the right channel.
  Range: 10Vpp (AC-Coupled)

24 Audio Output Left

- Audio output for the left channel.
  Range: 10Vpp (DC-Coupled)

25 Audio Output Right

- Audio output for the right channel.
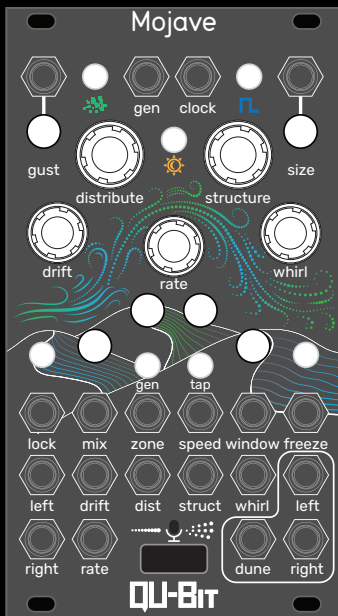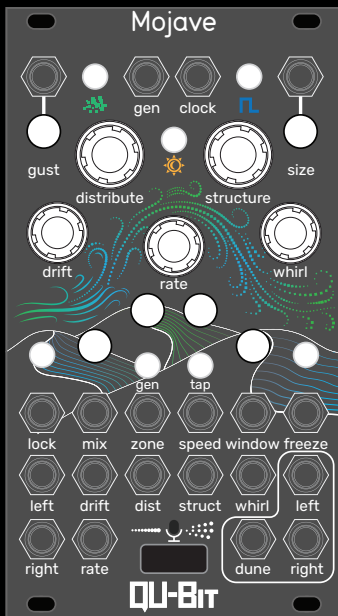 Range: 10Vpp (DC-Coupled)

Patch:
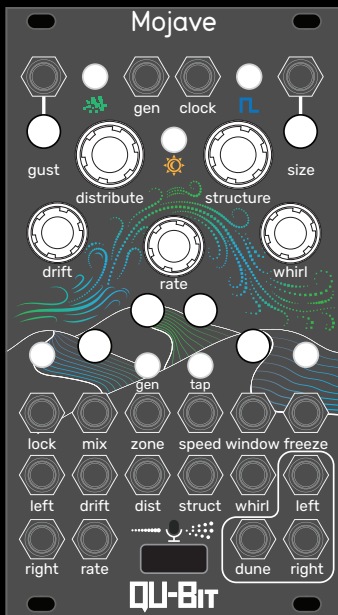
Patch:
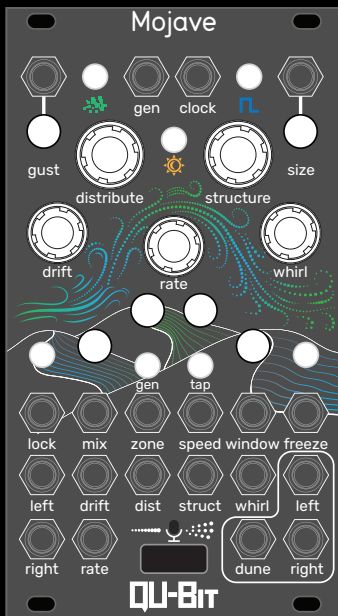
Patch:

Patch:

QU-BIT

Make it grain.

The Mojave desert has always been a special place for Qu-Bit team members. A place of rest, a place of renewal, and a place for invigorating the creative mind.

We hope the sonic possibilities of Mojave instill those same feelings in you. With every Mojave sold a portion of the proceeds will go to the Joshua Tree National Park Association, and will help to preserve a portion of the Mojave desert that we hold dear to our hearts.

Happy Patching,

The Qu-Fam

Learn More.

https://qubitelectronix.com