

S-Notation (2011)

Explanation (part1)

Symbolic of the S-Notation (part 1)

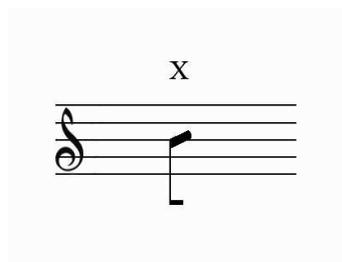
This notation is a system, which provides a description of the motion sequences turntablists operate when performing or creating musical patterns. It was invented by Alexander Sonnenfeld in 1999 and is in a continuous development process.

There are two main components to describe:

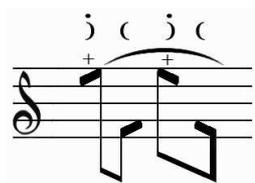
1: Record motions

2: Crossfader motions

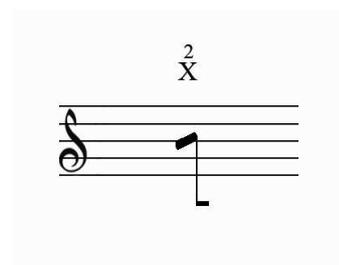
To define and describe those motions, different symbols are placed in/or above a set of five horizontal lines and four spaces. All symbols concerning the crossfader motions are situated above the staff ! All symbols concerning the record motions are situated on the staff! Here are some famous examples.



One click flare



Aquaman scratch



One click orbit

Like the traditional notation, the position of the symbol on the staff gives an indication on the pitch, therefore on the intensity of the hand motion on the record. Higher pitch sounds are placed above the center line of the staff and lower pitch sounds are placed under the center line of the staff. The distance between the symbol and the center line indicates how low or how high the sound is, compared to how the sample sounds when simply releasing the record.

Precisions about the record motion/one way movements

These movements are the base of many complex scratch patterns. To understand them is a prerequisite in describing scratch technics.

Forward motion: (called a **NOTE**)



Backwards motion: (is called an **ETON**, the reverse spelling of the word "note")



To indicate this record motion we use two different symbols which consists of a head and a stem: you simply have to keep in mind! The notehead towards right in an upward fashion! The etonhead towards left in an upward fashion!

NOTE



ETON



When the symbol is placed on or above the center line of the staff, the "stem" is placed on the left (NOTE) or on the right (ETON) extremity of the head, and "goes down".



When the symbol is placed under the center line, the "stem" is placed on the right (NOTE) or on the left (ETON) extremity of the symbol and "goes up"! The Eton is drawn as the mirrored fashion of the Note!

Integral movements

A movement is integral when a NOTE & ETON are performed back to back (with the same pitch & duration) or when an ETON & NOTE are performed back to back (with the same pitch and duration). These motions are respectively called **NOTETON** and **ETONOTE**. To simplify the notational indication, each symbol (Noteton & Etonote) has a distinct particularity:

The head of a Noteton is exactly the same as a Note (towards right in upward fashion). The graphic particularity of the symbol is the placement of the stem! When an Etonote is played, the same head as an Eton is used but the placement of the stem is different.



When the symbol is situated on or above the center line, the “stem” is placed on the right extremity (Noteton) or left extremity (Etonote) of the head, and “goes down”.



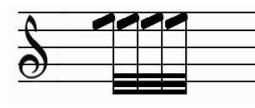
When the symbol is situated under the center line, the “stem” is placed on the left (Note) or on the right (Eton) extremity of the symbol and “goes up”! Major techniques can be described with the Noteton alone, such as the “baby scratch”, the “double time baby” and the “drill” (or scribble). Advice! It is of course possible to play the respective reverse variations as well, and use the Etonote symbol.



