

## Track effects

<b>000</b>	Do nothing.
<b>1ST</b>	Slide up. (ST is an index in the speedtable, left and right columns combined.)
<b>2ST</b>	Slide down (as above).
<b>3ST</b>	Slide to note. As above, or ST = 00 slides instantly.
<b>4ST</b>	Vibrato. Left column of ST index is frequency, right is amplitude
<b>5AD</b>	Set attack/decay.
<b>6SR</b>	Set sustain/release.
<b>7XY</b>	Set waveform register to XY. Wavetable takes precedence.
<b>8WT</b>	Set wavetable index.
<b>9PT</b>	Set pulsetable index.
<b>AFT</b>	Set filtertable index.
<b>BRM</b>	Set resonance to R and channel bitmask to M.
<b>CCO</b>	Set filter cutoff to C0.
<b>DXY</b>	Set master volume to Y. If X is not zero, copies XY to timing mark location (player address + 3F)
<b>EST</b>	Global funk tempo. Shuffles between tempo specified in left and right bytes at speedtable index ST.
<b>FXY</b>	Set tempo. 03-7F sets global tempo. 83-FF sets channel tempo + 80. Tempos 00-01 use the funk tempo values set by the E command above.

## Signed values

<b>01 -&gt; 7F</b>	Up
<b>FF -&gt; 80</b>	Down

## Wavetable (left)

<b>00</b>	Null command.
<b>01-0F</b>	Delay step by 1-15 frames
<b>E0-EF</b>	Inaudible
<b>F0-FE</b>	Execute track effect 0-E with right side as data
<b>FF</b>	Jump to table pos on right side
	Values from here are bit-masks
<b>x1</b>	Gate and initiate attack/decay. (0 here initiates sustain/release.)
<b>x2</b>	Hardsync. Ch1 uses Ch3, Ch2 uses Ch1 and Ch3 uses Ch2
<b>x4</b>	Ringmod, channels as above
<b>x8</b>	Test bit. Resets oscillator
<b>1x</b>	Use triangle
<b>2x</b>	Use sawtooth
<b>4x</b>	Use pulsewave
<b>8x</b>	Use noise

## Wavetable (right)

<b>00-5F</b>	Relative notes* upward
<b>7F-60</b>	Relative notes* downward
<b>80</b>	Unchanged note
<b>81-DF</b>	Absolute notes* C#0 to B-7

## Chord spellings

	major	minor	dim	aug	sus4	dim7	7	mi7	b5	#5	b9	9	#9	11	#11	b13	13
<b>root</b>	04 07	03 07	03 06	04 08	05 07	03 06 09	+0B	+0A	-07 +06	-07 +08	+0D	+0E	+0F	+11	+12	+14	+15
<b>1st inv</b>	78 7B	77 7B	7A 7D	78 7C	79 7B	77 7A 7D	+7F	+7E	-7B +7A	-7B +7C							
<b>2nd inv</b>	04 7B	03 7B	03 7D	04 7C	05 7B	03 7A 7D											
<b>3rd</b>						03 06 7D											

## Relative notes (wavetable right)

Horizontal is octave shift, vertical is interval

	-3	-2	-1	+0	+1	+2	+3	+4	+5	+6	+7
<b>r</b>	-	68	74	00	0C	18	24	30	3C	48	54
<b>b2</b>	-	69	75	01	0D	19	25	31	3D	49	55
<b>2</b>	-	6A	76	02	0E	1A	26	32	3E	4A	56
<b>b3</b>	-	6B	77	03	0F	1B	27	33	3F	4B	57
<b>3</b>	60	6C	78	04	10	1C	28	34	40	4C	58
<b>4</b>	61	6D	79	05	11	1D	29	35	41	4D	59
<b>b5</b>	62	6E	7A	06	12	1E	2A	36	42	4E	5A
<b>5</b>	63	6F	7B	07	13	1F	2B	37	43	4F	5B
<b>b6</b>	64	70	7C	08	14	20	2C	38	44	50	5C
<b>6</b>	65	71	7D	09	15	21	2D	39	45	51	5D
<b>b7</b>	66	72	7E	0A	16	22	2E	3A	46	52	5E
<b>7</b>	67	73	7F	0B	17	23	2F	3B	47	53	5F

## Absolute notes (wavetable right)

Horizontal is note, vertical is octave

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
<b>0</b>		81	82	83	84	85	86	87	88	89	8A	8B
<b>1</b>	8C	8D	8E	8F	90	91	92	93	94	95	96	97
<b>2</b>	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3
<b>3</b>	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF
<b>4</b>	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB
<b>5</b>	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7
<b>6</b>	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3
<b>7</b>	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF

## Filtertable

<b>00</b>	Set cutoff as right column.
<b>01-7F</b>	Filter modulation step. Time in left column, signed* extent and direction of modulation in right column.
<b>80-F0</b>	Filter configuration. Filter mode bitmask* in left column (filter can be in multiple modes); resonance is first value of right column and channel bitmask* is second value.
<b>FF</b>	Jump to index in right column. FF 00 means stop.

### Bit-

### masks

### Filter mode

<b>80</b>	none
<b>90</b>	LP
<b>A0</b>	BP
<b>B0</b>	LP & BP
<b>C0</b>	HP
<b>D0</b>	LP & HP
<b>E0</b>	BP & HP
<b>F0</b>	all

### Channel

<b>0</b>	none
<b>1</b>	1
<b>2</b>	2
<b>3</b>	1 2
<b>4</b>	3
<b>5</b>	1 3
<b>6</b>	2 3
<b>7</b>	all

## Pulsetable

<b>01-7F</b>	Pulse modulation step: time in left column; signed* speed in right.
<b>8X-FX</b>	Set pulse width. X is high value, right column is low value.
<b>FF</b>	Jump to index in right column. FF 00 stops the table.