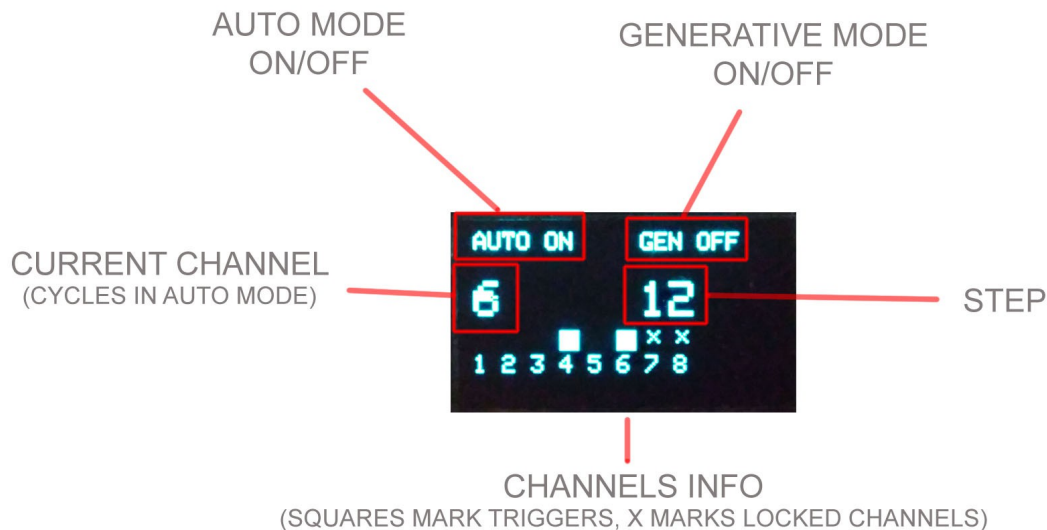


OPERA ROTAS MANUAL

The OPERA ROTAS (OR) firmware is currently in development, so this manual will change over time. (27 July 2020)

QUICKGUIDE AND SHORTCUTS



FIRMWARE 1.0 KEYS (check end of the guide for 1.1 and 1.3 Keys)

SHIFT+1-8 Select one set of instruments

SHIFT+Volume 1 changes the BPMs. Clock out sends a pulse on every beat. Useful to synch with external gear.

AUTO. Toggles AUTO mode On/Off

EDIT + 1-8. Enter gate edit mode of the selected channel

LOCK + 1-8. Locks/unlocks selected channel

REC Record movement (to be implemented)

CHAN + 1-8. Turns off AUTO mode and select channel to modify it's parameters with the pots or play tonally with keys 1 to 8

SHIFT+**SAVE** Exit edit mode, goes back to AUTO mode

RND Randomizes all parameter of all instruments. Can get loud!

SAVE Makes a dump of the current instruments to the serial port so it can be saved in the computer.

AUTO Mode

Opera Rotas Display shows if the machine is in AUTO mode. Press **AUTO** button to toggle it. In auto mode in every step the selected channel automatically jumps to the next channel. So now you are tweaking, for example channel 2 waveshape, but in the next movement, you are tweaking channel 3 waveshape. So it's a way of modify a lot of parameters in different channels and give movement and open the door to happy accidents.

GENERATIVE Mode

You can toggle Generative mode by pressing **SHIFT+AUTO**. In GEN Mode, OR modifies and mutates the patterns of the current channel. But only if the channel is not locked.

So lets say in channel 1 we have this pattern

O O O X O O O X O O X O O O O X

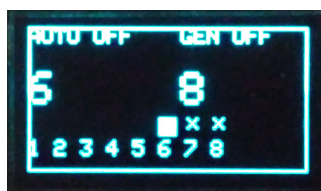
With the O's marking silences and X's marking when a channel is triggered. If we are in generative mode, chances are that this pattern is going to be randomly mutated to something similar like this:

O X O X O O O X O O X O O O O O

The amount and frequency of mutation can be entered. It will be explained forward

EDIT Mode

When in edit mode, the screen shows a frame like this:



