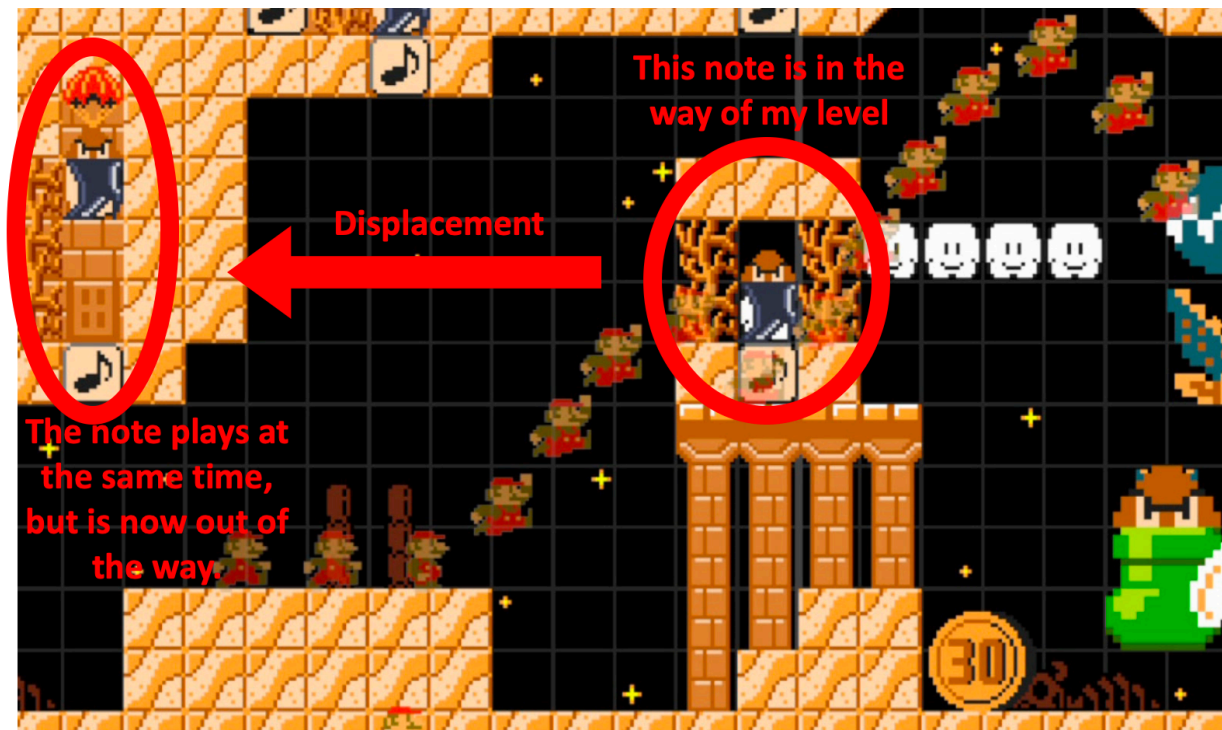


# Note Displacement Techniques in Mario Maker 2

By LoupAndSnoop

Special thanks: h267 (aka UncaughtCursor) calculated many displacements. Com\_poser provided many fast autoscroll tricks.

**Important note:** ALL pictures in this guide show notes that all play at the same time. *Semisolids matter!*



## What it is:

In music levels, a **note displacement** is a way to move a music note somewhere else, but it plays at the same time

## Why we use it:

In music levels, we frequently move music notes to solve one of 2 problems:

- We want to play two notes, but they conflict.
- A music note is in the way of the play area.