Baby scratch



Double time baby scratch



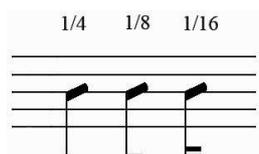
Drill (skribble)

The difference between a baby and a double time baby is, as the name applies, the Duration. The same record motion can be operated in different time values. To indicate the duration, the same system as in music theory is used: Beams on the stem of each Note/Eton and Noteton and Etonote are added as the timing is shortened.

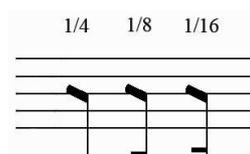
Duration of the record motions

This notation uses the same tempo principles than in music theory: The most important time values for scratching are the quarter, one-eighth and one-sixteenth notes.

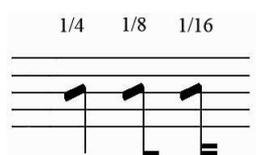
NOTE



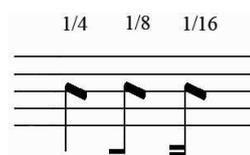
ETON



NOTETON



ETONOTE



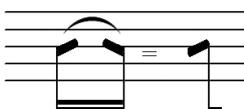
The beam of each Note or Noteton (when single) is always headed towards right, and the beam of an Eton or Etonote is always headed towards left. For Groups, the symbols are linked by the beam.

Groups of record motions

When any hand motion is performed using more than one record motion, it is called a **group**. The most popular form is the Noteton or Etonote. For example a 1/8th Noteton or Etonote consists in performing two single movements with a 1/16th duration each.

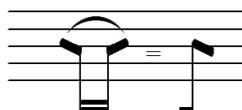
Timing of a Noteton

$$1/16 + 1/16 = 1/8$$



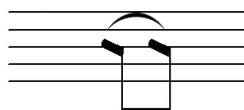
Timing of an Etonote

$$1/16 + 1/16 = 1/8$$



The first two movements are beamed. The number of beams depends on the duration. In this case the duration is 2x 1/16. This is very important to indicate a group.

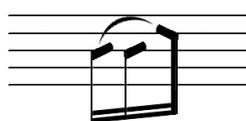
Another group of 2 goes like this: One beam indicates that every record motion has a 1/8th duration (When there are two beams, every record motion has a 1/16th duration).



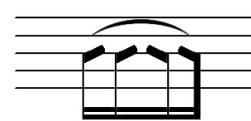
Here, there is a symbol that links the record motions, they are "**SLURS**" -> The slur is very important! It indicates that this group of 2 record motions is played subsequently and in chronological order. Other forms of groups are possible. The tears performance is a good example:



1f/2b Tear



2f/1b Tear



Clover tear

The last record motion of the pattern is represented by a thicker Stem. This indicates that the performance has to be repeated from the top. This is a very important symbol to denote the repetition of a performance.

When there is no slur, it indicates that we start scratching from the same start point. For a better understanding we compare both possibilities and explain the practical conversions below:

A)



B)



C)

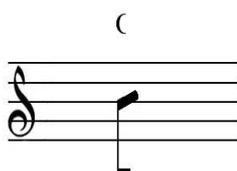


- A. Here we play four $1/16^{\text{th}}$ notes from the same start point. This can be compared to *Stabs*. This technic requires moving the record back to the start point after each Note, and we would need the crossfader to make that step silent. The important point here is to understand the function of the Slur, not to describe a scratch pattern.
- B. Here there is a slur above the record motions, which implies to move the record subsequently forward in 4 steps. Here, every record motion is a $1/16^{\text{th}}$ Note!
- C. Here the record motion is divided in 4 (cut by the crossfader) but we move the record only in one stroke!! This type of indication is necessary to describe different parts of the record motion divided by crossfader technics.

