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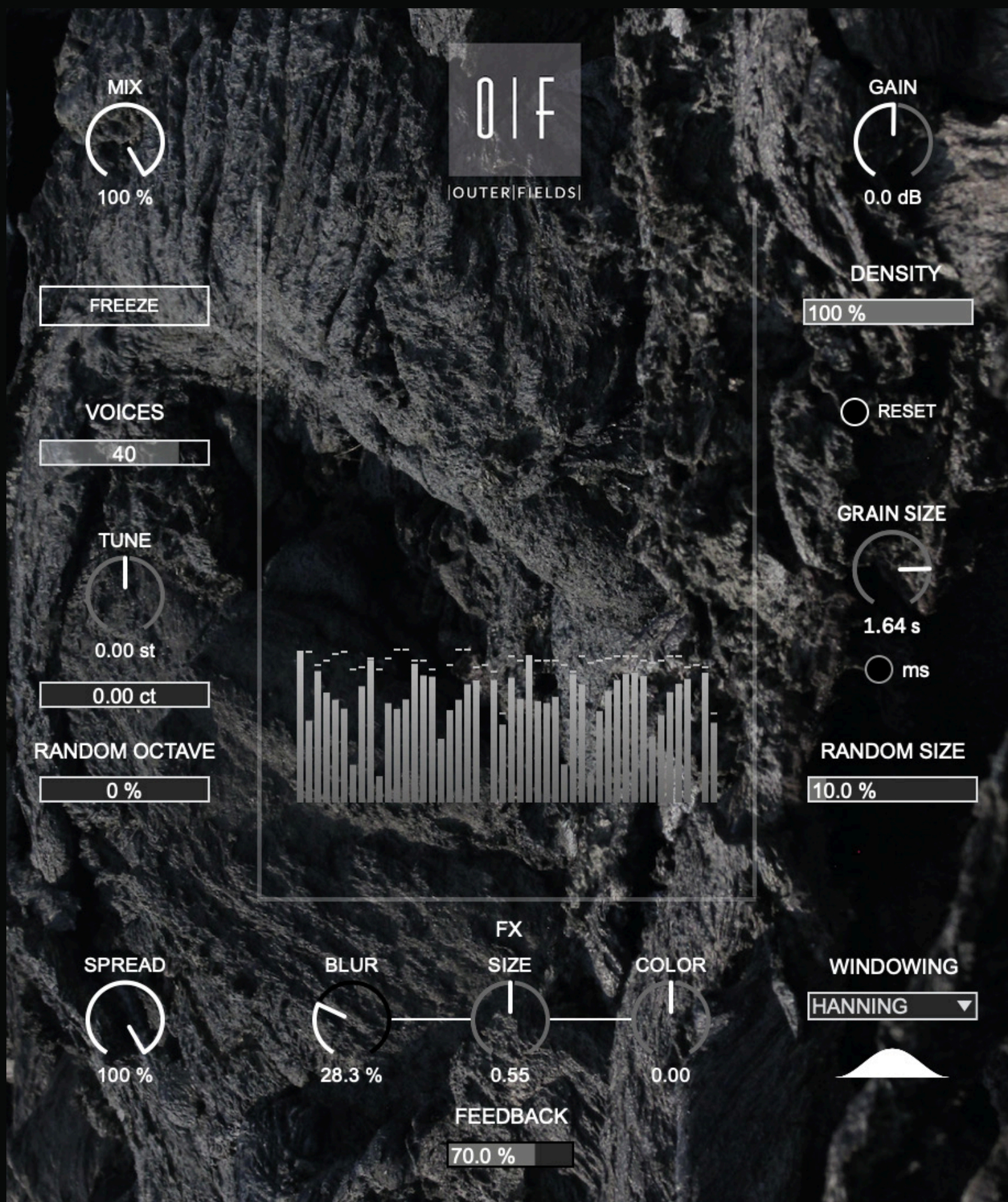
|OUTER|FIELDS|

# GROTTA

GRANULAR TEXTURIZER

USER MANUAL





GROTTA IS A MAX4LIVE DEVICE DEVELOPED TO CREATIVELY WORK WITH THE OUTER FIELDS SOUND LIBRARIES AND ANY OTHER RECORDING. IT'S AN AUDIO EFFECT IMPLEMENTING A REAL-TIME GRANULAR SYNTHESIS ALGORITHM USING A MULTI-VOICES AUDIO SCANNER THAT CREATES A CONSTANT STREAM OF DESTRUCTURED CROSSFADING SECTIONS OF THE INPUT SOUND SOURCE. PITCH, SIZE, WINDOWING AND DENSITY OF EACH GRAIN CAN BE MODULATED TO CREATE A DEEP VARIETY OF SOUND PROCESSING WITH AN ADDITIONAL BLURRING EFFECT PROVIDED ON-CHAIN TO GENERATE VAST AND DENSE SOUNDSCAPES.





