

PATTERN COMMANDS

- Command 0XY: Do nothing. Databyte will always be 00.
- Command 1XY: Portamento up. XY is index to a 16-bit speed in speedtable.
- Command 2XY: Portamento down. XY is index to a 16-bit speed in speedtable.
- Command 3XY: Toneportamento. Raise or lower pitch until target note has been reached. XY is index to a 16-bit speed or 00 for tie note.
- Command 4XY: Vibrato. XY is index to speedtable. Left side value determines how long until the direction changes (speed) and right side value is the amount of pitch change each tick (depth).
- Command 5XY: Set attack/decay register to value XY.
- Command 6XY: Set sustain/release register to value XY.
- Command 7XY: Set waveform register to value XY. If a wavetable is actively changing the channel's waveform at the same time, will be ineffective.
- Command 8XY: Set wavetable pointer. 00 stops wavetable execution.
- Command 9XY: Set pulsetable pointer. 00 stops pulsetable execution.
- Command AXY: Set filtertable pointer. 00 stops filtertable execution.
- Command BXY: Set filter control. X is resonance and Y is channel bitmask. 00 turns filter off and also stops filtertable execution.
- Command CXY: Set filter cutoff to XY. Can be ineffective if the filtertable is active and also changing the cutoff.
- Command DXY: Set mastervolume to Y, if X is 0. If X is not 0, value XY is copied to the timing mark location, which is playeraddress+\$3F.
- Command EXY: Funktempo. XY is an index to speedtable. Will alternate left side and right side tempo values on each pattern step.
- Command FXY: Set tempo. Values 03-7F set tempo on all channels, values 83-FF only on current channel (subtract 80 to get actual tempo). Tempos 00 and 01 recall the funktempos set by EXY command.

TABLES

- Wavetable left side: 00 Leave waveform unchanged
 01-0F Delay this step by 1-15 frames
 10-DF Waveform values
 E0-EF Inaudible waveform values 00-0F
 F0-FE Execute command 0XY-EXY. Right side is parameter
 FF Jump. Right side tells jump position (00 = stop)
- Wavetable right side: 00-5F Relative notes
 60-7F Negative relative notes (lower pitch)
 80 Keep frequency unchanged
 81-DF Absolute notes C#0 - B-7
- Pulsetable left side: 01-7F Pulse modulation step. Left side indicates time and right side the speed (8bit signed value).
 8X-FX Set pulse width. X is the high 4 bits, right side tells the 8 low bits.
 FF Jump. Right side tells jump position (00 = stop)
- Filt.table left side: 00 Set cutoff, indicated by right side
 01-7F Filter modulation step. Left side indicates time and right side the speed (signed 8bit value)
 80-F0 Set filter parameters. Left side high nybble tells the passband (90 = lowpass, A0 = bandpass etc.) and right side tells resonance/channel bitmask, as in command BXY.
 FF Jump. Right side tells jump position (00 = stop)
- Speedtbl. vibrato: XX YY Left side tells how long until vibrato direction changes (speed), right side is the value added to pitch each tick (depth).
- Speedtbl. portamento: XX YY A 16-bit value added to pitch each tick. Left side is the MSB and the right side the LSB.
- Speedtbl. funktempo: XX YY Two 8-bit tempo values that are alternated on each pattern row, starting from the left side.

For both vibrato and portamento, if XX has the high bit (\$80) set, note independent vibrato depth / portamento speed calculation is enabled, and YY specifies the divisor (higher value -> lower result and more rastertime taken).