## How it works:

There are a few main ways to displace notes:

1. Instrument spawns to fall some distance to hit the music block and hits the note later.
2. A semisolid along the music block will add a small delay for when the note plays.
3. An assisted load with a lift makes an instrument load *sooner*.\*
4. Putting a music block on tracks.\*

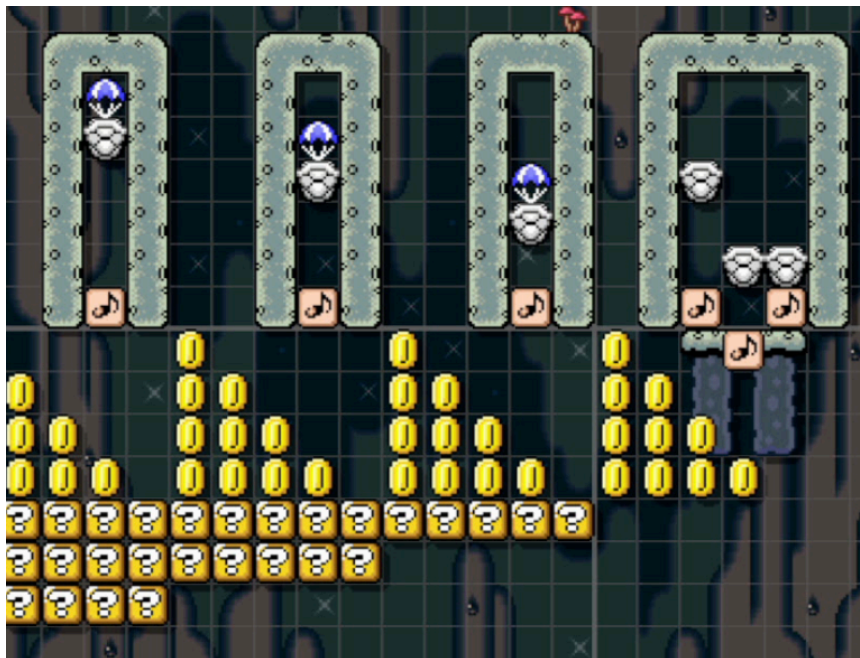
\*These cost an extra entity, and are less preferred.

Many note displacement setups are specific to a certain speed of autoscroll, so they will be broken up as such.

## Specific Note Displacement Setups

These setups are specific to a certain speed of autoscroll (or pseudo-autoscoll). These are preferred because they do not cost extra entities. Coins and blocks act as a ruler.

### Fast Autoscroll (Cheetah):



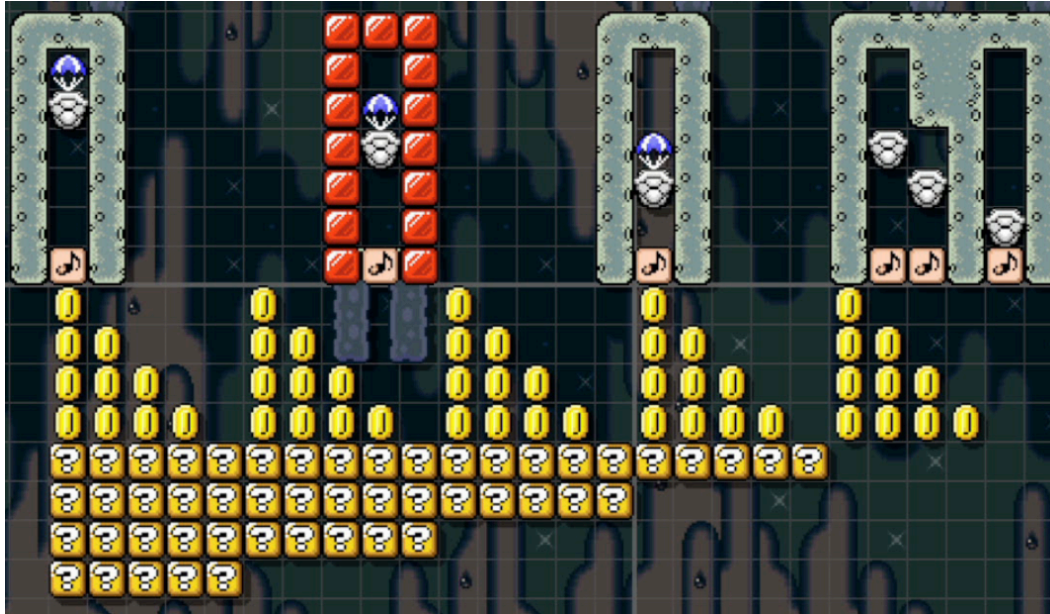
Medium Autoscroll (Rabbit):



Slow Autoscroll (Turtle):



## Running Speed



The note marked with red blocks has a slightly inaccurate time.

