

| Global keyboard controls                                         |                                                                                                                                                     |             |                                            |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------|
| Cmd-Alt-F                                                        | Switch between full screen and windowed display                                                                                                     | Cmd-Left    | Increase current pattern number            |
| Shift-M                                                          | Mute current channel                                                                                                                                | Cmd-Right   | Decrease current pattern number            |
| Cmd-Shift-M                                                      | Invert muting                                                                                                                                       | Cmd-F       | Toggle song follow                         |
| Cmd-Shift-T                                                      | Open new tab                                                                                                                                        | Cmd-P       | Toggle prospective pattern view            |
| Cmd-Shift-W                                                      | Close current tab                                                                                                                                   | Cmd-W       | Toggle pattern wrapping                    |
| Cmd-Shift-Left                                                   | Select previous tab                                                                                                                                 | Cmd-L       | Toggle pattern change behavior (live mode) |
| Cmd-Shift-Right                                                  | Select next tab                                                                                                                                     | Cmd-Shift-L | Load song                                  |
| 2, 3, 5, 6...<br>Q, W, E, R...<br>S, D, F, G...<br>Z, X, C, V... | Play / Insert notes (depending on whether edit mode is on); try to play around with pressing other keys to find out what notes they're mapped to =) | Cmd-Shift-S | Save song                                  |
| F1...F8                                                          | Select octave                                                                                                                                       | Cmd-Shift-S | Save song as...                            |
| Enter                                                            | Play song from current order                                                                                                                        | Esc         | Exit program                               |
| Cmd-Enter<br>Shift-F9                                            | Play current pattern from beginning                                                                                                                 | Cmd-Alt-A   | Switch to advanced edit                    |
| Shift-Enter                                                      | Play current pattern from current row                                                                                                               | Cmd-Alt-C   | Switch to configuration                    |
| Shift-F10                                                        | Play current pattern from first quarter of the pattern length                                                                                       | Cmd-Alt-D   | Switch to disk operations                  |
| Shift-F11                                                        | Play current pattern from second quarter of the pattern length                                                                                      | Cmd-Alt-I   | Switch to instrument editor                |
| Shift-F12                                                        | Play current pattern from third quarter of the pattern length                                                                                       | Cmd-Alt-R   | Switch to disk recorder                    |
| Alt-Space                                                        | Play song from current row (stop and return when released)                                                                                          | Cmd-Alt-S   | Switch to sample editor                    |
| Shift-Space                                                      | Play row by row                                                                                                                                     | Cmd-Alt-T   | Switch to transpose                        |
| Space                                                            | Stop / Edit                                                                                                                                         | Cmd-Alt-X   | Switch to main screen                      |
| Shift-Left                                                       | Increase song position                                                                                                                              | Cmd-Alt-Z   | Toggle scopes                              |
| Shift-Right                                                      | Decrease song position                                                                                                                              |             |                                            |

| Pattern Editor, clipboard, volume scaling, command/volume macro and additional keyboard controls |                                                  |                                 |                                |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------|--------------------------------|
| Cursor keys                                                                                      | Move around                                      | Alt-Cursor keys                 | Select block                   |
| PageUp                                                                                           | Jump 16 rows up                                  | Shift-Alt-Crsr keys             | Extend block                   |
| PageDown                                                                                         | Jump 16 rows down                                | Alt-F3                          | Cut block                      |
| Home                                                                                             | Jump to first row                                | Alt-F4                          | Copy block                     |
| End                                                                                              | Jump to last row                                 | Alt-F5                          | Paste block                    |
| Tab                                                                                              | Jump to next track                               | Shift-F3                        | Cut track                      |
| Shift-Tab                                                                                        | Jump to previous track                           | Shift-F4                        | Copy track                     |
| Alt-Q...I                                                                                        | Jump to track (0...7) MOD N-Channels             | Shift-F5                        | Paste track                    |
| Alt-A...K                                                                                        | Jump to track (8...15) MOD N-Channels            | Cmd-F3                          | Cut pattern                    |
| F9                                                                                               | Jump to beginning of the pattern                 | Cmd-F4                          | Copy pattern                   |
| F10                                                                                              | Jump to position ¼ through the pattern           | Cmd-F5                          | Paste pattern                  |
| F11                                                                                              | Jump to position halfway through the pattern     | Cmd-Alt-Z                       | Undo                           |
| F12                                                                                              | Jump to position ¾ through the pattern           | Cmd-Alt-Y                       | Redo                           |
| Delete                                                                                           | Delete note or volume column at cursor           | Cmd-Alt-A                       | Select entire pattern          |
| Shift-Delete                                                                                     | Delete note, volume and effect at cursor         | Shift-I                         | Interpolate values             |
| Cmd-Delete                                                                                       | Delete volume and effect at cursor               | Alt-V                           | Volume scale block             |
| Alt-Delete                                                                                       | Delete effect at cursor                          | Shift-V                         | Volume scale track             |
| Insert                                                                                           | Insert space on current track at cursor position | Cmd-V                           | Volume scale pattern           |
| Shift-Insert                                                                                     | Insert row at cursor position                    | Shift-Alt-1...0                 | Read command/volume at cursor  |
| Backspace                                                                                        | Delete previous note                             | Alt-1...0                       | Write command/volume at cursor |
| Shift-Backspace                                                                                  | Delete previous row                              | 1<br>The key right of<br>LShift | Enter key-off                  |

