Sound Control – Part 2 : Flutes

In this, the second article in our "Sound Control" series, we shall be looking at the various Flute sounds in the Wersi OAS-7 database. It is my experience that I need to edit all of these sounds except for GM Flute* [089-000-073]. This is because all the other Flute sounds have a pronounced breathy and pitch-changing attack which is not wanted on every note. This can be modified by playing very legato until the attack effect is required, but it's not easy.

The first way of adjusting the way this attack demonstrates itself is to alter the Dynamic setting. This is not a permanent sound edit but just a way of taming the effect in a particular Total Preset. Touch **Selectors** at the top of the screen to enter that screen, then touch the **Advanced** button so it goes from blue to green and shows **Advanced On**.

The bottom row of parameters is **Dynamic**. If this is unticked, no Dynamic effect will be applied and the sound will be the same regardless of how quickly you attack the key. In this state, the Flute attack effect described above is barely noticeable. The disadvantage of doing this is that you cannot invoke that effect at any time while playing. The second row up is called **Dynamic Curve** and different values here change the way the Dynamic effect presents itself. The default is "4" which serves for most purposes, except here. Changing it to "3" considerably tames the Flute breathy and pitch-change attack. Legato is easier to play without the effect intruding at all, yet by playing one note staccato the effect will occur.

Incidentally, if you tick the appropriate **Aftertouch** box at the top of the **Selectors** > **Advanced** screen, all the Flute sounds will be given a vibrato when applying extra pressure on the key being played.

I have found it desirable to edit each of the Flute sounds (except GM Flute*) to provide new user-saved sounds in which the breathy and pitch-change attack is tamed. Let's have a look at each Flute sound in turn. The editing in each case was done solely within the **Sound Control** section of **Settings** > **Edit Long Waves**.

1. Flute Tremolo Fade [082-000-052]

Here is a table comparing the "Inst" values with my edited values for the six Sound Control parameters.

Sound Control Parameter	"Inst" Value	Edited Value
Release	25	31
Attack	0	40
Color	63	89
Tone	127	82
Tremolo Fade	0	4
Balance	68	95

I've changed the **Attack** value to reduce the attack thus taming the undesired effect but still allowing it to be generated by increasing the velocity of attacking the key. **Tremolo Fade** has also had a taming effect though it does tend to change the tonality and introduces a rapid tremolo effect if the value is raised too high. The other changes have changed the tone slightly. The overall volume of the sound was raised to 90 from 79 originally.

2. Flute Tremolo Switch [082-000-053]

Here is the table for this Sound.

Sound Control Parameter	"Inst" Value	Edited Value
Release	25	28
Attack	0	23
Color	63	85
Tone	127	83
Tremolo Select	0	0
Mono Poly	127	127

Tremolo Select is an example of a "switching" parameter. It causes the same result between values of 0 – 63 (very slow tremolo) and a different result between values of 64 – 127 (fast tremolo). It therefore switches between 63 and 64. The **Attack** value is not raised as high as in the previous sound. This makes it easier to invoke the attack effect if needed.

Mono Poly is also a switching parameter, giving the sound a monophonic property with values between 0 – 63 and a polyphonic property between 64 – 127. The overall volume of this sound was raised to 106 from 95 in the original sound.

3. Flute Vibrato [082-000-054]

The table:

Sound Control Parameter	"Inst" Value	Edited Value
Release	24	29
Attack	0	14
Color	63	84
Tone	127	77
Attack Shape	0	70
Mono Poly	127	127

The *Modulation Wheel* can be used to tame the built-in vibrato here. *Aftertouch* increases the vibrato depth, not the frequency.

You'll notice a pattern developing within the tables. Raising the **Attack** value lowers the attack which tames the effect I'm trying to control. **Color** and **Tone** changes affect the overall sound.

The **Attack Shape** parameter affects the duration of the attack. Low values give a fast attack, boosting the effect I'm trying to tame, while higher values spread the attack over a longer time helping with the taming. Hence this value is raised from 0 to 70. The overall volume of the sound was raised to 102 from 99 originally. I also raised the preset footage to 4' (Octave setting on screen 1 of **Edit Long Waves**).

4. Jazzflute 1* [090-000-018]

In the two Jazzflute sounds, the attack effect is, at 8' pitch and within the "Middle C octave", more breathy than pitch-change, and this, I find, is more acceptable, though at higher pitches the pitch-change is very noticeable. Therefore, a minimal amount of editing was needed. The table is presented below:

Sound Control Parameter	"Inst" Value	Edited Value
Release	24	24
Attack	0	13
Color	63	74
Tone	127	106
Attack Shape	0	42
Mono Poly	0	0

Here, the **Mono Poly** range of values has been reversed: 0 – 63 is polyphonic. The volume of the sound was raised to 90 from 75.

5. Jazzflute 2* [093-000-020]

Sound Control Parameter	"Inst" Value	Edited Value
Release	18	24
Attack	0	27
Delay	63	50
Tone	102	91
5th Switch	0	48
Sub Noise	49	49

Now we have some different parameters.

5th Switch controls the attack pitch-change. Higher values reduce the effect.
Sub Noise is much more elusive and I've not yet been able to recognize what it does.
The volume was raised to 80 from 64.

Finally, for completeness, let's have a look at:

6. GM Flute* [089-000-073]

Sound Control Parameter	"Inst" Value
Release	24
Attack	0
Color	63
Tone	127
Attack Shape	0
Mono Poly	0

Mono Poly value is reversed again. Notice the Attack value of zero provides maximum attack and raising this value will reduce the breathy effect at the start of each note.

I hope you have found this article of some value. Sound Control is a very interesting and useful feature and we shall investigate its possibilities with many other sounds in future articles.

Colin
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