

# Adding Maps to Octave

Octave will look for maps in a folder called OctaveMaps. This folder is located in a different place depending on which operating system you are using:

## Windows

The OctaveMaps folder should be inside the same folder as the executable.

## MacOS

Right click on the application, then click "Show Package Contents". Open Contents, then Resources, and it should be right there.

## Love

The OctaveMaps folder should be located in the same folder as the .love file.

After locating the OctaveMaps folder, simply place the folder containing the map inside. Then, run Octave.

**Do not make changes to this folder while the game is running.**

## Making your own Octave Maps

Want to make your own Octave maps? Great! Making an Octave map is very simple. All you need are four files:

- The music file, as an MP3, named `track.mp3`
- The beatmap, as a MIDI file, named `beatmap.mid`. More information below.
- Some additional data, as a JSON file, named `data.json`. More information below.
- (Optional) A piece of album artwork, as a JPG or a PNG, named `albumart.jpg` or `albumart.png`.

Put all of these in a folder, then put that folder into the OctaveMaps folder and you should be good to go!

If you want to share maps with others, I highly recommend compressing the map folder into a ZIP file for easy portability. Then just unzip the file and it's ready to go. **Please ensure you own the rights to the music and art before distributing your maps.**

Only one beatmap can be present per folder. If you wish to make multiple maps for the same track, you should create a different map folder for each one.

## beatmap.mid

Notes in Octave directly correspond to MIDI notes. Create MIDI notes starting at the appropriate times you want a note to appear in Octave, export as a .mid file, and you can use it in Octave. The duration of the notes does not matter.

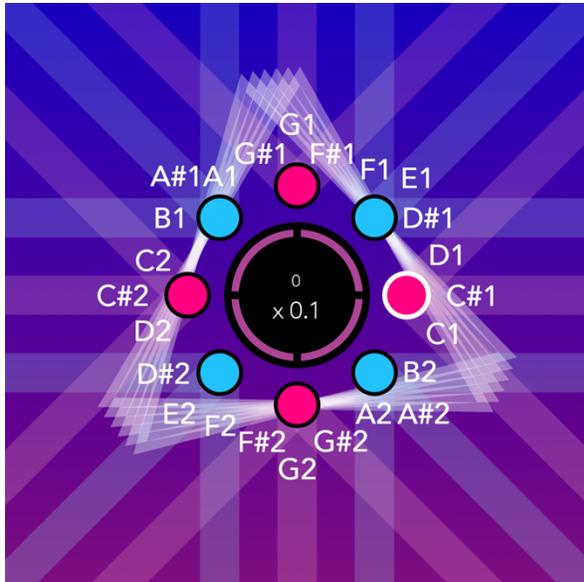
## Type

The velocity of a note will determine what button the player must press to strike it:

△	86 – 127
both	46 – 85
▽	0 – 45

## Lane

The pitch of a note will determine what lane it travels on:



## General Map Design Tips

- I recommend overlaying the audio track with a MIDI track in a DAW to make it easy to place notes accurately. It's even easier if you have Snap to Grid on.
  - Garageband and Logic Pro users: when you export your MIDI file, make sure to drag the MIDI region to the start of the project before exporting, or extra time will be added to the start of the file.
- The player can only aim in one direction at a time. Make sure no two notes start at the same time.
  - Also make sure you don't have two identical notes on top of each other, since Octave will only strike one of them.
- Use both notes as accents, not the main bulk of the notes in the map.
- The lanes to the left and right are, on most displays, longer than the top and bottom. Placing notes on the sides gives the player more time to react to them.
- We've found through playtesting that mixing notes angled to a single pad and head-on notes to multiple pads in one phrase makes that phrase very hard to parse visually. This can be fine if that's your intention, but easier levels should probably avoid this.
- When introducing a new rhythmic phrase, it's a good idea to make it look visually distinct from the phrase before it.

## data.json

Copy the following text into a file named `data.json` in your map folder:

```
{
  "difficulty" : ____,
  "background" : "____",
  "palette" : "____",
  "title" : "____",
  "artist" : "____",
  "source" : "____",
  "year" : ____,
  "noteDelay" : ____,
  "speedCoeff" : ____,
}
```

Now we just have to replace the underscores with appropriate values.

**All values are case-sensitive.**

### Difficulty

The difficulty of the track, as a whole number from 1–5. Displayed as stars on the map select menu. You can use the difficulties of the starter tracks as a guide to judge the difficulty of your map.

### Background

The name of the background for this map. This will affect how the shapes move.

### Palette

The name of the palette for this map. This will affect the colors of the map.

See the “Octave Backgrounds and Palettes” document for a full list of what’s available.

### Title

The title of the music track.

### Artist

The artist of the music track.

### Source

The origin of the music track. For GCS projects, this would be the title of the game. For other music tracks, this might be the album the track was released on. You can also choose to leave it blank by leaving nothing between the quotation marks.

### Year

The year that the song was released. Not the year the map was finished!

### noteDelay

This value must be the amount of time, in seconds, between the start of the audio track and the start of the first note. It’s important that this value is accurate so that notes sync up with the music properly.

### speedCoeff

This value controls how fast the notes in the map will travel. 0.1 is a pretty slow speed, while 0.3 is fairly fast. I recommend experimenting to find the right speed. Speed must be greater than 0.