Before running your scripts, turn off vsync otherwise you'll get poopoo performance. Also it would be wise to load the map you want to TAS beforehand with the game settings that you would like (e.g. number of laps, number of AI karts, etc.). This is because some settings may not be properly set by the plugin, and will use whatever value was previously set.

Header fields

The header consists of a few mandatory values:

```
map "map_name"
kart_name "kart_name"
num_laps <num_no_brackets>
difficulty <num_no_brackets>
quick_reset <boolean>  // this field is optional, default is false
```

If quick_reset is true, then whatever map is being played will simply be restarted, and not fully reloaded. If using this, all other header fields are ignored if you're already in a loaded map and all settings are kept at whatever they currently are (e.g. number of ai karts and difficulty won't be updated).

Framebulks

A framebulk is a set of inputs that is sent to the game for a set number of ticks. The framebulk section starts with the keyword "frames". Each framebulk is placed on its own line after that.

A framebulk that does nothing and takes no time looks like this:

```
--|---|-|0|
```

The first 2 characters correspond to accelerate/brake. The next 3 correspond to fire/nitro/skidding. Then there is a field for the steering angle with 0 degrees being straight forward, and positive angles corresponding to the right. The final field is the number of ticks for which to execute the framebulk.

```
ab|fns|angle|ticks|
```

For example, here's how you accelerate while turning slightly to the right for 20 ticks while using nitro:

```
a-|-n-|5.0|20|
```

A framebulk may be replaced with "playspeed x" where x is a multiplier - a value of 1 is close to what normal gameplay looks like. This will adjust the framerate and tickrate of the game. High values probably won't speed up the game too much unless you have a speedy computer,

but specifying a negative multiplier will run the game as quickly as possible *without rendering graphics*. A multiplier of 0 is valid and will effectively pause the game. (In general, it is a good idea to keep the graphics settings down and vsync off to increase the playback speed of scripts).

Example script

```
map "abyss"
kart_name "tux"
num_laps 1
difficulty 0

// ab|fns|angle|ticks|
framebulks

playspeed -1

// wait
--|---|0|600|
a-|---|0|740|

// turn to left
a-|---|-1|80|
a-|---|0|190|

playspeed 0.5

// turn towards nitrous
a-|---|1|60|
a-|---|0|140|

// adjust for second nitrous
a-|---|1|50|
a-|---|0|90|

// adjust for third nitrous
a-|---|1|50|
a-|---|0|80|

// fast
a-|-ns|1|50|
a-|-n-|0|200|

playspeed 0
```

Handy tips

- You must skid for exactly 121 ticks (1 second) before you get a speed boost from it, and 361 ticks before getting a big speed boost.
- You must wait 85 ticks after stopping a skid to start another one

PALETTE
wait for boost
--|---|0|484|

accelerate forward
a-|---|0|100|
use boost forward
a-|f--|0|100|
use nitro forward
a-|-n-|0|100|

turn left
a-|---|-1|50|
turn right
a-|---|1|50|

(reverse for left)
slight skid right
a-|--s|-1|50|
normal drift right
a-|--s|0|50|
heavy drift right
a-|--s|1|50|

Initiate skid left (slight) (1 boost)
a-|--s|-1|5|
a-|--s|1|120|
a-|---|0|50|

initiate drift right (slight) (1 boost)
a-|--s|1|5|
a-|--s|-1|120|
a-|---|0|50|