| Transpose keyboard controls |                                              |          |                                           |
|-----------------------------|----------------------------------------------|----------|-------------------------------------------|
| Alt+F7                      | Transpose current instrument in block down   | Alt+F1   | Transpose all instruments in block down   |
| Alt+F8                      | Transpose current instrument in block up     | Alt+F2   | Transpose all instruments in block up     |
| Shift+F7                    | Transpose current instrument in track down   | Shift+F1 | Transpose all instruments in track down   |
| Shift+F8                    | Transpose current instrument in track up     | Shift+F2 | Transpose all instruments in track up     |
| Cmd+F7                      | Transpose current instrument in pattern down | Cmd+F1   | Transpose all instruments in pattern down |
| Cmd+F8                      | Transpose current instrument in pattern up   | Cmd+F2   | Transpose all instruments in pattern up   |

| Instrument selection |                            |           |                    |
|----------------------|----------------------------|-----------|--------------------|
| Shift-Up             | Select previous instrument | Num /     | Quick-type digit B |
| Shift-Down           | Select next instrument     | Num *     | Quick-type digit C |
| Cmd-Shift-Up         | Select previous sample     | Num –     | Quick-type digit D |
| Cmd-Shift-Down       | Select next sample         | Num +     | Quick-type digit E |
| Num 0...9            | Quick-type digits 0 to 9   | Num Enter | Quick-type digit F |
| Num =                | Quick-type digit A         |           |                    |

| Sample Editor keyboard controls |                  |            |                              |
|---------------------------------|------------------|------------|------------------------------|
| Shift & drag                    | Quick draw       | Alt & drag | Move selection or loop range |
| Cmd & drag                      | Resize selection |            |                              |

| Not too trivial control buttons |                                                                                                                                                      |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SEQ                             | Sequence – inserts the next unused pattern in the pattern order table                                                                                |
| CLN                             | Clone – inserts the next unused pattern in the pattern order table and copies the data from the current pattern to the new one                       |
| F                               | Follow – toggles song following; disabling it allows better song editing while playing                                                               |
| P                               | Prospective – toggles prospective pattern view; when disabled, one pattern is shown; when enabled the patterns show as a continuous strip            |
| W                               | Wrap – toggles pattern wrapping; if enabled allows moving from pattern to pattern with cursor keys, otherwise sticks editing to the selected pattern |
| L                               | Live – toggles live mode; if enabled applies position changes only after the pattern has finished, otherwise behaves normally                        |

| Commands accepted by the volume column |                                                   |    |                                                          |
|----------------------------------------|---------------------------------------------------|----|----------------------------------------------------------|
| xx                                     | Set note volume                                   | Vx | Vibrato; x=depth                                         |
| +x                                     | Volume slide up; x=speed                          | Px | Set note panning position; x=0: far left, x=F: far right |
| -x                                     | Volume slide down; x=speed                        | Lx | Panning slide left (displayed as ◀x); x=speed            |
| Ux                                     | Fine volume slide up (displayed as ▲x); x=speed   | Rx | Panning slide right (displayed as ▶x); x=speed           |
| Dx                                     | Fine volume slide down (displayed as ▼x); x=speed | Mx | Portamento to note; x=speed                              |
| Sx                                     | Set vibrato speed; x=speed                        |    |                                                          |