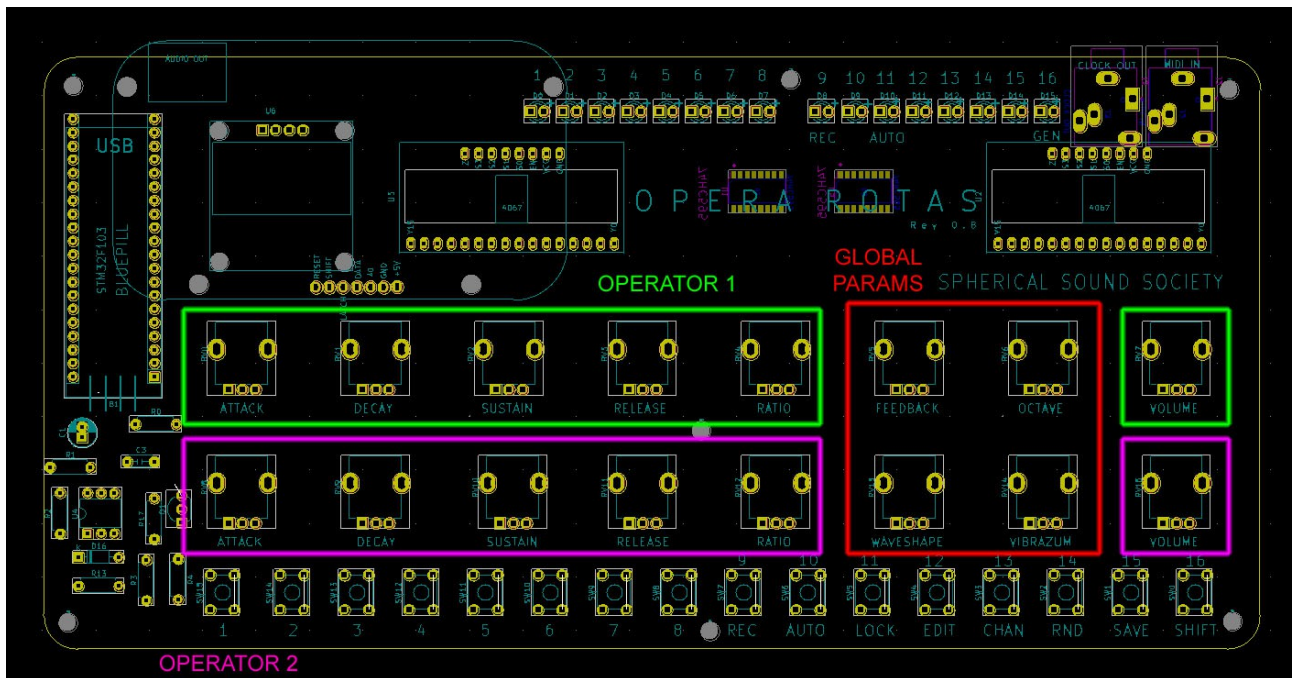
In this mode all keys does not do it's normal actions but toggles on/off the gates of the CURRENT CHANNEL. Leds now shows what gates are Os or Xs. To exit edit mode, press **SHIFT+SAVE**

POTS Overview

Upper pots modifies Operator 1.

Downer pots modifies Operator 2.

Except Feedback, Octave, Waveshape and Vibrazum which are global to both operators



FIRMWARE 1.1 KEYS

SHIFT+1-8 Select one set of instruments

SHIFT+Volume 1 changes the BPMs. Clock out sends a pulse on every beat. Useful to synch with external gear.

AUTO. Toggles AUTO mode On/Off

EDIT + 1-8. Enter gate edit mode of the selected channel

LOCK + 1-8. Locks/unlocks selected channel

REC + 1-8 Mute / Unmute channel

SAVE + 1-8 Delete all gates of selected channel

CHAN + 1-8. Turns off AUTO mode and select channel to modify it's parameters with the pots or play tonally with keys 1 to 8

SHIFT+**SAVE** Exit edit mode, goes back to AUTO mode

RND Randomizes all parameter of all instruments. Can get loud!

SAVE Makes a dump of the current instruments to the serial port so it can be saved in the computer.

FIRMWARE 1.3 KEYS

SHIFT+1-8 Select one set of instruments

SHIFT+Volume 1 changes the BPMs. Clock out sends a pulse on every beat. Useful to synch with external gear.

SHIFT+**REC** toggle MIDI mode. On MIDI mode it syncs to external MIDI clock

SHIFT+**CHAN** toggle GEN mode on/off

AUTO. Toggles AUTO mode On/Off

EDIT + 1-8. Enter gate edit mode of the selected channel

LOCK + 1-8. Locks/unlocks selected channel

REC + 1-8 Mute / Unmute channel

SAVE + 1-8 Delete all gates of selected channel

CHAN + 1-8. Turns off AUTO mode and select channel to modify it's parameters with the pots or play tonally with keys 1 to 8

SHIFT+**SAVE** Exit edit mode, goes back to AUTO mode

RND Randomizes all parameter of all instruments. Can get loud!

SAVE Makes a dump of the current instruments to the serial port so it can be saved in the computer.