

<https://github.com/LSPECTRONIZTAR/osu-3D/tree/main>

# osu!3D Level Editor Guide

The complete guide to making your own beatmaps in osu!3D

## 1. Creating a Beatmap

Go to the main menu and go to “Play” > “Custom” > “Edit Your Beatmaps”. This will take you to the “Custom Beatmaps” page. Then click “New Beatmap”. You will be redirected to the metadata screen for your beatmap. Then edit the metadata as needed.

### Full list of editable data

- Song Name - This is pretty self-explanatory.
- Song Artist - This is also self-explanatory.
- Song Sub-Name - This is the sub-name for your beatmap (e.g. "featuring Adrien Williams"). This is entirely optional.
- Song BPM - This is the number of beats per minute in this song.
- Song Offset - This is the number of seconds before the first beat in the song.
- Preview Start Time - This is the start time of the audio preview when selecting the song in the Custom Beatmaps song selection page.
- Preview Duration - This is the number of seconds before the audio preview loops back to the start time.

### Full list of difficulty-exclusive editable data (none of them really have a use except for the reaction time)

- # of Fingers Needed - This is the number of fingers needed to play the level. Values over 1 mean that the level is made for mobile users and unplayable for computer users.
- Difficulty Level - This is the difficulty level for the song.
- Reaction Time - The number of seconds the player has to click the circle after the circle's appearance.

### Important notes

- While editing metadata for your beatmap, keep in mind that values containing only and exactly of “null” will be rejected. If the name of your song is “Null” (which is unlikely), we recommend adding a space at the end.
- Even if you make your beatmap for mobile users, computer users can still try to play your beatmaps, but chances are they will either fail or somehow manage to clear it without a full combo.

## 2. Making Your Level

After editing the metadata accordingly, click “Edit Beatmap”, and you will be in the editor.

The editor has a variety of tools for your beatmap:

- Back to Menu - This takes you back to the song page.
- Jump to Beat - You will jump to the chosen beat.
- Quick Select - This selects all the notes within the given value (e.g. a value of 16-32 will select all the notes between beat 16 and beat 32). Alternatively, you can click a square while holding down the Control key (if you're using an Apple device, you still must use Control, not Command), and scroll up to select notes within the area of the selection cube.
- Play/Pause - This plays/pauses the song.
- Paste - This pastes the copied notes at the current beat.
- Beat Interval - This uses the beat interval you would like to scroll with (e.g. a value of 4 scrolls through 1/4 beat).

To place a note, click a square on the grid. To delete a note, click on it again. To select a note, click on a square with a note while holding Shift. Here's what you can do with selected notes:

- Copy - This copies the note to the clipboard. This is useful for when you want to copy notes onto another beat and don't want to do it by hand. Alternatively, you can hit C while holding Control.
- Cut - This copies the note and then deletes it. This is useful for moving notes that are in the wrong spot. Alternatively, you can hit X while holding Control.
- Deselect - This deselects the selected notes. Alternatively, you can hit Escape.
- Delete - This deletes the selected notes. Alternatively, you can hit Delete.

\* The rest of the buttons will be explained in full detail later.

### 3. Converting Notes

The editor has a feature where you can convert a batch of notes into special kinds of notes that are commonly used in the original game. To do this, select at least two notes and click "Convert." Then type in the special note you want to convert them into. Here are the types of notes you can convert into so far:

- Slider - This turns the selected notes into a slider. If you convert two notes, the slider will be a straight line from the first note to the second one. If you convert more than two notes, the slider will ease out from the first note to the second one, and into the next one.

### 4. Custom Note Data

Custom note data allows you to add decoration to your beatmaps. To add custom note data to your level, select a note and click 'Note Data.' Then enter the note data for the selected note. If you want to remove data from a note, select it and click 'Note Data,' but this time leave the input completely blank.

You can add a variety of commands to your notes, but they MUST be valid JSON (JavaScript Object Notation) for them to be applied. First, add quotation marks ("" ) around the keys, add a colon (:), and then insert the value (quotation marks if the value contains characters that aren't digits). Then surround the entire data with braces {these are braces}. This is an example of valid JSON data:

```
{"name": "MrBeast", "subscribers": 200000000}
```

## Full list of commands

- “color” - This sets the note's color to the set value (ranges between 0 and 200). A value of random will set the color to a random color.
- “interact” - This changes the interaction type for the note. For example, if the value is "false", then the note won't require being clicked. Use this for astonishing visuals!
- “reactiontime”

## Important notes

- Support for displaying visual custom data in the editor is unfinished, so some visual data might not display correctly like they will in the actual game. For example, if you set the "color" value to random, or set the "reactiontime" value to 99, the note will display as red, and the reaction time will match the speed of the song.
- If you convert multiple notes with existing custom data into a slider or a spinner, the data will be removed to avoid confusion with loading the level.
- Don't worry about whether you have smart punctuation on or off, because it won't matter (or at least it didn't for me).

## 5. Events

Events are like broadcasts to the game that take effect at a certain time in the level. Events can do stuff like changing the camera position and other stuff. They must be valid JSON, just like for custom note data.

### List of commands you can assign to events

- “x”, “y”, “z” - This changes the camera position by the axis. For those of you who are unfamiliar with the “x”, “y”, “z” axes, “x” moves the camera left and right, “y” moves the camera up and down, and “z” moves the camera forward and backward. Note that if you move the camera in one direction, the scene will appear to be moving the other direction. This applies to all axes. The default values for the “x”, “y”, “z” axes respectively are “0”, “0”, and “0”.
- “cameraspeed” - This is the time it takes for the camera to move in seconds. The default value is “1”.
- “easingtype” - This is the easing type of the camera when it moves. The default value is “sine”. The supported easing types are as follows:
  - “linear”
  - “sine”
  - “quad”
  - “cubic”
  - “quart”
  - “quint”
  - “expo”
  - “circ”
  - “back”
  - “elastic”
  - “bounce”

- “easingrate” - This is the easing rate of the camera when it moves. The default value is “in out”. The supported easing rates are as follows:
  - “in”
  - “out”
  - “in out”

## 6. Environmental Animations

## 7. Managing Your Beatmaps

To go back to the “Custom Beatmaps” page, go back to the song page and click “Back to Custom Beatmaps”. To go back to a beatmap, click on the thumbnail of the beatmap.

If you want to delete a beatmap, open it and press “Delete Beatmap”. After a quick confirmation, you will be asked if you want to download your beatmap in case you change your mind (or in case you want to test it).

In order to download a beatmap without risking deletion, go to the “Custom Beatmaps” page and click the “Download” button next to the beatmap you want to download. If you want to download all beatmaps at once, click “Download All Beatmaps”. This tool is useful for keeping all of your beatmaps in one place, and designed specifically to access all of the beatmaps in a custom playlist.

## 8. Playing Your Beatmaps