

Swing explained ... almost !

- Origin ?
- What mean Swing in electronic music ?
- What for ?
- What kind of Swing exist in the world ?
- Focus on Electronic Music Machines & DAW
- Example of a simple code
- Conclusion if any

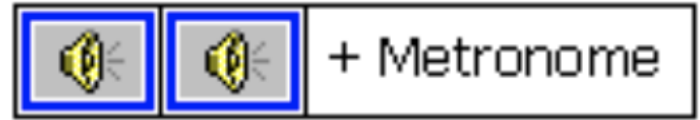
Origin ?

- Swing Music in the 1930
- Jazz...
- Principe ?
- Don't confused Swing style music with nowadays Swing Rhythm !

What mean Swing in electronic music ?

- a bar is still a bar, swing refers to what you do inside the walls :)

Straight Rhythm



What for ?

- **To give a feeling of groove** ... a suite of consecutive notes that are felt like natural, remind musical past music experience, emotional response to foot-tapping, etc.
- It is also known as shuffle.

What kind of Swing exist in the world ?

- Different perceptions, different techniques, ...
- It would be another presentation !

Focus on Electronic Music Machines & DAW

Roger Linn DrumLinn

TR 909

DAW Swing template through Ableton Live Swing template

Focus on Electronic Music Machines & DAW

Roger Linn DrumLinn

- Note that the "standard" x0x swing is simply a delay of the 2nd and 4th 1/16 notes in a 4/4 time-signature 1/16th note pattern.
 - Every other note is delayed. The amount of swing sets how much these hits are delayed :
 - Delay steps 2 4 6 8 10 ... 16 ...
 - No delay on Steps 1 3 5 7
 - The delay is calculated easy as 0 to 100 (100 is the maximum, if more you will have a step that start with the next step)
- Velocity changes
- 1/3 up to 2/3 note length changes
- Exemple → 75 % of swing → the second downbeat is late - funky drummer style.

Focus on Electronic Music Machines & DAW

TR909

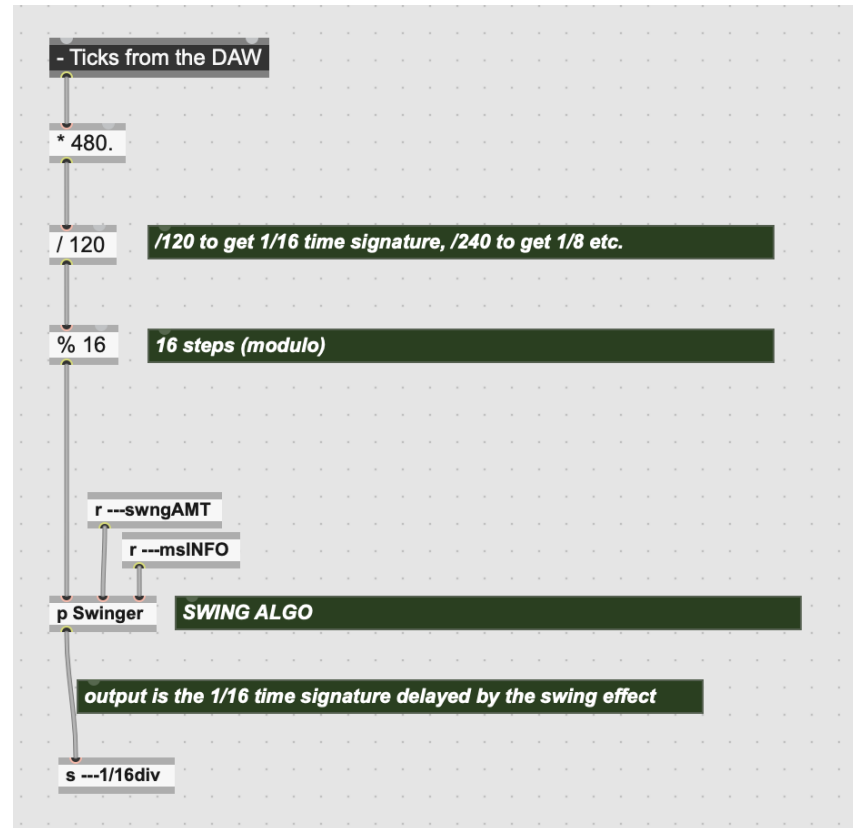
- The shuffle of the TR-909 delays each **even-numbered 1/16th by 2/96 of a beat** for shuffle **setting 1**, 4/96 for setting 2, 6/96 for 3, 8/96 for 4, 10/96 for 5 and 12/96 for 6. (on TR909 there are only 7 settings !)
 - Delay steps 2 4 6 8 10 16 ...
 - No delay on Steps 1 3 5 7
- Velocity changes of course...

