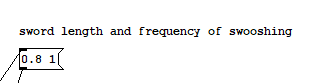
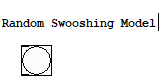
**Some Notes**

* After drawing, there is only a one pair of swooshing sound. To continue, click the message :



Reynolds number automatically recalculated if you change and hit this message.

You can also switch to “random swooshing model” if you do not want to initate the swooshes manually :



* I could not complete the hitting of swords, but you can manually hit them with the blue bang. Or you can use “random hit”
* Because of some timing [incompatiblity](https://www.seslisozluk.net/incompatiblity-nedir-ne-demek/), I disabled the draw “speed” control. You can still see it inside the “draw\_run” object, unconnected.
* Speed at the tip of the sword is calculated (pd Reynolds) with v = 2\* π \* L \* w where,

L =sword length and w = angular velocity

If you think you are rotating the sword 360 degrees in half seconds, it would be 120 rpm. 120 rpm = 2 Hz which may be the second argument of the above message (“freq. of swooshing”)

**Objects**

**Draw\_run :** Execute drawing sound with a proper timing command (vline)

**Draw\_a :** Users drawing model

**Draw\_b :** Opponents drawing model (I made them slightly different to follow easily)

**Swordd :** Model of the sword with some band pass filters

**Sword** : Another sword model for different opponent, I did not used at the finalmodel.

**Swosh\_env :** Includes necessary vline object

**Pd Reynolds :** Calculates the Reynolds number. If Re<50000 , no swoosh sound. (Reynolds number is 2000 for internal flow (pipe, closed duct etc. but it is **50000** for external flow like sword or air flow over plate etc)

**Pd swing:**

**Swosh\_run\_a :** Execute swooshing sound with a proper timing command (vline) for user

**Swosh\_run\_b :** Execute swooshing sound with a proper timing command (vline) for enemy.

**Swosh :** Swoosh model, few bandpass filters and oscillator

**Swosh\_env\_a/b :** Timing of swoosh for user/enemy

**Pd fighttimer :** Delays the opponents move (random 100 -500ms or 400-800ms): the second swoosh sound that you hear

I did not know that "message"s are not visible on graph on parent. Did not have time to fix the appearance

**Hit** : Model of hitting sound, it also have a ping metallic sound to represent the actual reverberation of the sword if there is an impact. **(swordping ~)**