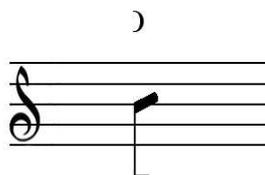
Precisions about the crossfader motions/one way movements

The symbol representing the crossfader performance is ALWAYS placed above the staff, right above the record motion symbol. The graphical shape of this symbol detects the functionality of the crossfader motion. To indicate this crossfader motion we use two different symbols:

Open motion: *(in combination with a 1/8 Note)*



Closing motion: *(in combination with a 1/8 Note)*



On the left example, the record motion and the crossfader motion are performed EXACTLY at the same time. The 1/8th NOTE record performance is done at the same time as the “open the crossfader” performance is done. The starting position of the crossfader is in this case, closed and the ending position of the crossfader is opened.

In the second example, the starting position of the crossfader is to be opened and the ending position is to be closed. The record motion is a 1/8th note as well. It's important to close the crossfader as soon as the 1/8th record motion is heard!

!! ->There is a particularity concerning the Close performance: The record motion has to be started slightly before the crossfader does. If both performances are started at the same time, the record motion WOULD NOT BE HEARD! In this example a 1:8th Note has to be performed BEFORE the crossfader is closed.

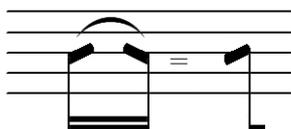
Integral movements

When the crossfader is subsequently closed then opened or opened then closed, it is called an integral crossfader motion. Those crossfader performances are respectively called “close-open” and “open-close”. There are specific symbols to represent the integral movements. These are simply the result of the fusion of the braces.

As in music theory, the addition of two $1/16^{\text{th}}$ valued symbols equals a $1/8^{\text{th}}$ valued symbol. Here are two examples on a $1/8^{\text{th}}$ NOTETON:

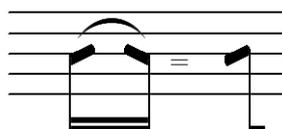
Open-Close motion

() O



Close-Open motion

) (X



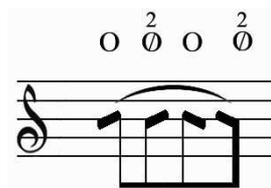
Here the $1/8^{\text{th}}$ NOTETON record motion is performed while the “Open-Close” crossfader motion is performed. In the first example, the “open” motion is performed on the $1/16^{\text{th}}$ Note of the $1/8^{\text{th}}$ NOTETON, and the “close” motion is performed on the $1/16^{\text{th}}$ Eton of the $1/8^{\text{th}}$ NOTEON.

The starting position of the crossfader is to be closed and the ending position is also to be closed. The record motion is a $1/8^{\text{th}}$ NOTETON.

This is exactly the same practical conversion as the beginning of the autobahn pattern or as the 3 Click Delayed Flare.

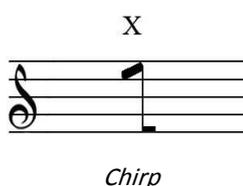


Slow autobahn



3-click delayed flare

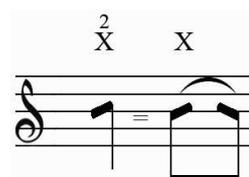
Other scratch patterns can be described using the “Close-Open”, such as Chirps or Flares. **There is a particularity concerning the Chirp performance:** The record motion has to be started slightly before the crossfader does. If both performances are started at the same time, the first part of the record motion WOULD NOT BE HEARD! In this example a 1:16th Note has to be performed BEFORE the crossfader is closed. The other motions of this performance happen at the same time.



This performance is tricky, since the hand-record movements and the crossfader hand movements are not synchronized on half the pattern. Repeating this pattern requires some practice. This methodology also works with the 1-click flare performance, which consists in a combination of a 1/8th Note and a Close-Open symbol.



1 Click Flare



1 Click orbit

The combination of a NOTETON and 2 Close-Open results in performing a 1 Click Orbit! Next to the simplified indication we see the decomposition of the single movements. There is a very important orthographical rule concerning the transcription of crossfader motions! When a same motion is repeated, it is written only once above the record motion symbol, until the crossfader motion changes (see above, in the 1-Click Orbit).

