Micromoog Time-Touch Sensitivity Filter Contour

By Tom Rhea

This PDF supports the YouTube video and audio file on my https://www.drtomrhea.com/resources website:

Resources:

Functional Design of Synthesizers:

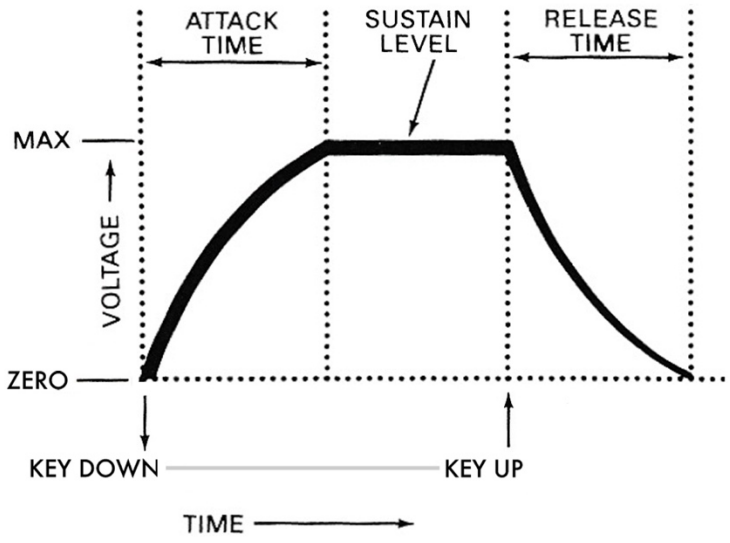
Development of the Moog Micromoog 1973-1975:

Micromoog Keyboard Technique ca. 1979

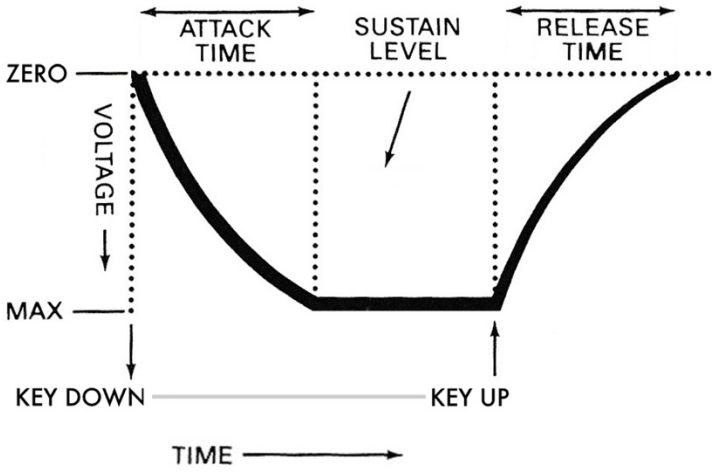
This PDF describes how the inverted contour of the Micromoog can be set to create what I call "time-touch sensitivity," which simulates velocity sensitive timbre control on a non-velocity sensitive keyboard.

First, a normal Micromoog ASR Filter Contour (there is no "D"):

Micromoog Filter Contour

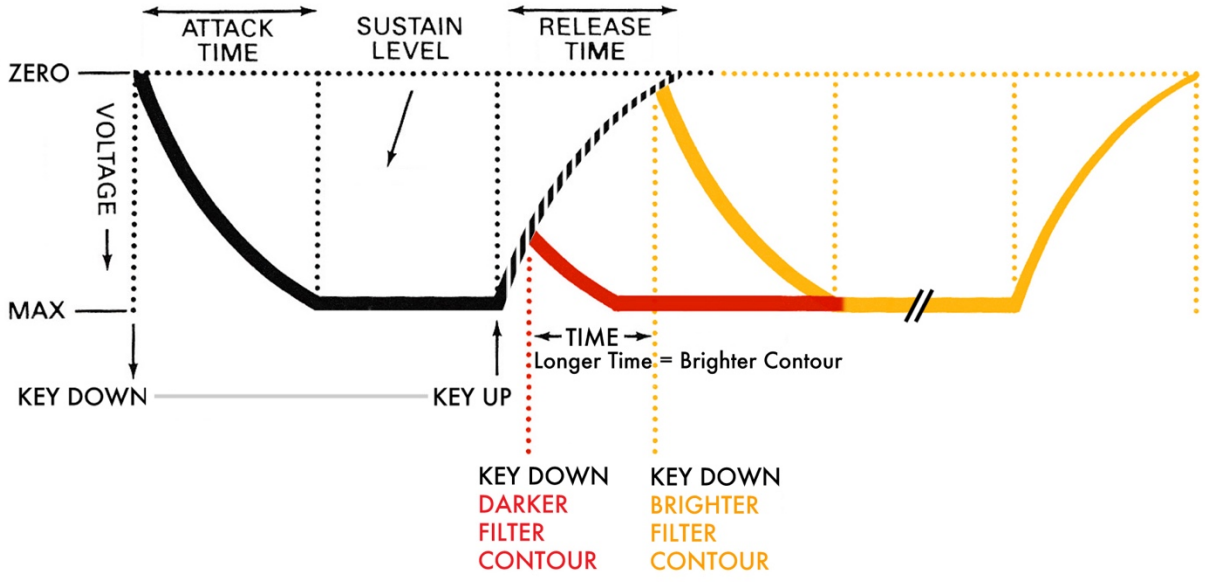


Micromoog Inverted Filter Contour



On KEY DOWN, the long ATTACK TIME in the normal Filter Contour now becomes a long (implied) "*Decay Time–D"* in the Inverted version! The filter starts at its highest-brightest point–the "attack" actually heard is instantaneous and bright.

Micromoog Time-Touch Sensitivity



As the inverted FILTER CONTOUR slowly *rises*–rather than *falls,* if a *later* KEY DOWN occurs, a new ATTACK TIME will be started. As the graphic shows, a *later* KEY DOWN time will catch the RELEASE TIME at a *later* time on its upward trajectory, and a brighter ATTACK TIME will occur. Voila! "time-touch sensitivity!"

The question naturally arises: Why don't we actually *hear* the inverted contour RELEASE TIME as it rises? **Because the LOUDNESS CONTOUR RELEASE time is set to *minimum,* as the Micromoog facsimile or "patch" below shows:**

The settings shown above with a black star are *critical,* and *times* (necessarily using a *negative* CONTOUR AMOUNT) must be set depending on the speed of notes you want to play on the keyboard–facilitated by your understanding of this idea.

Play with it. It works, as the audio example clearly illustrates! I discovered this *after* Jim Scott and I provided this Micromoog feature! We intuitively knew an inverted contour would be useful.