| Commands accepted by the effects column |                                                                                                                                          |     |                                                                                                                                           |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------|
| 0xy                                     | Arpeggio (not FT2 compliant when song speed is greater than or equal to 16); x and y in semitones                                        | E60 | Set pattern loop begin point (mix on same row with EEx pattern delay has problems)                                                        |
| 1xx                                     | Portamento up; xx=speed                                                                                                                  | E6x | Pattern loop (mix on same row with EEx pattern delay has problems); x=number of iterations                                                |
| 2xx                                     | Portamento down; xx=speed                                                                                                                | E7x | Tremolo control (not yet implemented); x=waveform<br>0: sine, 1: ramp down, 2: square, 4: cont. sine, 5: cont. ramp down, 6: cont. square |
| 3xx                                     | Portamento to note; xx=speed                                                                                                             | E8x | Set note panning position (not supported; use 8xx or Px instead)                                                                          |
| 4xy                                     | Vibrato; x=speed, y=depth                                                                                                                | E9x | Re-trigger note; x=retrigger interval in ticks                                                                                            |
| 5x0                                     | Portamento to note with volume slide up; x=volume slide speed                                                                            | EAx | Fine volume slide up; x=speed                                                                                                             |
| 50x                                     | Portamento to note with volume slide down; x=volume slide speed                                                                          | EBx | Fine volume slide down; x=speed                                                                                                           |
| 6x0                                     | Vibrato with volume slide up; x=volume slide speed                                                                                       | ECx | Cut note after x ticks; x=0..song speed-1                                                                                                 |
| 60x                                     | Vibrato with volume slide down; x=volume slide speed                                                                                     | EDx | Delay note by x ticks (does not support additional effects in volume column); x=0..song speed-1                                           |
| 7xy                                     | Tremolo; x=speed, y=depth                                                                                                                | EEx | Pattern delay (mix on same row with E6x pattern loop has problems); x=row count                                                           |
| 8xx                                     | Set note panning position; xx=00: far left, xx=FF: far right                                                                             | EFx | Funk it! (not implemented)                                                                                                                |
| 9xx                                     | Sample offset; xx=offset in 256 bytes steps                                                                                              | Fxx | Set song speed / bpm; xx=speed in ticks per row (00..1F) or bpm (20..FF); xx=00 stops the song                                            |
| Ax0                                     | Volume slide up; x=speed                                                                                                                 | Gxx | Set global volume; xx=volume (00..40)                                                                                                     |
| A0x                                     | Volume slide down; x=speed                                                                                                               | Hx0 | Global volume slide up; x=speed                                                                                                           |
| Bxx                                     | Jump to order; xx=new song position                                                                                                      | H0x | Global volume slide down; x=speed                                                                                                         |
| Cxx                                     | Set note volume; xx=volume (00..40)                                                                                                      | Kxx | Key off after xx ticks; xx=00..song speed-1                                                                                               |
| Dxx                                     | Pattern break; xx=row to start from in next pattern                                                                                      | Lxx | Set volume envelope position; xx=new position                                                                                             |
| E0x                                     | Amiga LED filter toggle (not implemented)                                                                                                | Px0 | Panning slide right; x=speed                                                                                                              |
| E1x                                     | Fine portamento up; x=speed                                                                                                              | P0x | Panning slide left; x=speed                                                                                                               |
| E2x                                     | Fine portamento down; x=speed                                                                                                            | Rxy | Re-trigger note with volume slide; x=volume slide speed, y=interval (0=previous, 1..7=-1..*0.5, 8=no change, 9..F=+1..*2)                 |
| E3x                                     | Glissando control (not yet implemented); x=0: off, x=1: on                                                                               | Txy | Tremor; x=number of ON ticks, y=number of OFF ticks                                                                                       |
| E4x                                     | Vibrato control (not yet implemented) x=waveform<br>0: sine, 1: ramp down, 2: square, 4: cont. sine, 5: cont. ramp down, 6: cont. square | X1x | Extra fine portamento up; x=speed                                                                                                         |
| E5x                                     | Set note fine-tune; x=offset<br>XM modules: 0..7=-128..-16, 8=0, 9..F=+16..+112<br>MOD modules: 0..7=0..+112, 8..F=-128..-16             | X2x | Extra fine portamento down; x=speed                                                                                                       |

| Known replay differences between FT2 and MilkyTracker       |                                                                  |
|-------------------------------------------------------------|------------------------------------------------------------------|
| 0xy arpeggio when song speed is greater than or equal to 16 | E7x tremolo control is not implemented                           |
| E3x glissando control is not implemented                    | ?x volume column effects used in conjunction with EDx note delay |
| E4x vibrato control is not implemented                      | Portamento overflow "effect" isn't reproduced                    |
| E6x pattern loop and EEx pattern delay on the same row      |                                                                  |