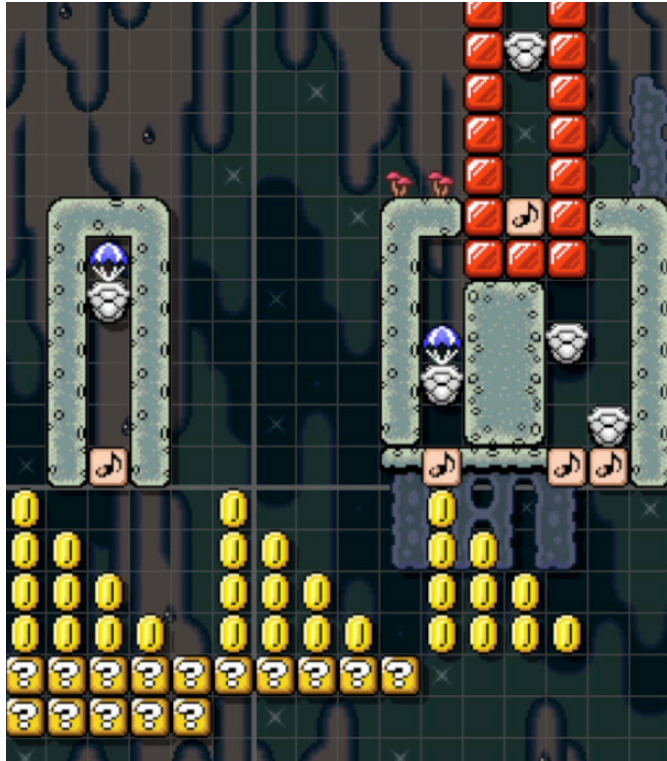
## Blue Lava Lift:



## Winged Block on Tracks / Walking:

Winged block on tracks = walking speed. Flimsy lifts have a very slightly different speed and won't work for this.

