

Music Manager.

A plugin for Godot that allows for easy music implementation. The plugin UI is a DAW like interface with a single tempo measured in crotchets/quarter notes and time signature track and an optional amount of audio tracks with volume and bus control.

The manager has a workflow of [Level 1 > Stage 1, Stage 2, etc] [Level 2 > Stage 1, Stage 2, etc] e.g. Level – Boss fight, Stage – Phase2. The stages hold 3 pieces of data – start time, end time and selected tracks.

The interface has a two keyboard shortcuts:

Save is ctrl + S however the plugin saves automatically with the `resource_saved` signal. Data is saved to a custom resource in the `SaveData` directory.

To duplicate a sound clip is shift + D (couldn't use ctrl + D as the plugin doesn't override the other docks).

Left clicking a level, track controls, clip or stage will show a delete option.

Scripting.

For scripting, there are 4 methods to make it so one line of code can switch between music. All these methods are void functions.

`set_level_and_play(String: level name, String: stage name, float: volume fade in seconds, enum value INSTANT, ON_BEAT, ON_BAR or ON_LOOP)`

Sets the level and plays stage. This should be the first method to be called to start playing music instantly or to quickly change the level without stopping.

`play_stage(String: stage name, enum value INSTANT, ON_BEAT, ON_BAR or ON_LOOP, float: volume fade in seconds, bool: overdub/layering will add and remove tracks whilst playing if the time selection is the same as the last stage)`

`set_level(String: level name)` Only use this while music is stopped to get a level ready, it's slightly quicker than using `set_level_and_play()`.

`stop(float: volume fade in seconds)`

There's also the 'playing' property that can be set directly to pause and play the music.

Example:

```
Music.set_level_and_play("All Menus", "Main Theme")
```

```
if go_to_map_selection:
```

```
    Music.play_stage("Map Selection", Music.ON_BEAT)
```

Signals.

For syncing the game with music there are the `next_beat`, `next_bar`, `on_loop` and `clip_playing` signals.

`next_beat(beat number from stage start)`

`next_bar(measure number from beginning)`

`on_loop`

`clip_playing(sound clip name, track number starting from 0)` this calls as the sound clip starts playing.

Example:

```
Music.connect("next_beat", self, "do_something")
```

```
func do_something(beat):  
    #use fmod (float modulus) or % to find beats.  
    #assuming in common time, 4/4.  
    if beat % 4 == 0:  
        #First beat of bar, same time as on_bar with beat value instead of measure parameter.  
    elif fmod(beat + 1, 2):  
        #Off beats
```