Focus on Electronic Music Machines & DAW

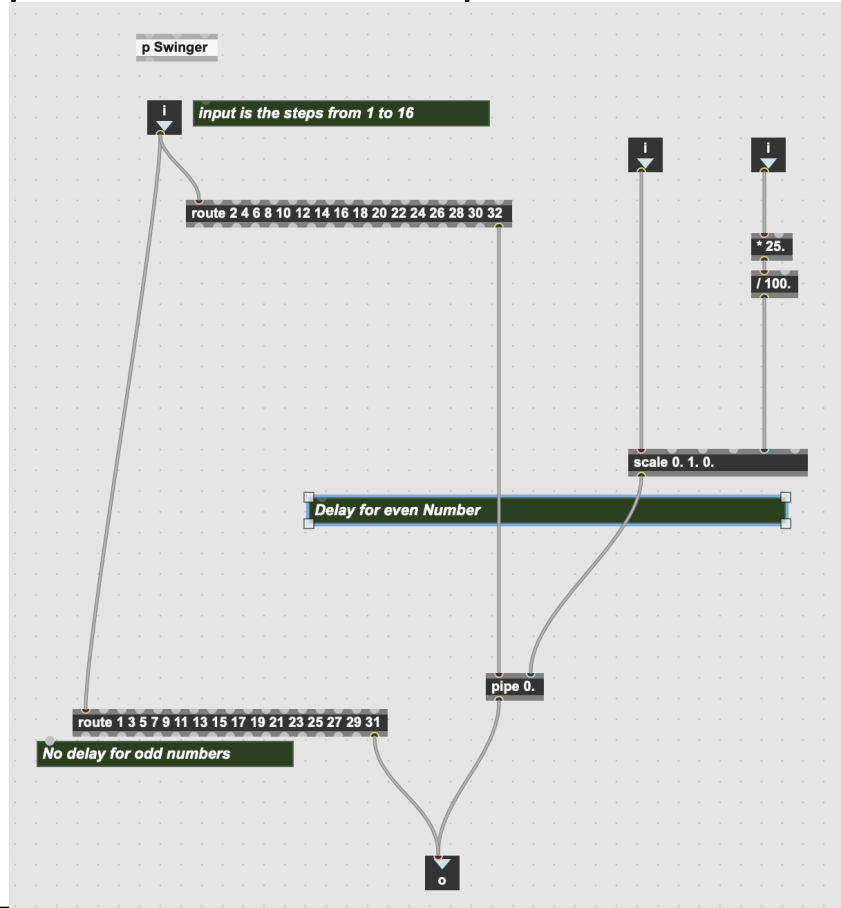
DAW Swing template through Ableton Live Swing template

- It has midi files of different swing patterns that tells it which hits to delay and by how much. You can play with the different patterns for different feels that will delay notes other than simply the 2nd and 4th.
- Let's see in Ableton Live !
 - MPC, SP1200 & Logic swing templates.

Example of a simple code



Example of a simple code



You should also add **velocity** changes, and, $1/3$ up to $2/3$ **note length changes**

Conclusion

- No need to go to into complex algorithm
- Best algo are simple & straitgh forward method (TR909 & Roger Linn)
- Many people implemented sort of machine learning algo from real drummers... even though results can be very good, no perfect solution as dependant on the style & music culture of the listeners.
- Today, people are more electronic music swing oriented with sort of binary signature.
- Delay somes note, adding velocity movement & notes length size changes in your midi loops ... are already a lot to explore !
- Playing on the different length of the drum patterns is also a lot of fun and new directions ...
- Playing the different instrument at different time signature is fun as well !