MIX: CONTROL THE AMOUNT OF DIRECT SIGNAL AND EFFECTED SIGNAL.

FREEZE

FREEZE: PUSH THE BUTTON TO FREEZE A PORTION OF THE INCOMING SIGNAL TO BE PROCESSED; PUSH AGAIN TO RELEASE THE FREEZE MODE GOING ON PROCESSING THE REAL-TIME INCOMING SIGNAL.



TUNE: SET THE GRAINS' PITCH.  
0 CORRESPONDS TO THE ORIGINAL TUNING,  
THE KNOB OPERATES IN SEMITONES. ADJUST THE TUNE IN CENTS.

RANDOM OCTAVE  
0 %

RANDOM OCTAVE: ADD RANDOMICITY TO THE OCTAVE OF EACH GRAIN'S PITCH. HIGH % MEANS MORE CHANCE OF TUNING FAR FROM THE TUNE SET.



SPREAD: BALANCE THE SIGNAL OUTPUT BETWEEN MONO AND STEREO DISTRIBUTION. USE IT TO SET A NARROW OR WIDE SPATIAL SPREAD.



## DENSITY

70.0 %

☐ RESET

DENSITY: SET THE AMOUNT OF DENSITY IN THE GRANULATION PROCESS. LESS DENSITY MEANS EACH GRAIN WILL WAIT MORE TIME BEFORE TO RE-START PLAYING. RESET: TRIG MANUALLY THE ENVELOPE OF EVERY GRAIN SIMULTANEOUSLY. PRESS IT IF YOU CHANGE THE BUFFER SIZE OF THE LIVE SESSION.

## GRAIN SIZE



500 ms

☐ ms

LENGTH: SET THE ENVELOPE'S DURATION OF EACH GRAIN. LONGER IS THE SIZE, MORE CHUNKS OF SOUND ARE PLAYED IN REVERSE. PUSH THE MS/NOTE BUTTON TO DECIDE THE TYPE OF CONTROL UNIT: ENABLES A CONTROL VALUE IN MILLISECONDS OR ENABLES A CONTROL VALUE IN NOTEVALUE (RELATED TO THE TRANSPORT'S BPM).

## RANDOM SIZE

50.0 %

RANDOM SIZE: ADD RANDOMICITY ON THE SIZE SELECTION OF EACH GRAIN.

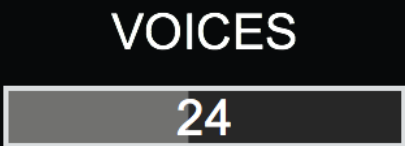
## WINDOWING

HANNING ▼

WINDOWING: SET THE SHAPE OF THE GRAIN'S AMPLITUDE ENVELOPE CHOOSING THROUGH THE MENU.



GAIN: CONTROL THE OUTPUT VOLUME OF THE GRANULAR EFFECT (DB). IT WILL AFFECT HOW STRONGLY IT'S SENT TO THE BLUR EFFECT.



VOICES: SET THE AMOUNT OF VOICES ACTIVE USED BY THE ALGORITHM.



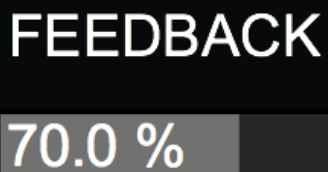
BLUR: BALANCE THE AMOUNT OF BLUR EFFECT TO ADD TO THE GRANULAR SOUND.



SIZE: SET THE SIZE OF THE BLUR EFFECT. THIS CONTROLS THE VASTNESS AND DENSITY OF THE AMBIENT. AT VERY LOW VALUES IT'S A SOFTENED LAYER OF THE ORIGINAL SOUND, BUT AT HIGHER VALUES THE SOUND BECOMES VAST AND WIDE.



COLOR: ACT AS A HIGH-PASS FILTER ON POSITIVE VALUES (0 1) OR AS A LOW-PASS FILTER ON NEGATIVE VALUES (-1 0).



FEEDBACK: SET THE AMOUNT OF FEEDBACK ON THE BLUR EFFECT. THIS ELONGES THE TAIL OF THE REVERBERATION.

**VERSION 1.0**  
**NOVEMBER 2021**

**TESTED WITH ABLETON LIVE 11.0.12**  
**MINIMUM REQUIREMENT ABLETON LIVE 10.1.18**



**FOR MORE INFO AND VIDEO DEMO:**  
[www.outerfields.net/libraries/grotta/](http://www.outerfields.net/libraries/grotta/)

**IN CASE OF NEED (TO REPORT PROBLEMS, BUGS, DOUBTS)**  
**OR JUST FOR INFO AND CURIOSITY, PLEASE - CONTACT US BY EMAIL:**  
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