Special motions on the crossfader

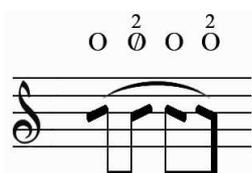
A multiplicity of crossfader motions can be performed. Here are the most important!

The transformer click (or tapping): We start with a closed crossfader, while keeping a little bit of pressure with the thumb (the index when being hamsterstyle) and hit the fader with the index (use the thumb for hamstersyle). The symbol for this technic is a circle (like the open closing motion) with a diagonal line inside.

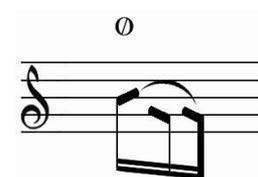
The tapping is used, for example, in the second crossfader motion of the slow autobahn (and the last one). It is also used in the 3-click delayed flare (but 2 times over the respective Note + the last Eton) or the dicing pattern.



Slow autobahn



3-click delayed flare

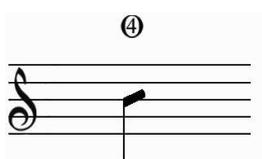


Dicing 1f/2b

For the Dicing pattern, the tap-motion is also used on the crossfader for every record motion. Again, it's only necessary to write over the first record motion the symbol of the tap-motion. Each one of the following movements is combined with the same crossfader motion.

To indicate the crab performance we use numbers to denote the finger-sequence. There are different kinds of crabs (2,3,4,5,...), so different types of symbols are needed. Here is a demonstration, where we play the 4 finger crab in combination with a 1/4th note.

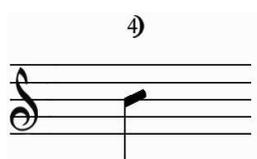
1.



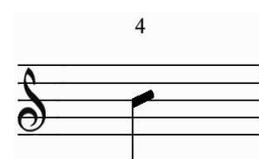
2.



3.



4.



1. The full encircled "4" means that we start with a closed fader, then brush with 4 fingers over the crossfader and end with a closed fader.
2. The half encircled (open brace) means that we start with a closed fader and end up with an open fader.
3. We start with an open fader, then we close with the thumb and brush with 4 fingers over the crossfader and the end-position is closed. Here we have 5 sounds.
4. This is the indication for the so called 4-finger-crabflare, which produces 5 sounds as well. The starting-position is an open fader, then close with the thumb to finally brush with 4 fingers, and the final-position is an open fader.

Groups of crossfader motions

More complex scratch techniques are generated by grouping different crossfader motions as one sequence. The most popular group is the 2-clicker. It is done by 1.closing 2.tap 3. open subsequently as one performance. To simplify the transcription we create symbols for so called grouped crossfader sequences. Here are the different symbols:

	1--2--3		1--2--3--4
open&close&tap	$\dot{O} = () \emptyset$	open&close&tap&tap	$\ddot{O} = () \emptyset \emptyset$
tap&open&close	$\dot{\emptyset} = \emptyset ()$	tap&tap&open&close	$\ddot{\emptyset} = \emptyset \emptyset ()$
close&tap&open	$\dot{X} =) \emptyset ($	close&tap&tap&open	$\ddot{X} =) \emptyset \emptyset ($

Here are some famous examples of scratch technics which are generated by groups of crossfader motions. Next to the simplified indication we see the so called decomposition which divided the pattern in the respective single movements. In the 2click flare indication we see a **dotted note** (a Note with a small dot written after it). The dot increases the duration of the basic note by half of its original value. This methodology applies also for the Eton, Noteton or Etonote.



2-click flare



3-click crescent flare



Swing flare

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[Youtube.com/user/tonspielzeug](https://www.youtube.com/user/tonspielzeug)

Facebookgroup: "S-notation education" (for question and answers)