

1xy	SET PAN	bit 0 set: pan channel 1 right (add 0x01 to parameter) bit 1 set: pan channel 1 left (add 0x02 to parameter) bit 0.1 reset: pan channel 2 relept (don't add anything to parameter) bit 2 set: pan channel 2 left (add 0x04 to parameter) bit 3 set: pan channel 2 left (add 0x08 to parameter) bit 3 set: pan channel 2 left (add 0x08 to parameter) bit 4 set: pan channel 3 left (add 0x10 to parameter) bit 5 set: pan channel 3 right (add 0x10 to parameter) bit 5 set: pan channel 3 left (add 0x20 to parameter) bit 6 set: pan channel 3 left (add 0x20 to parameter) bit 6 set: pan drums right (add 0x40 to parameter) bit 6 set: pan drums left (add 0x80 to parameter) bit 7 set: pan drums left (add 0x80 to parameter) bit 7 set: pan drums left (add 0x80 to parameter) bit 7 set: pan drums left (add 0x80 to parameter)
2xx	PITCH SLIDE UP CH3	Cause a (rather fast) upward pitch slide on channel 3. xx defines the speed of the slide, lower values mean slower slides. xx can be any value, but beware that the pitch counter will eventually wrap. 200 switches off the effect.
3xx	PITCH SLIDE DOWN CH3	Cause a (rather fast) downward pitch slide on channel 3. Using this will disable effect $9xx$ . $xx$ defines the speed of the slide, lower values mean slower slides. $xx$ can be any value, but beware that the pitch counter will eventually wrap. $300$ switches off the effect.
4xx	DUTY CYCLE/ NOISE CH1	Set the duty cycle for channel 2, and toggle noise mode. $xx <= 0x80$ - set duty cycle and disable noise mode $xx > 0x80$ - set duty cycle and enable noise mode
5xx	DUTY CYCLE/ SWEEP CH2	Set the duty cycle for channel 2, or enable duty cycle sweep. $xx <= 0.80$ - set duty cycle and disable duty cycle sweep. A value of 0x80 produces the default 50:50 wave. Very low values will cause glitches. $xx > 0x80$ - enable SID-style duty cycle sweep. Sweep speed = $(xx \& 0x7F)$ , 581 will produce the classic sweep effect known from HT versions <= 2.20. Some parameters are shared with effect 7xx, hence these two effects impact each other.
6xx	DUTY CYCLE / GRIND CH3	Set the duty cycle for channel 3, and toggle grind mode. $xx \le 0x80$ - set duty cycle and disable grind mode xx > 0x80 - set duty cycle to $(xx*2)&0xff$ and enable grind mode
7xx	AUTO CHORD CH2	Add a chord effect to channel 2. The chord created varies depending on the note used, and is not necessarily harmonic. xx can be any value, 700 turns off the effect. HINT: Try 780 with channel 2 duty cycle sweep enabled.
8xx	EXEC NOTE TABLE CH3	Execute a given pattern as a note table for channel 3. This effect operates on a per-tick basis. Execution starts after the first tick. xx is the pattern to be executed as note table. If the current tempo is greater than 0x10, table execution will continue at the following pattern.  To disable the effect, set xx to a value greater than 0x7F. Using this effect will disable the Cxx (note cut ch1) effect.
9xx	GLITCH CH3	Add a nasty glitch effect to channel 3. Using this will disable effect $3xx$ . $xx$ can be any value, 900 turns off the effect.
Axx	CH3 PHASE	Set the phase offset for channel 3. This has little effect on itself, but will cause interference when used together with another channel that plays the same note as ch3. In this case, it can be used as a primitive form of volume control.  xx can be any value, values around 0x80 will work best. A00 turns off the effect.
Вху	LOOP SECTION/ BREAK PTN	xy = 0 - break pattern immediately and jump to the next position in the sequence. B00 is ignored on the first line of a pattern. $xy > 0$ - jump back $y$ rows in the pattern, repeating the section $x$ times. The Bxy effect should not be nested (ie. don't put a Bxy loop within another Bxy loop)
Cxx	NOTE CUT CH1	Cut the note on channel 1 after xx ticks. Using this effect can make the sound output slightly more noisy. Use COO to disable the effect. Using this effect will disable the 8xx (exec note table ch3) effect.
Dxx	DRUM MODE	Set the drum mode, where xx is 0x000x4F. Refer to the <u>drums section</u> for details.
Exx	EXTENDED FX	Exx with xx < 0x40 - execute up to 5 effects stored at the start of effects pattern xx at once. Effects Bxx and Exx will be ignored.  E80 - reset all effects and restore global variables to their defaults.  E81 - as above, but does not reset speed.  E82 - as above, but does not reset speed and duty cycles.  E83 - as above, but does not reset speed, duty cycles, and panning settings.
Fxx	SET SPEED	Set the current speed. This command temporarily overrides the global speed setting, but does not permanently change it. For details on how the speed setting works, refer to the section on global variables.  TIP: When entering this effect while the player is running, make sure to enter the parameter first, and then the F command.