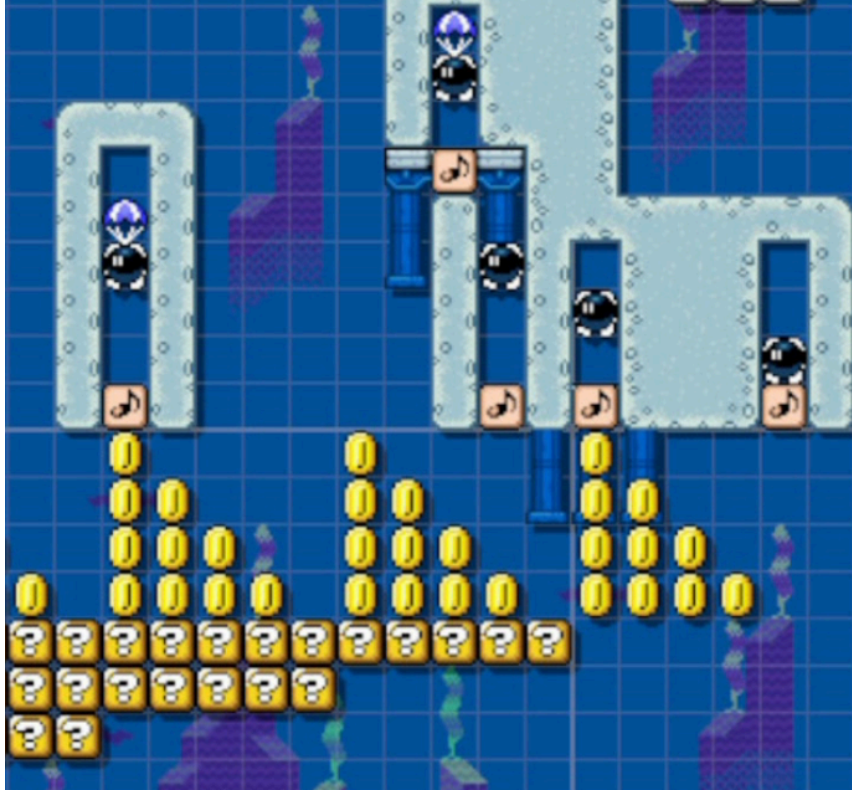




The note in red is slightly inaccurate.

### Winged Block on Tracks (Underwater/LowGrav)

See above. This should be the same timings as for Night Sky or Night Airship themes.



## Universal Note Displacement Setups

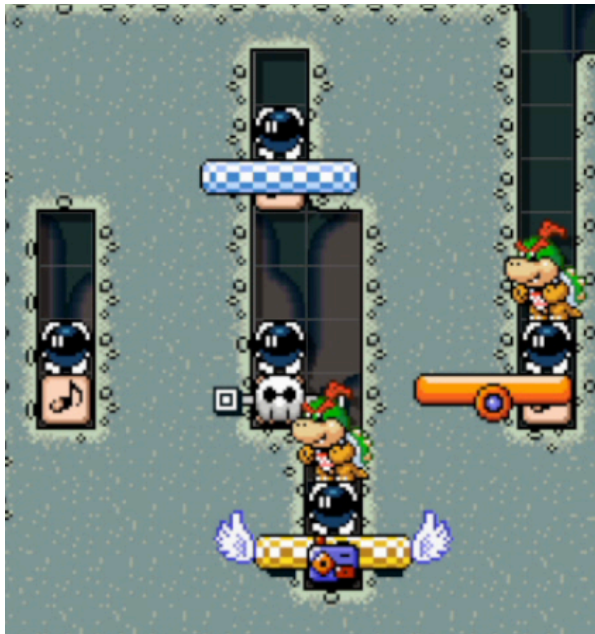
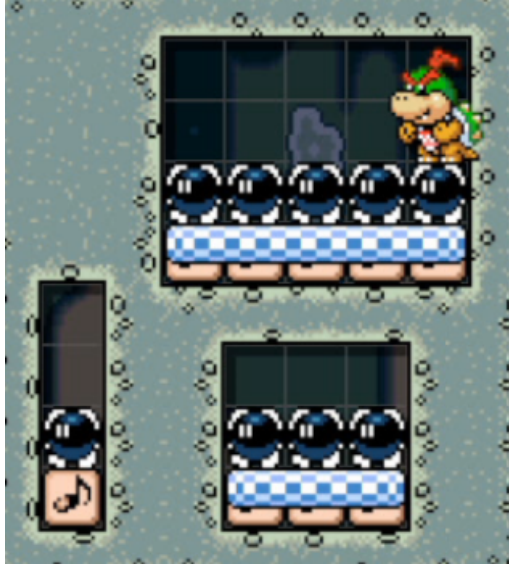
These setups work for ALL speeds of autoscroll. They generally cost an extra entity, so avoid using them if you have other options.

### Assisted load setups:

These setups abuse the fact that objects on lifts load early.

- Anywhere on the lift is fine, big or small.
- The center of the lift determines when it goes off.

There are music blocks hidden where you'd expect.



**Boss Stacking:** Stacking Bosses on top stops the note from playing twice when it spawns far.

- Boom-boom-free setups depend on the instrument.
- Boom-boom is not needed if the object is close enough to the spawn window.
- Make sure the stack stays together long enough to avoid a double hit.
- Boom-boom, Bowser Jr, and Bowser are mostly interchangeable.

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For more guides, see [this list of resources](#).

