

Notes on SYNTAL

Chapter 7: Master Envelopes and Settings (V.00.2) For OSX

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Summary of Master Envelopes and Settings.

The table below lists all of the master envelopes (**glxx**-type commands) and master settings (**setxx**-type statements) in SYNTAL2K.

Command	Defaults	Description
mm	— (beats/min.)	Set new temp (beat).
glmm	— (beats/min.)	Gliss to new tempo.
setav	0.0 (dB)	Set voicing increment.
glav	0.0 (dB)	Gliss to new AV increment.
setf0	0.0 (“oct”)	Set F0 increment.
glf0	0.0 (“oct”)	Gliss to new F0 increment.
setoq	0.5	Set open quotient.
gloq	0.5	Gliss to new OQ.
setfl	0.002	Set flutter.
glfl	0.002	Gliss to new FL.
setdi	0.00	Set diplophonia.
gldi	0.00	Gliss to new DI.
settl	1000.0 (Hz)	Set spectral tilt.
gttl	1000.0 (Hz)	Gliss to new TL.
setdv	0.008	Set vibrato depth.
gldv	0.008	Gliss to new DV.
setfv	1.00 (Hz)	Set vibrato freq.
glfv	1.00 (Hz)	Gliss to new FV.
setas	0.0 (dB)	Set aspiration increment.
glas	0.0 (dB)	Gliss AS increment.
setaf	0.0 (dB)	Set affrication increment.
glaf	0.0 (dB)	Gliss AF increment.

Chapter 5 introduced the idea of “master” changes in parameters. The **mm** and **gmm** commands controlling tempo—or, strictly speaking, the value of the internal parameter “beat”—were introduced. Also master setting and master envelope commands for AV, **setav** and **glav**, were described. Almost all of the parameters—the most prominent exceptions are the sound color parameters (planned for later)—can be affected by master settings and master envelopes (i.e., the **glxx** type commands).

The table above gives important details about all the master envelopes and all the master setting commands. The default values should be noted carefully. In particular the settings and changes of levels (e.g., **glav**, **setas**, etc.) should not be increased very much above the default levels—typically 0.0.

For the **glxx** statements, the first parameter is a duration over which the “glissando” is to take place, and the second parameter is the value toward which the master setting is to move during the specified duration. As always (nearly) the duration is in units of beats. For a nice mind bender, imagine what happens when you have master envelopes that occur within the scope of a **gmm** command. The value of “beat” will be changing under those circumstances. It all works out pretty well, but sometimes the total duration of a stretch of music is not quite you’d expect. Especially when you are trying to coordinate two separate voices, you may have to make duration adjustments after you run them through SYNTAL the first time.

There is only one parameter for the **setxx** commands. It is the new value of the master setting, which is to take effect immediately.

Cautionary Note. There are important differences between the master settings and master envelopes for AV, F0, AS, and AF, on the one hand, and all the others. In the case of AV, F0, AS, and AF, you are setting, or glissing to, a specified *increment* for those values. The value you specify *is* the increment. In the cases of all the others (OQ, FL, etc.) you give the value of the variable that you wish to set or gliss to. Then SYNTAL03 calculates the increment that will get you to the new value. In each case, you do what comes naturally. (At least what you do comes naturally to *me*; I hope it seems natural to you, too.)